



Global Solutions, Direct to Your Business

joseph@globalsourcingdirect.us

2021

Air is life

Innovative team to provide high-quality HVAC solutions

HVAC

Parts



Here, We are very proud to introduce our complete range of ventilation products including Air valve, Air diffusion, Flexible Ducting, Pressed fitting and ducting accessories, etc...

We are also manufacturer and supplier of air conditioning parts, including condensate drain pump, vacuum pump, manifold gauge, A/C brackets, refrigeration gas, cooper tube and fittings, thermometer, capicitor and etc.

With experience of more than 10 years, we are exporting overseas such as Europe, South America, North Africa etc. We have a strong design team, mass production capabilities, the standard quality control procedures, logistics services, after-sales service, all of which allows us to provide more effective solutions to demand for cost savings and the strict quality control from clients.

Quality is the enterprise's life, we know the importance and make it. Our team have professional staff to regular check to prohibit any inferior products into warehouse, standard operating procedures, and profound research, qualified production processes and strict quality control in order to ensure delivery to the client the perfect product.

We will provide safe, efficient, reliable and a full range of logistics services. And our company have team of senior professionals with rich professional knowledge and years of practical experience, timely shipping to collect the latest information, accurately keep the market conditions and inform customers in a timely manner, for international transport on a number of specific issues that may arise. We will timely and safely delivery to the clients, and meet their specified logistics needs and growing demands.

We will provide tailored services to each client. And we always aim at helping our custmer maximum benefits. We study customers satisfactory reserch to have your feedback acting as our improved gudiance.



Content

Ventilation

1	Verteil system	1-001
2	Air valve and diffation	2-001
3	Flexible duct	3-001
4	Duct fitting	4-001
5	Duct hardware	5-001
6	Fastener	6-001
7	Fixing system	7-001
8	HVAC Tape	8-001
9	Duct fan	9-001
10	Damper actuators	10-001

Refrigeration

11	Condensate managemet	11-001
12	Brass and copper fittings	12-001
13	Manifold	13-001
14	service tools	14-001
15	Other spare parts for refrigerants	15-001





Ventilation terminal system

- 

independent volume control
- 

Heat recovery
- 

Silent
- 

No pipeline

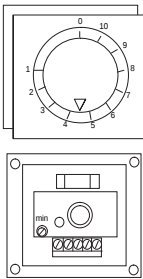


- Suitable for building ventilation which has installed central ventilation system
- the air flow can be controlled independently of each room by controller
- ten steps air flow control
- Ceilling-mounted, minimize indoor space occupied
- Stable airflow and no noise pollution



FSC

- Voltage : 230V
- Standard dimensions (Fixed version) (IN) (mm) : 82x82x62
- Standard dimensions (Surface version) (ON) (mm) : 82x87x70
- Regulation from max to min.



Type	Intensity	Minimum regulation intensity	Fuse
FSC-0.5A	0.5A	0.1A	630mA
FSC-1.5A	1.5A	0.15A	1.5A
FSC-2.5A	2.5A	0.25A	2.5A
FSC-4A	4A	0.4A	4A

Single room air handling unit

- 

High efficiency filter
- 

90%Heat recovery
- 

Silent
- 

No pipeline



Single room air handling unit overcomes the disadvantage of traditional ventilation system which must be equipped with pipeline. This product consists of the indoor air valve, fan,regenerator and exterior grille.The core material is the regenerator which has a cylindrical ceramic honeycomb body. The air exchange the heat in the regenerator and up to 90% energy can be recovered.

The no pipeline design make it convenient for indoor installation and save the indoor space. The high efficiency,excellent sound insulation , simple installation and maintenance, provide our life comfort and health.

Technical Data	
Installation	Wall mounted with no pipeline
Voltage/Frequency (V/Hz)	230V/50HZ
Air flow volume (m³/h)	40/20
Sound level (db/A)	29/17
Filtering level	G4/G3/F6
Heat recovery efficiency (%)	> 90%
The diameter of pipe (mm)	Φ160
Switch optional	Capative switch or Remote



Mechanical air handling unit

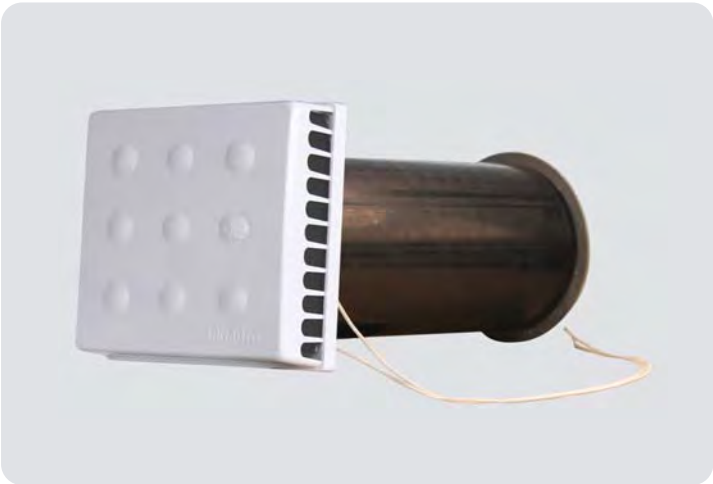
- 

Primary efficiency filter
- 

Stepless volume flow control
- 

Silent
- 

No pipeline



It is designed to provide controlled fresh air indoor with natural or mechanical exhaust ventilation. The volume flow can be steplessly controlled using the adjusting knob or rope.

Recommended location of the valve:
the window or the same height on the wall, the suitable thickness of the wall is between 80mm and 100mm, the length of the pipe can be shortened if needed

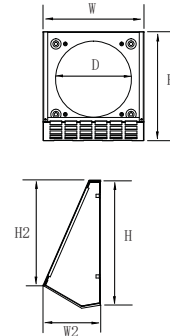
Technical Data	
Installation	Wall mounted with no pipeline
Outside diameter of the pipe (mm)	132mm
Inside diameter of the pipe (mm)	127mm
Filtering level	G4

EXTERNAL LOUVER

Made for waterproof, wind-break and dustproof

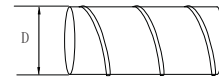
W2

size	W (mm)	H (mm)	D (mm)	H2 (mm)	111.8 (mm)
EL160	220	238.7	160	196.1	



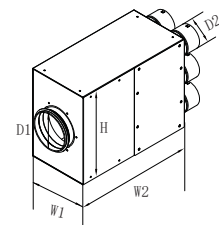
SPIRAL TUBE

size	D (mm)
PT75	128



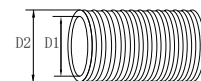
SILENCING DISTRIBUTION BOX

size	D1 (mm)	D2 (mm)	W1 (mm)	W2 (mm)	H (mm)
SDB125	125	78	200	400	300



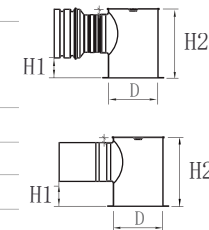
PLASTIC TUBE

size	D1 (mm)	D2 (mm)
PT75	63	75



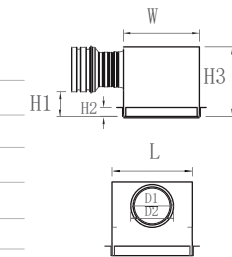
AD

size	D (mm)	H1 (mm)	H2 (mm)
AD100	100	51	140
AD125	125	51	140
AD160	160	51	140



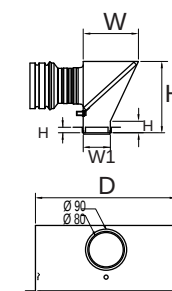
AK

size	W (mm)	L (mm)	H1 (mm)	H2 (mm)	H3 (mm)	D1 (mm)	D2 (mm)
AK125*125	134	134	55	20	155	80	90
AK160*160	169	169	55	20	155	80	90
AK200*100	109	209	55	20	155	80	90
AK300*50	59	309	55	20	155	80	90
AK300*100	109	309	55	20	155	80	90
AK400*50-1	59	409	55	20	155	80	90
AK400*50-2	59	409	55	20	155	80	90
AK600*50	59	609	55	20	155	80	90



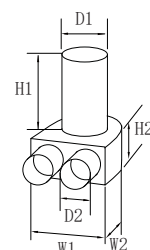
AKS

size	D (mm)	W1 (mm)	W (mm)	H (mm)	H1 (mm)	H2 (mm)
AKS200*100	209	109	170	155	12	25
AKS300*50	309	59	120	155	12	25
AKS400*50*1	409	59	120	155	12	25
AKS400*50*2	409	59	120	155	12	25
AKS600*50	609	59	120	155	12	25



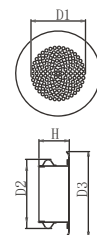
TERMINAL BOX

size	D1 (mm)	D2 (mm)	H1 (mm)	H2 (mm)	W1 (mm)	W2 (mm)
TB	78	64	110	95	170	110



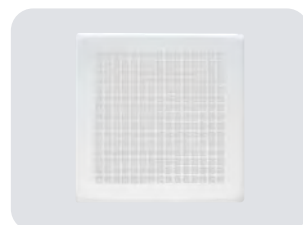
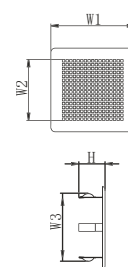
GR (with/without damper)

size	D1 (mm)	D2 (mm)	D3 (mm)	H (mm)
GR100	90	110	140	40
GR125	115	135	165	40
GR160	150	170	200	40



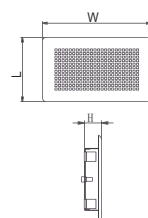
GQ(with round/square hold, with/without damper)

size	W1 (mm)	W2 (mm)	W3 (mm)	H (mm)
GQ125	165	120	135	40
GQ160	200	155	170	40



GE (Round hole and square hole is available)

size	W (mm)	L (mm)	H (mm)
GE200*100	245	145	27
GE300*50	345	95	27
GE300*100	345	145	27
GE400*50	445	95	27
GE400*100	445	145	27
GE600*50	645	95	27



Duct CO2 Transmitter SDC-C1

- Indoor CO₂ measurement
- Indication with three color LED light
- Minimum and maximum value memory
- 0...10V, 0...20mA or 2...10V, 4...20mA measuring signals selectable with jumpers
- Optional alternative signal ranges programmable
- May be used as simple P-controller
- Selectable averaging signal
- Status LED



Indoor CO2 Transmitter SRC-C1

- Indoor CO₂ measurement
- Indication with three color LED light
- Minimum and maximum value memory
- 0...10V, 0...20mA or 2...10V, 4...20mA measuring signals selectable with jumpers
- Optional alternative signal ranges programmable
- May be used as simple P-controller
- Selectable averaging signal
- Status LED



Indoor HUMIDITY Transmitter SRC-H1-A3-1

- Indoor humidity measurement
- Minimum and maximum value memory
- 0...10 V, 0...20 mA or 2...10 V, 4...20 mA measuring signals selectable with jumpers
- Optional alternative signal ranges programmable
- Selectable averaging signal
- Status LED
- Supervision of critical humidity



DUCT HUMIDITY Transmitter SDC-H1-A3-1

- Indoor humidity measurement
- Minimum and maximum value memory
- 0...10 V, 0...20 mA or 2...10 V, 4...20 mA measuring signals selectable with jumpers
- Optional alternative signal ranges programmable
- Selectable averaging signal
- Status LED
- Supervision of critical humidity



Without auditorium

Base distributor 1/1, DVS 1 Article no. 8001	
Base distributor 2/2, DVS 2.1 Article no. 8002.1	
Base distributor 3/3, DVS 3.1 Article no. 8003.1	
Base distributor 4/4, DVS 4.1 Article no. 8004.1	
Base distributor 5/5, DVS 5.1 Article no. 8005.1	
Base distributor 6/6, DVS 6.1 Article no. 8006.1	



Base distributors are inserted between the reinforcements, the mounting feet are already pre-assembled.
Up to 12 standard combinations can be connected to the base distributors.
Includes screw kit, material: sendzimir galvanized sheet metal

With inspection nozzle DN 160

Base distributor 1/1, DVS 1.1 Article no. 8001.1	
Base distributor 2/2, DVS 2 Article no. 8002	
Base distributor 3/3, DVS 3 Article no. 8003	
Base distributor 4/4, DVS 4 Article no. 8004	
Base distributor 5/5, DVS 5 Article no. 8005	
Base distributor 6/6, DVS 6 Article no. 8006	



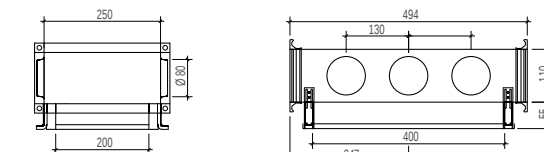
Base distributors are inserted between the reinforcements, the mounting feet are already pre-assembled.
Up to 12 standard combinations can be connected to the base distributors.
Includes screw kit, material: sendzimir galvanized sheet metal

With square inspection sockets 400 x 200 mm

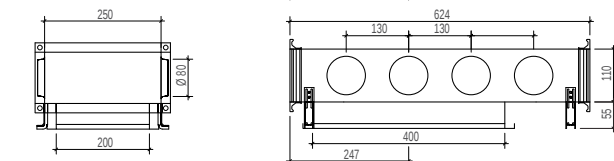
Base distributors are inserted between the reinforcements, the mounting feet are already pre-assembled.
Up to 12 maximum standard combinations can be connected to the base distributors.
Includes screw kit, material: sendzimir galvanized sheet metal



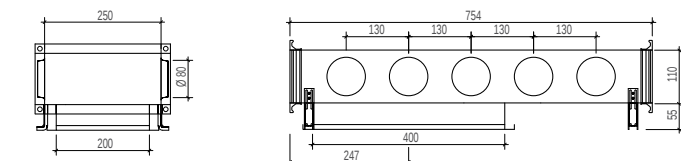
Basic distributors 3/3, DVS 3E
Article no.8023



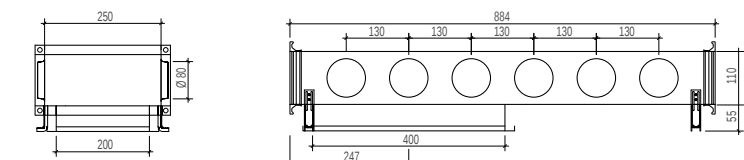
Basic distributors 4/4, DVS 4E
Article no.8024



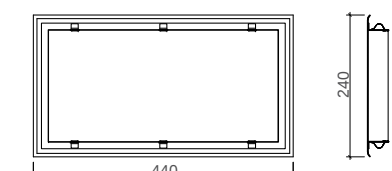
Basic distributors 5/5, DVS 5E
Article no.8025



Basic distributors 6/6, DVS 6E
Article no.8026

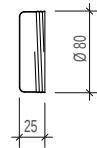


Revision cover RD 400200
Article no. 8124
Connection 400 x 200 mm
With clamping springs,
White, RAL 9016

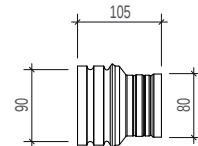


Blind plugs and combi plugs for DVS distributors

Blind plugs BS 80
Article no.8050
End cap for screwing



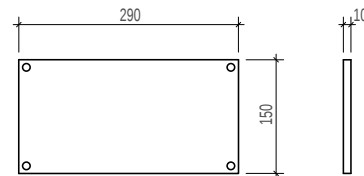
Combination plug KS 90/75
Article no.8060
Combined use
For injector drill 75 and 90 mm,
And spiral tube 100 mm



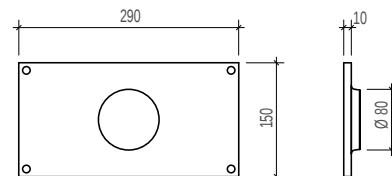
End pieces for DVS distributors

Material: sendzimir galvanized sheet metal

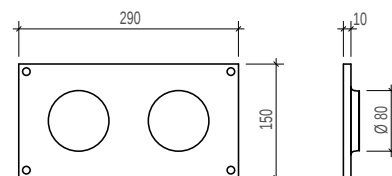
End piece ES 1
Article no.8130
End piece as end bottom
For distributors



End piece ES 2
Article no.8140
End piece as end bottom
For distributors with 1
Combination connector DVN 90/75



End piece ES 3
Article no.8140.2
End piece as end bottom
For distributors with 2
Combined connections DVN 90/75

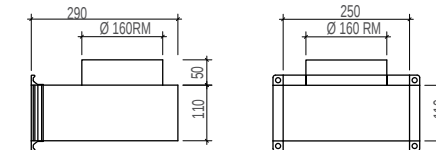


Heads

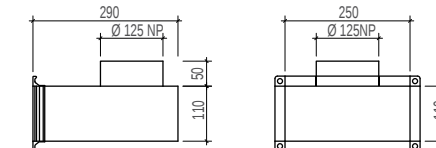
DVS distributor head, for connection to vertical and horizontal connection lines

Material: sendzimir galvanized sheet metal

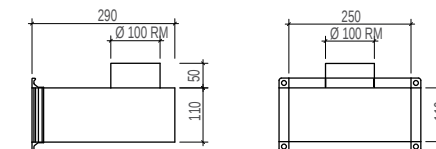
Headboard KT 1
Article no.8070
DN 160 (pipe dimensions),
1 connection
Optional connection
top or bottom



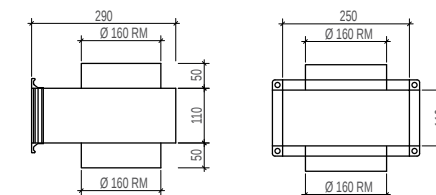
Head part KT 1-125NP
Article no.8072
DN 125 (nipple mass),
1 connection
Optional connection
top or bottom



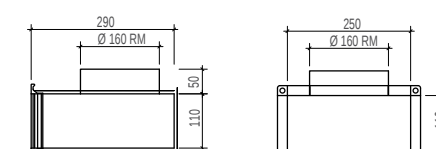
Headboard KT 1-100
Article no.8071
DN 100 (pipe dimensions),
1 connection
Optional connection
top or bottom



Head part KT 2
Article no.8080
DN 160 (pipe dimensions),
2 connections
above and below



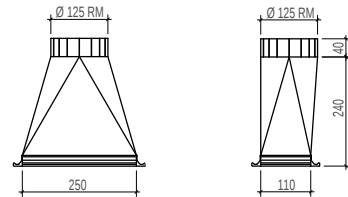
Headboard KT 1-i
Article no.8073
DN 160 (pipe dimensions),
1 connection piece optional
Connection top or bottom,
Externally insulated with 13 mm
Arma fl ex,



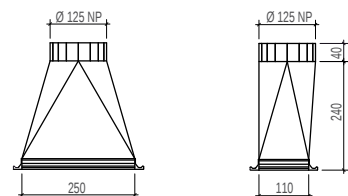
DVS distributor heads

Material: sendzimir galvanized sheet metal

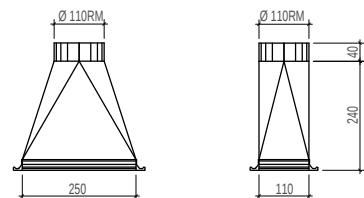
Head part KT 5
Article no.8110
DN 125 (pipe dimensions),
Front connection
Of 1 ventilation pipe / hose



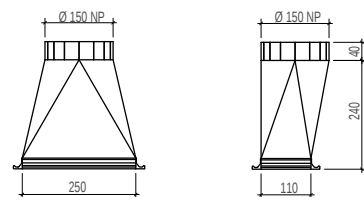
Head part KT 5-1
Article no.8111
DN 125 (nipple mass),
Front connection
Of 1 ventilation pipe / hose



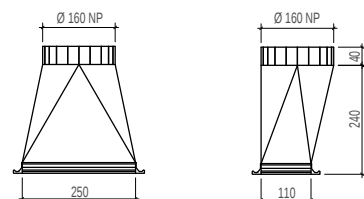
Headboard KT 6
Article no.8120
DN 110 (pipe dimensions),
Front connection
Of 1 ventilation pipe / hose



Head part KT 7
Article no.8119
DN 150 (nipple mass),
Front connection
Of 1 ventilation pipe / hose



Head part KT 8
Article no.8121
DN 160 (nipple mass),
Front connection
Of 1 ventilation pipe / hose

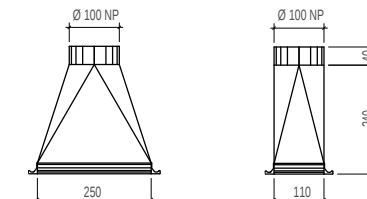


Heads

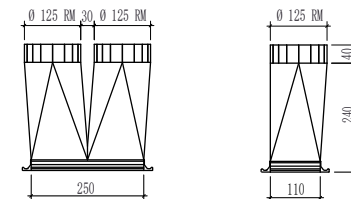
DVS distributor heads

Material: sendzimir galvanized sheet metal

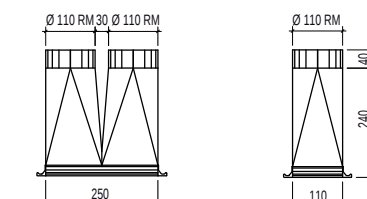
Headboard KT 9
Article no.8122
DN 100 (nipple mass),
Front connection



Head part KT 3
Article no.8090
DN 125 (pipe dimensions),
Front connection
Of 2 ventilation hoses



Head part KT 4
Article no.8100
DN 110 (pipe dimension)
Front connection
Of 2 ventilation hoses

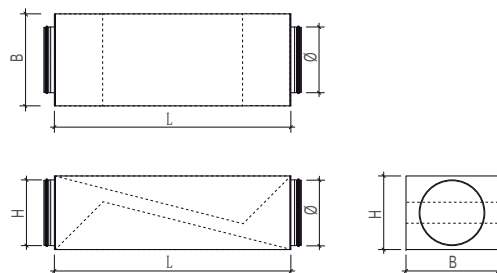


DVS distributor heads

Dresohn duct mufflers with pipe connection are specifically designed for controlled ventilation. Thanks to its special air duct and high-performance backdrops, high insertion loss is achieved.

DVS distributor heads

Rectangular silencer with round connections
Connection: DN 125, DN 160, DN 180, DN 200 and DN 250
Material: sendzimir galvanized steel sheet



Insertion Damping De-oct. In dB and pressure loss Dp in (Pa)															
Article no.	Typ	VL in ³ /h	f _m (HZ)								Δp in (Pa)	B width	H height	L length	Ø Pipe connection
			63	125	250	500	1000	2000	4000	8000					
8355	DLS125/500	150	7	13	15	20	21	25	25	21	4	280	200	500	DN125
8340	DLS125/700	150	9	19	23	28	29	35	35	29	5	280	200	700	DN 125
8341	DLS125/900	150	12	24	27	36	38	45	45	37	6	280	200	900	DN 125
8342	DLS125/1200	150	16	32	35	48	50	50	50	49	7	280	200	1200	DN 125
8356	DLS160/500	200	7	13	15	20	21	25	25	21	10	280	200	500	DN160
8343	DLS160/700	250	9	19	23	28	29	35	35	29	11	280	200	700	DN 160
8344	DLS160/900	250	12	24	27	36	38	45	45	37	13	280	200	900	DN 160
8345	DLS160/1200	250	16	32	35	48	50	50	50	49	15	280	200	1200	DN 160
8357	DLS180/500	250	7	13	15	20	21	25	25	21	15	280	200	500	DN180
8346	DLS180/700	350	9	19	23	28	29	35	35	29	13	280	200	700	DN 180
8347	DLS180/900	350	12	24	27	36	38	45	45	37	14	280	200	900	DN 180
8348	DLS180/1200	350	16	32	35	48	50	50	50	49	16	280	200	1200	DN 180
8358	DLS200/500	350	7	11	18	31	44	42	29	22	19	350	280	500	DN200
8349	DLS200/700	350	8	12	19	36	50	48	31	24	20	350	280	700	DN200
8351	DLS200/900	350	10	13	21	41	50	50	34	25	21	350	280	900	DN200
8360	DLS200/1200	350	12	17	25	48	50	50	40	29	23	350	280	1200	DN200
8359	DLS250/500	450	6	9	15	27	38	35	24	19	18	350	280	500	DN250
8361	DLS250/700	450	7	10	17	32	45	41	27	20	19	350	280	700	DN250
8350	DLS250/900	450	8	11	18	37	50	48	30	22	20	350	280	900	DN250
8362	DLS250/1200	450	10	14	23	45	50	50	36	25	22	350	280	1200	DN250

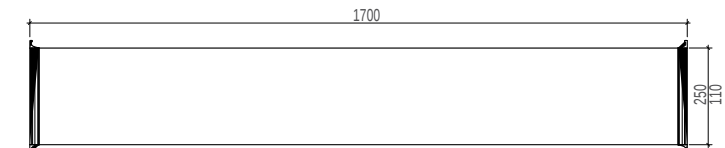
Measured values above 50db are given in practice with 50db

Channels

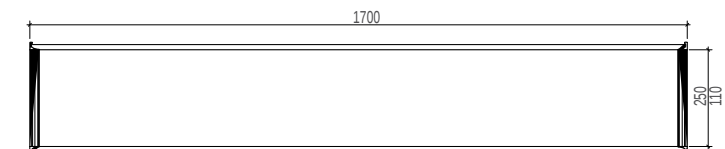
DVS channels for connection to base distributor, (other dimensions on request)

Material: sendzimir galvanized sheet metal

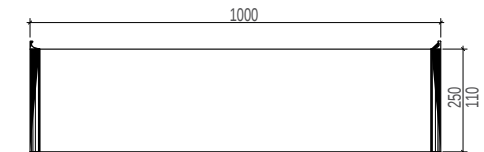
Channel CAT 1
Article no. 8204
250 x 110 mm,
length 1700 mm



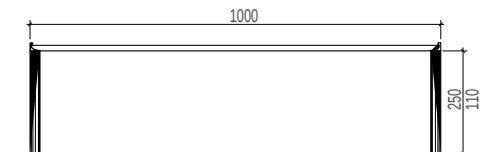
Channel KAT 1-i
Article no. 8205
250 x 110 mm,
length 1700 mm,
Externally
insulated with
13 mm Arma fl ex



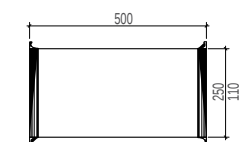
Channel CAT 2
Article no. 8200
250 x 110 mm,
length 1000 mm



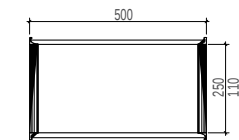
Channel KAT 2-i
Article no. 8203
250 x 110 mm,
length 1000 mm,
Externally insulated
with 13 mm
Arma fl ex



Channel CAT 3
Article no. 8202
250 x 110 mm,
length 500 mm



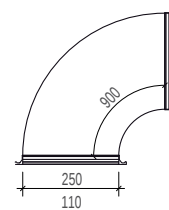
Channel KAT 3-i
Article no. 8201
250 x 110 mm,
length 500 mm,
Externally insulated
with 13 mm
Arma fl ex



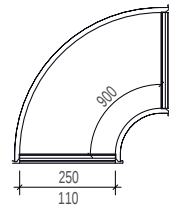
DVS channel shaped parts for connection to base distributor, (other dimensions on request)

Material: sendzimir galvanized sheet metal

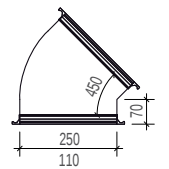
Bow BG 90
Article no. 8210
90 ° arc, 250 x 110 mm



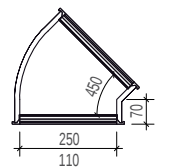
Sheet BG 90-i
Article no. 8212
90 ° arc, 250 x 110 mm,
Externally insulated with 13 mm
Arma fl ex



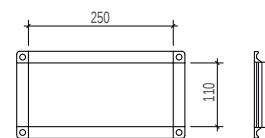
Bow BG 45
Article no. 8211
45 ° arc, 250 x 110 mm



Bow BG 45-i
Article No. 8213
45 ° arc, 250 x 110 mm,
Externally insulated with 13 mm
Arma fl ex



Channel frame loose KPK
Article no. 8209
250 x 110 mm, D2

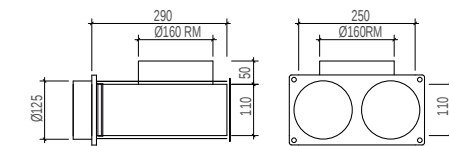


Outdoor and exhaust air box

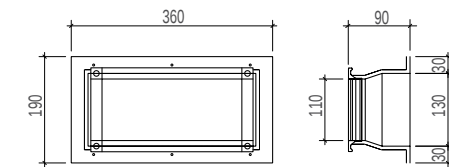
Connection boxes for weather protection grilles type KGE and WSG

Material: sendzimir galvanized sheet, insulated on the outside with 13 mm arma fl ex

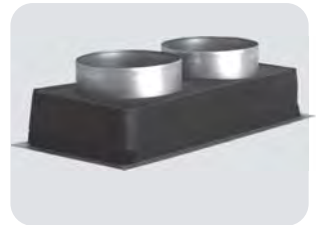
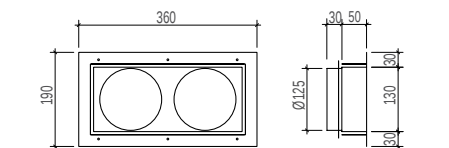
AUL / FOL connection box
AFK 160, article no. 8550
1 connection 160 mm,
2 connections 125 mm



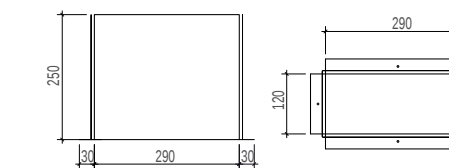
AUL / FOL - Facade Box
AFK-K, article no. 5551
290 x 130 mm, length 90 mm



AUL / FOL - Facade Box
AFK-R, article no. 8552
300 x 130 mm
2 connections 125 mm



AUL / FOL - Facades-
Sliding support
AFK-S, article no. 8553
290 x 120 mm, length 250 mm

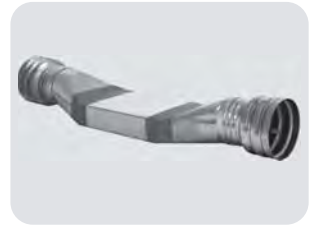
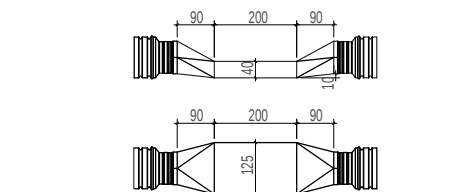


Crossing pieces / Insert sheets

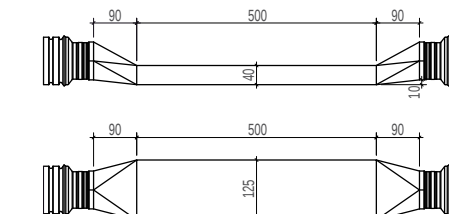
Crossing piece including combination socket for up to 5 pipes

Material: sendzimir galvanized sheet metal

Cross section KS 2
Article no. 8061
Crossing for 2
Pipelines,
With combi connection



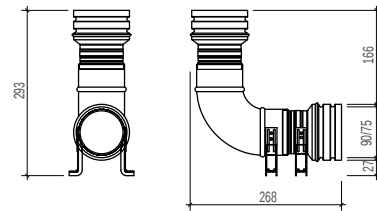
Article no. 8062
Crossing for 5
Pipelines,
With combi connection



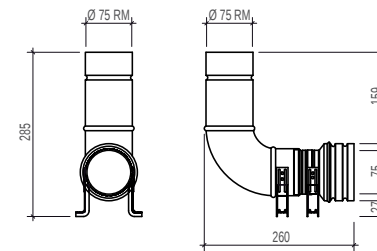
Inlay

Material: sendzimir galvanized sheet metal

Entry 90 ° ELB 90
Article no. 8215
With combi connection, DN 90,
With mounting feet



Entrance area 90 ° ELB 75
Article no. 8214
With combi connection, DN 75,
With mounting feet

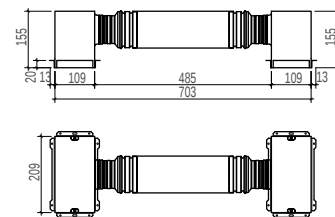


Overflow elements

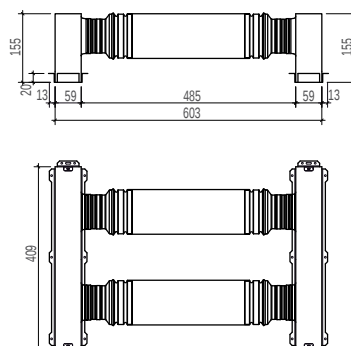
Overflow elements, for connection as overflow of two areas, including sound insulation element

Material: sendzimir galvanized sheet metal

Overflow element
ÜSE 200-100
Article no. 8565
200 x 100 mm



Overflow element
ÜSE 400-50
Article no. 8566
400 x 50 mm



Equipment

DVS distributor heads

Material: sendzimir galvanized sheet metal

O-ring OR
OR 75, article no. 8320
OR 90, article no. 8321
OR 110, article no. 8322
OR 125, article no. 8323
Made of elastomer



Plastic cover KD
KD 75, article no. 8273
KD 100, article no. 8270
KD 125, article no. 8271
KD 160, article no. 8272
Suitable for connection sockets



Connecting sleeve VBM
VBM 75, article no. 8310
VBM 90, article no. 8311
VBM 110, article no. 8312
VBM 125, article no. 8313



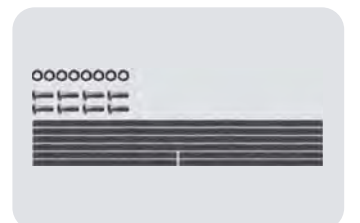
Single hose FES
FES 75, article no. 8301
FES 90, article no. 8300
FES 110, article no. 8302
FES 125, article no. 8303
Roll à 50 m



Cable Ties KB
Article no. 8330
9 x 530 mm, made of nylon, white,
100 pieces / pack



Screw kit SKB
Article no. 8570
Screw kit to distributor
For 2 channel connections,
Screws, nuts, sealing tape

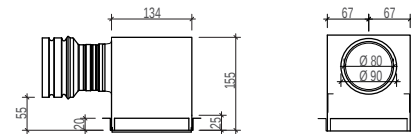


Revision cover RD 160
Article no. 8123
Connection DN 160,
200 x 200 mm,
With clamping springs,
White, RAL 9016

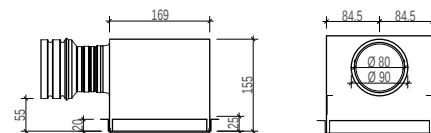


DVS connection box for inserts in concrete ceilings,
Connection boxes for ventilation grilles type GE, GR, GRK, GQ, GQK, LU, LD, BG and LG
Material: sendzimir galvanized sheet metal

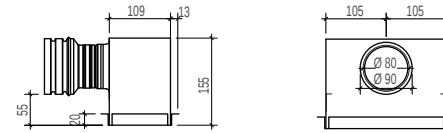
Connection box
AK 125-125
Article no. 8164
125 x 125 mm



Connection box
AK 160-160
Article no. 8165
160 x 160 mm



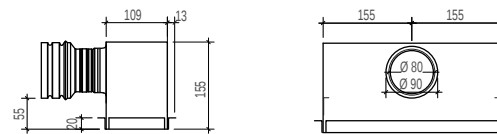
Connection box
AK 200-100
Article no. 8171
200 x 100 mm



Connection box
AK 300-50
Article no. 8160
300 x 50 mm



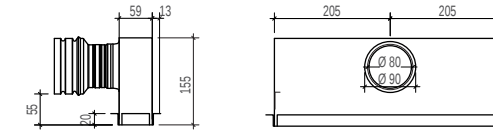
Connection box
AK 300-100
Article no. 8172
300 x 100 mm



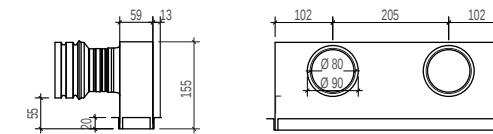
Connection box type AK

DVS connection box for inserts in concrete ceilings, recessed carrier frame, connection
boxes for ventilation grilles type GE, GR, GRK, GQ, GQK, LU, LD, BG and LG
Material: sendzimir galvanized sheet metal

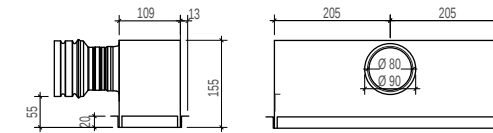
Connection box
AK 400-50-1
Article no. 8162
400 x 50 mm



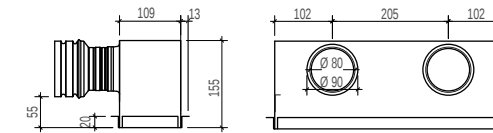
Connection box
AK 400-50-2
Article no. 8161
400 x 50 mm



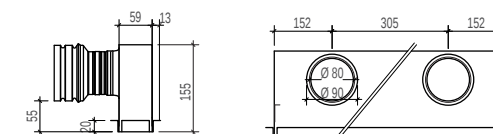
Connection box
AK 400-100-1
Article no. 8166
400 x 100 mm



Connection box
AK 400-100-2
Article no. 8170
400 x 100 mm



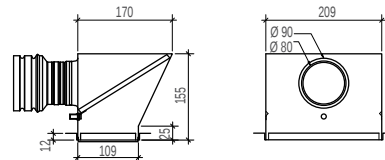
Connection box
AK 600-50
Article no. 8163
600 x 50 mm



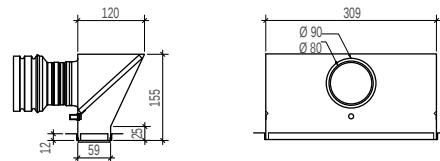
DVS Connection box for inserts in concrete ceilings with oblique volume body for the installation of filter elements and noise protection packs. Recessed support with nail board 20 mm, connection boxes for ventilation grilles type GE, GR, GQ, LU, LD, BG and LG

Material: sendzimir galvanized sheet metal

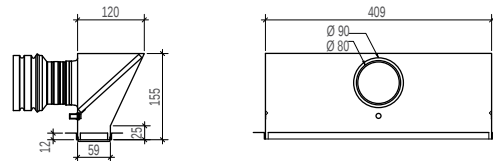
Connection box
AKS 200-100
Article no. 8176
200 x 100 mm



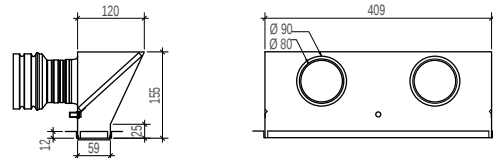
Connection box
AKS 300-50
Article no. 8173
300 x 50 mm



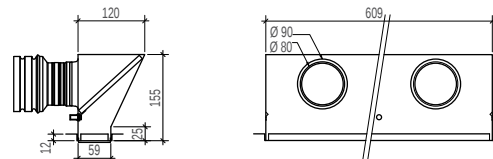
Connection box
AKS 400-50
Article no. 8174
400 x 50 mm



Connection box
AKS 400-50-1
Article no. 8174-1
400 x 50 mm



Connection box
AKS 600-50
Article no. 8175
600 x 50 mm

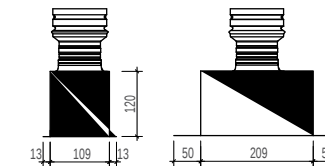


Connection box type ZAK

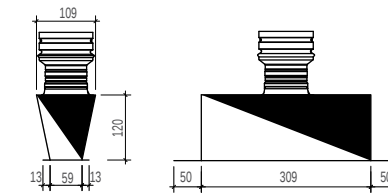
DVS Terminal box for inter-ceiling installation with lateral screw and rod holes, connection boxes for ventilation grilles type GE, GR, GQ, LU, LD, BG and LG

Material: sendzimir galvanized sheet metal

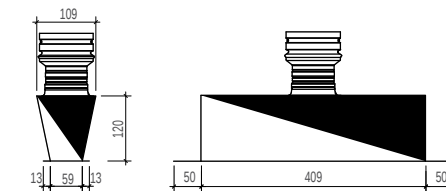
Connection box
ZAK 200-100
Article no. 8230
200 x 100 mm



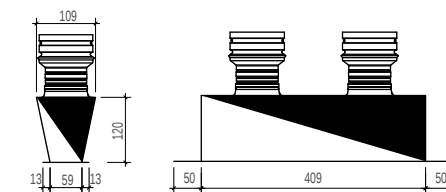
Connection box
ZAK 300-50
Article no. 8231
300 x 50 mm



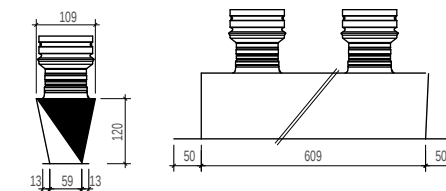
Connection box
ZAK 400-50
Article no. 8232
400 x 50 mm



Connection box
ZAK 400-50-2
Article no. 8233
400 x 50 mm



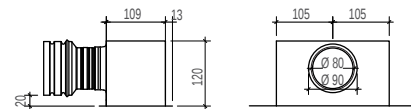
Connection box
ZAK 600-50-2
Article no. 8233
600 x 50 mm



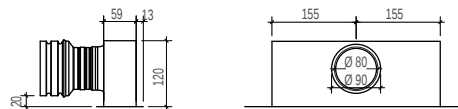
DVS connection box for wall mounting with lateral screw and nail holes, connection boxes for ventilation grilles type GE, GR, GQ, LU, LD, BG and LG

Material: sendzimir galvanized sheet metal

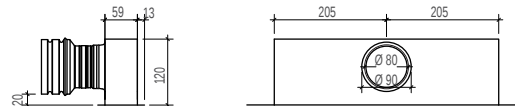
Wall connection box
WAK 200-100
Article no. 8224
200 x 100 mm



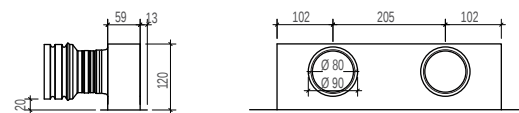
Wall connection box
WAK 300-50
Article no. 8220
300 x 50 mm



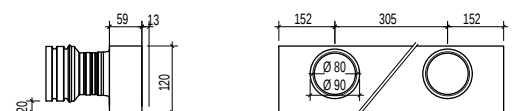
Wall connection box
WAK 400-50-1
Article no. 8222
400 x 50 mm



Wall connection box
WAK 400-50
Article no. 8221
400 x 50 mm



Wall connection box
WAK 600-50
Article no. 8223
600 x 50 mm

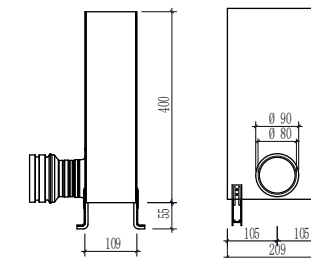


Floor box type BAK

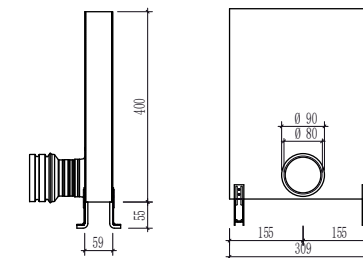
DVS Connection box for floor installation with preassembled mounting feet, connection boxes for ventilation grilles type GE, GR, GQ, LU, LD, BG and LG

Material: sendzimir galvanized sheet metal

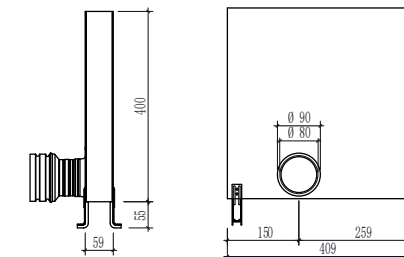
Ground connection box
BAK 200-100
Article no. 8228
200 x 100 mm



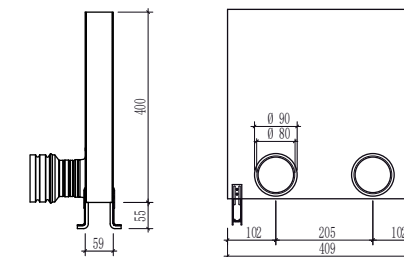
Ground connection box
BAK 300-50
Article no. 8225
300 x 50 mm



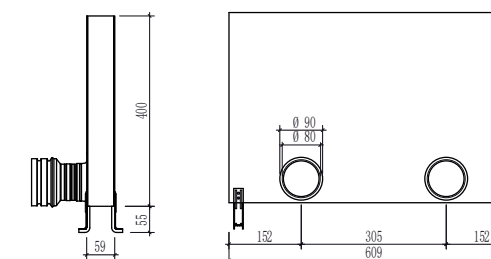
Ground connection box
BAK 400-50-1
Article no. 8229
400 x 50 mm



Ground connection box
BAK 400-50
Article no. 8226
400 x 50 mm



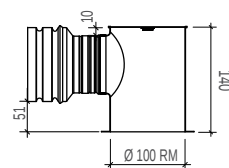
Ground connection box
BAK 600-50
Article no. 8227
600 x 100 mm



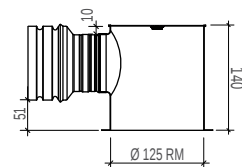
The right-angled combidose can be nailed directly onto the formwork cover. The Can is in the nominal sizes DN 100, 125 and 160 available. Flexible use: The combidose has a welded M8 screw nut (Not shown in the figure) and can be used for the most varied ventilation grilles or supply / exhaust valves Can be used. The combination connector Has retaining springs which prevent unwanted loosening of the insertion hoses. The Combidose is covered with a plastic cover (yellow in the picture).



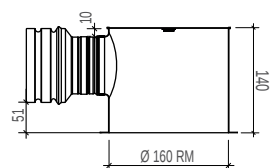
Connection socket AD 100
Article No. 8150
Connection socket DN 100
With 1 combination connector



Connection socket AD 125
Article No. 8151
Connection socket DN 125
With 1 combination connector

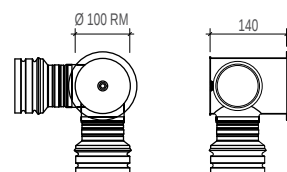


Connection socket AD 160
Article No. 8152
Connection socket DN 160
With 1 combination connector

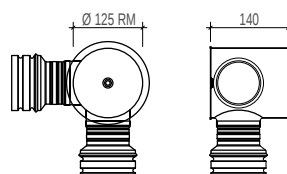


DVS power outlet with 2 connections
Connection sockets for ventilation grilles type GR, GRK, GQ, GQK, QA, ZVV and AVV
Material: sendzimir galvanized sheet metal

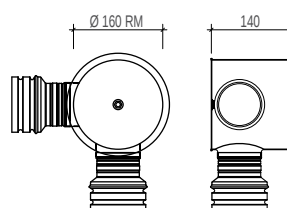
Anschlussdose AD 100-2
Artikel-Nr. 8580
Anschlussdose DN 100
Mit 2 Kombistutzen



Anschlussdose AD 125-2
Artikel-Nr. 8581
Anschlussdose DN 125
Mit 2 Kombistutzen



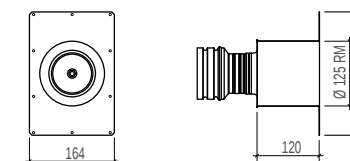
Anschlussdose AD 160-2
Artikel-Nr. 8582
Anschlussdose DN 160
Mit 2 Kombistutzen



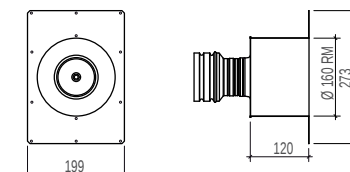
Anschlussdosen Typ ZAD

DVS power outlet sockets
Connection sockets for ventilation grilles type GR, GQ, QA, ZVV and AVV
Material: sendzimir galvanized sheet metal

Connection socket
ZAD 125
Article no. 8236
Connection socket DN 125



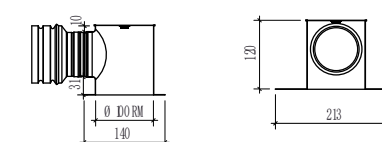
Connection socket
ZAD 160
Article no. 8237
Connection socket DN 160



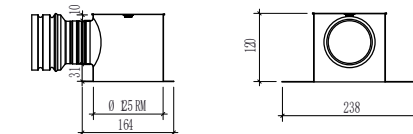
Wall sockets type WAD

DVS wall sockets
Connection sockets for ventilation grilles type GR, GQ, QA, ZVV and AVV
Material: sendzimir galvanized sheet metal

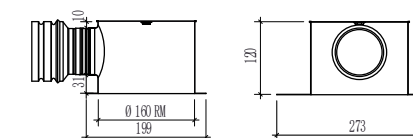
Wandanschlussdose
WAD 100
Artikel-Nr. 8156
Anschlussdose DN 100



Wandanschlussdose
WAD 125
Artikel-Nr. 8157
Anschlussdose DN 125



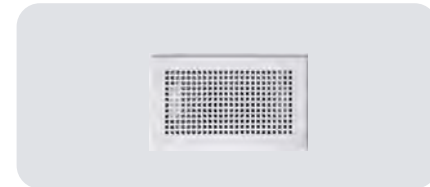
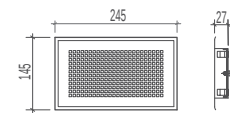
Wandanschlussdose
WAD 160
Artikel-Nr. 8158
Anschlussdose DN 160



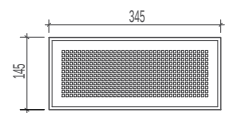
Ventilation grids with square perforation, to connection boxes type AK, AKS, ZAK, WAK and BAK, square perforation 5 x 5 mm, including set set
Color white: RAL 9016.



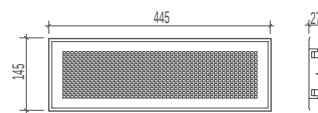
Ventilation grilles GE 200-100
Article no. 8183
200 x 100 mm,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



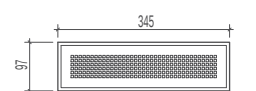
Ventilation grilles GE 300-100
Article no. 8184
300 x 100 mm,
VL = supply air 60 m³/h
VL = exhaust air 80 m³/h



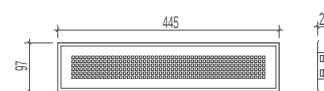
Ventilation grilles GE 400-100
Article no. 8179
400 x 100 mm,
VL = supply air 80 m³/h
VL = exhaust air 100 m³/h



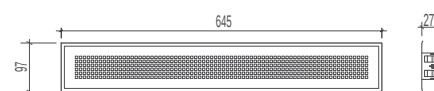
Ventilation grilles GE 300-50
Article no. 8180
300 x 50 mm,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



Ventilation grilles GE 400-50
Article no. 8181
400 x 50 mm,
VL = supply air 40 m³/h
VL = exhaust air 50 m³/h



Ventilation grilles GE 600-50
Article no. 8182
600 x 50 mm,
VL = supply air 60 m³/h
VL = exhaust air 80 m³/h

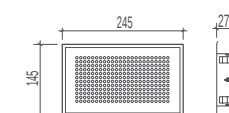


Ventilation grille type GR

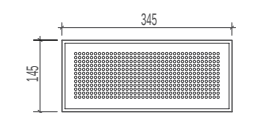
Ventilation grid with round perforation, to connection boxes type AK, AKS, ZAK, WAK and BAK Round perforation Ø 5 mm, including set set
Color white: RAL 9016.



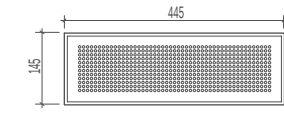
Ventilation grilles GR 200-100
Article no. 8188
200 x 100 mm,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



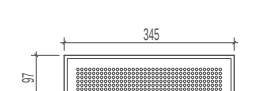
Ventilation grilles GR 300-100
Article no. 8178
300 x 100 mm,
VL = supply air 60 m³/h
VL = exhaust air 80 m³/h



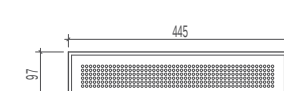
Ventilation grilles GR 400-100
Article no. 8189
400 x 100 mm,
VL = supply air 80 m³/h
VL = exhaust air 100 m³/h



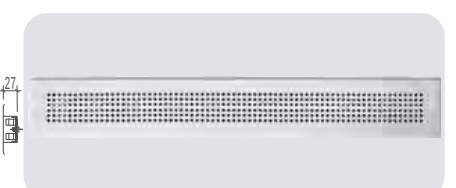
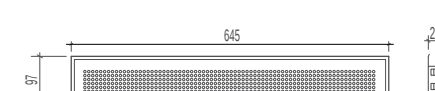
Ventilation grilles GR 300-50
Article no. 8185
300 x 50 mm,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



Ventilation grilles GR 400-50
Article no. 8186
400 x 50 mm,
VL = supply air 40 m³/h
VL = exhaust air 50 m³/h



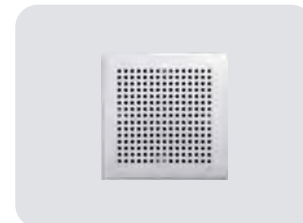
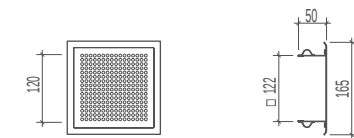
Ventilation grilles GR 600-50
Article no. 8187
600 x 50 mm,
VL = supply air 60 m³/h
VL = exhaust air 80 m³/h



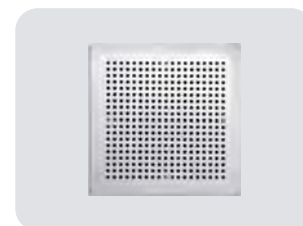
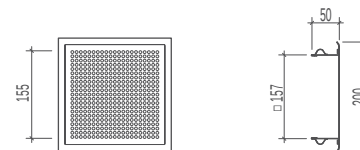
Ventilation grid with round and square perforation, to round and square connection sockets
With clamping springs, square perforation 5 x 5 mm, round perforation Ø 5 mm
Color: white, RAL 9016



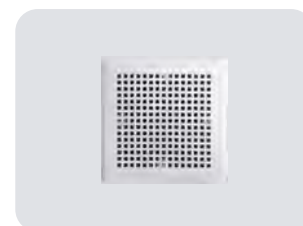
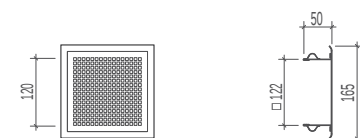
Ventilation grid square
GQK 125R, article no. 8280
Diffuser outlet, rectangular DN 125,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



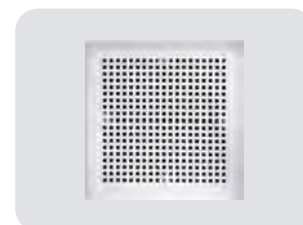
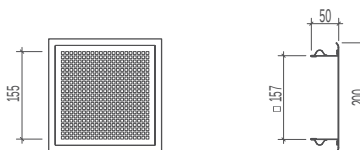
Ventilation grid square
GQK 160R, article no. 8281
Diffuse outlet square DN 160,
VL = supply air 40 m³/h
VL = exhaust air 50 m³/h



Ventilation grid square
GQK 125Q, article no. 8282
Diffuser outlet, rectangular DN 125,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h

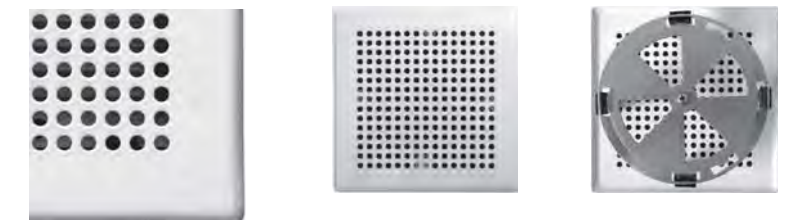


Ventilation grid square
GQK 160Q, article no. 8283
Diffuse outlet square DN 160,
VL = supply air 40 m³/h
VL = exhaust air 50 m³/h

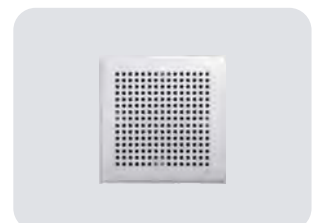
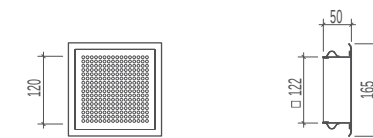


Ventilation grid type GQ

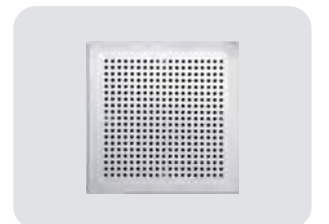
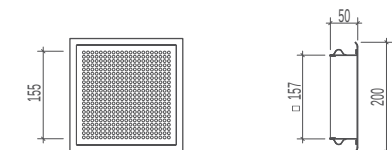
Ventilation grid with round and square perforation, to round and square connection sockets
With clamping springs, square perforation 5 x 5 mm, round perforation Ø 5 mm, including
quantity regulation
Color: white, RAL 9016



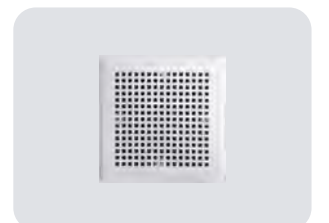
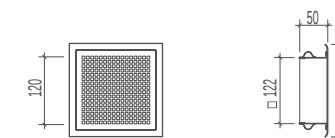
Ventilation grid square
GQ 125R, article no. 8190
Diffuser outlet, rectangular DN 125,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



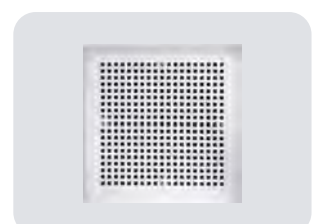
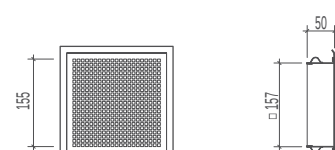
Ventilation grid square
GQ 160R, article no. 8191
Diffuse outlet square DN 160,
VL = supply air 40 m³/h
VL = exhaust air 50 m³/h



Ventilation grid square
GQ 125Q, article no. 8192
Diffuser outlet, rectangular DN 125,
VL = supply air 30 m³/h
VL = exhaust air 40 m³/h



Ventilation grid square
GQ 160Q, article no. 8193
Diffuse outlet square DN 160,
VL = supply air 40 m³/h
VL = exhaust air 50 m³/h

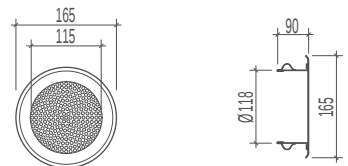


Ventilation grid with round perforation, round sockets, with clamping springs, round holes
 Ø 5 mm
 Color: white, RAL 9016

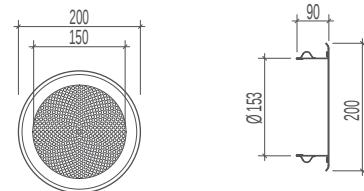
Ventilation grille round GRK 100
 Article no. 8260
 Outlet outlet DN 100,
 VL = supply air 20 m³/h
 VL = exhaust air 30 m³/h



Ventilation grid round GRK 125
 Article no. 8261
 Outlet outlet DN 125,
 VL = supply air 30 m³/h
 VL = exhaust air 40 m³/h

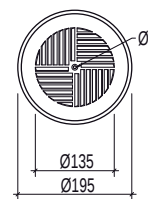


Ventilation grille round GRK 160
 Article no. 8262
 Outlet outlet DN 160,
 VL = supply air 40 m³/h
 VL = exhaust air 50 m³/h

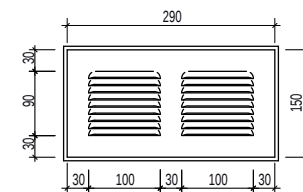


Ventilation grille

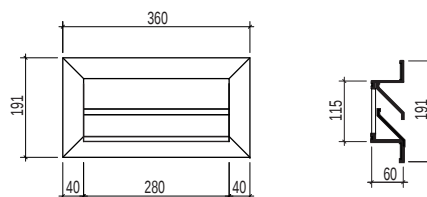
Displacement outlet QA
 Article no. 7030
 DN 160,
 white, RAL 9010
 for junction boxes



Gill grille KGE
 Article no. 8125
 290 x 150 mm,
 aluminum



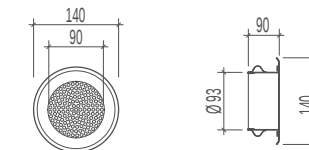
Weather protection grille WSG
 Article no. 8560
 280 x 115 mm,
 Anodized aluminum



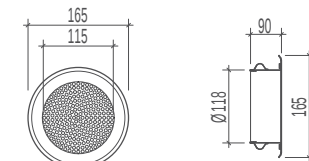
Ventilation grille type GR

Ventilation grid with round perforation, round sockets, with clamping springs, round holes
 Ø 5 mm Including quantity regulation
 Color: white, RAL 9016

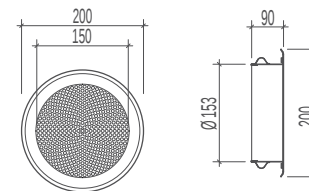
Ventilation grille round GR 100
 Article no. 8153
 Outlet outlet DN 100,
 VL = supply air 20 m³/h
 VL = exhaust air 30 m³/h



Ventilation grid round GR 125
 Article no. 8154
 Outlet outlet DN 125,
 VL = supply air 30 m³/h
 VL = exhaust air 40 m³/h



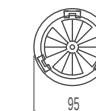
Ventilation grille round GR 160
 Article no. 8155
 Outlet outlet DN 160,
 VL = supply air 40 m³/h
 VL = exhaust air 50 m³/h



VENTILATION GRIDS QUANTITY REGULATION

Quantity control as retrofit kit for GRK and GQK ventilation grilles
 Material: sendzimir galvanized sheet metal

Regulation
 Article no. 8267
 DN 100



Volume regulation MG 125
 Article no. 8268
 DN 125



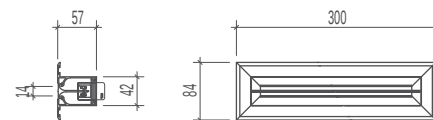
Flow regulation MG 160
 Article no. 8269
 DN 160



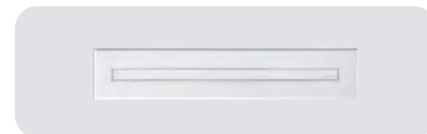
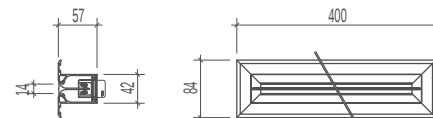
Slot outlet type LineaUno for connection boxes type AK, AKS, ZAK, WAK and BAK
Color / material: white, RAL 9016 or aluminum anodised



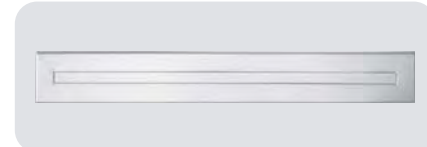
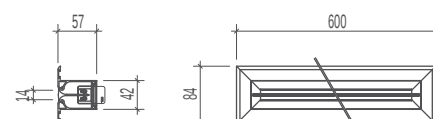
LineaUno LU 300
Article no. 8515
White, RAL 9016,
300 = 35 m³/h



LineaUno LU 400
Article no. 8510
White, RAL 9016,
400 = 45 m³/h



LineaUno LU 600
Article no. 8511
White, RAL 9016,
600 = 65 m³/h

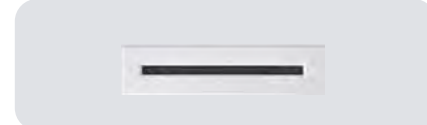
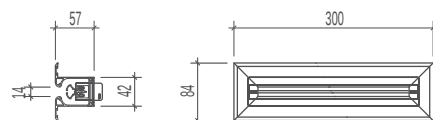


VENTILATION GRID TYPE LD

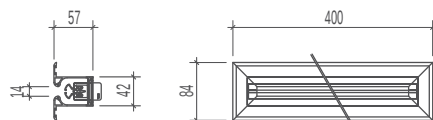
Slot outlet type LineaDuo for connecting boxes type AK, AKS, ZAK, WAK and BAK
Color / material: white, RAL 9016 or aluminum anodised



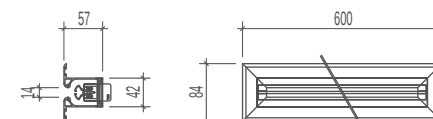
LineaDuo LD 300
Article no. 8505
White, RAL 9016,
300 = 35 m³/h



LineaDuo LD 400
Article no. 8500
White, RAL 9016,
400 = 45 m³/h



LineaDuo LD 600
Article no. 8501
White, RAL 9016,
600 = 65 m³/h



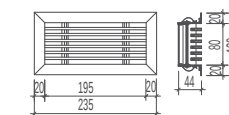
Ventilation grid type BG

Floor lattice to ground connection boxes, with clamping springs, flush surface and volume control

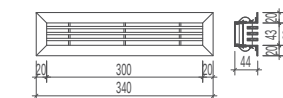
Color / Material: Aluminum anodised, other colors on request



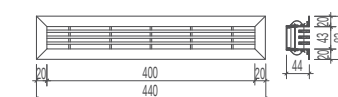
Floor grid BG 200-100
Article no. 8243
200 x 100 mm



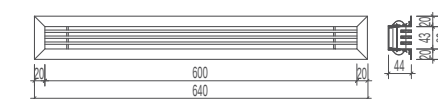
Floor grid BG 300-50
Article no. 8240
300 x 50 mm



Floor grid BG 400-50
Article no. 8241
400 x 50 mm



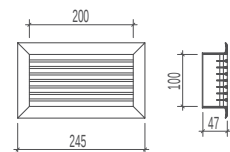
Floor lattice BG 600-50
Article no. 8242
600 x 50 mm



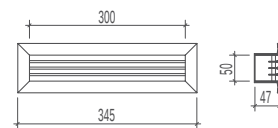
Linear lattice to connection boxes type AK and AKS, with fixed alum mounts, including quantity regulation
Color / Material: Aluminum anodised, other colors on request



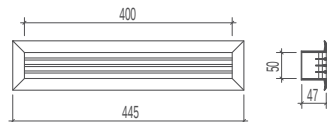
Linear litter LG 200-100
Article no. 8247
200 x 100 mm



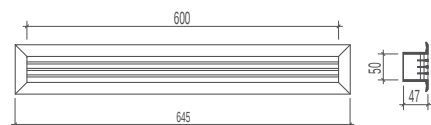
Linear grating LG 300-50
Article no. 8244
300 x 50 mm



Linear lattice LG 400-50
Article no. 8245
400 x 50 mm



Linear lattice LG 600-50
Article no. 8246
600 x 50 mm

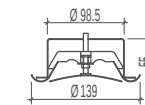


Ventilation grille type ZVV / AVV

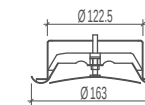
Inlet and exhaust air valves adjustable, for circular connection sockets, with clamping springs
Color: white, RAL 9003



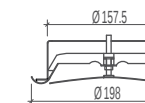
Supply air valve ZVV 100
Article no. 8250



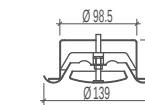
Supply air valve ZVV 125
Article no. 8251



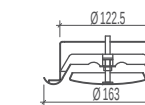
Supply air valve ZVV 160
Article no. 8252



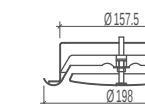
Exhaust valve AVV 100
Article no. 8255



Exhaust valve AVV 125
Article no. 8256



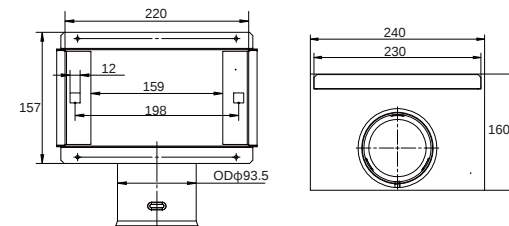
Exhaust valve AVV 160
Article no. 8257



Exhaust Box EB-S(1x90mm)



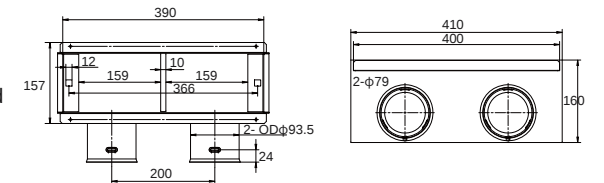
Max. 60 m³ / h
left / right version
with 2 connections (Ø75 / Ø90 / Ø110)
simple spring clip fastening system
Material: sheet steel, powder-coated
Size: 220mmx160mmx115mm



Exhaust Box EB-BS2(2x90mm)



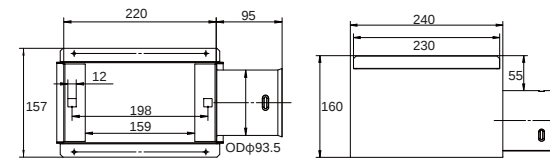
Max. 80 m³ / h
simple spring clip fastening system
Material: sheet steel, powder-coated
Size: 410mmx160mmx115mm



Exhaust Box EB-F(1x90mm)



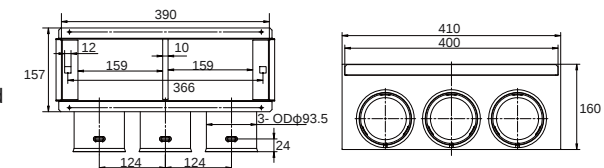
Max. 30 m³ / h
1 connection (Ø75 / Ø90 / Ø110)
simple spring clip fastening system
Material: sheet steel, powder-coated
Size: 220mmx160mmx115mm



Exhaust Box EB-BS3(1x90mm)



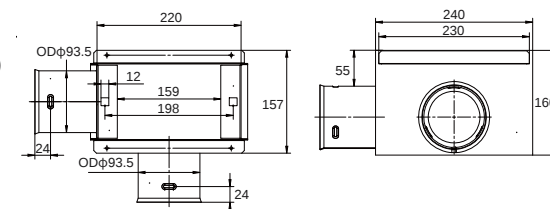
Max. 120 m³ / h
simple spring clip fastening system
Material: sheet steel, powder-coated
Size: 410mmx160mmx115mm



Exhaust Box EB-S2(2x90mm)



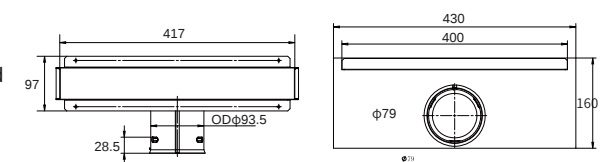
Max. 60 m³ / h
left / right version
with 2 connections (Ø75 / Ø90 / Ø110)
simple spring clip fastening system
Material: sheet steel, powder-coated
Size: 220mmx160mmx115mm



Outlet box PLD-T4 (1x90mm)



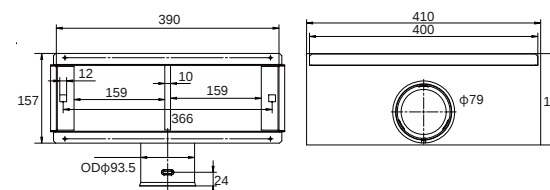
Max. 30 m³ / h
Material: sheet steel, powder-coated
Size: 623mmx55mmx170mm



Exhaust Box EB-BS1(1x90mm)



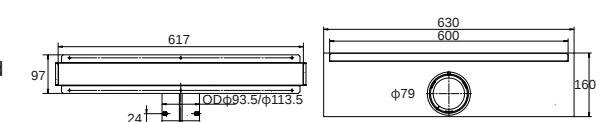
Max. 30 m³ / h
simple spring clip fastening system
Material: sheet steel, powder-coated
Size: 430mmx55mmx170mm



Outlet box PLD-T6 (1x90mm)



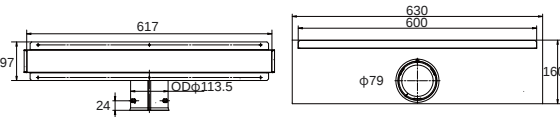
Max. 60 m³ / h
Material: sheet steel, powder-coated
Size: 623mmx55mmx170mm



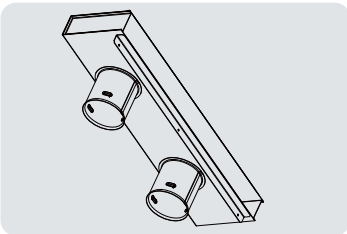
Outlet box PLD-T6(1x110mm)



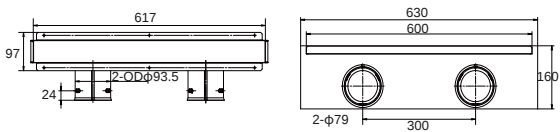
Max. 60 m3 / h
Material: sheet steel, powder-coated
Size:623mmx55mmx170mm



Outlet box PLD-T6(2x90mm)



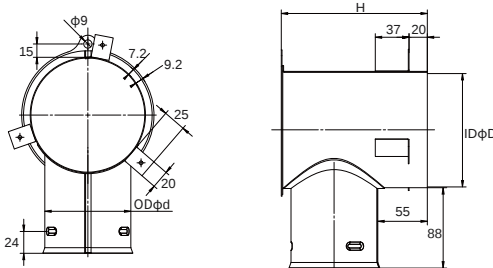
Max. 30 m3 / h
Material: sheet steel, powder-coated
Size:623mmx55mmx170mm



Exhaust box TV(1x90mm/110mm)



1 connection (Ø75 / Ø90 / Ø110)
Ø100 / Ø125 / Ø150 / Ø160
Height 160mm
with mounting bracket for formwork
Including protective cover made of galvanized sheet metal
Material: sheet steel, powder-coated

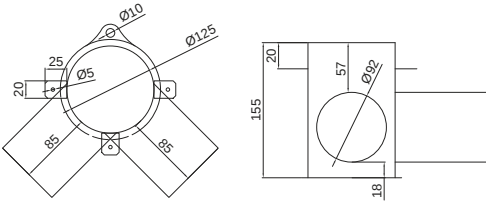


Model	IDØD(mm)	ODød(mm)	H(mm)
TV 100	100-100.5	93.5	160
TV 125	125-125.5	93.5	160
TV 150	150-150.5	93.5	160
TV 160	160-160.5	93.5	160
TV 160(110)	160-160.5	113.5	180

Outlet box TV - S2(2x90mm)



with 2 connections (Ø75 / Ø90 / Ø110)
Ø125 / Ø150 / Ø160
Height 160mm
with mounting bracket for formwork
Including protective cover made of galvanized sheet metal
Material: sheet steel, powder-coated

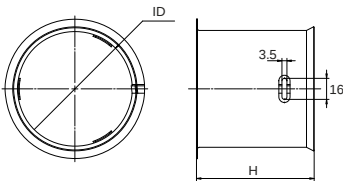


Model	Einlegekiste TV
TV 125-S2	Ø125 / S2(2x90mm)
TV 150-S2	Ø150 / S2(2x90mm)
TV 160-S2	Ø160 / S2(2x90mm)

Connection Tube



Model: CT
Size: CT075 CT090 CT110
Material: galvanized sheet

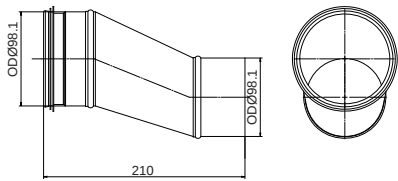


Size	ID	H
CT075	Ø77	95
CT090	Ø93.5	95
CT110	Ø113.5	95

Special Reduction



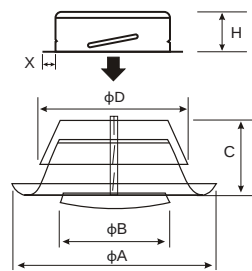
Model: Z080SR
Size: Z080SR100-080
Material: galvanized sheet



Metal Exhaust Air Valve



EAV

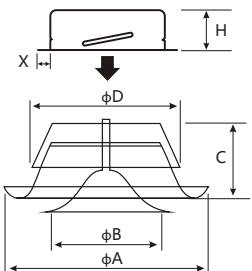


- Steel air exhaust valves with adjustable core and 50mm mounting frame
- EAV: Shooting valves in steel with collar of fixing.
 - Material: All steel construction
 - Colour : RAL 9016, RAL 9010
 - Composition: Pressed steel grill with adjustable core, supplied with galvanized steel mounting frame
 - Mounting: Fixing in the mounting frame

Type	φA(mm)	φB(mm)	C(mm)	φD(mm)	H(mm)	X(mm)
EAV80	115	62	42	78	48	14
EAV100	138	75	40	98	48	14
EAV125	164	100	46	123	48	14
EAV150	202	120	50	148	48	14
EAV160	211	130	54	158	48	14
EAV200	248	158	63	198	48	14
EAV250	295	210	63	248	48	14



SAV

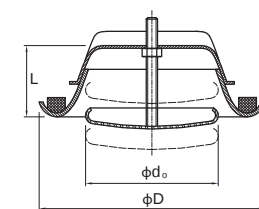


- Steel air exhaust valves with adjustable core and 50mm mounting frame
- SAV: Delivery valves in steel with collar of fixing.
 - Material: All steel construction
 - Colour : RAL 9016, RAL 9010
 - Composition: Pressed steel grill with adjustable core, supplied with galvanized steel mounting frame
 - Mounting: Fixing in the mounting frame

Type	φA(mm)	φB(mm)	C(mm)	φD(mm)	H(mm)	X(mm)
SAV80	115	76	42	78	48	14
SAV100	138	92	40	98	48	14
SAV125	164	111	46	123	48	14
SAV150	202	135	50	148	48	14
SAV160	211	145	54	158	48	14
SAV200	248	195	63	198	48	14
SAV250	295	235	75	248	48	14



EAVW



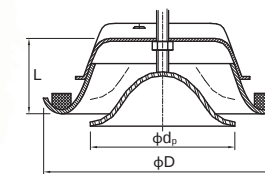
- 3 springs without frame
- Steel air exhaust valves with adjustable core and 50mm mounting frame
- Application: Wall or ceiling mounted valves EAV for air exhaust inside buildings.
- Material: All steel construction
- Colour : RAL 9016, RAL 9010
- Composition: Pressed steel grill with adjustable core
- Mounting: Fixing in the mounting frame

EAVW

Type	φD(mm)	φDφ(mm)	L(mm)
EAVW80	115	62	42
EAVW100	138	75	40
EAVW125	164	100	46
EAVW150	202	120	50
EAVW160	211	130	54
EAVW200	248	158	63
EAVW250	295	210	63



SAVW

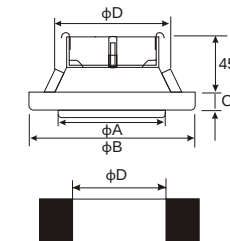


- 3 springs without frame
- Steel air supply valves with adjustable core and 50mm mounting frame
- Application: Wall or ceiling mounted valves SAV for air supply inside buildings.
- Material: All steel construction
- Colour : RAL 9016, RAL 9010
- Composition: Pressed steel grill with adjustable core
- Mounting: Fixing in the mounting frame

Type	φD(mm)	φDφ(mm)	L(mm)
SAVW80	115	76	42
SAVW100	138	92	40
SAVW125	164	111	46
SAVW150	202	135	50
SAVW160	211	145	54
SAVW200	248	195	63
SAVW250	295	235	75



EAVC

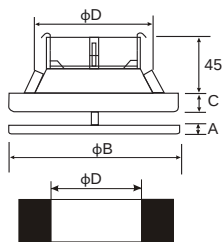


- Steel air exhaust valves with adjustable core
- Application: Wall or ceiling mounted valves EAVC for air supply inside buildings.
- Material: All steel construction
- Colour : RAL 9016, RAL 9010
- Composition: Pressed steel body with adjustable core
- Mounting: Fixing by clips in the mounting frame, can also be used for direct mounting into round duct (with or without mounting frame)

Type	φA(mm)	φB(mm)	C(mm)	φD(mm)
EAVC80	62	110	15	78
EAVC100	75	134	15	98
EAVC125	100	160	15	123
EAVC160	140	193	15	158
EAVC200	175	223	15	198



SAVC

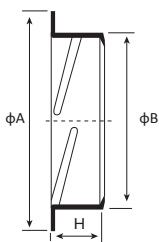


- Steel air supply valves with adjustable core and 50mm mounting frame
- Application: Wall or ceiling mounted valves SAVC for air supply inside buildings.
- Material: All steel construction
- Colour : RAL 9016, RAL 9010
- Composition:Pressed steel grill with adjustable core
- Mounting: Fixing in the mounting frame, can also be used for direct mounting into round duct (with or without mounting frame)

Type	A(mm)	ϕB (mm)	C(mm)	ϕD (mm)
SAVC80	10	110	15	78
SAVC100	10	134	15	98
SAVC125	10	160	15	123
SAVC160	10	193	15	158
SAVC200	10	223	15	198



Mounting Frames MAV



The control valve is equipped with a mounting frame with a bayonet socket. The frame is mounted directly in the pipe as well as in all types of flexible pipes.
MAV standard diameters:
80, 100, 125, 150, 160, 200, 250 mm.



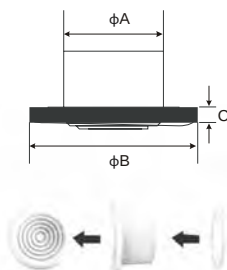
MAVC

Type	ϕA (mm)	ϕB (mm)	H(mm)	
			MAV	MAVC
80	105	79	50	30
100	125	98	50	30
125	150	123	50	30
150	175	148	50	30
160	186	158	50	30
200	226	198	50	30
250	280	248	50	30

Plastic Air valve



PAV-A

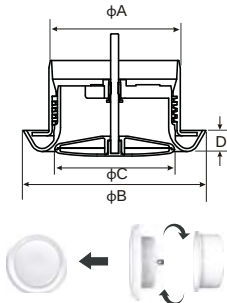


- Plastic air exhaust or supply grille with fix disk deflectors for domestic and industrial ventilation.
- Application: For supply ventilation, air conditioning and air heating systems
- Material: Polypropylene / ABS
- Colour : White
- Composition:Body grille made out of polypropylene / ABS. Special aerodynamic disk valve design ensures uniform air distribution. The internal part has a sealing ring for more tight fit.Anti-mosquito screen.
- Mounting: Designed for wall mounting or installation into false ceiling.
- Easy mounting with a mounting flange and a lock ring.

Type	ϕA (mm)	ϕB (mm)	C(mm)
PAV-A100	98	140	10
PAV-A125	123	165	10



PAV-B

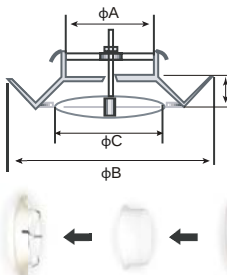


- Plastic air valves
- Application: For air supply and exhaust in ventilation systems
- Material: Polypropylene
- Colour : White
- Composition: Polypropylene body with adjustable core and thread
- Mounting: To be mounted into round duct by mounting frame

Type	ϕA (mm)	ϕB (mm)	ϕC (mm)	D(mm)
PAV-B100	97	138	90	15
PAV-B125	122	168	115	15
PAV-B160	157	215	130	15
PAV-B200	195	255	189	15
PAV-B250	245	305	240	15



PAV-C

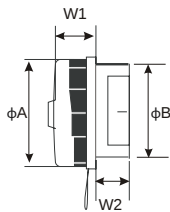


- Plastic air valves
- Application: For air supply and exhaust in ventilation systems
- Material: polypropylene
- Colour : White
- Less noise with spring fastening
- Composition: Polypropylene body with adjustable core and thread
- Mounting: To be mounted into round duct by thread

Type	ϕA (mm)	ϕB (mm)	ϕC (mm)	D(mm)
PAV-C100	98	148	88	20
PAV-C125	123	167	108	20
PAV-C150	148	184	129	20
PAV-C200	198	239	177	20



PAV-D

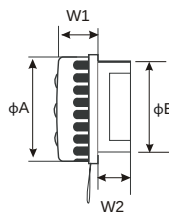


- Wall mounting
- Thermally insulated disc
- Efficient sound attenuator (size $\Phi 125$)
- Washable filter
- Smooth air distribution
- The plugs in the regulation unit can be removed to prevent the valve from closing completely
- Available sizes $\Phi 125$
- Tube length is available upon request

Type	ϕA (mm)	ϕB (mm)	W1(mm)	W2(mm)
PAV-D125	168	125	60	57



PAV-E

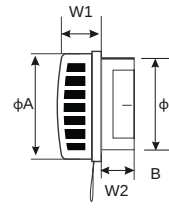


- Wall mounting
- Thermally insulated disc
- Efficient sound attenuator (size $\Phi 125$)
- Washable filter
- Smooth air distribution
- The plugs in the regulation unit can be removed to prevent the valve from closing completely
- Available sizes $\Phi 125$
- Tube length is available upon request

Type	ϕA (mm)	ϕB (mm)	W1(mm)	W2(mm)
PAV-E125	168	125	60	57



PAV-F

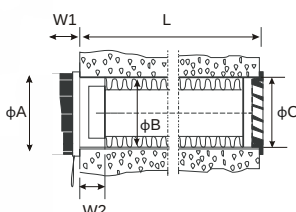


- Wall mounting
- Thermally insulated disc
- Efficient sound attenuator (size $\Phi 125$)
- Washable filter
- Smooth air distribution
- The plugs in the regulation unit can be removed to prevent the valve from closing completely
- Available sizes $\Phi 125$
- Tube length is available upon request

Type	ϕA (mm)	ϕB (mm)	W1(mm)	W2(mm)
PAV-F125	168	125	60	57



PAV-DS

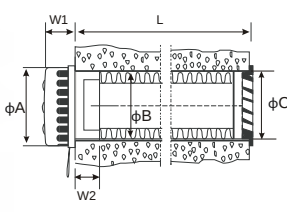


- Wall mounting
- Thermally insulated disc
- Efficient sound attenuator (size $\Phi 125$)
- Washable filter
- Smooth air distribution
- The plugs in the regulation unit can be removed to prevent the valve from closing completely
- Due to its sturdy construction, the inlet duct can be put in place when the wall unit is cast
- Available sizes $\Phi 125$
- Tube length is available upon request
- Option: full set with tube, insulation and aluminium valve

Type	ϕA (mm)	ϕB (mm)	ϕC (mm)	W1(mm)	W2(mm)	L(mm)
PAV-DS125	168	125	133	60	57	Length is available upon request



PAV-ES

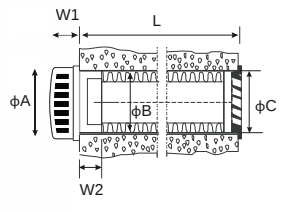


- Wall mounting
- Thermally insulated disc
- Efficient sound attenuator (size $\Phi 125$)
- Washable filter
- Smooth air distribution
- The plugs in the regulation unit can be removed to prevent the valve from closing completely
- Due to its sturdy construction, the inlet duct can be put in place when the wall unit is cast
- Available sizes $\Phi 125$
- Tube length is available upon request
- Option: full set with tube, insulation and aluminium valve

Type	ϕA (mm)	ϕB (mm)	ϕC (mm)	W1(mm)	W2(mm)	L(mm)
PAV-ES125	168	125	133	60	57	Length is available upon request



PAV-FS

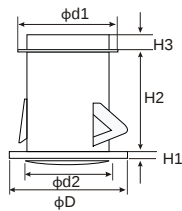


- Wall mounting
- Thermally insulated disc
- Efficient sound attenuator (size $\Phi 125$)
- Washable filter
- Smooth air distribution
- The plugs in the regulation unit can be removed to prevent the valve from closing completely
- Due to its sturdy construction, the inlet duct can be put in place when the wall unit is cast
- Available sizes $\Phi 125$
- Tube length is available upon request
- Option: full set with tube, insulation and aluminium valve

Type	ϕA (mm)	ϕB (mm)	ϕC (mm)	W1(mm)	W2(mm)	L(mm)
PAV-FS125	168	125	133	60	57	Length is available upon request



PAV-G

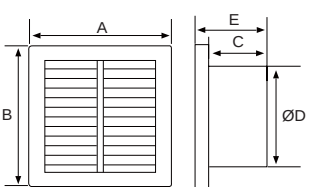


- Long neck design with three legs for easy installation
- Size available: 80, 125mm

Type	ϕD(mm)	ϕd1(mm)	ϕd2(mm)	H1(mm)	H2(mm)	H3(mm)
PAV-G80	114	75	57	6	84	16
PAV-G125	170	120	93	11	84	16



PAV-H

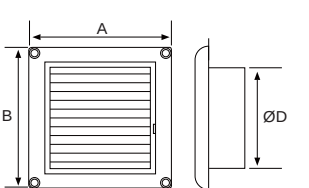


- Plastic Fixed Louvre Grille
- These outlets are injection moulded from white ABS plastic and easy to installed via four screw holes located behind the removable blades.
- Option of adding a plastic fly mesh.It is a good way to prevent the gnat go into the duct from this grille.
- There are 4 size of this products,The detail are be showed at left drawing.

Model	A	B	C	D	E
PAV-H100	125	125	54	99	71
PAV-H125	150	150	54	124	71
PAV-H150	175	175	54	148	71
PAV-H200	227	227	54	197	71



PAV-I

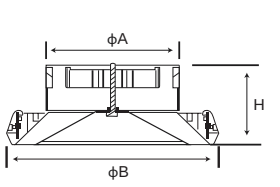


- Plastic Fixed Louvre Grille
- These outlets are injection moulded from white ABS plastic and easy to installed via four screw holes located behind the removable blades.
- Option of adding a plastic fly mesh.It is a good way to prevent the gnat go into the duct from this grille.

Model	A	B	D
PAV-I100	150	150	100

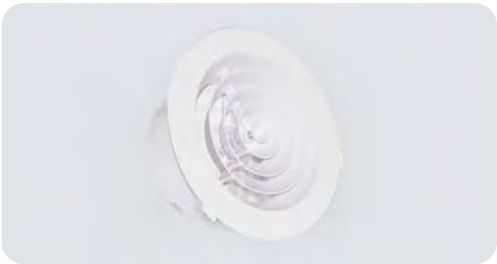


CD-RD

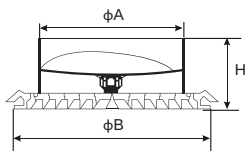


- The CD-RD Round Ceiling Diffuser is anufactured from high impact ABS for long term strength and rigidity.It is fully adjusfable by rotating the centre core from total shut-off to fully open, Available in 4 sizes, it allows for smooth quiet air flow that flows out in a concentric pattern across the ceiling,to provide good coverage in both cooling and most heating applications.
- Flush mounting
 - Easy clean non reflective white surface Fully adjustable flow from complete shut off to fully open
 - Constructed from ABS for longterm strength and stability

Type	ϕA(mm)	ϕB(mm)	H(mm)
CD-RD150	145	260	120
CD-RD200	200	320	120
CD-RD250	250	390	120
CD-RD300	295	440	120



CD-RE



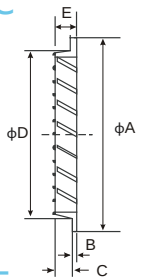
- The CD-RE is designed to jet the airflow right down to the floor which aids in mixing and circulating the air. It is particularly efficient for rooms with higher ceilings and stairwells where a stronger more direct flow is required to the floor level and mix properly.
- Flush mounting
 - Easy clean non reflective white surface with a butterfly damper
 - Constructed from ABS for long term strength and stability

Type	ϕA(mm)	ϕB(mm)	H(mm)
CD-RE150	145	235	121
CD-RE200	195	285	121
CD-RE250	245	335	121
CD-RE300	295	385	121

Aluminium Vlave



ALAV-C

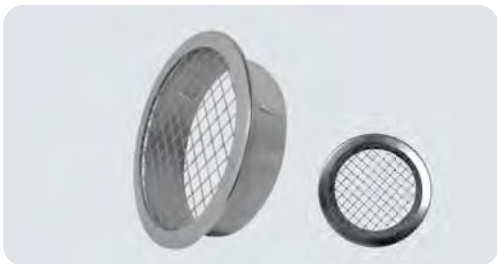


- Circular louvres
- Application: For air supply and exhaust in ventilation systems
- Material: Moulded aluminium and Inox mesh
- Colour : Aluminium natural finish
- Composition: Moulded aluminium body with enclined aluminium blades. Equipped with welded insect screen. Can be removed in mechanical ventilation, Size from ϕ80 to ϕ500, ϕ315 and ϕ500 different look
- Mounting: To be fitted in ducts or round openings in external wall

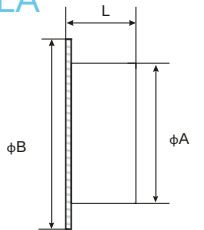


ALAV-F

Type	ϕA(mm)	B(mm)	C(mm)	ϕD(mm)	E(mm)
ALAV80	97	4.2	10.8	80	15
ALAV100	125	2.2	16.3	99	19
ALAV125	151	2.2	16.3	99	18.5
ALAV150	172	3	15	148	17.5
ALAV160	182	2.7	14.8	158	17.5
ALAV200	223	3.4	16.5	190	19.5
ALAV250	274	3.8	15.1	248	19
ALAV315	347	6.3	13.5	315	20
ALAV400	438	5.6	34.8	399	40.5
ALAV500	543	5.5	33.5	497	39



SS-ELA

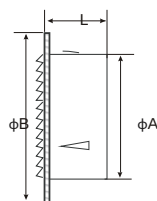


- Circular louvres
- Application: For air supply and exhaust in ventilation systems
- Material:Steel
- Colour : Natural finish
- Composition: Pressed body made of aluminium fich duct connector with clips. Insectscreen fitted behind the face of the louvre
- Mounting: To be fitted in ducts or round openings in external wall

Type	ϕA(mm)	ϕB(mm)	L(mm)
SS-ELA80	78	106	47
SS-ELA100	98	126	47
SS-ELA125	123	151	47
SS-ELA150	148	176	47
SS-ELA160	157	187	47
SS-ELA200	197	226	47
SS-ELA250	248	276	57
SS-ELA315	313	343	57



SS-ELAS

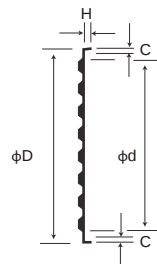


- Circular louvers
- Application: For air supply and exhaust in ventilation systems
- Material: Aluminium
- Colour : Aluminium natural finish
- Composition: Pressed body made of aluminium with clips. Insectscreen fitted behind the face of the louver.
- Mounting: To be fitted in ducts or round openings in external wall

Type	φA(mm)	φB(mm)	L(mm)
SS-ELAS80	78	106	47
SS-ELAS100	98	126	47
SS-ELAS125	123	151	47
SS-ELAS150	148	176	47
SS-ELAS160	157	187	47
SS-ELAS200	197	226	47
SS-ELAS250	248	276	57
SS-ELAS315	313	343	57



SS-ELD

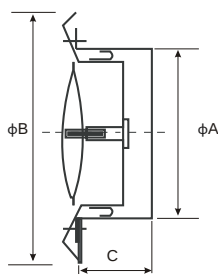


- SS-ELD is used as covering grilles in air supply and exhaust openings.
- SS-ELD is deep stamping of aluminium sheet.
- Equipped with insect screen.
- Fitted with screws.

Type	D(mm)	L(mm)
SS-ELD80	77	45
SS-ELD100	95	53
SS-ELD125	120	3
SS-ELD150	145	60
SS-ELD160	155	60
SS-ELD200	195	60
SS-ELD250	245	80



SS-VS

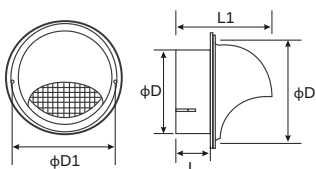


- Air supply and exhaust valves
- Application: For air supply and exhaust in ventilation systems
- Material: Stainless steel
- Colour : brush finish
- Composition: Body, innercore and mounting frame made of stainless steel 304
- Mounting: To be mounted with clips inside mounting frame or straight into round ducts without the mounting frame. Central core to be secured with counternut.
- Accessories: Standard mounting frame (included)

Type	φA(mm)	φB(mm)	C(mm)
SS-VS100	96	140	51
SS-VS125	120	175	54
SS-VS150	145	220	62
SS-VS160	155	220	63
SS-VS200	195	295	73



SS-SV

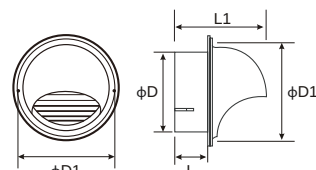


- Air supply and exhaust grilles
- Application: For air supply and exhaust in ventilation systems
- Material: Stainless steel
- Colour : Brush finish
- Composition: Housing and bird mesh made of stainless steel. With duct connection flange. Mounting screws and drip nose included
- Mounting: Fitted into round ducts or round wall openings

Type	φD1(mm)	φD(mm)	L(mm)	L1(mm)
SS-SV100	150	96	51	120
SS-SV125	187	120	54	139
SS-SV150	208	145	62	158
SS-SV160	208	155	63	158
SS-SV200	268	195	73	208



SS-SVN

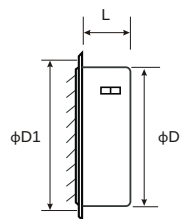


- Louvres with insectscreen and louver
- Application: For air intake or exhaust in ventilation systems
- Material: Stainless steel
- Colour: Brush finish
- Composition: Housing and inclined blades made of stainless steel. Insectscreen fitted behind the louver. Weather resistant blades under a 45° angle. With duct connection flange. Mounting screws and drip nose included.
- Mounting: Fitted into round ducts or round wall openings

Type	φD1(mm)	φD(mm)	L(mm)	L1(mm)
SS-SVN100	150	96	51	120
SS-SVN125	187	120	54	139
SS-SVN150	208	145	62	158
SS-SVN160	208	155	63	158
SS-SVN200	268	195	73	208



SS-SP



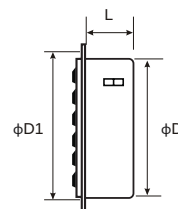
- Made of stainless steel sheet 30418/10, polishing surface finish
- Application: to raised shutter with heavy out flow
- Can be applied outside as well as inside
- Accessories: screws

Type	φD1(mm)	φD(mm)	L(mm)
SS-SP100	150	96	51
SS-SP125	187	120	54
SS-SP150	208	145	62
SS-SP160	208	155	63
SS-SP200	268	195	73

External Vent Louver and Diffuser

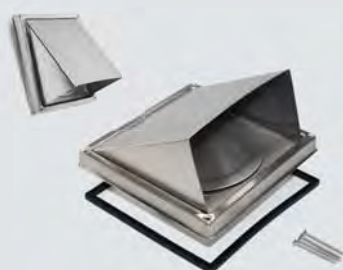


SS-SP-2

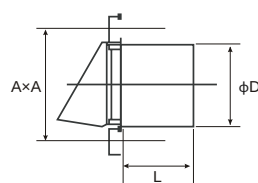


- SS-SP-2 is used as covering grilles in air supply and exhaust openings.
- SS-SP-2 is deep stamping of aluminium sheet
- Equipped with insect screen
- * Fitted with screws

Type	φD1(mm)	φD(mm)	L(mm)
SS-SP2-100	145	96	51
SS-SP2-125	180	120	54

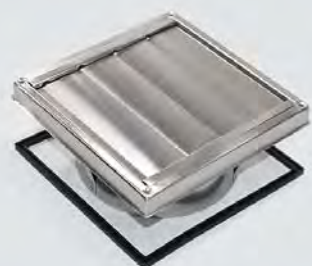


SS-SU

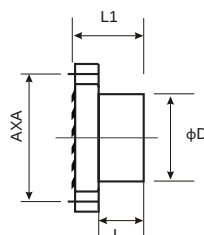


- The SS-SU series have large opening to eliminate clogging and easy to install
- Application: design for exterior application, incorporated with stainless steel. Offer anti draught cowl attachment for extra draught resistance and resist water from entering stove pipe.
- Material: stainless steel 30418/10 finish rushed
- Accessories: screws/ sealing rubber

Type	AxA(mm)	φD(mm)	L(mm)	Air Flow(cm³)
SS-SU100	160	96	51	51
SS-SU125	185	120	54	54
SS-SU150	185	145	62	62



SS-SM

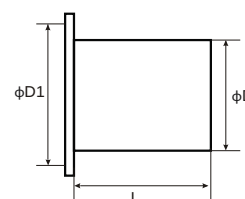


- The SS-SM series offer deflection shutter type help control back-drafts and resist water from entering stove pipe
- Material: Stainless steel 30418/10 finish brushed
- Accessories: screws / sealing rubber

Type	AxA(mm)	φD(mm)	L(mm)	L1(mm)	Air Flow(cm³)
SS-SM100	160	96	51	68	71
SS-SM125	185	120	54	73	112
SS-SM150	185	145	62	81	164



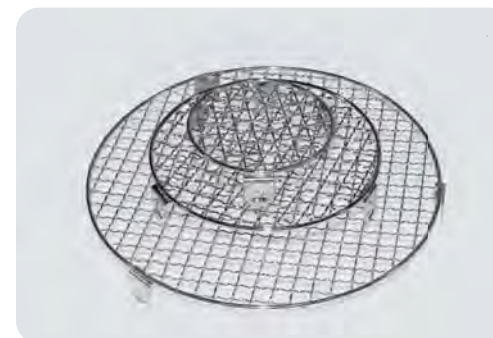
SS-LM



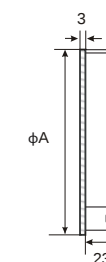
- Insect screen is optional. The vent with insect screen is NOT applicable for dryer.
- Application: To prevent debris from entering the vent pipe.
- The aluminum construction and lacquered finish of this classic.
- Material: Cast aluminium with insect screen, fixing clips, natural free air circulation
- Classic styling

Type	φD(mm)	φD1(mm)	L1(mm)	Air Flow(cm³)
SS-LM100	95	144	52	45
SS-LM125	120	182	52	67
SS-LM150	145	182	62	115

2-011



SS-EBS

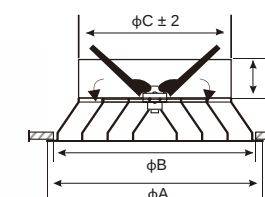


- Circular louvres
- Application: For air supply and exhaust in ventilation systems
- Material: Steel
- Colour : Natural finish
- Composition: Pressed body made of aluminium fish duct connector with clips. Insectscreen fitted behind the face of the louver
- Mounting: To be fitted in ducts or round openings in external wall
- SS-EBS-V : External vent louver Vertical
- SS-EBS-H : External vent louver Horizontal

Type	A(mm)	Type	A(mm)	Type	A(mm)	Type	A(mm)	Type	A(mm)	Type	A(mm)
SS-EBS80	80	SS-EBS160	160	SS-EBS315	315	SS-EBS450	450	SS-EBS630	630	SS-EBS1000	1000
SS-EBS100	100	SS-EBS200	200	SS-EBS355	355	SS-EBS500	500	SS-EBS710	710		
SS-EBS125	125	SS-EBS250	250	SS-EBS400	400	SS-EBS560	560	SS-EBS800	800		



CD-R



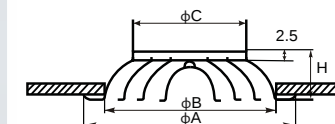
- Application: For air supply and exhaust of the hot or cold air
- Material: All aluminium construction
- Colour: Powder-coated or anodized finish, standard colour RAL9010, 9016
- Construction: Assembled with integral butterfly volume damper made of plastic.

The rotatable inner core offers free access to the integral butterfly plastic volume damper

Type	φA(mm)	φB(mm)	φC(mm)	D(mm)
CD-R150	260	210	150	50
CD-R200	310	260	200	50
CD-R250	360	310	250	50
CD-R300	410	360	300	50
CD-R350	460	410	350	50



CD-RH



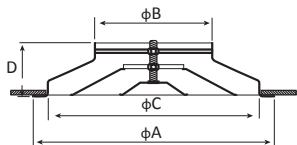
- Materials: Aluminium spinnings frame & blades.
- Core: Removable
- Color: Powder-coated or anodized finish, standard colour RAL9010, 9016

Type	φA(mm)	φB(mm)	φC(mm)	H(mm)
CD-RH80	230	165	78	65
CD-RH100	250	180	98	65
CD-RH150	300	230	148	65
CD-RH200	350	280	198	65
CD-RH250	400	335	248	65
CD-RH300	450	380	298	65
CD-RH350	500	425	348	65
CD-RH400	550	495	398	65
CD-RH450	600	535	448	65
CD-RH500	650	590	498	55
CD-RH550	800	690	448	135
CD-RH550	1000	580	448	180

2-012



CD-RW



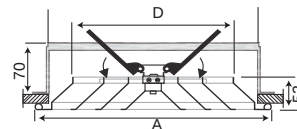
- Application: For air supply and exhaust of the hot or cold air
- Material: All aluminium construction
- Colour: Powder-coated or anodized finish, standard colour RAL9010, 9016
- Construction: Assembled with integral butterfly volume damper made of plastic.

The rotatable inner core offers free access to the integral butterfly plastic volume damper

Type	φA(mm)	φB(mm)	φC(mm)	D(mm)
CD-RW160	365	157	295	88
CD-RW200	400	198	330	92
CD-RW250	515	250	445	120



CD-RA

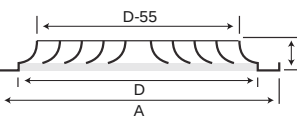


- Supply or exhaust round ceiling diffusers with fully adjustable cores to provide horizontal or vertical air pattern.
- Removable inner cores permit easy installation and access to duct.
- Sponge gasket added to prevent streaking.
- Construction: Aluminium.
- Standard finish: White, painted under electrostatic polyester powder polyester powder is used to enhance the appearance of the units.
- Application recommendation: Heating, Cooling or Ventilating with effect. For ceiling or exposed duct installation.
- Damper(optional) for volume control in round neck diffusers is available.

Type	φA(mm)	D(mm)
CD-RA150	257	148
CD-RA200	309	203
CD-RA250	362	249
CD-RA300	415	298
CD-RA350	459	348



CD-RB

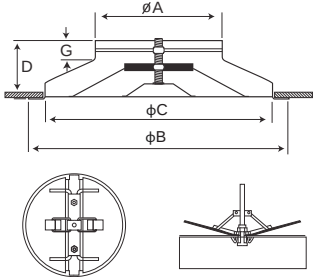


- The round diffusers with fixed cores(CD-RB) are the most economic solution to uniformly diffuser air from ceilings in areas with heights lower than 3.5 meters.
- Construction in stee with an electrostatic, white color RAL 9010.
- Fixing by screws using three holes supplied on

Type	φA(mm)	D(mm)
CD-RB150	244	192
CD-RB200	300	248
CD-RB250	356	304
CD-RB300	412	360
CD-RB350	468	416



CD-RD

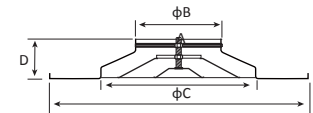


- Used for supply and exhaust of the hot or cold air.
- All aluminium construction.
- Powder-coated or anodized finish, standard colour RAL9010,9016
- Assembled with integral butterfly volume damper made of plastic.
- The rotatable inner core offers free access to the integral butterfly plastic volume damper.

Type	φA(mm)	φB(mm)	φC(mm)	D(mm)	G(mm)
CD-RD100	98	235	195	75	30
CD-RD150	148	320	280	105	45
CD-RD160	158	320	280	105	45
CD-RD200	198	426	370	118	45
CD-RD250	248	530	460	130	48
CD-RD300	298	644	560	146	45
CD-RD315	313	640	560	146	48
CD-RD350	348	730	640	185	65



CD-RS



- Application: For air supply and exhaust of the hot or cold air
- Material: All aluminium construction
- Colour: Powder-coated or anodized finish, standard colour RAL9010, 9016
- Construction: Assembled with integral butterfly volume damper made of plastic.
- The rotatable inner core offers free access to the integral butterfly plastic volume damper

Type	A-A(mm)	φB(mm)	φC(mm)	D(mm)
CD-RS160	595x595	157	295	88
CD-RS200	595x595	198	330	92
CD-RS250	595x595	250	445	120

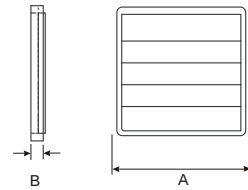


CD-RT

Type	Neck(mm)	Size(INCH)	Face(mm)	Size(INCH)
CD-RT15	150DIA	6"	230DIA	9.2"
CD-RT20	200DIA	8"	280DIA	11.2"
CD-RT25	250DIA	10"	330DIA	13.2"
CD-RT30	300DIA	12"	380DIA	15.2"
CD-RT35	350DIA	14"	430DIA	17.2"
CD-RT40	400DIA	16"	480DIA	19.2"



SMS-A

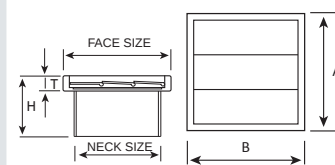


- Application: For air exhaust in any type of installation.
- The blades will open when the shutter is exposed to overpressure. Pressure of 20 Pa for air speed of 2m/s, 25 Pa for air speed of 3m/s, and 30 Pa for air speed of 4m/s
- Material: ABS
- Composition: Solid frame made of ABS, finished grey, RAL 7015 Grey PVC blades

Type	A(mm)	B(mm)
SMS-A200	242	20
SMS-A250	294	25
SMS-A315	357	25
SMS-A355	405	25

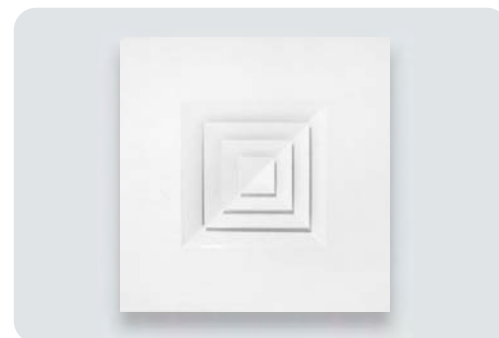


SMS-B

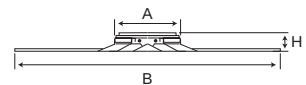


- Available in four sizes: 100mm, 125mm, 150mm, 200mm
- This diffuser is injection molded from white ABS plastic (stainless steel mesh is optional.)
- Lightweight and low cost
- Easy to install and maintenance via four screw holes located behind the removable face
- Scratch resistant surface can be used effectively in heating or cooling applications
- Tapered neck mounts directly to ductwork
- Packed with wall plugs and Fly mesh for option

Type	A(mm)	B(mm)	T(mm)	H(mm)
SMS-B100	125	125	17	71
SMS-B125	150	150	17	71
SMS-B150	175	175	17	71
SMS-B200	225	225	17	71



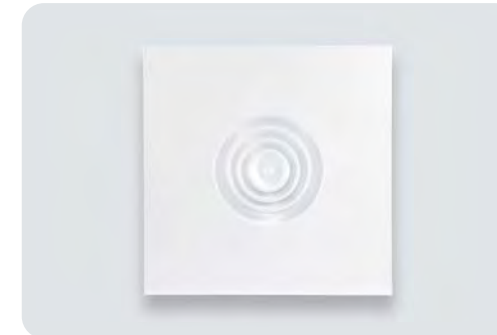
CD - SP1



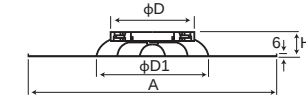
Plaque ceiling diffuser is for ceiling installation and for air intake and delivery. The frame is steel and the core is aluminum.

- Materials: Aluminium and steel combination
- Color: Standard-RAL 9010,Ral 9016
- Opposite Blade Damper Optional

Type	A-A(mm)	B-B(mm)	H(mm)
CD-SP1150x150	145x145	595x595	51
CD-SP1225x225	220x220	595x595	51
CD-SP1300x300	295x295	595x595	51
CD-SP1375x375	370x370	595x595	51



CD - SP2



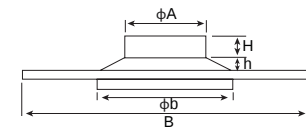
Plaque ceiling diffuser is for ceiling installation and for air intake and delivery. The frame is steel and the core is aluminum.

- Materials: Aluminium and steel combination
- Color: Standard-RAL 9010,Ral 9016
- Opposite Blade Damper Optional

Type	ϕD (mm)	$\phi D1$ (mm)	A-A(mm)	H(mm)
CD-SP2150	145	225	300x448	65
CD-SP2200	198	280	448x595	65
CD-SP2250	248	335	448x595	65
CD-SP2300	298	380	448x595	65



CD-SPS



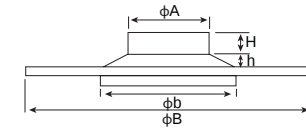
Air valve made of punched steel with adjustable cone Mounting clips for easy mounting in plenums, Square steel air valves for air discharge, consisting of a square valve body with round spares and a central cone with galvanized steel screw spindle and lock nut.

The flow setting is done by turning the central cone, which can be fixed after setting. air-conditioning diffusers for drop-in suspended ceilings found in offices, hotels, shopping centres, banks and residential sectors.

Type	ϕA (mm)	B-B(mm)	ϕb (mm)	H(mm)	h(mm)
CD-SPS150	150	595	345	80	55
CD-SPS175	175	595	345	80	55
CD-SPS200	200	595	345	80	55
CD-SPS250	250	595	345	80	55
CD-SPS300	300	595	345	80	55
CD-SPS350	350	595	345	80	55



CD-SPR



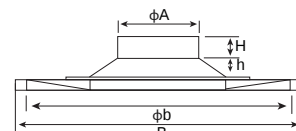
Air valve made of punched steel with adjustable cone Mounting clips for easy mounting in plenums, Square steel air valves for air discharge, consisting of a valve body with round spares and a central cone with galvanized steel screw spindle and lock nut.

The flow setting is done by turning the central cone, which can be fixed after setting. air-conditioning diffusers for drop-in suspended ceilings found in offices, hotels, shopping centres, banks and residential sectors.

Type	ϕA (mm)	ϕB (mm)	ϕb (mm)	H(mm)	h(mm)
CD-SPR150	150	495	345	80	55
CD-SPR175	175	495	345	80	55
CD-SPR200	200	495	345	80	55
CD-SPR250	250	495	345	80	55
CD-SPR300	300	495	345	80	55
CD-SPR350	350	495	345	80	55



CD-SP3S

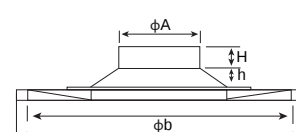


Air valve made of punched steel with adjustable cone. Mounting clips for easy mounting in plenums. Square steel air valves for air discharge, consisting of a square valve body with round spares and a central cone with galvanized steel screw spindle and lock nut. The flow setting is done by turning the central cone, which can be fixed after setting. air-conditioning diffusers for drop-in suspended ceilings found in offices, hotels, shopping centres, banks and residential sectors.

Type	φA(mm)	B-B(mm)	φb(mm)	H(mm)	h(mm)
CD-SP3S150	150	595	515	80	75
CD-SP3S175	175	595	515	80	75
CD-SP3S200	200	595	515	80	75
CD-SP3S250	250	595	515	80	75
CD-SP3S300	300	595	515	80	75
CD-SP3S350	350	595	515	80	75

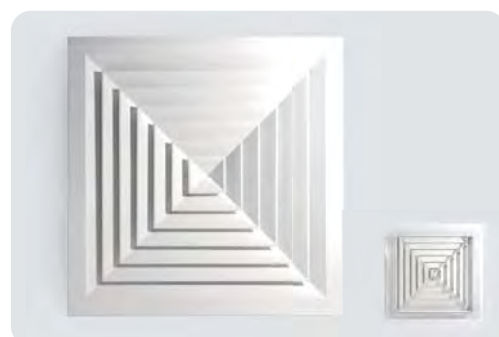


CD-SP3R

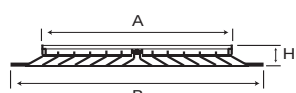


Air valve made of punched steel with adjustable cone. Mounting clips for easy mounting in plenums. Square steel air valves for air discharge, consisting of a valve body with round spares and a central cone with galvanized steel screw spindle and lock nut. The flow setting is done by turning the central cone, which can be fixed after setting. air-conditioning diffusers for drop-in suspended ceilings found in offices, hotels, shopping centres, banks and residential sectors.

Type	φA(mm)	φB(mm)	φb(mm)	H(mm)	h(mm)
CD-SP3S150	150	595	540	80	75
CD-SP3S175	175	595	540	80	75
CD-SP3S200	200	595	540	80	75
CD-SP3S250	250	595	540	80	75
CD-SP3S300	300	595	540	80	75
CD-SP3S350	350	595	540	80	75

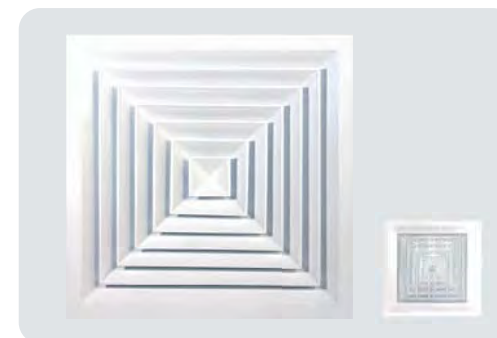


CD - 4S1

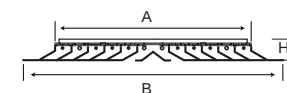


- 4-way ceiling diffuser with damper and removable core
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Aluminium
- Colour: RAL 9016, RAL 9010
- Composition: Frame made of aluminium. Fixed blades 4-way directional blades
- Mounting: Fixing by the collar of the diffuser in the plenum box
- Stamping for all frames, no welding

Type	A-A(mm)	B-B(mm)	H(mm)
CD-4S1150x150	145x145	295x295	47.5
CD-4S1225x225	220x220	370x370	47.5
CD-4S1300x300	295x295	445x445	47.5
CD-4S1375x375	370x370	520x520	47.5
CD-4S1595x595	445x445	595x595	47.5

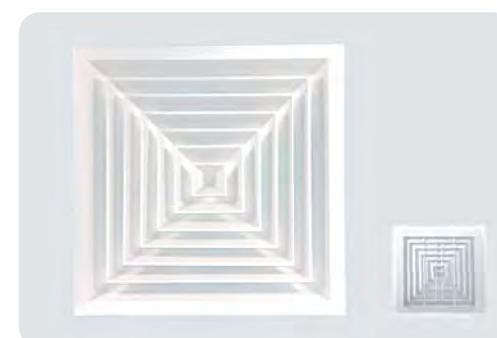


CD - 4S2

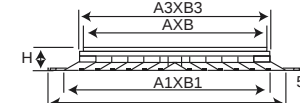


- 4-way ceiling diffuser with damper and removable core
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Aluminium
- Colour: RAL 9016, RAL 9010
- Composition: Frame made of aluminium. Fixed blades 4-way directional blades
- Mounting: Fixing by the collar of the diffuser in the plenum box
- Inner frames are integrally formed with the stamping process

Type	A-A(mm)	B-B(mm)	H(mm)
CD-4S2150x150	145x145	295x295	51.2
CD-4S2225x225	220x220	370x370	51.2
CD-4S2300x300	295x295	445x445	51.2
CD-4S2375x375	370x370	520x520	51.2
CD-4S2595x595	445x445	595x595	51.2

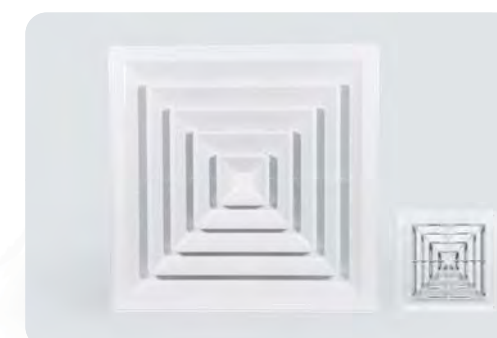


CD - 4S4

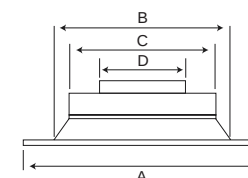


- 4-way multi-directional diffusers with removable central part.
- Application: For air supply and exhaust in ventilation and air conditioning systems
- Material: Aluminium. Fixing with non-visible screws
- Special executions: CD-4S4: A nodised aluminum version
- Stamping for all frames, no welding

Type	A-B(mm)	A1-B1(mm)	A2-B2(mm)	A3-B3(mm)	H(mm)
CD-4S4150x150	127x127	229x229	395x395	145x145	50-55
CD-4S4225x225	202x202	304x304	370x370	220x220	50-55
CD-4S4300x300	227x227	379x379	445x445	295x295	50-55
CD-4S4375x375	352x352	454x454	520x520	370x370	50-55
CD-4S4450x450	427x427	529x529	595x595	445x445	50-55

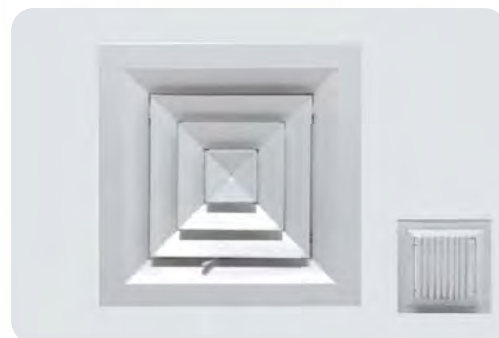


CD - 4S5

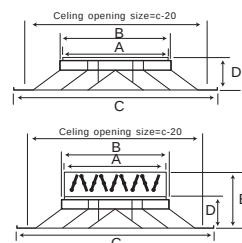


- 4-way multi-directional diffusers
- Application: For air supply and exhaust in ventilation and air conditioning systems
- Material: ABS

Type	A(mm)	B(mm)	C(mm)	D(mm)	
CD-4S5 300x300/180x180	300x300	245x245	180x180	-	without mounting part
CD-4S5 450x450/330x330	450x450	390x390	330x330	-	without mounting part
CD-4S5 595x595/363x363	595x595	430x430	363x363	-	without mounting part
CD-4S5 300x300/d150	300x300	245x245	180x180	150	with mounting part
CD-4S5 450x450/d250	450x450	390x390	330x330	250	with mounting part
CD-4S5 595x595/d300	595x595	430x430	363x363	300	with mounting part



CD - 4S3

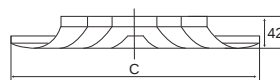


- 4-way ceiling diffuser with damper and removable core
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Aluminium
- Colour: RAL 9016, RAL 9010
- Composition: Frame made of aluminium Fixed blades 4-way directional blades
- Mounting: Fixing by the collar of the diffuser in the plenum box

Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
CD-4S3150x150	131	144	290	45	85
CD-4S3225x225	207	220	365	45	85
CD-4S3300x300	278	294	440	45	85
CD-4S3375x375	355	369	515	45	85
CD-4S3450x450	430	444	595/600	45	85



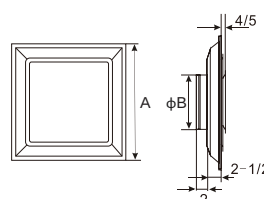
CD - SC



- The diffuser CD-SC is used for the supply and exhaust of cooled and heated air.
- Made from profiled steel.
- Available in overall size:
250x250 300x300
400x400 500x500
600x600 625x625



ASD-1

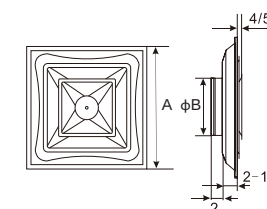


- All steel construction; formed steel back panel
- For sidewall or ceiling application
- Step down, three-cone design, fixed core
- Provides high air volume delivery in a four-way air diffusion pattern
- Fits 24"×24" exposed
- Nominal grille sizes 8", 10", 12"
- Various colors available
- T-Bar ceiling system.
- White powder-coating finish

Type	A-A(mm)	φB(mm)
ASD-1-200	610	200
ASD-1-250	610	250
ASD-1-300	610	300

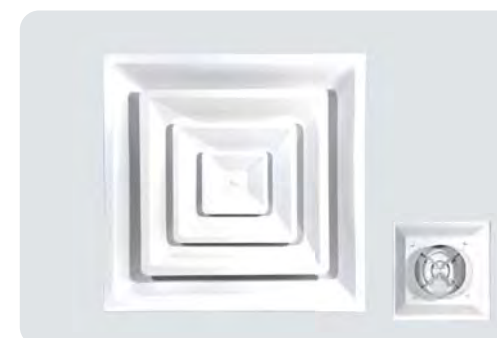


ASD-2

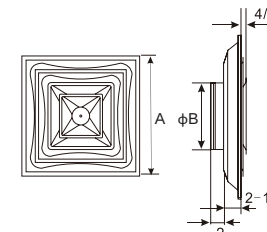


- All steel construction; formed steel back panel
- For sidewall or ceiling application
- Step down, three-cone design, fixed core
- Provides high air volume delivery in a four-way air diffusion pattern
- Fits 24"×24" exposed
- Nominal grille sizes 8", 10", 12"
- Various colors available
- T-Bar ceiling system.
- White powder-coating finish

Type	A-A(mm)	φB(mm)
ASD-2-200	610	200
ASD-2-254	610	254
ASD-2-300	610	300



ASD-3

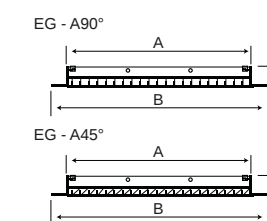


- All steel construction; formed steel back panel
- For sidewall or ceiling application
- Step down, four-cone design, fixed core
- Provides high air volume delivery in a four-way air diffusion pattern
- Fits 24"×24" exposed
- Nominal grille sizes 6", 8", 10"
- Various colors available
- T-Bar ceiling system.
- White powder-coating finish

Type	A-A(mm)	φB(mm)
ASD-3-200	610	200
ASD-3-254	610	254
ASD-3-300	610	300



EG - A



Description:
Industry standard extract grille capable of handling huge air handling units, and for areas where high changeover rates are needed, paint booths, restaurant, kitchens etc.

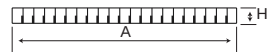
- Features:
- Materials: Aluminium
- Construction: Frame held together using punched in steel corners. Egg crate core in 12.7x12.7mm
- Color: Standard-RAL 9010, RAL9016
- Opposite blade damper optional

Type	A-A(mm)	B-B(mm)	H(mm)
EG-A150x150	145x145	196x196	32
EG-A200x200	195x195	246x246	32
EG-A250x250	245x245	296x296	32
EG-A300x300	295x295	346x346	32
EG-A350x350	345x345	396x396	32
EG-A400x400	395x395	446x446	32
EG-A450x450	445x445	496x496	32
EG-A600x600	595x595	646x646	32

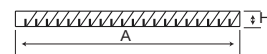


EG - B

EG - B90°



EG - B45°



Description:

Industry standard extract grille is for air exhaust in ventilation and air conditioning systems.

- Features:

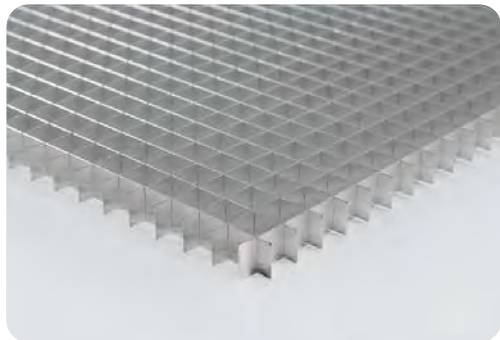
- Materials:poly

- Construction: U shape frame

Egg crate core in 12.7x12.7mm

- Color:Standard -RAL9010 、 RAL9016

Type	A-A(mm)	H(mm)
EG-B595x595	595x595	17
EG-B600x600	600x600	17
EG-B1195x595	1195x595	17
EG-B1200x600	1200x600	17



EG - D

Description:

Eggcrate core is made of aluminum material, and can be used in diffusers, grilles and light fixing.

Customized eggcrate sizes are also available upon Request.

Type	A-A(mm)	H(mm)
EG-D0538x538	538x538	12.7
EG-D0600x600	600x600	12.7
EG-D01200x600	1200x600	12.7
EG-D01219x610	1219x610	12.7
EG-D01200x1200	1200x1200	12.7
EG-D01219x1219	1219x1219	12.7

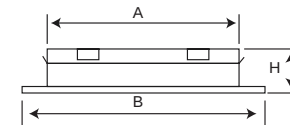
Type	A-A(mm)	H(mm)
EG-D45538x538	538x538	12.7
EG-D45542x542	542x542	12.7
EG-D45595x595	595x595	12.7
EG-D451213x603	1213x603	12.7
EG-D451195x595	1195x603	12.7
EG-D451200x1200	1200x1200	12.7

Type	A-A(mm)	H(mm)
EG-D15538x538	538x538	15
EG-D15542x542	542x542	15
EG-D15595x595	595x595	15
EG-D151213x603	1213x603	15
EG-D151195x595	1195x603	15
EG-D151200x1200	1200x1200	15

Type	A-A(mm)	H(mm)
EG-D2541213x603	1213x603	25.4
EG-D2541190x1190	1190x1190	25.4



EG - C



White aluminium grilles with removabe core.

Enabling the core to be removed entirely from the frame allows maximum entry space into ductwork behind.

Held with in its own frame, the core comes out in one whole unit for maximum ease.

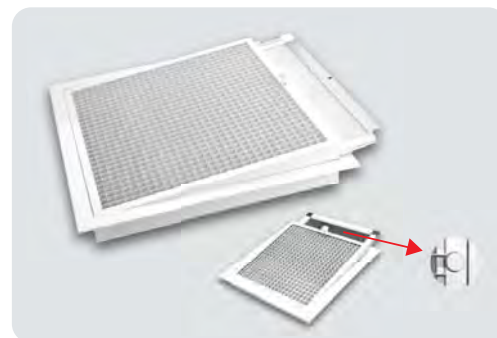
- Materials:Aluminium

- Construction:Egg crate grilles 12.7x12.7mm pitch

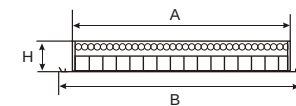
- Core:Removable

- Color:Standard -RAL9010,RAL9016

Type	A-A(mm)	B-B(mm)	H(mm)
EG-C150x150	145x145	194x194	43
EG-C200x200	195x195	244x244	43
EG-C250x250	245x245	294x294	43
EG-C300x300	295x295	344x344	43
EG-C350x350	345x345	394x394	43



EG - E



- White aluminium transfer grilles with square 12.7x12.7mm meshes.

- Application:For air exhaust in ventilation and air conditioning systems

- Material:Aluminium

- Colour:RAL 9016, RAL 9010

- Composition:made of aluminium finished white with frame and with a free area of 85%

- With filter material

- Easy to be replaced and cleaned

- Any size you would like

Type	A-A(mm)	B-B(mm)	H(mm)
EG-E600x400	595x395	644x444	40
EG-E750x400	745x395	794x444	40
EG-E750x450	745x445	794x494	40
EG-E800x500	795x495	844x544	40
EG-E900x400	895x395	944x444	40
EG-E900x500	895x495	944x544	40
EG-E900x550	895x545	955x604	40
EG-E595x595	546x546	595x595	40



EG - F

- White aluminium transfer grilles with square 12.7x12.7mm meshes.

- Application:For air exhaust in ventilation and air conditioning systems

- Material:Aluminium

- Colour:RAL 9016, RAL 9010

- Composition:made of aluminium finished white with frame

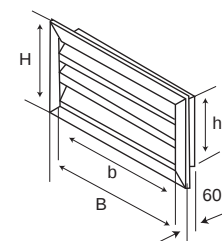
- With Hinged Core

- Easy to be installed in safe

- Any size you would like



WSG



- Aluminium rectangular louvres with physical free area of 70%

- Application:For air intake or exhaust in ventilation systems

- Material: Aluminium

- Colour: Anodized natural finish. Powder coated in RAL colour upon request

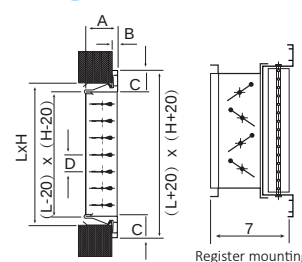
- Composition:Frame and blades of aluminium, galvanized steel birdmesh of 12 x 12 mm fitted behind the louver

- Mounting: Mounting with screws through the frame (not included)

Type	Fits nominal duct size(mm)	b(mm)	B(mm)	h(mm)	H(mm)
WSG300/150	300x150	296	370	146	220
WSG400/200	400x200	396	470	196	270
WSG500/250	500x250	496	570	246	320
WSG500/300	500x300	496	570	296	370
WSG600/300	600x300	596	670	296	370
WSG600/350	600x350	596	670	346	420
WSG700/400	700x400	696	770	396	470
WSG800/500	800x500	796	870	496	570
WSG1000/500	1000x500	996	1070	496	570



WG - A

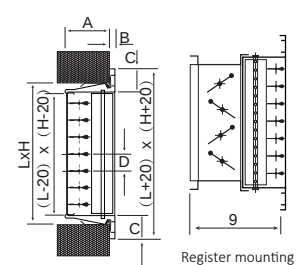


- WG-A:Single deflection wall grilles with adjustable blades
- Opposed blade damper is optional
- Application:For air supply and exhaust in ventilation and air conditioning systems
- Material:Aluminium
- Colour:Anodized natural finish / Powder coated in RAL colour
- Composition:Deflection: adjustable, Single row of blades
- Mounting:Invisible with clips in mounting frame
- Any size you would like

Type	A(mm)	B(mm)	C(mm)	D(mm)
WG-A	30	6	24	19



WG - C



- WG-C:double deflection wall grilles with adjustable blades
- Opposed blade damper is optional
- Application:For air supply and exhaust in ventilation and air conditioning systems
- Material:Aluminium
- Colour:Anodized natural finish / Powder coated in RAL colour
- Composition:Deflection: adjustable, double row of blades
- Mounting:Invisible with clips in mounting frame
- Any size you would like

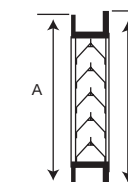
Type	A(mm)	B(mm)	C(mm)	D(mm)
WG-C	47	6	24	19



WG - I

- Aluminium grill WG-I,RAL9016
- Aluminium grill WG-I,AL anodised
- Application: For air supply and exhaust in ventilation.
- Materials: Aluminium.
- Color: RAL9016/AL anodised
- Easy to be installed in safe
- Composition: Deflection: adjustable.
- Mounting: Invisible with clips in mounting frame
- Size: 200*50mm

WG-D



- Made from extruded aluminium.
- Special shape profile of the blades idea for complete sight-proof.
- Wall or door mounting for air transfer.
- Standard finish: anodised. Other finish are available.
- Sizes manufactured on request.
- Model:
- DG-A: Double Flange Frame
- DG-AS: Single Flange Frame

Type	A(mm)	B(mm)	H(mm)
WG-D600x150	630x175	636x181	37
WG-D600x200	630x225	636x231	37
WG-D600x250	630x275	636x281	37
WG-D600x300	630x275	636x331	37

45° Degree Air grill



WG - F45

- This return air grilles are made of aluminium material.
- Used for returning some air into the air conditioner and changing to cold air and come into the room.
- Could be made with filter or without filter
- Size: 220x220, 300x300, 400x400, 540x540, 550x550, 605x605



WG - H

- WG-H:Single deflection wall grilles with fixed blades at 45 degree
- Opposed blade damper is optional
- Application:For air supply and exhaust in ventilation and air conditioning systems
- Material:Aluminium
- Colour:RAL9010/9016
- Mounting: fixing with clips on the connection plenum
- Customized size available

Damper For WG-A / WG-C



DWG

volume control dampers for WG-A and WG-B, adjustable with lever between the blades of the diffuser

Accessories Of Damper



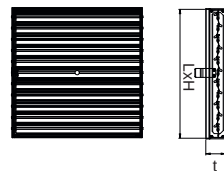
ADP

.Butterfly damper 6 INCH
.8" 10" 12" 14"

Accessories Of Square Diffusers

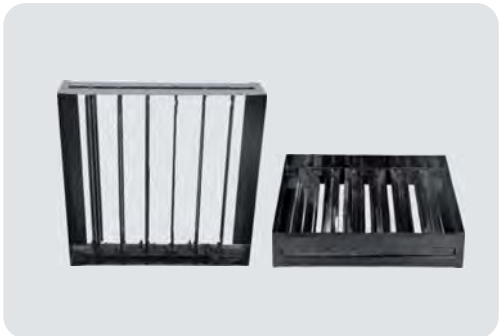


ADS-A



- Aluminum construction.
- Controls the air volume from full flow to shut off.
- Screwdriver slot type.
- Other finish are available.

ADS-B



- Iron construction.
- Controls the air volume from full flow to shut off.
- Screwdriver slot type.
- Other finish are available.

Type	L x H(mm)	t(mm)
ASD-A/ASD-B 294/150	145x145	44.2
ASD-A/ASD-B 369/225	220x220	44.2
ASD-A/ASD-B 444/300	295x295	44.2
ASD-A/ASD-B 519/375	370x370	44.2
ASD-A/ASD-B 595/450	445x445	44.2

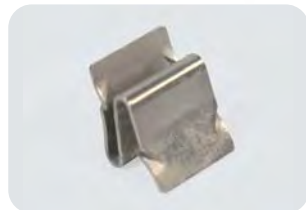
Accessories For Grilles



AG - 01



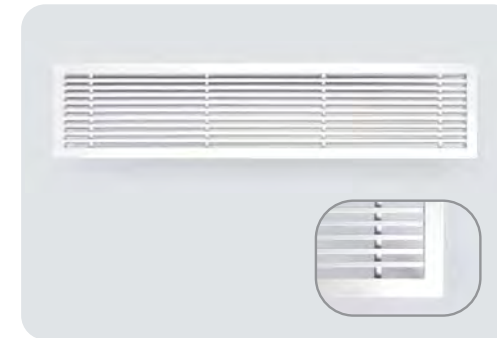
AG - 02



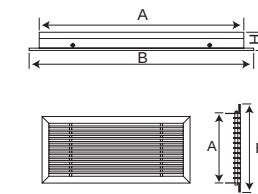
AG - 03



AG - 04



LD0



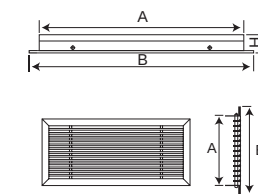
Description

0° Linear Bar Grille Fixed blade Ceiling Diffusers can be used as supply air and exhaust diffusers are capable of a high air volume. With a low resistance, they are ideal for use in ceiling mounted fan coil units, as well as for the side wall and floors ,they are made of aluminum and can be made up to the length of 3m

Type	A-A(mm)	B-B(mm)	H(mm)
LD0400x100	395x95	444x144	43
LD0400x150	395x145	444x194	43
LD0800x100	795x95	844x144	43
LD0800x150	795x145	844x194	43
LD01200x10	1195x95	1244x144	43
LD01200x15	1195x145	1244x194	43



LD0R



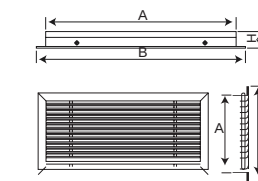
Description

0° Linear Bar Grille Removable blade Ceiling Diffusers can be used as supply air and exhaust diffusers are capable of a high air volume. With a low resistance, they are ideal for use in ceiling mounted fan coil units, as well as for the side wall and floors ,they are made of aluminum and can be made up to the length of 3m

Type	A-A(mm)	B-B(mm)	H(mm)
LD0R400x100	395x95	444x144	43
LD0R400x150	395x145	444x194	43
LD0R800x100	795x95	844x144	43
LD0R800x150	795x145	844x194	43
LD0R1200x10	1195x95	1244x144	43
LD0R1200x15	1195x145	1244x194	43



LD30



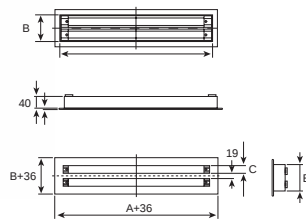
Description

30° Linear Bar Grille Fixed blade Ceiling Diffusers can be used as supply air and exhaust diffusers are capable of a high air volume. With a low resistance, they are ideal for use in ceiling mounted fan coil units, as well as for the side wall and floors ,they are made of aluminum and can be made up to the length of 3m

Type	A-A(mm)	B-B(mm)	H(mm)
LD30400x100	395x95	444x144	43
LD30400x150	395x145	444x194	43
LD30800x100	795x95	844x144	43
LD30800x150	795x145	844x194	43
LD301200x10	1195x95	1244x144	43
LD301200x15	1195x145	1244x194	43



LDS-A



With fixed blades the slot Diffusers are an attractive alternative to the ceiling or high sidewall supply diffuser that has been designed for efficient air distribution.

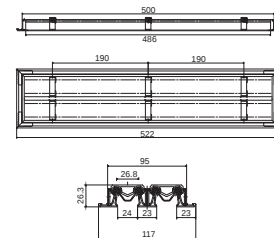
Slot diffusers can be installed individually in set lengths or in a continuous line. Continuous runs can consist of a combination of active and inactive sections as well as combining supply and return air applications.

- Materials: Aluminium
- Core: Black blades
- Plenum box is optional
- Color: Standard - RAL9010, RAL9016
- LDS-A: B=45
- LDS-AA: B=40

Type	A(mm)	B(mm)	C(mm)	Slot
LDS-AA800x40	800	40	20	1
LDS-AA1000x40	1000	40	20	1
LDS-A1000x90	1000	90	25	2
LDS-A1200x90	1200	90	25	2
LDS-A900x135	900	135	25	3
LDS-A1000x135	1000	135	25	3
LDS-A1000x180	1000	180	25	4
LDS-A1200x180	1200	180	25	4



LDS-B

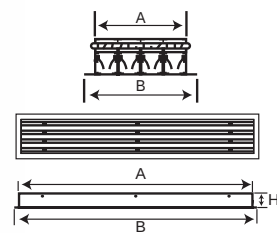


Slot diffusers can be installed individually in set lengths or in a continuous line. Continuous runs can consist of a combination of active and inactive sections as well as combining supply and return air applications.

- Materials: Aluminium
- Core: Black blades
- Plenum box is optional
- Color: Standard - RAL9010, RAL9016

Type	L(mm)	Neck size	H(mm)
LDS-B100x500	500	100	117
LDS-B100x600	600	100	117
LDS-B100x800	800	100	117
LDS-B100x1000	1000	100	117
LDS-B100x1200	1200	100	117
LDS-B100x1500	1500	100	117
LDS-B100x2000	2000	100	117
LDS-B100x2500	2500	100	117
LDS-B100x3000	3000	100	117
LDS-B100x4000	4000	100	117

SDS



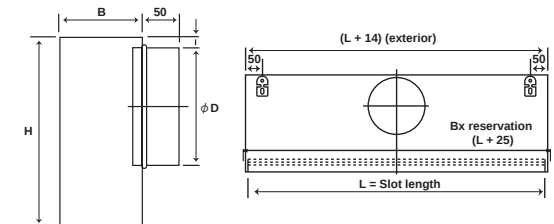
With adjustable blades the Slot Diffusers is suited to a wide range of applications including air curtains, and with VAV systems where the optional internal deflectors can be set up to exploit the Coanda effect and increase their effective range.

- Materials: Aluminium Extruded aluminium frame and blades.
- Construction: Frame and inner slots held by spacers and threaded bars.
- Core: Black blades
- Color: Standard - RAL9010, RAL9016
- Blades can be adjustable by hand

Type	A-A(mm)	B-B(mm)	H(mm)	Slot
SDS2000	2000x40.5	2000x76	58.5	1
SDS2000	2000x79.5	2000x115	58.5	2
SDS2000	2000x118.5	2000x154	58.5	3
SDS2000	2000x157.5	2000x193	58.5	4
SDS2000	2000x196.5	2000x232	58.5	5



Slot Diffuser Plenum Box

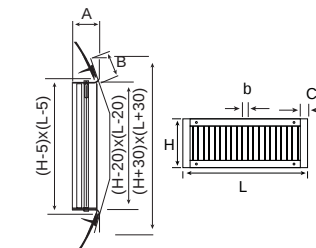


- Galvanized steel thickness 8/10.
- Options:
 - insulation (5 sides).
 - soundproofing (2 sides).

Long slits	B	nb of nozzles	φ D	H
1	70	1 piquage si L≤1174	124	225
2	113	1 piquage si L≤1174	159	275
3	156	1 piquage si L≤1174	199	325
4	199	1 piquage si L≤1174	199	325
5	242	2 piquage si L<1174	249	375
6	285	2 piquage si L<1174	249	375



Grilles For Spiral Ducts - GSD



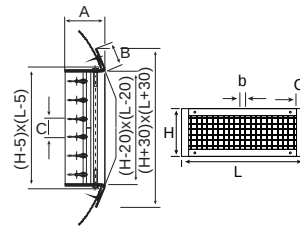
Steel exhaust grille with individually adjustable vanes

- Application: For the air exhaust air in facilities such as warehouses, workshops, commercial entres.
- Material: Galvanized steel
- Composition: Single of vane
- Mounting: Visible screw mounting on round duct

Type	L	H	A	B	C	b	Dia. spiro	Sponge strip
GSD42575	425	75	25	25	20	20	160-140	10x7
GSD52575	525	75	25	25	20	20	160-400	10x7
GSD62575	625	75	25	25	20	20	160-400	10x7
GSD82575	825	75	25	25	20	20	315-900	10x7
GSD102575	1025	75	25	25	20	20	315-900	10x7
GSD425125	425	125	33	25	20	20	315-900	10x7
GSD525125	525	125	33	25	20	20	315-900	10x7
GSD625125	625	125	33	25	20	20	315-900	10x7
GSD825125	825	125	33	25	20	20	315-900	10x7
GSD1025125	1025	125	33	25	20	20	315-900	10x7
GSD425175	425	175	33	25	20	20	450-1200	10x7
GSD525175	525	175	33	25	20	20	450-1200	10x7
GSD625175	625	175	33	25	20	20	450-1200	10x7
GSD825175	825	175	33	25	20	20	450-1200	10x7
GSD1025175	1025	175	33	25	20	20	450-1200	10x7
GSD425225	425	225	40	25	20	20	630-1400	10x7
GSD525225	525	225	40	25	20	20	630-1400	10x7
GSD625225	625	225	40	25	20	20	630-1400	10x7
GSD825225	825	225	40	25	20	20	630-1400	10x7
GSD1025225	1025	225	40	25	20	20	630-1400	10x7



Grilles For Spiral Ducts - GSDS

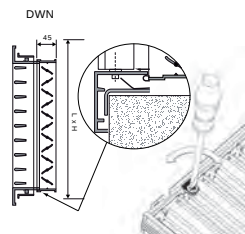


- Steel exhaust grille with individually adjustable vanes
- Application: For the air exhaust air in facilities such as warehouses, workshops, commercial entres.
 - Material: Galvanized steel
 - Composition: Double layers of vanes
 - Mounting: Visible screw mounting on round duct
 - GSDSDA--Installed with control damper for grills-A
 - GSDSDB--Installed with control damper for grills-B

Type	L	H	A	B	C	b	Dia. spiro	Sponge strip
GSDS42575	425	75	44	25	20	20	160-140	10x7
GSDS52575	525	75	44	25	20	20	160-400	10x7
GSDS62575	625	75	44	25	20	20	160-400	10x7
GSDS82575	825	75	44	25	20	20	315-900	10x7
GSDS102575	1025	75	44	25	20	20	315-900	10x7
GSDS425125	425	125	52	25	20	20	315-900	10x7
GSDS525125	525	125	52	25	20	20	315-900	10x7
GSDS625125	625	125	52	25	20	20	315-900	10x7
GSDS825125	825	125	52	25	20	20	315-900	10x7
GSDS1025125	1025	125	52	25	20	20	315-900	10x7
GSDS425175	425	175	52	25	20	20	450-1200	10x7
GSDS525175	525	175	52	25	20	20	450-1200	10x7
GSDS625175	625	175	52	25	20	20	450-1200	10x7
GSDS825175	825	175	52	25	20	20	450-1200	10x7
GSDS1025175	1025	175	52	25	20	20	450-1200	10x7
GSDS425225	425	225	60	25	20	20	630-1400	10x7
GSDS525225	525	225	60	25	20	20	630-1400	10x7
GSDS625225	625	225	60	25	20	20	630-1400	10x7
GSDS825225	825	225	60	25	20	20	630-1400	10x7
GSDS1025225	1025	225	60	25	20	20	630-1400	10x7



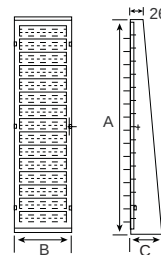
Control Dampers For Grilles - A



- Galvanized steel volume dampers for GSD grilles
- Application: For the air exhaust air in facilities such as warehouses, workshops, commercial entres.
 - Material: Galvanized steel
 - Mounting: The damper can be fixed to the grille by screws or directly on the clips of the grille
- The adjustment of the airflow can be set by a screwdriver trough the front of the grille



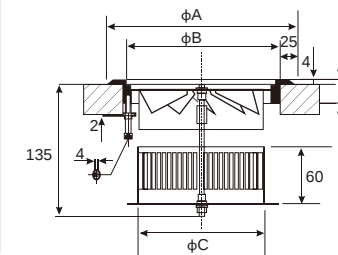
Control Dampers For Grilles - B



Type	A(mm)	B(mm)	C(mm)
425x75	410	60	61
525x75	510	60	69.5
625x75	610	60	78
425x125	410	110	61
525x125	510	110	69.5
625x125	610	110	78
425x225	410	210	61
525x225	510	210	69.5
625x225	610	210	78
825x225	810	210	78
1025x225	1010	210	78



Floor Twist Diffusers - FTD

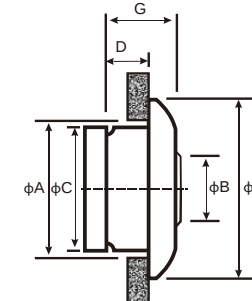


- Aluminum swirl floor diffusers with horizontal or vertical air diffusion pattern
- Application: Adjustable circular diffuser with swirl air supply, suitable for false floor installation. May be used in rooms with a variable or constant air volume
 - Material: Aluminum and steel
 - Color: Anodized natural finish
 - Composition: Removable inner grill and front grille manufactured in sanded aluminum Dust basket (also to be used as volume damper) and swirl unit made from sheet steel 3 Steel mounting straps for fixing of the diffuser frame into a floor tile
 - Mounting: To be mounted with 3 steel mounting straps for fixing the diffuser frame into a floor tile
 - FTD0-Accessories for FTD

Type	φA(mm)	φB(mm)	φC(mm)	E(mm)
FTD150	190	140	124	14
FTD200	240	190	160	19



Ball Jet Diffuser - BJD

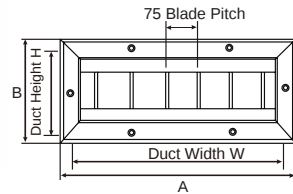


- BJD: Decorative long-throw nozzle
- Application: They can be used for spot cooling and are especially appropriate for large rooms requiring a decorative look. Hotels. Shopping malls. Salons. Convention centres. Airport vestibules. Passenger stations. Social halls, etc.
- Composition: The JET DESIGN long-throw nozzle and the decorative ring are manufactured in aluminium, with a standard paint finish in RAL9016/9010 white. The connection part is manufactured of galvanised steel sheet. The JETDESIGN nozzle has an extraordinarily good aesthetic design and can be painted by special order to fit any decorative need
- Mounting: can be mounted directly to the duct, plenum box or surface allows a flexible duct of standard dimensions to be coupled directly to each nozzle

Type	φA(mm)	φB(mm)	φC(mm)	D(mm)	φE(mm)	G(mm)
BJD100	101	48	100	42	148	64
BJD125	126	60	123	45	170	67
BJD150	159	76	158	57	200	80
BJD160	159	76	148	88	265	115
BJD200	203	96	199	88	265	115
BJD250	248	127	248	112	309	142
BJD315	317	180	313	138	378	168
BJD350	349	195	349	170	412	205
BJD400	396	220	398	171	466	207
BJD450	443	274	448	233	520	274
BJD500	487	286	487	270	582	211
BJD630	632	335	633	230	715	276



Drum Jet Diffuser - DJD

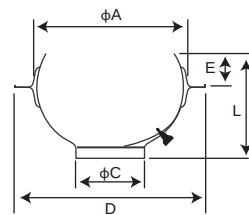


- Drum jet diffuser: The rectangular jet diffuser is equipped with deflecting blades for distributing the air in horizontal fan-shape
- Application: They are specially recommended for sport centres, Industrial warehouses, Clean rooms, Recording studios, Discotheques, Large premises, etc
- Composition: The diffuser is composed of a drum allowing the unit to be swiveled, thereby permitting the inlet airflow to be vertically positioned at an angle of $\pm 30^\circ$
- Mounting: The diffuser is always screw-mounted
- Material: Aluminium
- Color: RAL9010, RAL9016

Type	A(mm)	B(mm)	W(mm)	H(mm)
DJD906	300	217	261	170
DJD1206	376	217	337	170
DJD1806	529	217	490	170
DJD2406	681	217	642	170
DJD2010	579	319	540	271
DJD2510	706	319	667	271
DJD3010	833	319	794	271
DJD3510	960	319	921	271



Spot Diffuser - SDA

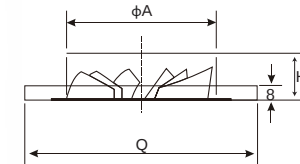


- SDA: Decorative long-throw nozzle
- Application: They can be used for spot cooling and are especially appropriate for large rooms requiring a decorative look. Hotels, Shopping malls, Salons, Convention centres, Airport vestibules, Passenger stations, Social halls, etc.
- Composition: The JET DESIGN long-throw nozzle and the decorative ring are manufactured in aluminium, with a standard paint finish in RAL9016/9010 white. The connection part is manufactured of galvanised steel sheet. The JET DESIGN nozzle has an extraordinarily good aesthetic design and can be painted by special order to fit any decorative need
- Mounting: can be mounted directly to the duct, plenum box or surface allows a flexible duct of standard dimensions to be coupled directly to each nozzle

Type	φC(mm)	φA(mm)	D(mm)	L(mm)	E(mm)
SDA41	41	80	120	63	15
SDA65	65	118	169	88	19
SDA75	75	145	195	110	23
SDA108	108	208	258	165	48
SDA140	140	245	300	185	45
SDA165	165	308	365	231	55
SDA190	190	342	403	264	62
SDA220	220	393	453	293	80



SWDS

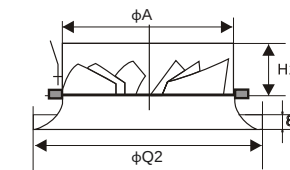


- Swirl diffusers for system ceiling with fixed blades
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Steel
- Colour: RAL 9016, RAL 9010
- Composition: Fixed blades
- Mounting: Fixing directly on the collar of the diffuser

Type	φA(mm)	Q-Q(mm)	H(mm)
SWDS200	240	320	185
SWDS250	295	370	195
SWDS315	368	468	212
SWDS350	396	500	216
SWDS400	456	567	232
SWDS500	559	655	233



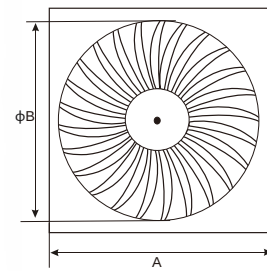
SWDR



- Round swirl ceiling diffusers with flat frame and fixed blades
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Steel
- Colour: RAL 9016, RAL 9010
- Composition: Fixed blades
- Mounting: Fixing directly on the collar
Fixing with central screw

Type	φA(mm)	H2(mm)	φQ2(mm)	Flow(m3/h)
SWDR200	238	145	315	450
SWDR250	290	145	365	750
SWDR315	352	165	465	1500
SWDR350	390	170	503	2000
SWDR400	440	185	570	2500
SWDR500	538	190	658	3000
SWDR630	697	235	865	3500
SWDR800	873	270	1068	4500

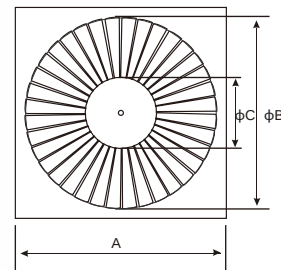
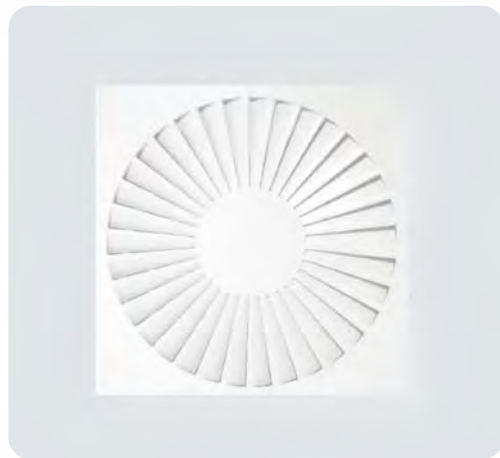
SWRS



- SWRS:Swirl ceiling diffusers with high induction rate, consisting of a square plate with multiple fixes curved blades arranged in a circular pattern and to be equipped with galvanized steel plenumbox.
- 4 swirl sizes available
- Application:For air supply and exhaust in ventilation and air conditioning systems
- Material:White powder coated Steel RAL9016,RAL9010
- Composition:Frontplate made of powdercoated steel. Central screw mounting
- Mounting:Fixing by central screw in the

Type	A-A(mm)	φB(mm)
SWRS300	595	254
SWRS400	595	336
SWRS500	595	440
SWRS600	595	530
SWRS625	625	530

SWA



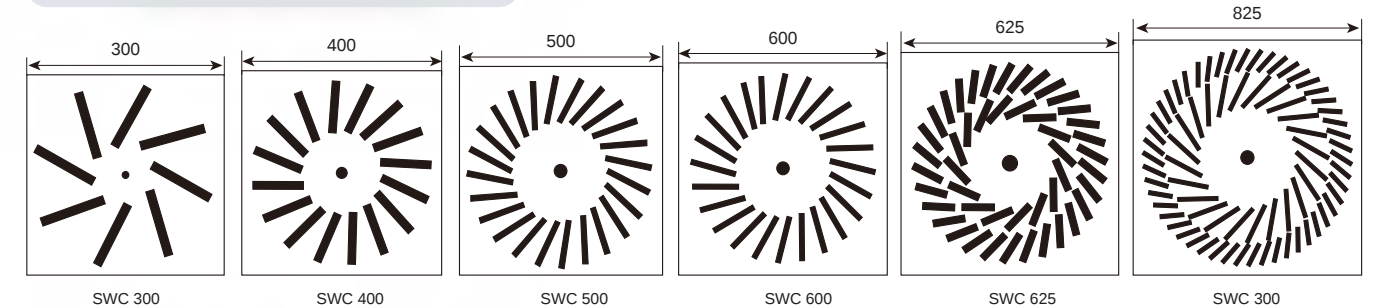
- SWA:Swirl ceilingdiffusers with high induction rate, consisting of a square plate with multiple fixes blades arranged in a circular pattern and to be equipped with galvanized steel plenumbox.2 swirl sizes available in several plate sizes
- Application:For air supply and exhaust in ventilation and air conditioning systems
- Material:White powdercoated Steel RAL9010
- Composition:Frontplate made of powdercoated steel. Central screw mounting
- Mounting:Fixing by central screw in the crossbar of the plenum box

Type	A(mm)	φB(mm)	φC(mm)
SWA400	398	350	130
SWA500	498	350	130
SWA600	598	350	130
SWA625	623	350	130
SWA600D	598	540	200
SWA625D	623	540	200
SWA675D	673	540	200

SWC



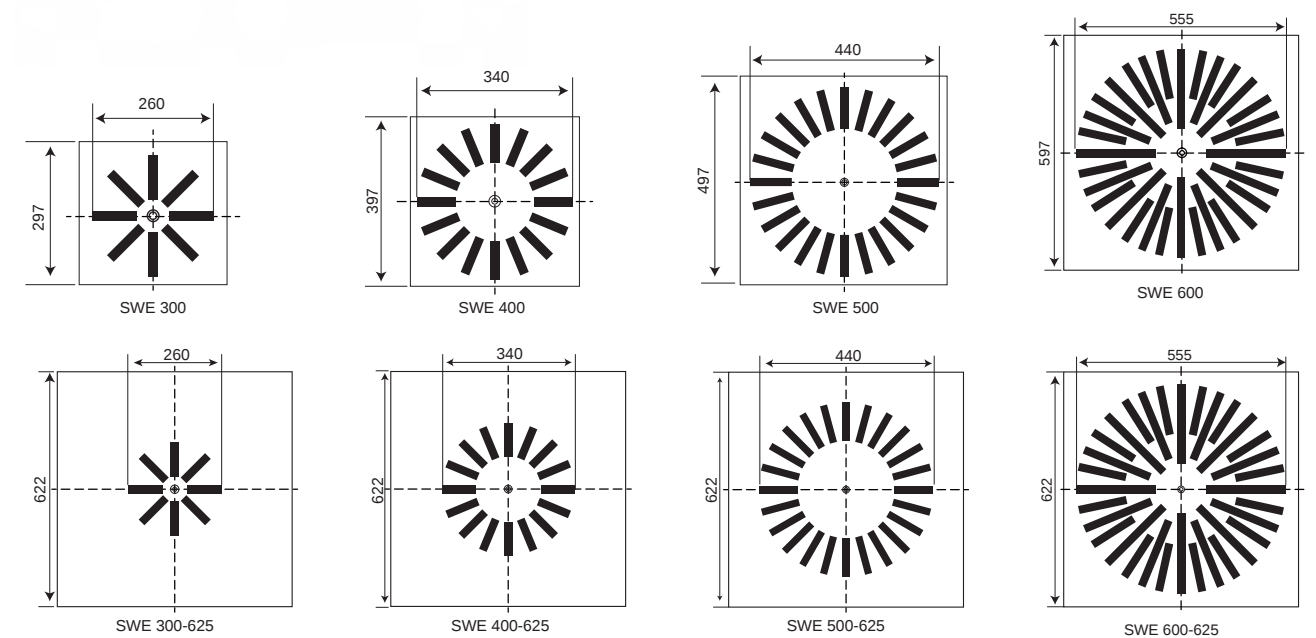
- Square swirl ceiling diffusers with adjustable blades
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Steel
- Colour: RAL 9016, RAL 9010 with black blades
- Composition: Square swirl ceiling diffuser made of steel. The radial blades are individually adjustable and are developed for optimal diffusion, ensuring an instant mixture of primary and secondary air.
- Size Available: SWC300, SWC400,SWC500,SWC600,SWC625,SWC825



SWE



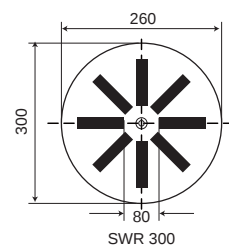
- Square swirl ceiling diffusers with adjustable blades
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Steel
- Colour: RAL 9016, RAL 9010 with black blades
- Composition: Square swirl ceiling diffuser made of steel. The radial blades are individually adjustable and are developed for optimal diffusion, ensuring an instant mixture of primary and secondary air.
- Size Available: SWE300,SWE400,SWE500,SWE600, SWE600-625,SWE300-625,SWE400-625,SWE500-625



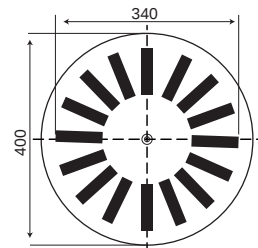


SWR

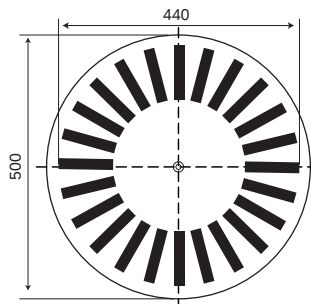
- Square swirl ceiling diffusers with adjustable blades
- Application: For air supply and exhaust in ventilation and air conditioning systems.
- Material: Steel
- Colour: RAL 9016, RAL 9010 with black blades
- Composition: Square swirl ceiling diffuser made of steel. The radial blades are individually adjustable and are developed for optimal diffusion, ensuring an instant mixture of primary and secondary air.
- Size Available: SWR300,SWR400,SWR500,SWR600,SWR625



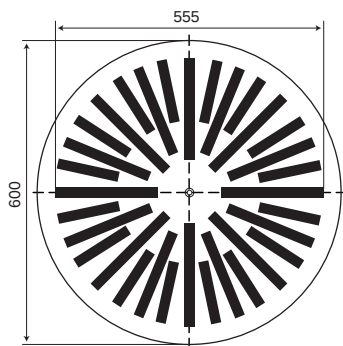
SWR 300



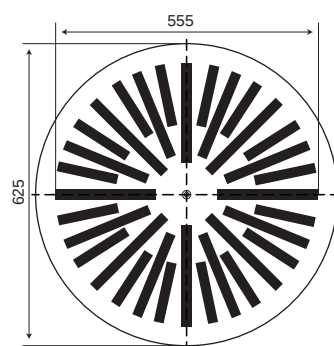
SWR 400



SWR 500



SWR 600

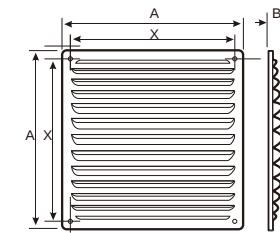


SWR 625

Type	Part size(mm)		Q _v (m³)
SWE300	8x90x20		0.0144
SWE400	16x90x20		0.0288
SWE500	24x110x20		0.0528
SWE600	8x210x20	8x185x20	0.0920
SWE300-625	8x90x20		0.0144
SWE400-625	16x90x20		0.0288
SWE500-625	24x110x20		0.0258
SWE600-625	8x210x20	8x185x20	0.0920
SWR300	9x90x20		0.0144
SWR400	16x90x20		0.0288
SWR500	24x110x20		0.0528
SWR600	8x210x20	8x185x20	0.0920
SWR625	8x210x20	8x185x20	0.0920



Return Air Grille Panel RAG

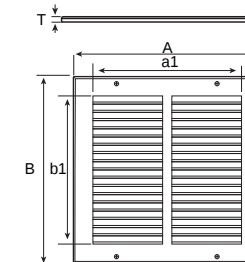


- Diffusers are made of steel sheet with zinc coating with mesh.
- Used for the natural ventilation systems
- Not recommended to use in the forced ventilation system due to the high air resistance.

Type	A-A(mm)	B(mm)	X-X(mm)
RAG125	125	9	111
RAG150	150	8	136
RAG200	200	8	186
RAG250	250	10	234
RAG300	300	13	284



RGP/RGPF

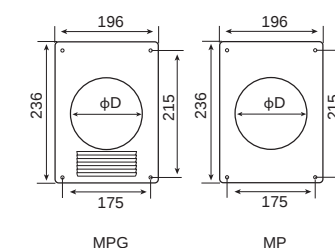


- Diffusers are made of steel sheet with zinc coating.
- Used for the natural ventilation systems
- Not recommended to use in the forced ventilation system due to the high air resistance.

Type	A(mm)	a1(mm)	B(mm)	b1(mm)	T(mm)	Louver	Decoration
RGP100x100	205	140	190	145	8	Single column	-
RGP125x100	205	140	190	145	8	Single column	-
RGP150x100	205	140	190	145	8	Single column	-
RGP200x200	205	140	190	145	8	Single column	-
RGP200x100	305	241	155	91	8	Double column	-
RGP200x150	305	241	205	141	8	Double column	-
RGP150x150	255	211	255	198	8	Double column	-
RGP150x160	255	211	255	198	8	Double column	-
RGP150x200	255	211	255	198	8	Double column	-
RGP300x150	407	343	207	145	8	Double column	-
RGPF150x150	138	89		88	6.5	Single column	with mesh
RGPF150x250	138	89	238	187	6.5	Single column	with mesh
RGPF205x205	205	140		140	8	Single column	with mesh
RGPF250x150	238	189	138	87	6.5	Double column	with mesh
RGPF250x250	238	189		185	6.5	Double column	with mesh



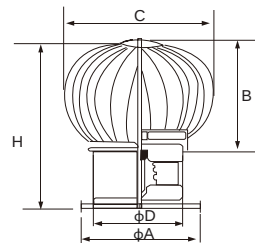
Metal Front Panels With Grill Of MPG



- Designed for mounting of round air ducts to pipeline from flue gas equipment of various types.
- Material: sheet steel, coated with polymeric enamel.
- Wall mounting is carried out with screws.
- Metal butt strap 196x236 with grill and flange D80,D90,D100,D115,D110,D120,D125,D130,D135,D140,D150



Turbovent Rotary Chimney Cowl TB

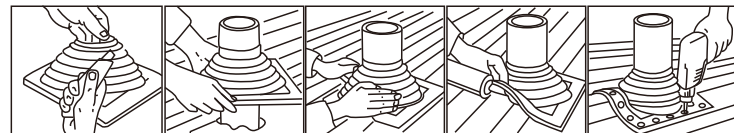


- *Base made of galvanized steel,cap made of stainless steel or aluminium sheet.
- *For roof and chimney application.
- *NSK bearing,with high-temperature oil.
- *Power free and greatly improve the natural ventilation.
- *With or without square base.

Type	A(mm)	B(mm)	C(mm)	D(mm)	H(mm)	Vane(mm)
TB200	200	160	260	150	270	16
TB250	250	220	300	200	300	18
TB300	300	230	320	250	310	18
TB350	350	250	350	300	330	22

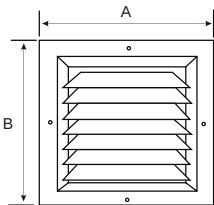


Masterflash



Size	Material				A(Width)							
	EPDM+ Aluminum	EPDM+ Aluminum, AL. Paiting	Silicon+ Aluminum	Silicon+ Aluminum, AL. Paiting	Black	Red	Green	Brown	Black/Black	Red/Red	Green/Green	Brown/Brown
4"-7" 275x275mm	*	*	*	*	*	*	*	*	*	*	*	*
5"-9" 275x275mm	*	*	*	*	*	*	*	*	*	*	*	*
6"-11" 360x360mm	*	*	*	*	*	*	*	*	*	*	*	*
7"-13" 435x435mm	*	*	*	*	*	*	*	*	*	*	*	*
8"-12" 435x435mm	*	*	*	*	*	*	*	*	*	*	*	*
10"-18" 630x630mm	*	*	*	*	*	*	*	*	*	*	*	*
3"-8" 505x505mm 45°	*	*	*	*	*	*	*	*	*	*	*	*
8"-11" 660x660mm 45°	*	*	*	*	*	*	*	*	*	*	*	*
8"-13" 865x735mm 45°	*	*	*	*	*	*	*	*	*	*	*	*
12"-18" 890x890mm 45°	*	*	*	*	*	*	*	*	*	*	*	*

AAD-1

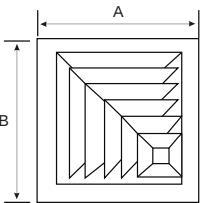


1ASD Aluminium Register Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
AAD16	6	x				
AAD18	8		x			
AAD110	10			x		
AAD112	12				x	
AAD114	14					x

- All-aluminum face construction
- Cores flush with margin
- One-way air diffusion
- Face mount for easy installation
- For sidewall or ceiling application
- Multi-shutter or opposed blade dampers
- Inconspicuous fingertip lever for air volume control
- Bright White finish

AAD-2

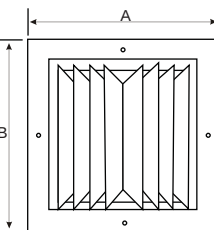


2ASD Aluminium Register Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
AAD26	6	x				
AAD28	8		x			
AAD210	10			x		
AAD212	12				x	
AAD214	14					x

- All-aluminum face construction
- Cores flush with margin
- Two-way air diffusion
- Face mount for easy installation
- For sidewall or ceiling application
- Multi-shutter or opposed blade dampers
- Inconspicuous fingertip lever for air volume control
- Bright White finish

AAD-3



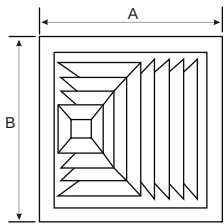
2ASD Aluminium Register Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
AAD36	6	x				
AAD38	8		x			
AAD310	10			x		
AAD312	12				x	
AAD314	14					x

- All-aluminum face construction
- Cores flush with margin
- Two-way air diffusion
- Face mount for easy installation
- For sidewall or ceiling application
- Multi-shutter or opposed blade dampers
- Inconspicuous fingertip lever for air volume control
- Bright White finish



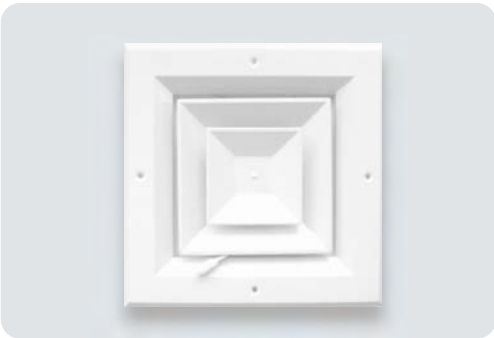
AAD-4



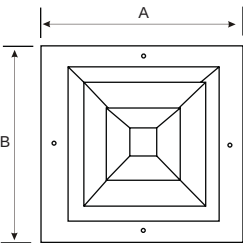
- All-aluminum face construction
- Cores flush with margin
- Three-way air diffusion
- Face mount for easy installation
- For sidewall or ceiling application
- Multi-shutter or opposed blade dampers
- Inconspicuous fingertip lever for air volume control
- Bright White finish

3ASD Aluminium Register Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
AAD46	6	x				
AAD48	8		x			
AAD410	10			x		
AAD412	12				x	
AAD414	14					x



AAD-5



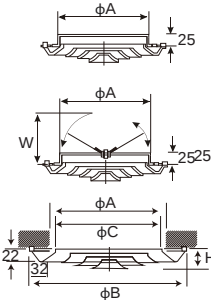
- All-aluminum face construction
- Cores flush with margin
- Four-way air diffusion
- Face mount for easy installation
- For sidewall or ceiling application
- Multi-shutter or opposed blade dampers
- Inconspicuous fingertip lever for air volume control
- Bright White finish

3ASD Aluminium Register Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
AAD56	6	x				
AAD58	8		x			
AAD510	10			x		
AAD512	12				x	
AAD514	14					x



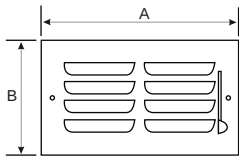
CD-RC



- Used for ceiling or eposed duct mounting and has a fixed horizontal air pattern
- Pressed steel sheet cones. assembled on three welded supports.
- Powder-coated white colour RAL9010.
- Foam sealong gaskets.
- Fixed by three visible side screws.
- Accessories:Mounting collar to connect circular duct Mounting collar with a built-in butterfly damper.
- Size Available: 150\200\250



WRA



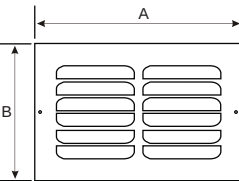
- For ceiling or sidewall application
- All steel construction
- One piece stamped face and“1” curved blade lanced
- One way deflection
- White powder-coating finish
- Any color you would like (2weeks more)

1 CF Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
WRA4	4		x			
WRA6	6	x	x	x	x	x
WRA8	8		x	x	x	x
WRA10	10			x		
WRA12	12				x	



WRB



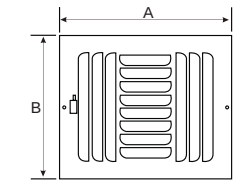
- For ceiling or sidewall application
- All steel construction
- One piece stamped face and “1” curved blade lanced
- Two way deflection
- White powder-coating finish
- Any color you would like (2 weeks more)

2 CF Available Sizes(in.)

Type	B(HT)	A(Width)	
		10	12
WRB6	6	x	
WRB8	8	x	x
WRB10	10	x	
WRB12	12		x



WRC



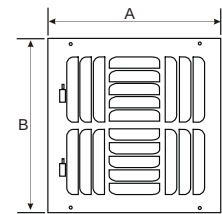
- For ceiling or sidewall application
- All steel construction
- One piece stamped face and “1” curved blade lanced
- Three way deflection
- White powder-coating finish
- Any color you would like

3 CF Available Sizes(in.)

Type	B(HT)	A(Width)			
		8	10	12	14
WRC4	4	x			
WRC6	6	x	x	x	x
WRC8	8		x	x	x
WRC10	10		x		
WRC12	12			x	



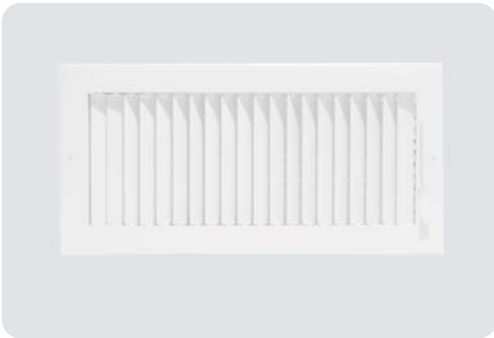
WRD



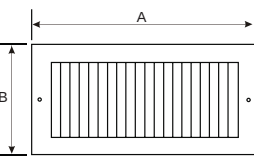
4 CF Available Sizes(in.)

- For ceiling or sidewall application
- All steel construction
- One piece stamped face and “1” curved blade lanced
- Four way deflection
- White powder-coating finish
- Any color you would like

Type	B(HT)	A(Width)				
		6	8	10	12	14
WRD6	6	x				
WRD8	8		x			
WRD10	10			x		
WRD12	12				x	
WRD14	14					x



WRE



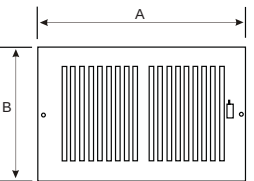
1 SF Available Sizes(in.)

- Used for ceiling or sidewall application
- All steel construction
- One piece stamped face
- Multi-shutter valve
- One way deflection
- White powder-coating finish
- Any color you would like

Type	B(HT)	A(Width)			
		8	10	12	14
WRE4	4	x			
WRE6	6		x	x	x
WRE8	8		x		



WRF



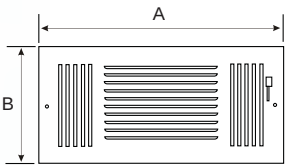
2 SF Available Sizes(in.)

- Used for ceiling or sidewall application
- All steel construction
- One piece stamped face
- Multi-shutter valve
- Two way deflection
- White powder-coating finish
- Any color you would like

Type	B(HT)	A(Width)				
		8	10	12	14	16
WRF4	4	x	x			
WRF6	6	x	x	x	x	x
WRF8	8		x	x	x	



WRG



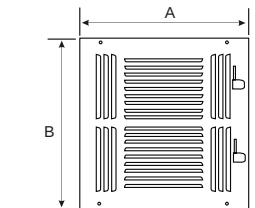
3 SF Available Sizes(in.)

- Used for ceiling or sidewall application
- All steel construction
- One piece stamped face
- Multi-shutter valve
- One way deflection
- White powder-coating finish
- Any color you would like

Type	B(HT)	A(Width)				
		6	8	10	12	14
WRG4	4		x	x	x	
WRG6	6	x	x	x	x	x
WRG8	8		x	x	x	x
WRG10	10			x		
WRG12	12				x	
WRG14	14					x



WRH



4 SF Available Sizes(in.)

- Used for ceiling or sidewall application
- All steel construction
- One piece stamped face
- Multi-shutter valve
- Two way deflection
- White powder-coating finish
- Any color you would like

Type	B(HT)	A(Width)				
		6	8	10	12	14
WRH6	6	x				
WRH8	8		x			
WRH10	10			x		
WRH12	12				x	
WRH14	14					x



BR Series



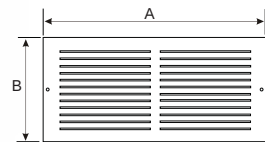
BR Available Sizes(in.)

- All stamped steel construction
- Front row of sdjustable blades are set on 3/4" centers
- Designed to blanket walls and windows from baseboard installations
- Lever operated multi-louver damper provide exacting volume control
- Snap in face for ease of installation
- Rear damper blades for volume control on 1" spacing
- Available in 15" and 18" length
- Finish:Bright White(W) or Golden Sand(GS) enamel.

Type	Size	
	15	18
BRBb	x	x
BRSp	x	x



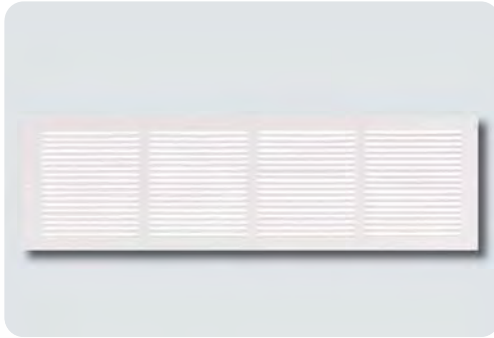
1RG Series



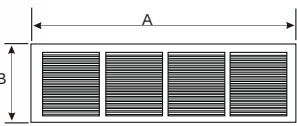
1RG Available Sizes(in.)

- For ceiling or sidewall application
- All-steel construction
- One piece stamped face
- One way deflection
- Bright White finish
- Any color you would like

Type	B(HT)	A(Width)				
		12	14	24	30	
1RG4	4	x				
1RG6	6	x	x	x	x	
1RG8	8	x	x	x	x	
1RG12	12	x				
1RG14	14		x			



1RF Series



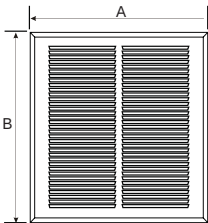
1RF Available Sizes(in.)

- For air return application
- All-steel construction
- 1/2 spaced fins set at 55 degrees
- Effectively conceals filter
- Removable face for easy installation and cleaning
- Equipped with adjustable filter retainers
- Bright white finish
- Any color you would like

Type	B(HT)	A(Width)										
		6	8	10	12	14	16	18	20	24	30	36
1RF4	4		x	x	x							
1RF6	6	x	x	x	x	x	x		x	x		
1RF8	8		x	x	x	x	x	x	x	x	x	x
1RF10	10			x		x	x		x	x	x	x
1RF12	12				x	x		x	x	x	x	x
1RF14	14								x	x	x	
1RF16	16						x		x	x	x	
1RF18	18							x		x	x	
1RF20	20				x	x	x		x	x	x	
1RF22	22											
1RF24	24				x	x			x	x		
1RF25	25					x	x		x	x		
1RF30	30								x	x		



AG



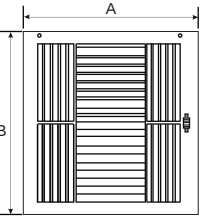
AG Available Sizes(in.)

- For ceiling or sidewall application
- All-steel construction
- One piece stamped face
- One way deflection
- Bright White finish
- Any color you would like

	Type	B(HT)	A(Width)								
			10	14	16	18	20	24	25	30	36
	AG10	10					x	x		x	
	AG12	12	x				x	x		x	x
	AG14	14		x			x	x	x	x	
	AG16	16			x		x	x	x	x	
	AG18	18				x		x			
	AG20	20		x	x		x	x	x	x	x
	AG24	24	x	x		x	x	x		x	x
	AG25	25		x	x		x		x		
	AG30	30		x			x	x			
	AG36	36					x	x			



SIDR-B



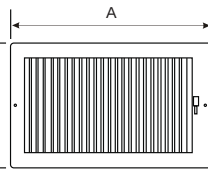
SIDR-B Available Sizes(in.)

- Steel construction
- For sidewall or ceiling application
- Three-way air deflection
- 1/3" Spaced fins
- One-piece stamped face construction
- White durable finish

Type	B(HT)	A(Width)				
		6	8	10	12	14
SIDR-B4	4		x			
SIDR-B6	6	x		x	x	x
SIDR-B8	8		x	x		x
SIDR-B10	10			x		
SIDR-B12	12				x	



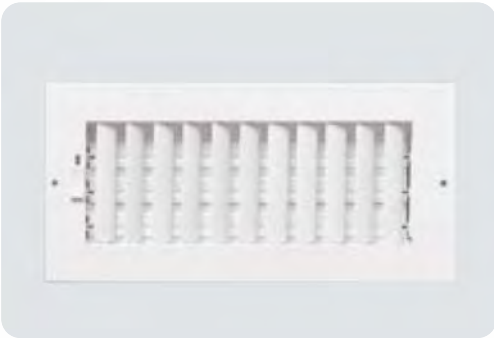
SIDR-A



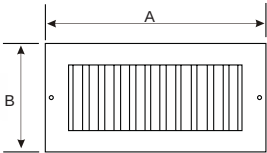
SIDR-A Available Sizes(in.)

- For floor use and heating & cooling applications Solid
- ABS plastic structure.
- Integral multi-shutter damper with easy to use damper handle
- Any color you would like.

Type	B(HT)	A(Width)			
		8	10	12	14
SIDR-A4	4	x	x		
SIDR-A6	6		x	x	x
SIDR-A8	8		x		x



FRA



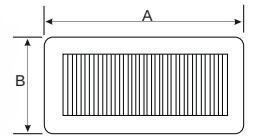
- All-steel construction
- Vertical front bars
- Horizontal second bars
- Adjustable face bars may be set to any desired deflection
- Opposed blade damper
- Larger sizes available in multiple-piece construction
- Bright White finish

110F Available Sizes(in.)

Type	B(HT)	A(Width)							
		6	8	10	12	14	16	18	24
FRA4	4		x	x	x	x			
FRA6	6	x		x	x	x	x	x	x
FRA8	8		x	x	x	x	x		
FRA10	10			x					
FRA12	12				x				



FRB



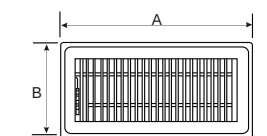
- Used for floor ventilation application
- All steel construction
- One piece stamped face
- Damper is available
- Two way deflection
- White powder-coating finish
- Any color you would like

FR Available Sizes(in.)

Type	B(HT)	A(Width)				
		6	8	10	12	14
FRB2	2			x	x	x
FRB3	3			x		
FRB4	4		x	x	x	x
FRB6	6	x			x	x



FRC



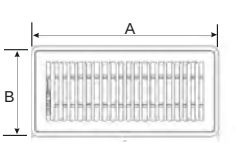
- For floor application
- All steel construction
- Multi-angle fin setting
- Any colour you would like
- Easy to clean

FRC Available Sizes(in.)

Type	B(HT)	A(Width)				
		8	10	12	14	
FEC4	4	x	x	x	x	
FEC6	6	x	x	x	x	
FEC8	8	x	x	x	x	



FRD



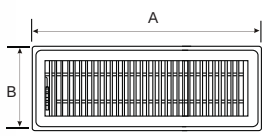
- For floor application
- All steel construction
- Heavy gauge stamped face and welded construction
- Low frame configuration
- White or bright brown powder-coating finish
- Any color you would like.

FRD Available Sizes(in.)

Type	B(HT)	A(Width)			
		8	10	12	14
FRD4	4	x	x	x	x
FRD6	6	x	x	x	x
FRD8	8	x	x	x	x



FRE



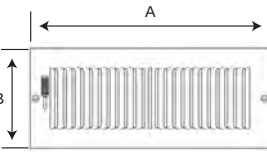
- For floor application
- All steel construction
- Heavy gauge stamped face and welded construction
- Low frame configuration
- White or bright brown powder-coating finish
- Any color you would like.

FRE Available Sizes(in.)

Type	B(HT)	A(Width)			
		8	10	12	14
FRE4	4	x	x	x	x
FRE6	6	x	x	x	x
FRE8	8	x	x	x	x



FRF



- For floor application
- All steel construction
- Heavy gauge stamped face and welded construction
- Low frame configuration
- White or bright brown powder-coating finish
- Any color you would like.

FRF Available Sizes(in.)

Type	B(HT)	A(Width)								
		6	8	10	12	14	16	18	20	24
FRF4	4	x	x	x	x	x	x			
FRF5	5			x	x					
FRF6	6	x	x	x	x	x	x	x	x	x
FRF8	8		x	x	x	x	x	x	x	x
FRF10	10				x	x				
FRF12	12				x					

Non-insulated Aluminium Flexible - NIAF



- **Application:**
Specifically produced for low and medium pressure heating, cooling, ventilation, exhaust and air conditioning systems.
- **Material:**
Produced from multi-layer aluminium and polyester, strengthened with high tension hard steel spring wire.
- **Characteristic:**
High elasticity and flexibility.
- **Mounting:**
It can be easily fitted to circular, oval or rectangular connectors.
- **Certification:**
The dimensions, tolerances and mechanical are tested, classified & certified according to EN 13180 standard.

Insulated Aluminium Flexible - IAF



- **Application:**
Specifically produced for low and medium pressure heating, cooling, ventilation, exhaust and air conditioning systems.
- **Material:**
Produced from multi-layer aluminium and polyester, strengthened with high tension hard steel spring wire,sounded with glass wool insulation and an aluminium vapour barrier.
- **Characteristic:**
High elasticity and flexibility.
- **Mounting:**
It can be easily fitted to circular, oval or rectangular connectors.
- **Certification:**
The dimensions, tolerances and mechanical are tested, classified & certified according to EN 13180 standard.

Technical specification

Technical specification	Multi layer	Single layer	Multi layer PET
Fire Resistance	Difficult to ignite	Limited combustibility	Limited combustibility
Construction	2 ply aluminium	1 ply aluminium	2 ply aluminium
	1 ply polyester	1 ply polyester	2 ply polyester
Available Diameters	Ø 102	Ø 102	Ø 102
	Ø 127	Ø 127	Ø 127
	Ø 152	Ø 152	Ø 152
	Ø 160	Ø 160	Ø 160
	Ø 203	Ø 203	Ø 203
	Ø 254	Ø 254	Ø 254
	Ø 305	Ø 305	Ø 305
	Ø 315	Ø 315	Ø 315
	Ø 356	Ø 356	Ø 356
	Ø 406	Ø 406	Ø 406
	Ø 456	Ø 456	Ø 456
	Ø 508	Ø 508	Ø 508
Temperature Range	-30 C / + 140 C	-30 C / + 140 C	-30 C / + 140 C
Air Velocity	30 m/s (max)	30 m/s (max)	30 m/s (max)
Operating Pressure	3000 Pa (max)	3000 Pa (max)	3000 Pa (max)
Standard Length	10 m	10 m	Any length within10 m
Packing	Single cardboard box	Single cardboard box	Single cardboard box

Technical specification

Technical Properties	Multi Layer	Single Layer	Multi / Single Layer
Inner Duct Construction	2 ply aluminium	1 ply aluminium	1or 2 ply aluminium
	1 ply polyester	1 ply polyester	1 ply polyester
Jacket Construction	1 ply aluminium	1 ply aluminium	1 ply aluminium
	1 ply polyester	1 ply polyester	1 ply polyester
Available Diameters	Ø 102	Ø 102	Ø 102
	Ø 127	Ø 127	Ø 127
	Ø 152	Ø 152	Ø 152
	Ø 160	Ø 160	Ø 160
	Ø 203	Ø 203	Ø 203
	Ø 254	Ø 254	Ø 254
	Ø 305	Ø 305	Ø 305
	Ø 315	Ø 315	Ø 315
	Ø 356	Ø 356	Ø 356
	Ø 406	Ø 406	Ø 406
	Ø 456	Ø 456	Ø 456
	Ø 508	Ø 508	Ø 508
Temperature Range	-30°C / +140°C	-30°C / +140°C	-30°C / +140°C
Air Velocity	30 m/s (max)	30 m/s (max)	30 m/s (max)
Operating Pressure	3000 Pa(max)	3000 Pa(max)	3000 Pa(max)
Insulation	Glass Wool	Glass Wool	Glass Wool
Insulation Thicknes	25 mm	25 mm	25 mm
Insulation Densitys	16 kg/m3	16 kg/m3	16 kg/m3
Standard Length	10 m	10 m	10 m
Fire Resistance	Fire Retardant	Fire Retardant	Fire Retardant
Packing	Single cardboard box	Single cardboard box	Single cardboard box

Insulated Aluminium Flexible- IAF



- **Application:**
Specifically produced for low and medium pressure heating, cooling, ventilation, exhaust and air conditioning systems.
- **Material:**
Produced from multi-layer aluminium and polyester, strengthened with high tension hard steel spring wire,sounded with glass wool insulation and an aluminium vapour barrier.
- **Characteristic:**
High elasticity and flexibility.
- **Mounting:**
It can be easily fitted to circular, oval or rectangular connectors.
- **Certification:**
The dimensions, tolerances and mechanical are tested, classified & certified according to EN 13180 standard.

Acoustic Insulated Aluminium Flexible - AFS



- **Application:**
Specifically produced for low and medium pressure heating, cooling, ventilation, exhaust and air conditioning systems.
- **Material:**
Produced from multi-layer aluminium and polyester, strengthened with high tension hard steel spring wire,sounded with glass wool insulation and an aluminium vapour barrier.
- **Characteristic:**
High elasticity and flexibility.
- **Mounting:**
It can be easily fitted to circular, oval or rectangular connectors.
- **Certification:**
The dimensions, tolerances and mechanical are tested, classified & certified according to EN 13180 standard.

Technical specification

Technical Properties	Multi Layer	Single Layer	Multi / Single Layer
Inner Duct Construction	2 ply aluminium	1 ply aluminium	1or 2 ply aluminium
	1 ply polyester	1 ply polyester	1 ply polyester
Jacket Construction	1 ply aluminium	1 ply aluminium	1 ply aluminium
	1 ply polyester	1 ply polyester	1 ply polyester
Available Diameters	Ø 102	Ø 102	Ø 102
	Ø 127	Ø 127	Ø 127
	Ø 152	Ø 152	Ø 152
	Ø 160	Ø 160	Ø 160
	Ø 203	Ø 203	Ø 203
	Ø 254	Ø 254	Ø 254
	Ø 305	Ø 305	Ø 305
	Ø 315	Ø 315	Ø 315
	Ø 356	Ø 356	Ø 356
	Ø 406	Ø 406	Ø 406
	Ø 456	Ø 456	Ø 456
	Ø 508	Ø 508	Ø 508
Temperature Range	-30°C / +140°C	-30°C / +140°C	-30°C / +140°C
Air Velocity	30 m/s (max)	30 m/s (max)	30 m/s (max)
Operating Pressure	3000 Pa(max)	3000 Pa(max)	3000 Pa(max)
Insulation	Glass Wool	Glass Wool	Glass Wool
Insulation Thicknes	25 mm	25 mm	25 mm
Insulation Densitys	16 kg/m3	16 kg/m3	16 kg/m3
Standard Length	10 m	10 m	7.5 m
Fire Resistance	Fire Retardant	Fire Retardant	Fire Retardant
Packing	Single cardboard box	Single cardboard box	Single cardboard box

Technical specification

Technical Properties	Multi Layer	Single Layer
Inner Duct Construction	2 ply aluminium	1 ply aluminium
	1 ply polyester	1 ply polyester
Jacket Construction	1 ply aluminium	1 ply aluminium
	1 ply polyester	1 ply polyester
Available Diameters	Ø 102	Ø 102
	Ø 127	Ø 127
	Ø 152	Ø 152
	Ø 160	Ø 160
	Ø 203	Ø 203
	Ø 254	Ø 254
	Ø 305	Ø 305
	Ø 315	Ø 315
	Ø 356	Ø 356
	Ø 406	Ø 406
	Ø 456	Ø 456
	Ø 508	Ø 508
Temperature Range	-30°C / +140°C	-30°C / +140°C
Air Velocity	30 m/s (max)	30 m/s (max)
Operating Pressure	3000 Pa(max)	3000 Pa(max)
Insulation	Glass Wool	Glass Wool
Insulation Thicknes	25 mm	25 mm
Insulation Densitys	16 kg/m3	16 kg/m3
Standard Length	10 m	10 m
Fire Resistance	Fire Retardant	Fire Retardant
Packing	Single cardboard box	Single cardboard box

1 ply polyester between glass wooland flexible duct

Non-insulated Reinforced PVC Flexible Air Ducts - PVCR



- **Application:**
specifically produced for low and medium pressure heating, cooling, ventilation, air conditioning, exhaust and dust extraction systems.
- **Material:**
PVC flexible is manufactured from hardwearing PVC canvas strip reinforced with high tension steel spring wire.
- **Characteristic:**
PVC flexible flexible air ducts are airtight. PVC flexible is highly elastic and flexible. can be used in applications with excessive vibration and/or perpetual motion systems, It can be easily fitted to circular, oval or rectangular connectors.

Pure PVC Flexible Duct - PVCP



- **Application:**
For discharging welding fumes (where high mechanical resistance is required), low and medium pressure heating, cooling and air conditioning systems.
- **Material:**
produced from Single layer PVC with high tension steel spring wire
- **Characteristic:**
A PVC layer on the outer surface of pvc flexible acts as an insulation which makes the duct more impermeable to water and keeps surface temperature higher.Punctures and tears could also lead to condensation and air leaks. Prevention from such deformations is achieved by adding a PVC layer which maintains more mechanical resistance than aluminum flexible air duct. flexible is elastic and flexible.

Technical specification

Technical properties	Combi air
Base Fabric	Polyester
Coating	PVC (both sides)
Nominal Thickness	250 micron
PVC Color	Grey
Available Diameters	Ø 102
	Ø 127
	Ø 150
	Ø 160
	Ø 180
	Ø 203
	Ø 254
	Ø 305
	Ø 315
	Ø 356
	Ø 406
	Ø 457
	Ø 508
Temperature Range	-30°C/+80°C
Air Velocity	30 m/s(max)
Operating Pressure	3000 Pa(maks)
Standard Length	10m
Packing	Single Cardboard Box

Technical specification

Technical properties	Combi air	Combi air
Inner Duct	PVC	PVC Fabric
Available Diameters	Ø 82	Ø 82
	Ø 102	Ø 102
	Ø 127	Ø 127
	Ø 152	Ø 152
	Ø 160	Ø 160
	Ø 180	Ø 180
	Ø 204	Ø 204
	Ø 229	Ø 229
	Ø 254	Ø 254
	Ø 305	Ø 305
	Ø 315	Ø 315
	Ø 356	Ø 356
	Ø 406	Ø 406
	Ø 457	Ø 457
	Ø 508	Ø 508
Wire Pitch	18mm(Ø≥102mm)	18mm(Ø≥102mm)
Temperature Range	-30°C/+150°C	-30°C/+150°C
Air Velocity	30 m/s(max)	30 m/s(max)
Operating Pressure	3000 Pa(maks)	3000 Pa(maks)
Standard Length	10m	10m
Packing	Individual carton	Individual carton

Pure PVC Insulated Flexible Duct - PVCI



- **Application:**
For discharging welding fumes (where high mechanical resistance is required), low and medium pressure heating, cooling and air conditioning systems.
- **Material:**
produced from Single layer PVC with high tension steel spring wire
- **Characteristic:**
A PVC layer on the outer surface of pvc flexible acts as an insulation which makes the duct more impermeable to water and keeps surface temperature higher.Punctures and tears could also lead to condensation and air leaks. Prevention from such deformations is achieved by adding a PVC layer which maintains more mechanical resistance than aluminum flexible air duct. flexible is elastic and flexible.

Technical specification

Technical properties	Combi air	Combi air
Inner Duct	PVC	PVC Fabric
Available Diameters	Ø 82	Ø 82
	Ø 102	Ø 102
	Ø 127	Ø 127
	Ø 152	Ø 152
	Ø 160	Ø 160
	Ø 180	Ø 180
	Ø 204	Ø 204
	Ø 229	Ø 229
	Ø 254	Ø 254
	Ø 305	Ø 305
	Ø 315	Ø 315
	Ø 356	Ø 356
	Ø 406	Ø 406
	Ø 457	Ø 457
	Ø 508	Ø 508
Wire Pitch	18mm(Ø≥102mm)	18mm(Ø≥102mm)
Temperature Range	-30°C/+70°C	-30°C/+70°C
Insulation Thicknes	220 micron	220 micron
Air Velocity	30 m/s(max)	30 m/s(max)
Operating Pressure	3000 Pa(maks)	3000 Pa(maks)
Standard Length	10m	10m
Packing	Individual carton	Individual carton

Polyester Duct - PDF



- **Application:**
specifically produced for low and medium pressure heating, cooling, ventilation and air conditioning systems.
- **Material:**
Airtight Polyester duct is produced from multi layer polyester, strengthened with high tension hard steel spring wire.
- **Characteristic:**
Polyester duct is highly elastic and flexible. It can be easily fitted to circular or oval connectors.

Technical specification

Technical properties	Combi air
Construction	2 Ply Polyester
Available Diameters	Ø 102
	Ø 127
	Ø 150
	Ø 160
	Ø 203
	Ø 254
	Ø 305
	Ø 315
	Ø 356
	Ø 406
	Ø 457
	Ø 508
Temperature Range	-30°C/+120°C
Air Velocity	30 m/s(max)
Operating Pressure	3000 Pa(maks)
Standard Length	10m
Packing	Single Cardboard Box

Polyester Insulated Aluminium Flexible - PDFI



- **Application:**
specifically produced for low and medium pressure heating, cooling, ventilation and air conditioning systems.
- **Material:**
Airtight Polyester duct is produced from multi layer polyester, strengthened with high tension hard steel spring wire.
- **Characteristic:**
Polyester duct is highly elastic and flexible. It can be easily fitted to circular or oval connectors.

Technical specification

Technical properties	Combi air
Construction	2 Ply Polyester
Available Diameters	Ø 102
	Ø 127
	Ø 150
	Ø 160
	Ø 203
	Ø 254
	Ø 305
	Ø 315
	Ø 356
	Ø 406
	Ø 457
	Ø 508
Temperature Range	-30°C/+120°C
Air Velocity	30 m/s(max)
Operating Pressure	25(mm)
Insulation Thicknes	16(kg/m³)
Insulation Densitys	3000 Pa(maks)
Standard Length	10m
Packing	Single Cardboard Box

Combi-Alu/pvc Flexible - PVCC



- **Application:**
The combi-alu/pvc flexible ducts are used in ventilation, air conditioning, and air handling systems with low and moderate air pressure where a high mechanical strength, temperature and fire resistance is required
- **Material:**
produced from multi-layer aluminium & polyester strengthened with high tension steel spring wire, covered with a PVC layer.
- **Characteristic:**
Combi-alu/pvc flexible is more effective against condensation than a standard non-insulated aluminium flexible air duct. In order to prevent condensation the surface temperature of the duct shall be kept higher than the dew point of the air surrounding it. A PVC layer on the outer surface of Combi-alu/pvc flexible acts as an insulation which makes the duct more impermeable to water and keeps surface temperature higher.Punctures and tears could also lead to condensation and air leaks. Prevention from such deformations is achieved by adding a PVC layer which maintains more mechanical resistance than aluminum flexible air duct. Combi-alu/pvc flexible is elastic and flexible.

Technical specification

Technical properties	Combi air
Construction	1 Ply Aluminium
	1 Ply Polyester
	1 Ply PVC
PVC Color	Black
Available Diameters	Ø 102
	Ø 127
	Ø 150
	Ø 160
	Ø 203
	Ø 254
	Ø 305
	Ø 315
	Ø 356
	Ø 406
	Ø 457
	Ø 508
Wire Pitch	18mm(Ø≥102mm)
Temperature Range	-30°C/+140°C
Air Velocity	20 m/s(max)
Operating Pressure (max)	-188 to + 2500Pa
Standard Length	10m
Packing	Single Cardboard Box

Combi-Alu/pvc Insulated Flexible Ducting - PVCCI



- Application:**
specifically produced for low and medium pressure heating, cooling, ventilation and air conditioning systems.
- Material:**
Airtight Polyester duct is produced from multi layer polyester, strengthened with high tension hard steel spring wire.
- Characteristic:**
Polyester duct is highly elastic and flexible. It can be easily fitted to circular or oval connectors.

Technical specification

Technical properties	Combi air
Construction	1 Ply Aluminium
	1 Ply Polyester
	1 Ply PVC
PVC Color	Black
Available Diameters	Ø 102
	Ø 127
	Ø 150
	Ø 160
	Ø 203
	Ø 254
	Ø 305
	Ø 315
	Ø 356
	Ø 406
	Ø 457
	Ø 508
Wire Pitch	18mm(Ø≥102mm)
Temperature Range	-30°C/+150°C
Air Velocity	30 m/s(max)
Operating Pressure	3000 Pa(maks)
Standard Length	10m
Packing	Single Cardboard Box

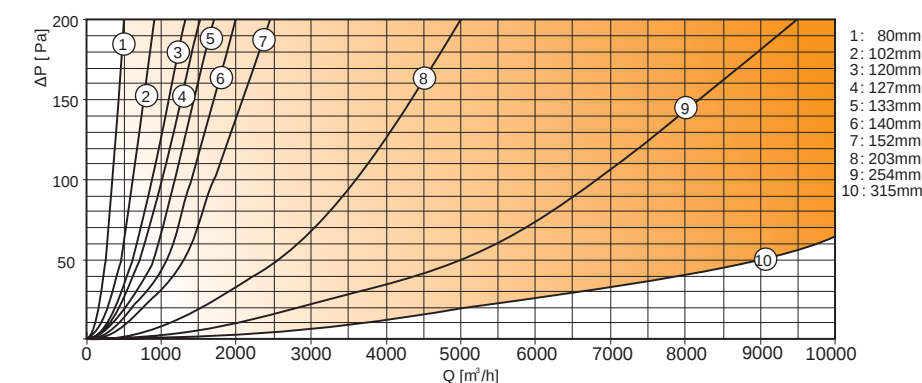
Aluminum Semi Flexible Air Ducts - ASF



- The aluminum semi flexible air ducts is a semi-flexible 1-layer aluminium alloy duct.
- The aluminum semi flexible air ducts is easy to install on circular connection parts.
- As the product does not contain PVC, no toxic vapours are released should fire occur
- Application**
The aluminum semi flexible air ducts flexible ducts are used in ventilation, air conditioning, and air handling systems where a high mechanical strength is required.
 - Composition**
Spiral wound and profiled strip from aluminium alloy, thickness: 80 µ
Colour: Aluminium (in black colour available on request)
 - Chemical resistance**
Good resistance to many solvents
Moderate resistance to acid and base

Technical specification

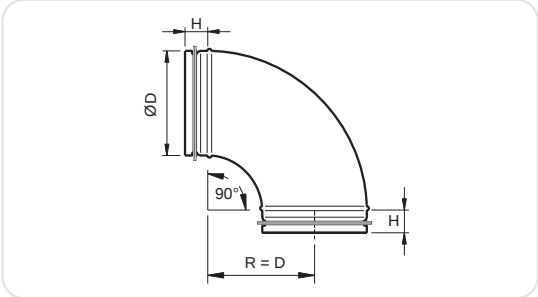
Technical properties	Combi air
Temperature range	From -10 C till + 200 °C
Air velocity(max)	15 m/s
Operating pressure(max)	+ 2000 Pa
Bend radius	1 x D
Diameter range	82mm-315mm
Fire resistance	A1 according DIN4102KL and EN3180



Bends 90°



B90X



B90



B90S



B90SS



B90H

Galvanized steel pressed and seam welded bends 90°, with rubber sealing. Radius $R = 1 \times D$.
The airtightness class is also determined by the mounting on the construction site.

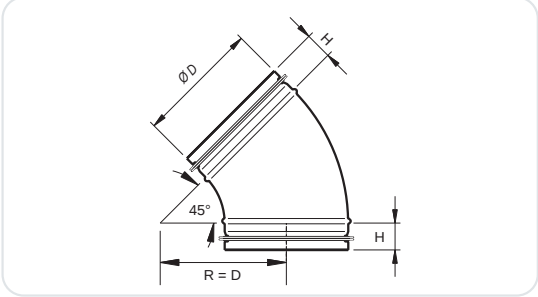
Other available products
Pressed bends 90° without rubber sealing type
B90 B90S B90SS B90H

Size	ΦD(mm)	R(mm)	H(mm)
80	78.8	80	40
100	98.8	100	40
125	123.8	125	40
150	148.7	150	40
160	158.7	160	40
180	178.6	180	40
200	198.6	200	40
250	248.5	250	40
315	315	315	60

Bends 45°



B45X



B45



B45S



B45SS



B45H

Bends 45°

Galvanized steel pressed and seam welded bends 45°, with rubber sealing. Radius $R = 1 \times D$.
The airtightness class is also determined by the mounting on the construction site.

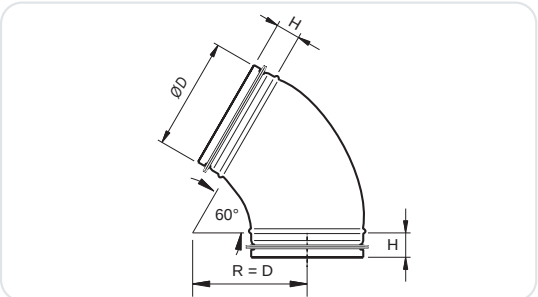
Other available products
Pressed bends 45° without rubber sealing type
B45 B45S B45SS B45H

Size	ΦD(mm)	R(mm)	H(mm)
80	78.8	80	40
100	98.8	100	40
125	123.8	125	40
150	148.7	150	40
160	158.7	160	40
180	178.6	180	40
200	198.6	200	40
250	248.5	250	40
315	315	315	60

Bends 60°



B60X



B60



B60S



B60SS



B60H

Galvanized steel pressed and seam welded bends 60°, with rubber sealing. Radius $R = 1 \times D$.
The airtightness class is also determined by the mounting on the construction site.

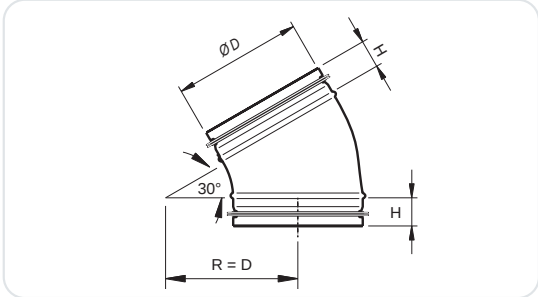
Other available products
Pressed bends 60° without rubber sealing type
B60 B60S B60SS B60H

Size	ΦD(mm)	R(mm)	H(mm)
80	78.8	80	40
100	98.8	100	40
125	123.8	125	40
150	148.7	150	40
160	158.7	160	40
180	178.6	180	40
200	198.6	200	40
250	248.5	250	40
315	315	315	60

Bends 30°



B30X



B30



B30S



B30SS



B30H

Galvanized steel pressed and seam welded bends 30°, with rubber sealing. Radius $R = 1 \times D$. The airtightness class is also determined by the mounting on the construction site.

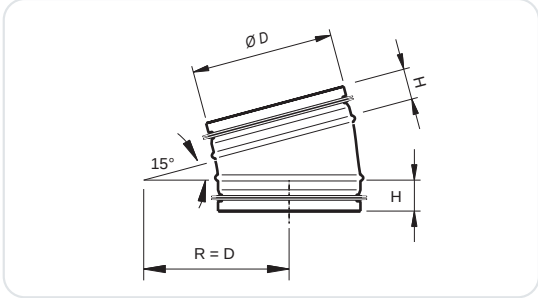
Other available products
Pressed bends 30° without rubber sealing type
B30 B30S B30SS B30H

Size	ΦD(mm)	R(mm)	H(mm)
80	78.8	80	40
100	98.8	100	40
125	123.8	125	40
150	148.7	150	40
160	158.7	160	40
180	178.6	180	40
200	198.6	200	40
250	248.5	250	40
315	315	315	60

Bends 15°



B15X



B15



B15S



B15SS



B15H

Bends 15°

Galvanized steel pressed and seam welded bends 15°, with rubber sealing. Radius $R = 1 \times D$. The airtightness class is also determined by the mounting on the construction site.

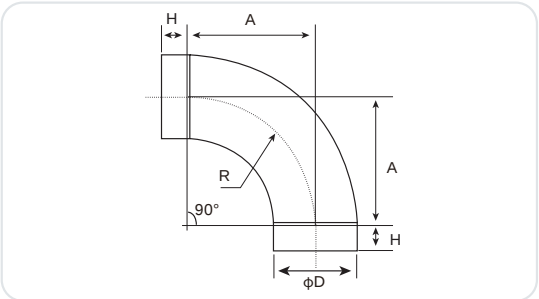
Other available products
Pressed bends 15° without rubber sealing type
B15 B15S B15SS B15H

Size	ΦD(mm)	R(mm)	H(mm)
80	78.8	80	40
100	98.8	100	40
125	123.8	125	40
150	148.7	150	40
160	158.7	160	40
180	178.6	180	40
200	198.6	200	40
250	248.5	250	40
315	315	315	60

Long Radius Elbow 90°



LB90X



LB90



LB90S



LB90SS



LB90H

Galvanized steel pressed and seam welded bends 90°, with rubber sealing. Radius $R = 1.5 \times D$. The airtightness class is also determined by the mounting on the construction site.

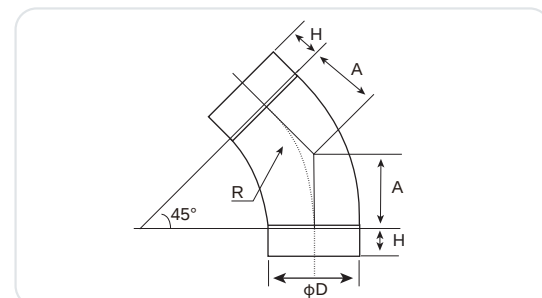
Other available products
Pressed bends 90° without rubber sealing type
LB90 LB90S LB90SS LB90H

Size	ΦD(mm)	A(mm)	H(mm)
80	78.8	120	40
100	98.8	150	40
125	123.8	187.5	40
150	148.7	225	40
160	158.7	240	40
180	178.6	270	40
200	198.6	300	40
250	248.5	375	40

Long Radius Elbow 45°



LB45X



LB45



LB45S



LB45SS



LB45H

Galvanized steel pressed and seam welded bends 45°, with rubber sealing. Radius $R = 1.5 \times D$. The airtightness class is also determined by the mounting on the construction site.

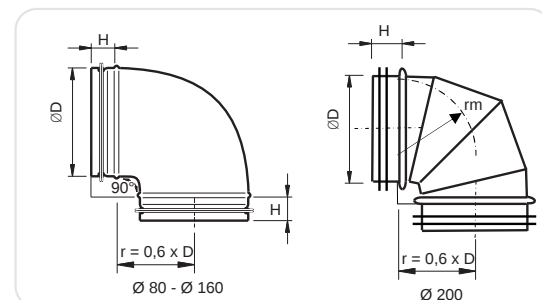
Other available products
Pressed bends 45° without rubber sealing type
LB45 LB45S LB45SS LB45H

Size	ΦD(mm)	A(mm)	H(mm)
80	78.8	120	40
100	98.8	150	40
125	123.8	187.5	40
150	148.7	225	40
160	158.7	240	40
180	178.6	270	40
200	198.6	300	40
250	248.5	375	40

Short Radius Elbow 90°



SB90X



SB90



SB90S



SB90SS



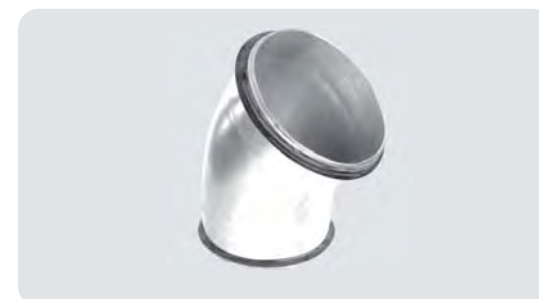
SB90H

Short Radius Elbow 90°

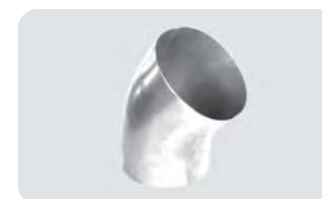
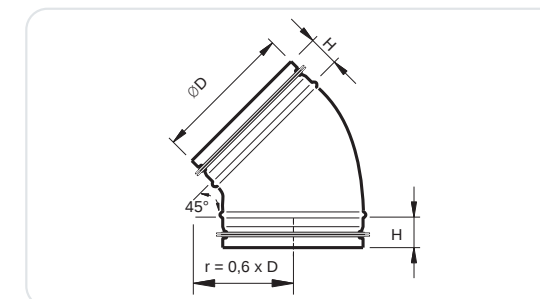
Galvanized steel pressed short bends 90° with male-male connection with rubber lip sealing. Radius $R = 0.6 \times D$. For reduction of space loss in narrow false ceilings. The airtightness is also determined by the mounting on the construction site.

Size	ΦD(mm)	A(mm)	H(mm)
80	80	48	40
100	100	60	40
125	125	75	40
150	150	90	40
160	160	96	40
180	180	108	40
200	200	120	40
250	250	150	40

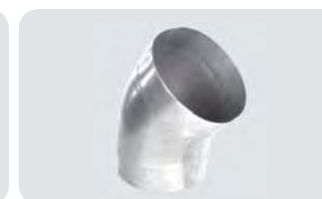
Short Radius Elbow 45°



SB45X



SB45



SB45S



SB45SS



SB45H

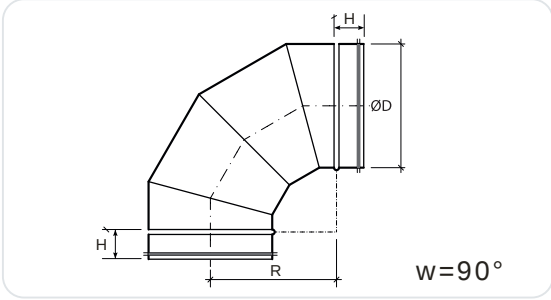
Galvanized steel pressed short bends 45° with male-male connection with rubber lip sealing. Radius $R = 0.6 \times D$. For reduction of space loss in narrow false ceilings. The airtightness is also determined by the mounting on the construction site.

Size	ΦD(mm)	A(mm)	H(mm)
80	78.8	48	40
100	98.8	60	40
125	123.8	72.5	40
150	148.7	85	40
160	158.7	95	40
180	178.6	100	40
200	198.6	110	40
250	248.5	120	40

Sectional Bend 90°



BS90X



BS90S



BS90SS

Galvanized steel segmented bends 90° with rubber sealing.
Radius $R = 1 \times D$ (upto Ø630), $R=0.75 \times D$ (starting from Ø710).
The airtightness class is also determined by the mounting on the construction site.

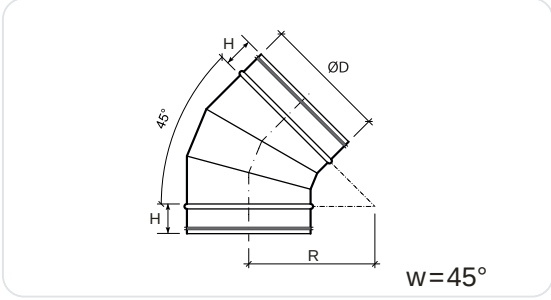
Other available products
Pressed bends 90° without rubber sealing type
BS90S BS90SS

Size	φD(mm)	R(mm)	H(mm)
250	250	250	50
315	315	315	50
355	355	355	50
400	400	400	50
450	450	450	55
500	500	500	55
560	560	560	55
630	630	630	55
710	710	533	60
800	800	600	100

Sectional Bend 45°



BS45X



BS45S



BS45SS

Sectional Bend 45°

Galvanized steel segmented bends 45° with rubber sealing.
Radius $R = 1 \times D$ (upto Ø630), $R=0.75 \times D$ (starting from Ø710).
The airtightness class is also determined by the mounting on the construction site.

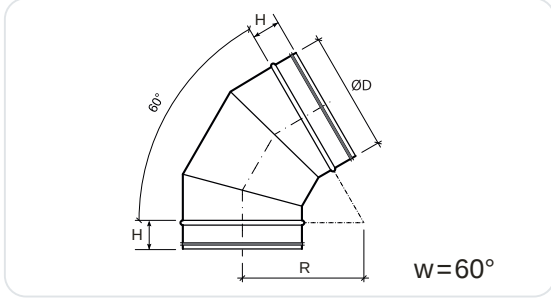
Other available products
Pressed bends 45° without rubber sealing type
BS45S BS45SS

Size	φD(mm)	R(mm)	H(mm)
250	250	250	45
315	315	315	45
355	355	355	45
400	400	400	45
450	450	450	45
500	500	500	45
560	560	560	70
630	630	630	70
710	710	533	70
800	800	600	70

Sectional Bend 60°



BS60X



BS60S



BS60SS

Galvanized steel segmented bends 60° with rubber sealing.
Radius $R = 1 \times D$ (upto Ø630), $R=0.75 \times D$ (starting from Ø710).
The airtightness class is also determined by the mounting on the construction site.

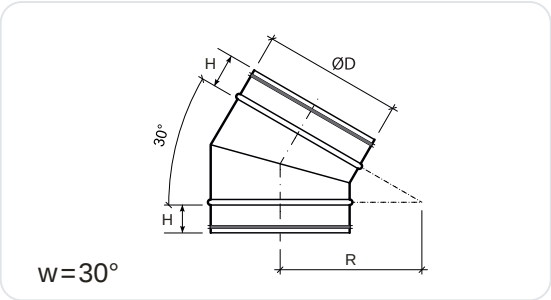
Other available products
Pressed bends 60° without rubber sealing type
BS60S BS60SS

Size	φD(mm)	R(mm)	H(mm)
80	80	80	45
100	100	100	45
125	125	125	45
150	150	150	45
160	160	160	45
180	180	180	45
200	200	200	45
250	250	250	45
315	315	315	45
355	355	355	45
400	400	400	45
450	450	450	45
500	500	500	45
560	560	560	70
630	630	630	70
710	710	533	70
800	800	600	70

Sectional Bend 30°



BS30X



BS30S



BS30SS

Galvanized steel segmented bends 30° with rubber sealing.
Radius $R = 1 \times D$ (upto $\varnothing 630$), $R=0.75 \times D$ (starting from $\varnothing 710$).
The airtightness class is also determined by the mounting on the construction site.

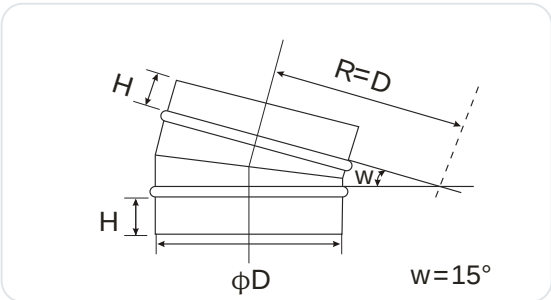
Other available products
Pressed bends 30° without rubber sealing type
BS30S BS30SS

Size	$\varphi D(\text{mm})$	$R(\text{mm})$	$H(\text{mm})$
80	80	80	45
100	100	100	45
125	125	125	45
150	150	150	45
160	160	160	45
180	180	180	45
200	200	200	45
250	250	250	45
315	315	315	45
355	355	355	45
400	400	400	45
450	450	450	45
500	500	500	45
560	560	560	70
630	630	630	70
710	710	533	70
800	800	600	70

Sectional Bend 15°



BS15X



BS15S



BS15SS

Galvanized steel segmented bends 15° with rubber sealing.
Radius $R = 1 \times D$ (upto $\varnothing 630$), $R=0.75 \times D$ (starting from $\varnothing 710$).
The airtightness class is also determined by the mounting on the construction site.

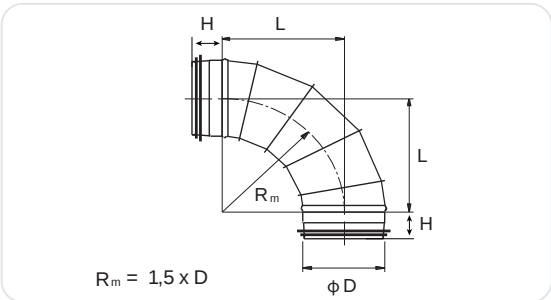
Other available products
Pressed bends 15° without rubber sealing type
BS15S BS15SS

Size	$\varphi D(\text{mm})$	$R(\text{mm})$	$H(\text{mm})$
224	224	224	50
250	250	250	50
280	280	280	50
300	300	300	50
315	315	315	50

Long Sectional Bend 90°



LBS90X



LBS90S



LBS90SS

Long Sectional Bend 90°

Galvanized steel segmented bends 90° with rubber sealing.
Radius R = 1.5 x D
The airtightness class is also determined by the mounting on the construction site.

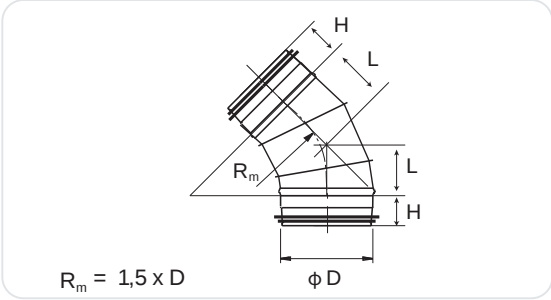
Other available products
Pressed bends 90° without rubber sealing type
LBS90S LBS90SS

Size	φD(mm)	L(mm)	H(mm)
280	280	420	50
300	300	450	50
315	315	472.5	50
350	350	525	50
355	355	532.5	50
400	400	600	50
450	450	675	55
500	500	750	55
560	560	840	55
630	630	945	60
710	710	1065	100

Long Sectional Bend 45°



LBS45X



LBS45S



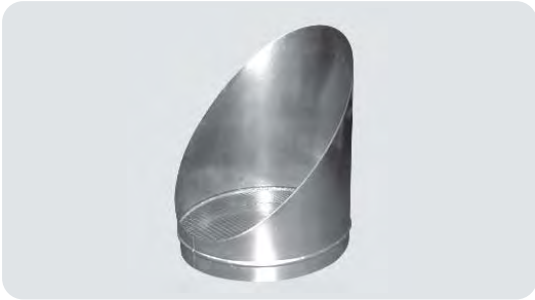
LBS45SS

Galvanized steel segmented bends 45° with rubber sealing.
Radius R = 1.5 x D.
The airtightness class is also determined by the mounting on the construction site.

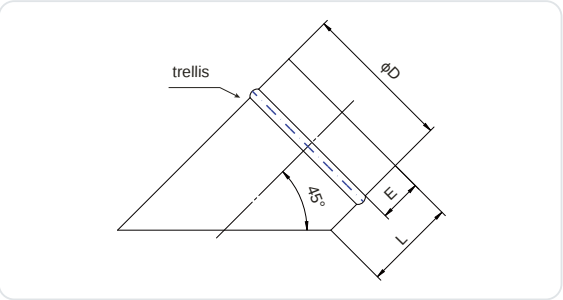
Other available products
Pressed bends 45° without rubber sealing type
LB45S LB45SS

Size	φD(mm)	L(mm)	H(mm)
280	280	420	50
300	300	450	50
315	315	472.5	50
350	350	525	50
355	355	532.5	50
400	400	600	50
450	450	675	55
500	500	750	55
560	560	840	55
630	630	945	60
710	710	1065	100

Branching With Net



Bus



- Galvanized steel
- Netmounted by spot welding

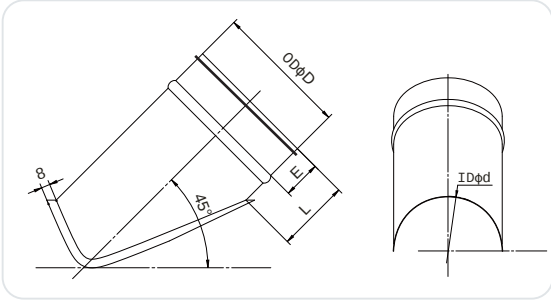
- Branching connection(linear weld)
- Net drawn, mesh 12x12mm.

Size	φD(mm)	E(mm)	L(mm)
100	99	35	75
125	124	35	75
160	158.9	35	75
200	198.9	35	75
250	248.9	35	75
315	313.8	35	75
355	353.8	55	95

45° Branching For Round Ducts



PS4X



PS4S



PS4SS

- Galvanized steel
- EPDM(PS4X)rubber gasket pressed

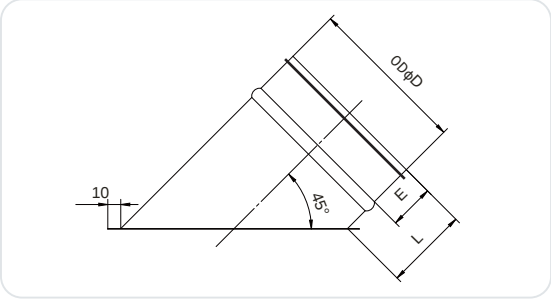
- Single element

Size	ODφD(mm)	IDφd(mm)	E(mm)	L(mm)
100	100	99	35	65
125	125	124	35	65
160	160	158.9	35	65
200	200	198.9	35	65
250	250	248.9	35	65
315	315	313.8	35	65
355	355	353.8	55	85

45° Cylindrical Branching



IL4X



IL4S



IL4SS

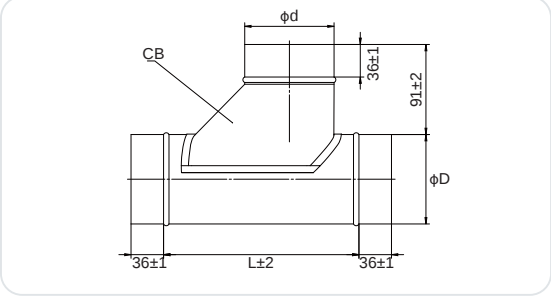
- Galvanized steel
- EPDM(IL4X)rubber gasket pressed
- Single element

Size	ODφD(mm)	E(mm)	L(mm)
100	99	35	65
125	124	35	65
160	158.9	35	65
200	198.9	35	65
250	248.9	35	65
315	313.8	35	65
355	353.8	55	85

Branching Overlaying Round/Rectangular Duct



CB



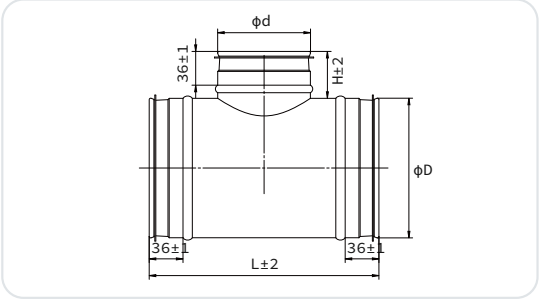
CBF

Size	φD(mm)	φd(mm)	L(mm)
100-100	99	99	288
125-100	124	99	288
150-100	148.9	99	288
160-100	158.9	99	288
200-100	198.9	99	288

T-Piece 90°



TSX



TS



TSS

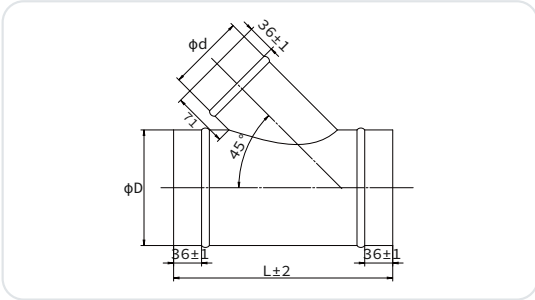
Galvanized steel symmetrical T-pieces 90°.
The airtightness class is also determined by the mounting on the construction site.

Size	φD(mm)	φd(mm)	L(mm)		H(mm)	
			T	TS/TSX	T	TS/TSX
100-100	99	99	214	204	52	47
125-100	124	99	255	245	43	38
125-125	124	124	243	233	52	47
150-100	148.9	99	255	245	63	58
150-125	148.9	124	285	275	63	58
150-150	148.9	148.9	300	290	63	58
160-100	148.9	99	255	245	43	38
160-125	158.9	124	285	275	43	38
160-160	158.9	158.9	309	299	53	48
200-100	198.9	99	255	245	43	38
200-125	198.9	124	285	275	43	38
200-160	198.9	158.9	309	299	53	48
200-200	198.9	198.9	355	345	40	35
250-100	248.9	99	255	245	63	58
250-125	248.9	124	285	275	43	38
250-160	248.9	158.9	309	299	63	58
250-200	248.9	198.9	355	345	63	58
250-250	248.9	248.9	400	390	63	58

T-Pieces 45° With / Without Rubber



T45X



T45SS

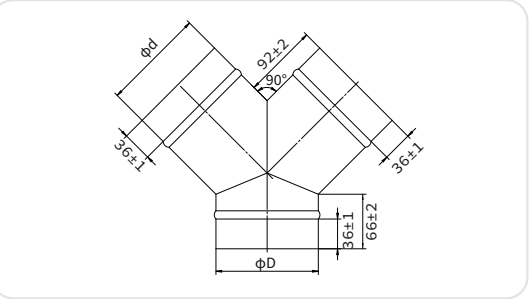
Galvanized steel symmetrical T-pieces 45°, out with/with rubber sealing.
The airtightness class is also determined by the mounting on the construction site.

Size	$\phi D(\text{mm})$	$\phi d(\text{mm})$	L(mm)
100-100	99	99	282
125-100	124	99	282
125-125	124	124	317
150-100	148.9	99	282
150-125	148.9	124	317
150-150	148.9	148.9	352
160-100	158.9	99	282
160-125	158.9	124	317
160-150	158.9	148.9	352
160-160	158.9	158.9	366
200-100	198.9	99	282
200-125	198.9	124	317
200-150	198.9	148.9	352
200-160	198.9	158.9	366
200-200	198.9	198.9	423

Y-piece



YS



YX

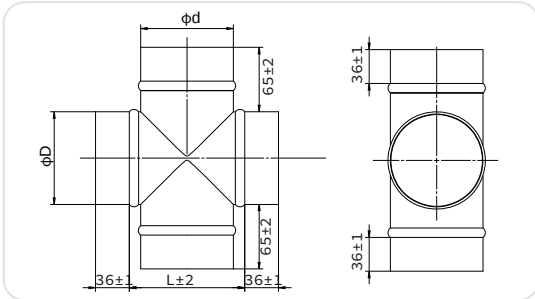
Y-Piece

Size	$\phi D(\text{mm})$		$\phi d(\text{mm})$	
	YS	YX	YS	YX
80-80	79	-	79	-
100-100	99	100	99	100
125-100	124	125	99	125
125-125	124	125	124	125
150-100	148.9	-	99	-
150-125	148.9	-	124	-
150-150	148.9	150	148.9	150
160-100	158.9	160	99	160
160-125	158.9	160	124	160
160-150	158.9	-	148.9	-
160-160	158.9	160	158.9	160
200-100	198.9	-	99.3	-
200-125	198.9	-	124	-
200-150	198.9	-	148.9	-
200-160	198.9	200	158.9	200
200-200	198.9	200	198.9	200
250-200	-	250	-	250
315-200	-	315	-	315
400-200	-	400	-	400
250-250	-	250	-	250
315-250	-	315	-	315
315-315	-	315	-	315
355-355	-	355	-	355
400-400	-	400	-	400
450-450	-	450	-	450
500-500	-	500	-	500
560-560	-	560	-	560
630-630	-	630	-	630

Crossing T-Piece 90°



C-T90S



C-T90



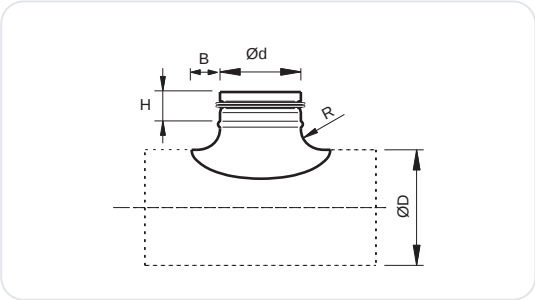
C-T90X

Size(mm)	$\phi D(\text{mm})$	$\phi d(\text{mm})$	L(mm)
80-80	79	79	123

Collar Saddle



PSX



PS



PSS

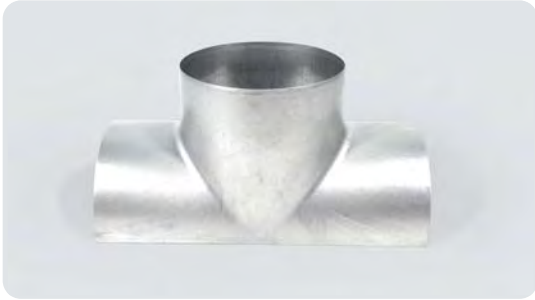


PSSS

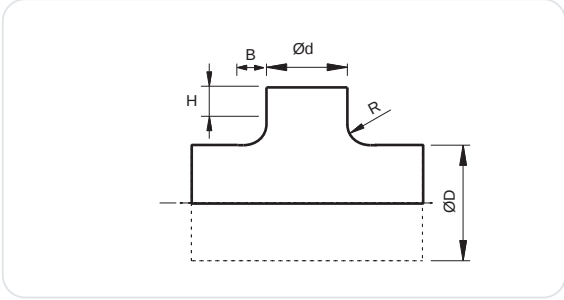
Galvanized steel pressed symmetrical branches 90°,
The airtightness class is also determined by the mounting on the construction site.

Size	φd(mm)	φD(mm)	H(mm)		B(mm)	R(mm)
			PS/PS/PSSS	PSSX		
100-100	98.8	100	40	35	32	12
125-100	98.8	125	40	35	32	12
150-100	98.8	160	40	35	32	12
160-100	98.8	160	40	35	32	12
200-100	98.8	200	40	35	32	12
125-125	123.8	125	40	35	32	12
150-125	123.8	150	40	35	32	12
160-125	123.8	160	40	35	32	12
200-125	123.8	200	40	35	32	12
250-125	123.8	250	40	35	32	12
150-150	148.7	150	40	35	36	16
200-150	148.7	200	40	35	36	16
250-150	148.7	250	40	35	36	16
160-160	158.7	160	40	35	36	16
200-160	158.7	200	40	35	36	16
250-160	158.7	250	40	35	36	16
315-160	158.7	315	40	35	36	16
200-200	198.6	200	40	35	36	16
250-200	198.6	250	40	35	36	16
315-200	198.6	315	40	35	36	16
250-250	248.5	250	40	35	36	16
315-250	248.5	315	40	35	36	16

Collar Saddle



PS-H



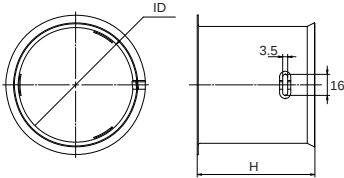
Galvanized steel pressed symmetrical branches 90°, with rubber sealing.
The airtightness class is also determined by the mounting on the construction site.

Size	φd(mm)	φD(mm)	H(mm)	B(mm)	R(mm)
100-80		100	40	32	12
125-80		125	40	32	12
100-100	98.8	100	40	32	12
125-100	98.8	125	40	32	12
160-100	98.8	160	40	32	12
125-125	123.8	125	40	32	12
160-125	123.8	160	40	32	12
200-125	123.8	200	40	32	12
250-125	123.8	250	40	36	16
160-160	158.7	160	40	36	16
200-160	158.7	200	40	36	16
250-160	158.7	250	40	36	16
200-200	198.6	200	40	36	16
250-200	198.6	250	40	36	16

Connection Tube



Model: CT
Size: CT075 CT090 CT110
Material: galvanized sheet

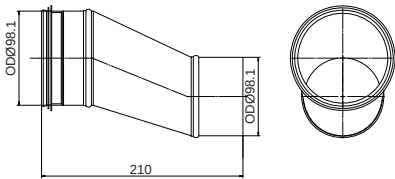


Size	ID	H
CT075	Ø77	95
CT090	Ø93.5	95
CT110	Ø113.5	95

Special Reduction



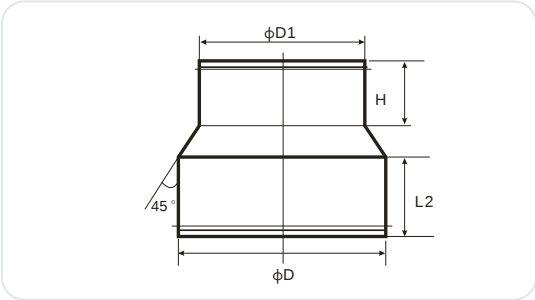
Model: Z080SR
Size: Z080SR100-080
Material: galvanized sheet



Reducers



RCX



RC



RCS



RCSS

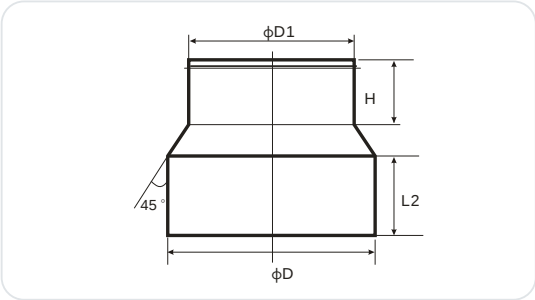
Galvanized steel pressed reduction pieces, Male Largest side = duct size ; other side = fitting size.
For reducing plenumbox connections, connections on air handling units,...
The airtightness class is also determined by the mounting on the construction site.

Size(mm)	D(mm)	D1(mm)	L2(mm)	H(mm)
100-80	98.8	78.8	50/55	40/45
125-80	123.8	78.8	50/55	40/45
125-100	123.8	98.8	50/55	40/45
150-80	148.7	78.8	50/55	40/45
150-100	148.7	98.8	50/55	40/45
150-125	148.7	123.8	50/55	40/45
160-80	158.7	78.8	50/55	40/45
160-100	158.7	98.8	50/55	40/45
160-125	158.7	123.8	50/55	40/45
160-150	158.7	148.7	50/55	40/45
180-125	178.6	123.8	50/55	40/45
180-150	178.6	148.7	50/55	40/45
180-160	178.6	158.7	50/55	40/45
200-80	198.6	78.8	50/55	40/45
200-100	198.6	98.8	50/55	40/45
200-125	198.6	123.8	50/55	40/45
200-150	198.6	148.7	50/55	40/45
200-160	198.6	158.7	50/55	40/45
200-180	198.6	178.6	50/55	40/45
250-100	248.5	98.8	50/55	40/45
250-125	248.5	123.8	50/55	40/45
250-150	248.5	148.7	50/55	40/45
250-160	248.5	158.7	50/55	40/45
250-180	248.5	178.6	50/55	40/45
250-200	248.5	198.6	50/55	40/45
300-200	298.4	198.6	50/55	40/45
300-250	298.4	248.5	50/55	40/45
315-160	313.4	158.7	50/55	40/45
315-200	313.4	198.6	50/55	40/45
315-250	313.4	248.5	50/55	40/45
355-250	353.4	248.5	50/55	40/45
355-315	353.4	313.4	50/55	40/45

Reducers



RCFX



RCF



RCFS

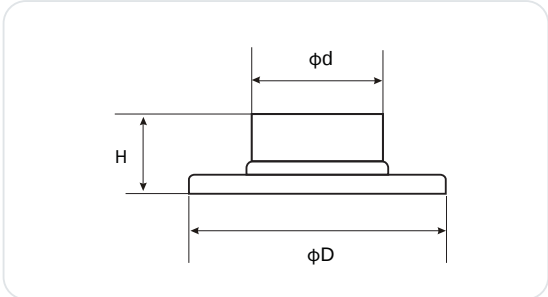
Galvanized steel pressed reduction pieces, Female Largest side = duct size ; other side = fitting size.
For reducing plenumbox connections, connections on air handling units,...
The airtightness class is also determined by the mounting on the construction site.

Size(mm)	D(mm)	D1(mm)	L2(mm)	H(mm)
100-80	100.5	78.8	55	40/45
125-80	125.5	78.8	55	40/45
125-100	125.5	98.8	55	40/45
150-80	150.6	78.8	55	40/45
150-100	150.6	98.8	55	40/45
150-125	150.6	123.8	55	40/45
160-80	160.6	78.8	55	40/45
160-100	160.6	98.8	55	40/45
160-125	160.6	123.8	55	40/45
160-150	160.6	148.7	55	40/45
180-125	180.7	123.8	55	40/45
180-150	180.7	148.7	55	40/45
180-160	180.7	158.7	55	40/45
200-80	200.7	78.8	55	40/45
200-100	200.7	98.8	55	40/45
200-125	200.7	123.8	55	40/45
200-150	200.7	148.7	55	40/45
200-160	200.7	158.7	55	40/45
200-180	200.7	178.6	55	40/45
250-100	250.8	98.8	55	40/45
250-125	250.8	123.8	55	40/45
250-150	250.8	148.7	55	40/45
250-160	250.8	158.7	55	40/45
250-180	250.8	178.6	55	40/45
250-200	250.8	198.6	55	40/45
300-200	300.9	198.6	55	40/45
300-250	300.9	248.5	55	40/45
315-160	315.9	158.7	55	40/45
315-200	315.9	198.6	55	40/45
315-250	315.9	248.5	55	40/45
355-250	356	248.5	55	40/45
355-315	356	313.4	55	40/45

Aluminum Reducers



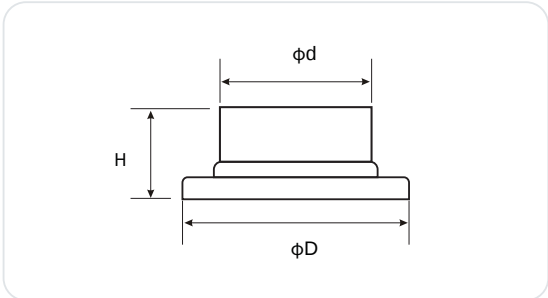
ARC



Size(mm)	φD(mm)	φd(mm)	H(mm)
ARC80	190	78	78
ARC100	210	98	78
ARC125	234	124	78
ARC160	263	158	78
ARC200	312	198	78
ARC250	368	248	78



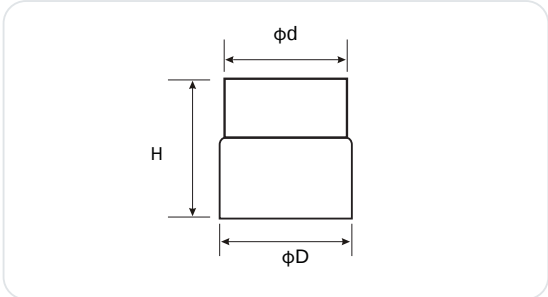
ARCS



Size(mm)	φD(mm)	φd(mm)	H(mm)
ARCS80	135	78	78
ARCS100	158	98	78
ARCS125	192	123	78
ARCS160	210	153	78



ARCSS

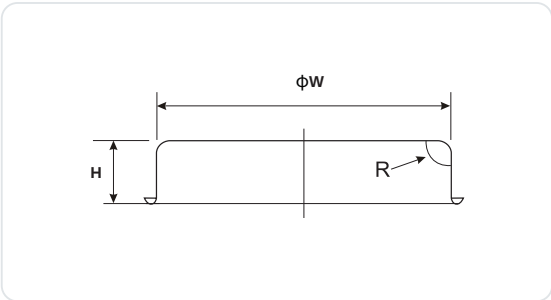


Size(mm)	φD(mm)	φd(mm)	H(mm)
ARCSS80	89	78	113
ARCSS85	94	83	113
ARCSS100	108	97	113
ARCSS112	120	111	113
ARCSS125	133	125	113
ARCSS130	138	129	113
ARCSS140	148	139	113
ARCSS150	158	148	113
ARCSS155	164	152	113

End Cap



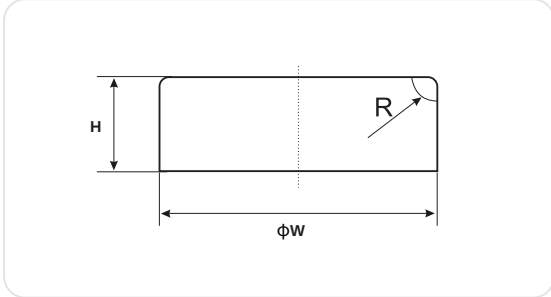
EP



Size	D(mm)	H(mm)	R(mm)	Weight(kg)
80	78.8	20	4	0.04
100	98.8	20	4	0.08
125	123.8	20	4	0.09
140	138.7	20	4	0.1
150	148.7	20	4	0.14
160	158.7	20	4	0.14
180	178.6	20	4	0.19
200	198.6	20	4	0.20
225	223.6	20	4	0.26
250	248.5	20	4	0.27
280	278.5	20	4	0.50
300	298.4	20	4	0.50
315	313.4	20	4	0.51
355	353.3	20	4	0.65
400	398.3	20	4	0.67



EPF



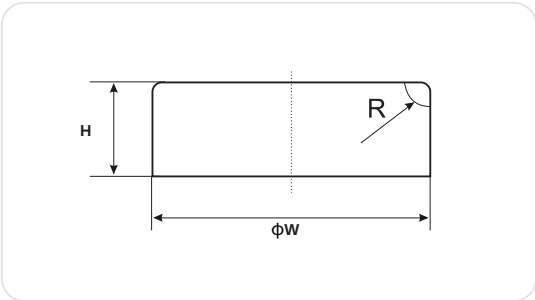
EPFH

Size	W(mm)	H(mm)	R(mm)	Weight(kg)
80	80.5	40	4	0.07
100	100.5	40	4	0.09
125	125.5	40	4	0.1
150	150.6	40	4	0.12
160	160.6	40	4	0.16
200	200.7	40	4	0.17
250	250.8	40	4	0.22
315	315.9	40	4	0.35
355	356	40	4	0.52
400	401	40	4	0.64

End Cap



EPX



EPXH



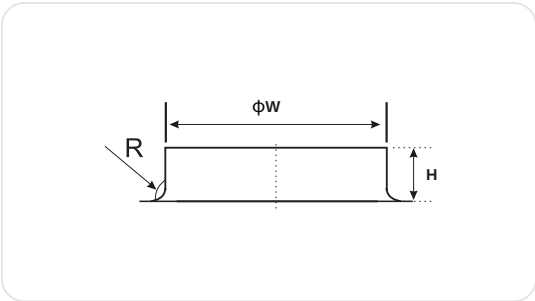
EPXX

Size	W(mm)	H(mm)	R(mm)	Weight(kg)
80	78.8	54	4	0.06
100	98.8	54	4	0.09
125	123.8	54	4	0.11
140	138.4	52.5	4	0.13
150	148.7	54	4	0.15
160	158.7	58	4	0.16
180	178.6	58/52.5	4	0.20
200	198.6	58	4	0.21
224	222.2	52.5	4	0.28
250	248.5	58	4	0.34
280	278.2	73	4	0.40
315	313.4	58	4	0.46
355	353.4	58	4	0.51
400	398.4	58	4	0.76

Straight Branches



IL



ILS



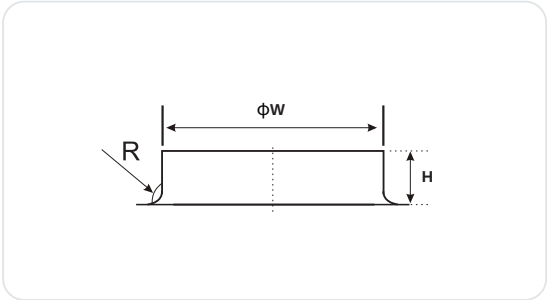
ILX

Straight Branches

Size	W(mm)	H(mm)	R(mm)
80	78.8	45	4
100	98.8	45	4
125	123.8	45	4
150	148.7	45	4
160	158.7	45	4
200	198.6	45	4
250	248.5	45	4
315	313.4	45	4
355	353.4	45	4
400	398.4	45	4



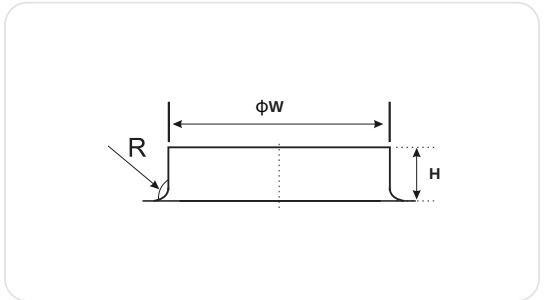
ILH



Size	W(mm)	H(mm)	R(mm)
152.4	149.4	64	4
127	124	51.3	4
101.6	98.6	51.3	4



ILR



ILRS



ILRX

Size	W(mm)	H(mm)	R(mm)
80	78.8	45	12
100	98.8	45	15
125	123.8	45	20
150	148.7	45	20
160	158.7	45	25
200	198.6	45	25
250	248.5	45	25
315	313.4	45	25

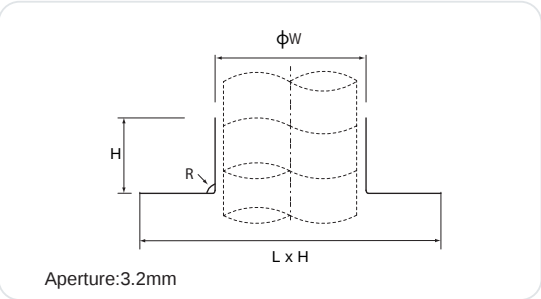
Stinger With Square Flate



SFX



SF

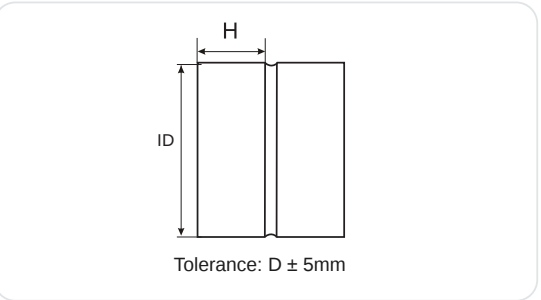


Size	LXH	W(mm)	H(mm)	R(mm)
100	255x255	98.8	40	4
125	255x255	123.8	40	4
160	255x255	158.7	40	4

Coupling



VF

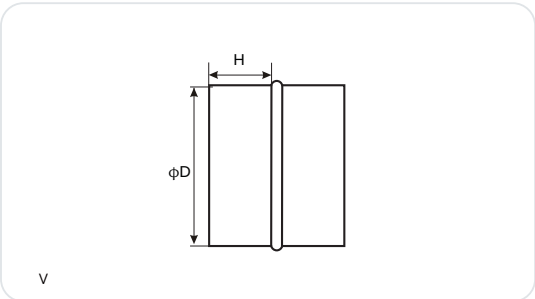


Size	φD(mm)	H(mm)	t(mm)
80	80.5	45	0.5
100	100.5	45	0.5
125	125.5	45	0.5
140	140.6	45	0.5
150	150.6	45	0.5
160	160.6	45	0.5
180	180.6	45	0.5
200	200.7	45	0.5
224	224.7	45	0.5
250	250.8	45	0.5
280	280.8	45	0.5
300	300.9	45	0.5
315	315.9	45	0.5
355	356.0	45	0.5
400	401.0	45	0.5
450	451.1	45	0.5
500	501.1	45	0.5
560	561.2	45	0.5
630	631.2	45	0.5

Coupling



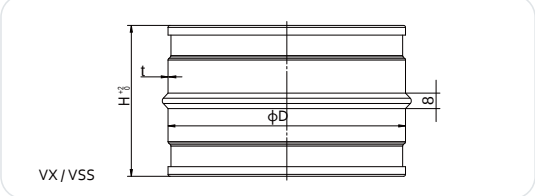
V



VX



VS



Galvanized steel connection pieces for ducts with double lip seal.
The airtightness class is also determined by the mounting on the construction site.

Size	φD(mm)		H(mm)		t(mm)
	V	VX / VS	V	VX / VS	
80	78.8	79	45	78	0.5
100	98.8	99	45	78	0.5
125	123.8	124	45	78	0.5
140	138.8	-	45	-	0.5
150	148.7	148.9	45	78	0.5
160	158.7	158.9	45	78	0.5
180	178.7	-	45	-	0.5
200	198.6	198.9	45	78	0.5
224	198.6	-	45	-	0.5
250	248.5	248.9	45	118	0.5
280	278.5	-	45	-	0.5
300	298.5	298.9	45	118	0.5
315	313.4	313.8	45	185	0.5
350	348.4	-	45	-	0.5
355	353.4	-	45	-	0.5

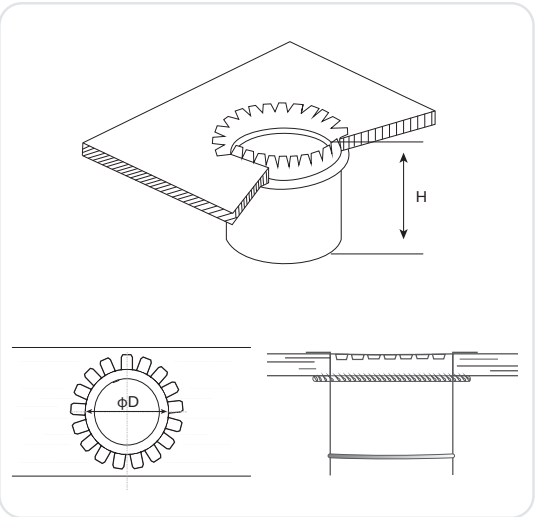
Plenum Collars



PCR



PCRS



The Plenum Collar has a snap-together design for easy assembly. This plenum collar can be used to transition from a flat surface such as a lined or duct board plenum to round pipe or insulated flexible ducts. Can also be attached to metal surfaces. Made of galvanized steel, this plenum collar is made for durability. The 2 in. space between the bead and flange provides you with plenty of space for securing an insulated flexible duct.

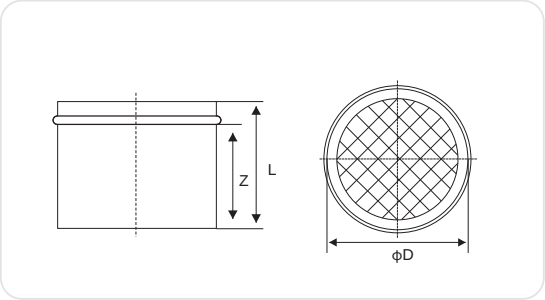
- Made of galvanized steel
- Helps transition from lined or duct board plenums to round pipes or insulated, flexible ducts
- Can be used with unlined, metal plenums
- Snap-together design
- 2 in. between bead and flange allow space for securing insulated flexible duct
- Seal seams with mastic, sealant or duct tape (sold separately)
- Size available: 100, 125, 150, 160, 200, 250, 300mm.

Size	φd(mm)	H(mm)	t(mm)
80	97	152	0.5
100	99	152	0.5
125	124	152	0.5
150	148.9	152	0.5
160	158.9	152	0.5
200	198.9	152	0.5
250	248.9	152	0.5
315	313.8	152	0.5
355	353.8	152	0.5
400	398.8	152	0.5
450	448.8	152	0.6
500	498.8	152	0.6
560	558.8	152	0.6
630	628.8	152	0.6

Net Straight Branching



NS



- galvanized steel.
- mesh fixed with spot weld,
- branching connection (linear weld)
- expanded metal mesh, openings 12x12mm

Size	φd(mm)	H(mm)	L(mm)
80	97	55	40
100	99	55	40
125	124	55	40
150	148.9	55	40
160	158.9	55	40
200	198.9	55	40
250	248.9	55	40
315	313.8	55	40
355	353.8	55	40
400	398.8	55	40
450	448.8	55	40
500	498.8	55	40
560	558.8	55	40
630	628.8	55	40

Rectangel - Round Transitionl



RRTL

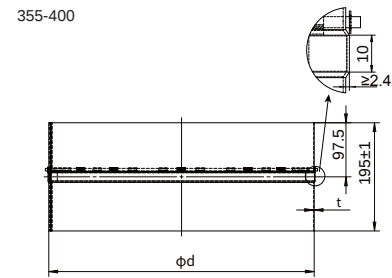
- Used for in-line frantion from round pipe or insulation flexible duct to a range hood
- Gdvanized construction



RRTF

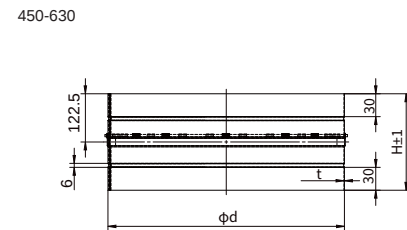


BDA



Blades made of aluminium

The backdraught shutters for round ducts shall be of the type with galvanized steel body and aluminium blades. They will be mounted in between two ducts to prevent backdraught when the fan stops.



Size	φd(mm)	H(mm)	t(mm)
80	97	88	0.5
100	99	88	0.5
125	124	88	0.5
150	148.9	88	0.5
160	158.9	88	0.5
200	198.9	88	0.5
250	248.9	128	0.5
315	313.8	128	0.5
355	353.8	97.5	0.5
400	398.8	97.5	0.5
450	448.8	122.5	0.6
500	498.8	122.5	0.6
560	558.8	122.5	0.6
630	628.8	122.5	0.6

BDAX



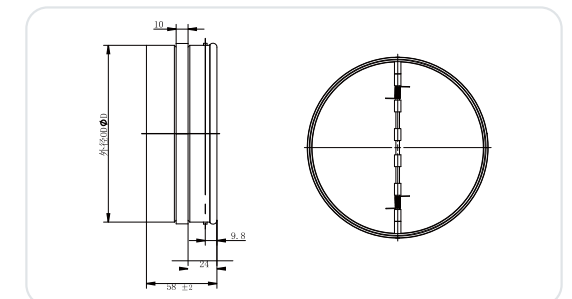
BDASS

Stainless steel springs

Size	φd(mm)	H(mm)	t(mm)
80	79	78	0.5
100	99	78	0.5
125	124	78	0.5
150	148.9	78	0.5
160	158.9	78	0.5
200	198.9	78	0.5
250	248.9	118	0.5
315	313.8	118	0.5



BDP



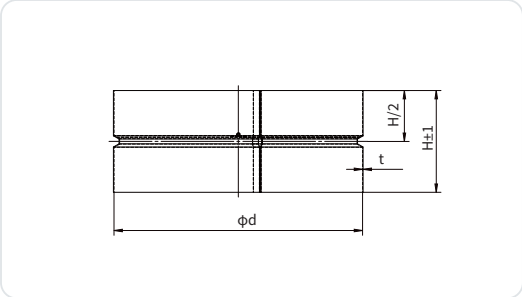
Size	φD
80	78.5-79
100	98.5-99
125	123.5-124
150	148.5-148.9
160	158.5-158.9
200	198.1-198.9
250	248.1-248.9
315	313-313.8
355	352.8-353.8
400	397.8-398.8

The backdraught shutters for round ducts shall be of the type with galvanized steel body and aluminium blades. They will be mounted in between two ducts to prevent backdraught when the fan stops.

Duct backdraught shutters



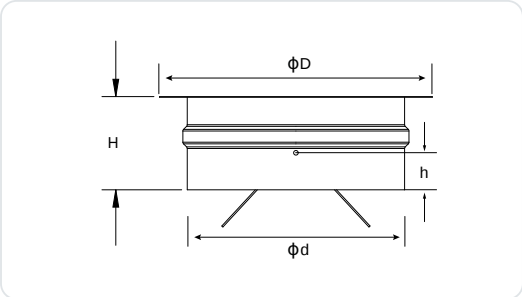
BDB



Size	ϕd(mm)	H(mm)	t(mm)
80	80	84	0.5
100	100	84	0.5
125	125	84	0.5
150	150	84	0.5
160	160	84	0.5
200	200	84	0.5
250	250	124	0.5
315	315	124	0.5



BDU

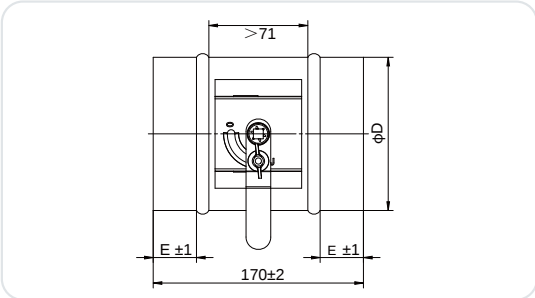


Size	ϕD(mm)	ϕd(mm)	H(mm)	h(mm)
152.4	187.5	149.3	64	28.4

Regulating damper



RD



RDS



RDX



RDX-B

Size	ϕD(mm)	E(mm)	H(mm)
80	79	35	170
100	99	35	170
125	124	35	170
150	148.9	35	170
160	158.9	35	170
200	198.9	35	170
250	248.9	35	170
300	298.9	35	170
315	313.8	35	170
355	353.8	35	170
400	398.8	35	170



RDH



RDHS



RDHX



RDHX-B



RDA



RDAS



RDAX



RDAX-B



RDV



RDVS



RDVX



RDVX-B



RDO



RDOS



RDOX

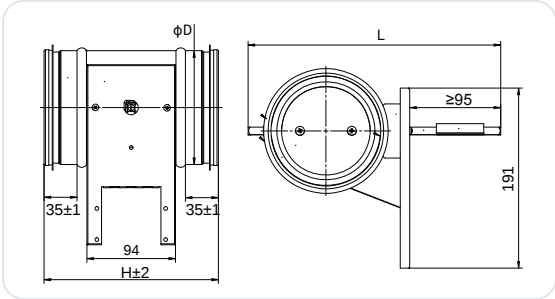


RDOX-B

Regulating Damper



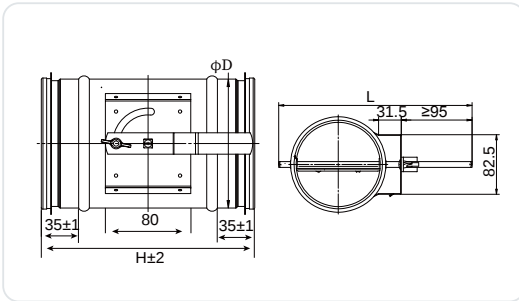
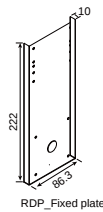
RDN



Size	ϕD(mm)	H(mm)	L(mm)
100	99	185	243
125	124	185	268
150	148.9	185	293
160	158.9	185	303
200	198.9	185	343
250	248.9	185	393
315	313.8	185	458



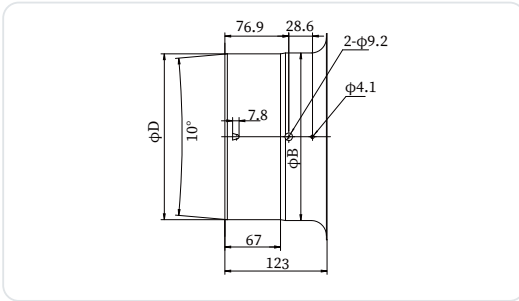
RDP



Size	ϕD(mm)	H(mm)	L(mm)
100	99	200	243
125	124	200	268
150	148.9	200	293
160	158.9	200	303
200	198.9	200	343
250	248.9	200	393
315	313.8	200	458



RDL-H



RDL

Volume control damper
A volume control damper(RDL) is a valve that stops or regulates the flow of air inside a duct or other air handling equipment. A RDL may be used to cut off central air conditioning to an unused room, or to regulate it for room-by-room temperature and climate control.

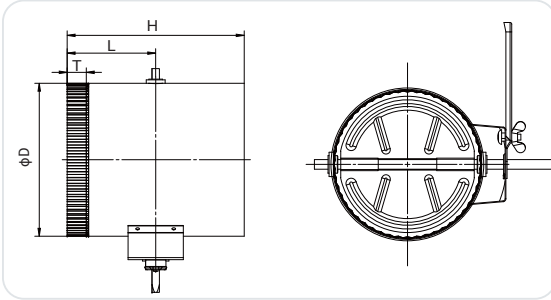
Regulating Damper

Size	ϕD(mm)	ϕB(mm)
150	149	150.5
200	199	200.5
250	249	250.5
300	299	300.5
350	349	350.5
400	399	400.5
450	449	450.5

Damper Sleeve



PDS



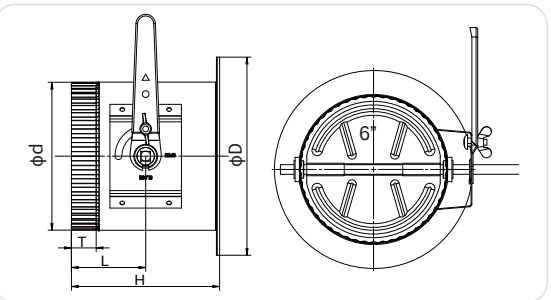
--- Standard construction:
Manufactured from galvanized steel
--- Popular sizes: 6", 8", 10",12"...

Size	ϕD(mm)	H(mm)	L(mm)	T(mm)
4"	102	175	87.5	25.4
5"	127	175	87.5	25.4
6"	153	175	87.5	25.4
7"	178	175	87.5	25.4
8"	203	175	87.5	25.4
9"	229	175	87.5	25.4
10"	254.2	175	87.5	25.4
12"	305	175	87.5	25.4
14"	356	175	87.5	25.4
16"	407	175	87.5	25.4
18"	457.2	175	87.5	25.4

Press-On Damper With HD Standoff Hardware



PDN



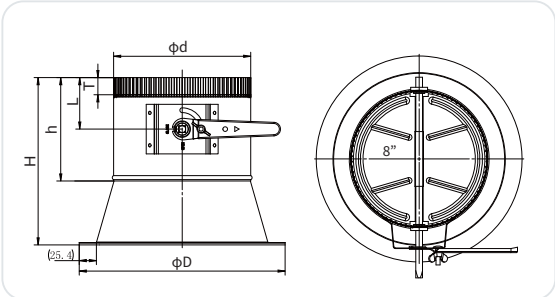
Standard construction:
· Manufactured from galvanized steel
· 1" Flange
· 1/8" x 1" Polyethylene "High Density" Gasket

Press-On Collar
· Press-On Collar is used for Low & Medium Pressure applications.

Size	ϕD(mm)	ϕd(mm)	H(mm)	L(mm)	T(mm)
4"	152.4	100.2	152.4	76.2	25.4
5"	177.8	125.2	152.4	76.2	25.4
6"	203.2	150.2	152.4	76.2	25.4
7"	228.6	180.2	152.4	76.2	25.4
8"	254.0	200.2	152.4	76.2	25.4
9"	279.4	224.2	152.4	76.2	25.4
10"	304.8	254.2	152.4	76.2	25.4
12"	355.6	300.2	152.4	76.2	25.4
14"	406.4	355.2	152.4	76.2	25.4
16"	457.2	400.2	152.4	76.2	25.4
18"	508.0	450.2	152.4	76.2	25.4

Conical Volume Damper

PDV



- Standard construction:
- Manufactured from galvanized steel
 - 1" Flange
 - 1/8" x 1" Polyethylene "High Density" Gasket

- Press-On Collar
- Press-On Collar is used for Low & Medium Pressure applications.

Size	φD(mm)	φd(mm)	H(mm)	h(mm)	L(mm)	T(mm)
4"	203.2	100.2	247.7	152.4	76.2	25.4
5"	228.6	125.2	247.7	152.4	76.2	25.4
6"	254.0	150.2	247.7	152.4	76.2	25.4
7"	279.4	180.2	247.7	152.4	76.2	25.4
8"	304.8	200.2	247.7	152.4	76.2	25.4
9"	330.2	224.2	247.7	152.4	76.2	25.4
10"	355.6	254.2	247.7	152.4	76.2	25.4
12"	406.4	300.2	247.7	152.4	76.2	25.4
14"	457.2	355.2	266.7	152.4	76.2	25.4
16"	508.0	400.2	266.7	152.4	76.2	25.4
18"	558.8	450.2	266.7	152.4	76.2	25.4

Damper Blade

DBE



- Available sizes: 6", 7", 8", 9", 10", 12", 14", 16"
- Reinforced stamped 20 or 22 gauge damper blade
- Blade available in galvanized steel
- Rod available in aluminum or steel
- This damper is for controlling the airflow inside smoke-fittings and round ductwork.

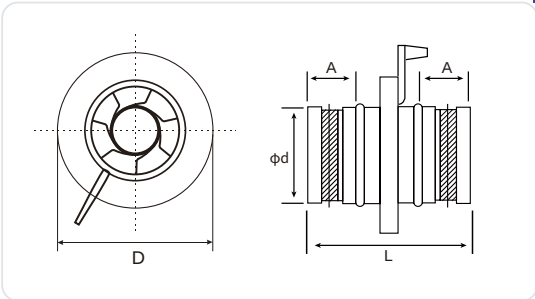
Spiral Wind Flow Mouth Damper



- For the control of flow rates in constant volume systems
- For low velocity systems
- Mechanical systems-powered, without external power supply
- Suitable for supply or extract air
- Volume flow range maximum 10:1
- Flow ratr adjustment using pointer on external scale
- The damper blade mechanisms maintenance free
- Operation temperature range 10 °C to 50 °C
- Selection according to nominal size of the duct system
- Low rate adjustment without special tools
- Differential pressure range 30 to 500 Pa

Volume Control Damper

IRIS



Construction

The IRIS is composed of regulation plates, regulating handle and regulation scale plus manometer connections and casing. The casing and regulation plates are made of hot-galvanized steel (standard IRIS) , other components of plastic. The joining collars are supplied with rubber sealing gasket.

Type	d(mm)	D(mm)	L(mm)	A(mm)	Material THK(mm)
80	79	125	115	33	0.6
100	99	165	115	27	0.6
125	124	188	115	27	0.6
150	149	230	115	27	0.6
160	159	230	115	27	0.6
200	199	285	120	27	0.6
250	249	335	135	33	0.6
315	314	405	140	33	0.6
400	398	525	150	46	1.0
500	948	655	150	46	1.0
630	628	815	155	46	1.0
800	798	1015	285	110	1.0

Material

Part	Material
Casing / Blades	Galvanised steel
Regulation mechanism	polyacetal
Measurement taps	TRP plastic

Function and installation

Regulation and measurement of air flow

The regulation plates form a virtually ideal measuring orifice which enables an easy and reliable measurement of the air flow.

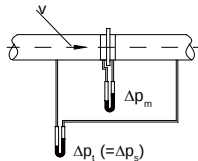
To determine the air flow, measure the pressuredifference Δp_m at the manometer connections and check the corresponding air flow from the regulation chart.

The chart is shown on the damper casing and in the separate information for air flow regulation and measure-ment (the selection diagrams do not serve the air flow measurement).

Air flow is regulated by the regulating nut or handle.

The IRIS damper is secured to the ducting with rivets. For vertical mounting ensure the weight of the interconnecting ductwork is fully supported.

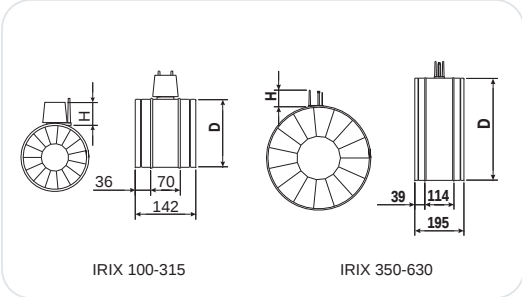
Refer to the form for recommended safety distances.



Type of flow disturbance	The required safety distance L $m2= \pm 7\%$	$m2= \pm 10\%$
	> 1D	> 1D
	> 4D	> 2D
	> 2D	> 2D
	> 2D	> 2D

Volume Control Damper

IRIX



Feature

- Airflow balancing, adjustment and measurement unit
- Manual adjustment, no tools required
- Accurate airflow measurement based on flow nozzle principle
- Minimize sound generation due to conical adjustment section
- Temperature operation range from -30 C to +70 C
- Self-locking adjustment mechanism, position can be ensured with locking screw.
- Inlet and outlet spigots equipped with integral rubber gasket

Function

The air flow rate is adjusted by turning the adjustment knob in order to change the aperture size of the adjustment cone formed by IRIX blades. Once the opening area is reduced, the air flow rate decreases and the total pressure loss caused by the device increases. The airflow can be determined by measuring the differential pressure in the measurement taps.

Material

Part	Material
Casing / Blades	Galvanised steel
Operating mechanism	ABS and PBT plastic
Duct gasket	EPDM rubber gasket
Measurement taps	Polyurethane

Technical Data

D(mm)	qmin[1/s]	[m³/h]	qmax[1/s]	[m³/h]
100	8	28	47	170
125	12	44	74	265
160	20	72	121	434
200	31	113	188	679
250	49	177	295	1060
315	78	281	468	1683
350	96	346	577	2078
400	126	452	754	2714
500	196	707	1178	4241
630	312	1122	1870	6733
qmin	1m/s duct velocity			
qmax	6 m/s duct velocity - recommended maximum airflow for comfort applications			

IRIX 100-315

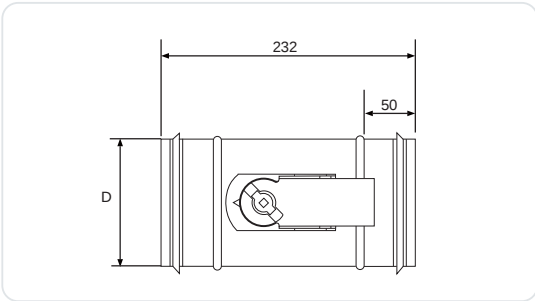
NS	ØD	H
IRIX100	99	57
IRIX125	124	57
IRIX160	159	57
IRIX200	199	57
IRIX250	249	57
IRIX315	314	57

IRIX 350-630

NS	ØD	H
IRIX350	349	70
IRIX400	399	70
IRIX500	499	70
IRIX630	629	70

Volume Flow Control

VFC



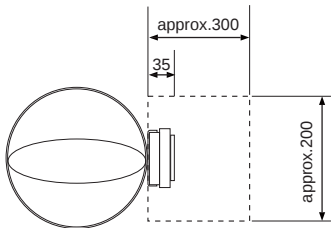
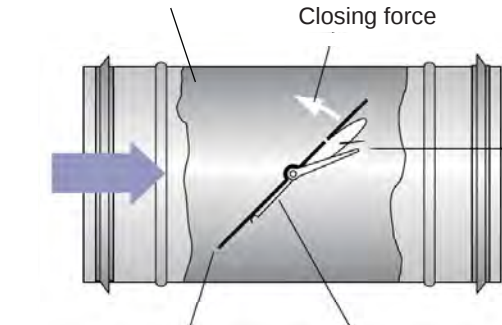
Feature

- For the control of flow rates in constant volume systems
- For low velocity systems
- Mechanical system-powered, without external power supply
- Suitable for supply or extract air
- Volume flow range maximum 10:1
- Flow rate adjustment using pointer on external scale
- The damper blade mechanisms maintenance free
- Operation temperature range 10 C to 50 C
- Selection according to nominal size of the duct system
- low rate adjustment without special tools
- Differential pressure range 30 to 500 Pa

Galvanised steel casing

Closing force

Polyurethane bellow



Plastic Control damper blade Stainless steel leaf spring

Size	φD(mm)	Weight(kg)
80	79	0.5
100	99	0.6
125	124	0.7
160	159	0.8
200	199	1.0
250	249	1.3

Multi Blade Volume Control damper

VFC-M

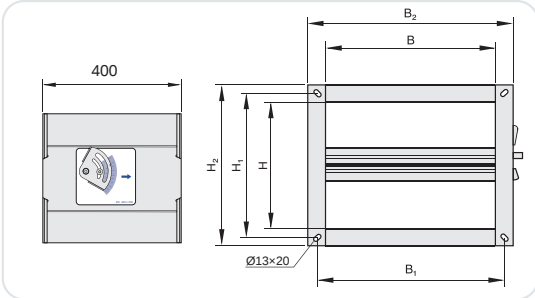


The damper are multi-leaf, opposed blade dampers. Designed for balancing applications where a high level of shut-off is not required. Made of steel plates&aluminum profile. Size:100, 125, 150, 160, 180, 200, 224, 250, 280, 300, 315, 355 400, 450 and 500mm

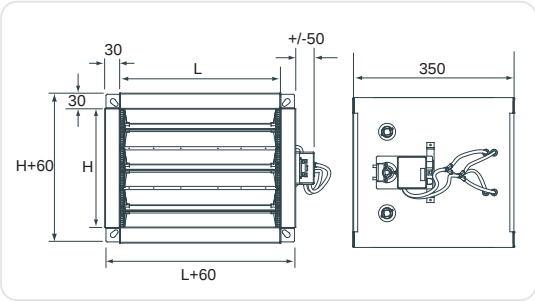
Constant Volume Flow Control



VFCS



VAVS



Feature

- Mechanical system-powered, without external power supply
 - Suitable for supply or extract air
 - volume flow range 4:1
 - Flow rate adjustment using pointer on external scale, scale accuracy approximately ±4%
 - Differential pressure range 50 to 1000 Pa
 - Flow rate adjustment using pointer on external scale
- The damper blade mechanisms maintenance free
 - Operation temperature range 10°C to 50°C
 - Selection according to nominal size of the duct system
 - low rate adjustment without special tools
 - For more stringent noise requirements the silencer can be used

Size	Width(mm)	Height(mm)	B1(mm)	B2(mm)	H1(mm)	H2(mm)	m(kg)
200x100	200	100	234	276	134	176	5
300x100	300	100	334	376	134	176	6
300x150	300	150	334	376	184	226	7
300x200	300	200	334	376	234	276	7
400x200	400	200	434	476	234	276	9
400x250	400	250	434	476	284	326	10
400x300	400	300	434	476	334	376	12
400x400	400	400	434	476	434	476	18
500x200	500	200	534	576	234	276	11
500x250	500	250	534	576	284	326	12
500x300	500	300	534	576	334	376	13
500x400	500	400	534	576	434	476	18
500x500	500	500	534	576	534	576	19
600x200	600	200	634	676	234	276	13
600x250	600	250	634	676	284	326	14
600x300	600	300	634	676	334	376	15
600x400	600	400	634	676	434	476	18
600x500	600	500	634	676	534	576	19
600x600	600	600	634	676	634	676	20

Rectangular VAVS Dampers



VAVS air flow regulator can be used both for variable and constant flow and, if appropriate, for forced shut-off for both air supply and air exhaust

Application
Regulating of air volumes to change the temperature or air quality in a room
Control and regulate the supply air flow and exhaust air flow
Airflow range can be set between two set values or as constant airflow

Material
Galvanized steel
Composition
Operating range is between 2 to 12 m/s

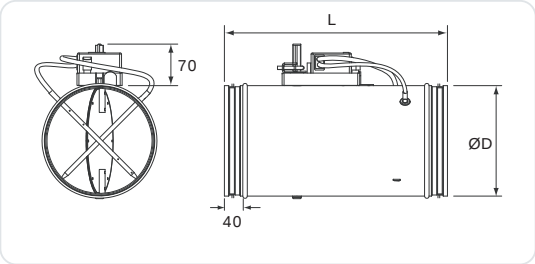
Integrated flow measurement with separate measurement nipples for control and manual measurement
The casing of the damper is equipped with a EPDM rubber blade seal conforms to air tightness class C
Blade air tightness class 3 in accordance with EN1751 due to EPDM seal around the blade
The VAVS-damper can be placed in any position in accordance with the airflow direction
Manual measurement of the air flow can be performed without disturbing the control circuit through a separate pressure outlet on the orifice plate of the flow variator
All duct connections have spigot dimensions and are equipped with sealing rings made of rubber

Size	L(mm)	H(mm)	Vnom(m³/h)
200x100	200	100	720
200x200	200	200	1440
300x100	300	100	1080
300x200	300	200	2160
300x300	300	300	3240
400x100	400	100	1440
400x200	400	200	2880
400x300	400	300	4320
400x400	400	400	5760
500x200	500	200	3600
500x300	500	300	5400
500x400	500	400	7200
500x500	500	500	9000
600x200	600	200	4320
600x300	600	300	6480
600x400	600	400	8640
600x500	600	500	10800
600x600	600	600	12960
700x300	700	300	7560
700x400	700	400	10080
700x500	700	500	12600
700x600	700	600	15120
700x700	700	700	17640
800x300	800	300	8640
800x400	800	400	11520
800x500	800	500	14400
800x600	800	600	17250
800x700	800	700	20160
900x300	900	300	9720
900x400	900	400	12960
900x500	900	500	16200
900x600	900	600	19440
900x700	900	700	22680
1000x300	1000	300	10800
1000x400	1000	400	14400
1000x500	1000	500	18000
1000x600	1000	600	21600
1000x700	1000	700	25200

VAV Dampers With Actuator



VAV



VAV air flow regulator can be used both for variable and constant flow and, if appropriate, for forced shut-off for both air supply and air exhaust

Application
Regulating of air volumes to change the temperature or air quality in a room
Control and regulate the supply air flow and exhaust air flow
Airflow range can be set between two set values or as constant airflow

Material
Galvanized steel
Composition
Operating range is between 2 to 12 m/s

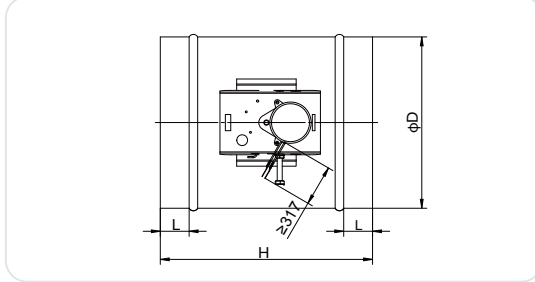
Integrated flow measurement with seperate measurement nipples for control and manual measurement
The casing of the damper is equipped with a EPDM rubber blade seal conforms to air tightness class C
Blade air tightness class 3 in accordance with EN1751 due to EPDM seal around the blade
The VAV-damper can be placed in any position in accordance with the airflow direction
Manual measurement of the air flow can be performed without disturbing the control circuit through a separate pressure outlet on the orifice plate of the flow variator
All duct connections have spigot dimensions and are equipped with sealing rings made of rubber

Size	φD(mm)	L(mm)
100	98	400
125	123	400
160	158	400
200	198	400
250	248	500
315	313	600
355	353	600
400	398	600
500	498	750
630	628	800

Motorized Damper



MD



Feature

- 24 Volt , 60Hz AC motor
- Normally closed damper
- Automatieally opens when exhaust fans are ativated
- Foam sealed minimize air leakage
- Damper adjustment scren for balancing adjustment
- Available size 6"、 8"、 10"

Automatic Make-Up Air Damper provides interlocked damper operation so outside air is only allowed to enter the house when a connected fan or hood is operating.

Size	L(mm)	H(mm)	φD(mm)
4"	34	250	100.6
5"	34	250	126
6"	34	250	151.4
8"	34	250	202.2
10"	34	250	253.0
12"	34	300	303.8
14"	55	355.6	354.6
16"	55	406.4	405.4

Electric Heaters



ESH

MAKING OF GALVANIZED PLATE MATERIAL
WITH RUBBER SEAL RING AT BOTH OF THE EDGE
two-stage of temperature protection

Round Electric heater(ESH series) is used for heating handling of fresh air in ventilaton system or assisting air handling unit to pre-heat or repeated heating. In order to reach the aim of temperature regulation, ESH series of heater could be used with ESR temperature controller of our company.

Model	Size	Min heating air flow(m3/h)	Electric current (A)	Voltage (V/50Hz)	Watts (W)	Quantity of heating tubes	Phase number
ESH-100/06	100	60	2.61	1-230	600	1*600	1
ESH-100/12	100	90	5.22	1-230	1200	2*600	1
ESH-100/18	100	130	7.83	1-230	1800	3*600	1
ESH-100/08	100	80	3.48	1-230	800	1*800	1
ESH-100/16	100	120	6.96	1-230	1600	2*800	1
ESH-125/06	125	60	2.61	1-230	600	1*600	1
ESH-125/12	125	90	5.22	1-230	1200	2*600	1
ESH-125/08	125	80	3.48	1-230	800	1*800	1
ESH-125/16	125	120	6.96	1-230	1600	2*800	1
ESH-125/24	125	150	10.5	1-230	2400	3*800	1
ESH-150/12	150	120	5.3	1-230	1200	1*1200	1
ESH-150/24	150	150	10.6	1-230	2400	2*1200	1
ESH-150/36	150	265	15.9	1-230	3600	3*1200	1
ESH-150/51	150	320	12.75	2-400	5100	3*1700	2
ESH-150/60	150	360	15	2-400	6000	3*2000	2
ESH-160/12	160	150	5.3	1-230	1200	1*1200	1
ESH-160/24	160	180	10.6	1-230	2400	2*1200	1
ESH-160/36	160	265	15.9	1-230	3600	3*1200	1
ESH-160/51	160	375	12.75	2-400	5100	3*1700	2
ESH-160/60	160	440	15	2-400	6000	3*2000	2
ESH-200/12	200	150	5.3	1-230	1200	1*1200	1
ESH-200/24	200	180	10.6	1-230	2400	2*1200	1
ESH-200/36	200	265	15.9	1-230	3600	3*1200	1
ESH-200/51	200	375	12.75	2-400	4800	3*1700	2
ESH-200/60	200	440	15	2-400	6000	3*2000	2
ESH-250/12	250	180	5.3	1-230	1200	1*1200	1
ESH-250/24	250	265	10.6	1-230	2400	2*1200	1
ESH-250/36	250	375	15.9	1-230	3600	3*1200	1
ESH-250/60	250	440	15	2-400	6000	3*2000	2
ESH-250/90	250	660	22.5	2-400	9000	3*3000	2
ESH-315/12	315	180	5.3	1-230	1200	1*1200	1
ESH-315/24	315	265	10.6	1-230	2400	2*1200	1
ESH-315/36	315	375	15.9	1-230	3600	3*1200	1
ESH-315/60	315	440	15	2-400	6000	3*2000	2
ESH-315/90	315	660	22.5	2-400	9000	3*3000	2

Attachment: ESR/230 ESR/400

Electric Heaters



ESH-E

MAKING OF GALVANIZED PLATE MATERIAL
WITH RUBBER SEAL RING AT BOTH OF THE EDGE
two-stage of temperature protection
Built in temperature control module
Round Electric heater(ESH-E series) is used for heating handling of fresh air in ventilaton system or assisting air handling unit to pre-heat or repeated heating. ESH-E series of heater is built in temperature control module. The temperature control module is based on the actual temperature collected by NTC and calculated with specific control arithmetic to drive traic works open or closed. The potentiometer on this module is to set the air outlet temperature of the heater. This item could only work with NTC sensor.

Model	Size	Min heating air flow(m3/h)	Electric current (A)	Voltage (V/50Hz)	Watts (W)	Quantity of heating tubes	Phase number
ESH-E 100/06	100	60	2.61	1-230	600	1*600	1
ESH-E 100/12	100	90	5.22	1-230	1200	2*600	1
ESH-E 100/18	100	130	7.83	1-230	1800	3*600	1
ESH-E 100/08	100	80	3.48	1-230	800	1*800	1
ESH-E 100/16	100	120	6.96	1-230	1600	2*800	1
ESH-E 125/06	125	60	2.61	1-230	600	1*600	1
ESH-E 125/12	125	90	5.22	1-230	1200	2*600	1
ESH-E 125/08	125	80	3.48	1-230	800	1*800	1
ESH-E 125/16	125	120	6.96	1-230	1600	2*800	1
ESH-E 125/24	125	150	10.5	1-230	2400	3*800	1
ESH-E 150/12	150	120	5.3	1-230	1200	1*1200	1
ESH-E 150/24	150	150	10.6	1-230	2400	2*1200	1
ESH-E 150/36	150	265	15.9	1-230	3600	3*1200	1
ESH-E 150/51	150	320	12.75	2-400	5100	3*1700	2
ESH-E 150/60	150	360	15	2-400	6000	3*2000	2
ESH-E 160/12	160	150	5.3	1-230	1200	1*1200	1
ESH-E 160/24	160	180	10.6	1-230	2400	2*1200	1
ESH-E 160/36	160	265	15.9	1-230	3600	3*1200	1
ESH-E 160/51	160	375	12.75	2-400	5100	3*1700	2
ESH-E 160/60	160	440	15	2-400	6000	3*2000	2
ESH-E 200/12	200	150	5.3	1-230	1200	1*1200	1
ESH-E 200/24	200	180	10.6	1-230	2400	2*1200	1
ESH-E 200/36	200	265	15.9	1-230	3600	3*1200	1
ESH-E 200/51	200	375	12.75	2-400	4800	3*1700	2
ESH-E 200/60	200	440	15	2-400	6000	3*2000	2
ESH-E 250/12	250	180	5.3	1-230	1200	1*1200	1
ESH-E 250/24	250	265	10.6	1-230	2400	2*1200	1
ESH-E 250/36	250	375	15.9	1-230	3600	3*1200	1
ESH-E 250/60	250	440	15	2-400	6000	3*2000	2
ESH-E 250/90	250	660	22.5	2-400	9000	3*3000	2
ESH-E 315/12	315	180	5.3	1-230	1200	1*1200	1
ESH-E 315/24	315	265	10.6	1-230	2400	2*1200	1
ESH-E 315/36	315	375	15.9	1-230	3600	3*1200	1
ESH-E 315/60	315	440	15	2-400	6000	3*2000	2
ESH-E 315/90	315	660	22.5	2-400	9000	3*3000	2

Attachment: Temperature sensor NTC 1% 100K B=3950

Electric Heater



ESH-EP

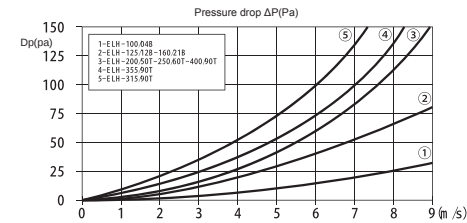
MAKING OF GALVANIZED PLATE MATERIAL
WITH RUBBER SEAL RING AT BOTH OF THE EDGE
two-stage of temperature protection
Built in temperature control module and differential pressure sensor
Round Electric heater(ESH-EP series) is used for heating handling of fresh air in ventilaton system or assisting air handling unit to pre-heat or repeated heating. ESH-EP series of heater is built in temperature control module. The temperature control module is based on the actual temperature collected by NTC and calculated with specific control arithmetic to drive bidirectional thyristor works open or closed. The potentiometer on this module is to set the air outlet temperature of the heater. This item could only work with NTC sensor. ESH-EP series of heater is also integrated with differential pressure sensor. The temperature control module is not permitted to start heating tubes even if the temperature is lower than stated one when there's no air flow in the duct. Only when the air flow rate is higher than 1.5M/S, the constraint of the temperature control module would be relieved and re-control the temperature again.

Model	Size	Min heating air flow(m3/h)	Electric current (A)	Voltage (V/50Hz)	Watts (W)	Quantity of heating tubes	Phase number
ESH-EP-100/06	100	60	2.61	1-230	600	1*600	1
ESH-EP-100/12	100	90	5.22	1-230	1200	2*600	1
ESH-EP-100/18	100	130	7.83	1-230	1800	3*600	1
ESH-EP-100/08	100	80	3.48	1-230	800	1*800	1
ESH-EP-100/16	100	120	6.96	1-230	1600	2*800	1
ESH-EP-125/06	125	60	2.61	1-230	600	1*600	1
ESH-EP-125/12	125	90	5.22	1-230	1200	2*600	1
ESH-EP-125/08	125	80	3.48	1-230	800	1*800	1
ESH-EP-125/16	125	120	6.96	1-230	1600	2*800	1
ESH-EP-125/24	125	150	10.5	1-230	2400	3*800	1
ESH-EP-150/12	150	120	5.3	1-230	1200	1*1200	1
ESH-EP-150/24	150	150	10.6	1-230	2400	2*1200	1
ESH-EP-150/36	150	265	15.9	1-230	3600	3*1200	1
ESH-EP-150/51	150	320	12.75	2-400	5100	3*1700	2
ESH-EP-150/60	150	360	15	2-400	6000	3*2000	2
ESH-EP-160/12	160	150	5.3	1-230	1200	1*1200	1
ESH-EP-160/24	160	180	10.6	1-230	2400	2*1200	1
ESH-EP-160/36	160	265	15.9	1-230	3600	3*1200	1
ESH-EP-160/51	160	375	12.75	2-400	5100	3*1700	2
ESH-EP-160/60	160	440	15	2-400	6000	3*2000	2
ESH-EP-200/12	200	150	5.3	1-230	1200	1*1200	1
ESH-EP-200/24	200	180	10.6	1-230	2400	2*1200	1
ESH-EP-200/36	200	265	15.9	1-230	3600	3*1200	1
ESH-EP-200/51	200	375	12.75	2-400	4800	3*1700	2
ESH-EP-200/60	200	440	15	2-400	6000	3*2000	2
ESH-EP-250/12	250	180	5.3	1-230	1200	1*1200	1
ESH-EP-250/24	250	265	10.6	1-230	2400	2*1200	1
ESH-EP-250/36	250	375	15.9	1-230	3600	3*1200	1
ESH-EP-250/60	250	440	15	2-400	6000	3*2000	2
ESH-EP-250/90	250	660	22.5	2-400	9000	3*3000	2
ESH-EP-315/12	315	180	5.3	1-230	1200	1*1200	1
ESH-EP-315/24	315	265	10.6	1-230	2400	2*1200	1
ESH-EP-315/36	315	375	15.9	1-230	3600	3*1200	1
ESH-EP-315/60	315	440	15	2-400	6000	3*2000	2
ESH-EP-315/90	315	660	22.5	2-400	9000	3*3000	2

Attachment: temperature sensor NTC 1% 100K B=3950
differential pressure sensor YC-001F

Technical drawing of the pump assembly showing dimensions:

- Top length: 277
- Bottom length: 375
- Left side width: 90
- Right side width: 49
- Height: H
- Flange diameter: 60
- Port diameter: 20

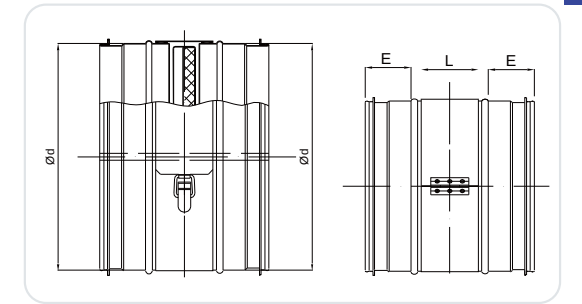


Model	φD	B	H
100/06	99	104	192
100/08	99	104	192
100/12	99	104	192
100/18	99	104	192
100/16	99	104	192
125/06	124	129	212
125/12	124	129	212
125/08	124	129	212
125/16	124	129	212
125/24	124	129	212
150/12	149	129	237
150/24	149	129	237
150/36	149	129	237
150/51	149	129	237
150/60	149	129	237
160/12	159	129	247
160/24	159	129	247
160/36	159	129	247
160/51	159	129	247
160/60	159	129	247
200/12	199	129	287
200/24	199	129	287
200/36	199	129	287
200/51	199	129	287
200/60	199	129	287
250/12	249	129	337
250/24	249	129	337
250/36	249	129	337
250/60	249	129	337
250/90	249	129	337
315/12	313	129	401
315/24	313	129	401
315/36	313	129	401
315/60	313	129	401
315/90	313	129	401

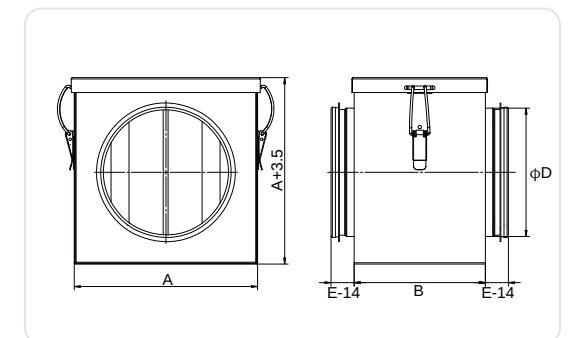


Technical drawing of a rectangular box with dimensions and labels. The drawing shows a top view and a side view. The top view is a rectangle with dimensions C_1 and C . The side view is a rectangle with dimensions H_1 and H . The side view also shows internal dimensions $H+21$ and $H+42$, and a label A on the side. The top view also shows internal dimensions L , $L+21$, $L+42$, and L_1 . The drawing is labeled with C_1 , C , H_1 , H , $H+21$, $H+42$, A , L , $L+21$, $L+42$, and L_1 .

Size	L(mm)	H(mm)	C(mm)	L1(mm)	H1(kg)	C1(kg)
40-20	400	200	500	545	202	430
50-25	500	250	500	645	252	430
50-30	500	300	500	645	302	430
60-30	600	300	500	745	302	430
60-35	600	350	500	745	352	430
70-40	700	400	600	845	502	530
80-50	800	500	600	945	502	530
100-50	1000	500	600	1145	502	530



Size	φD(mm)	L(mm)	E(mm)
100	100	120	40
125	125	120	40
150	150	120	40
160	160	120	40
200	200	120	40
250	250	120	40
315	315	120	40
355	355	120	40
400	400	140	50
500	500	140	50

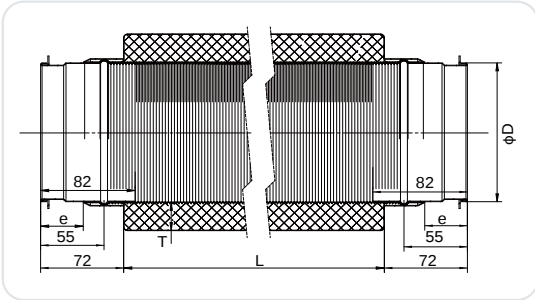


Size	A(mm)	B(mm)	φD(mm)	E(mm)
100	180	150	99.0	40
125	180	150	124.0	40
150	210	150	148.9	40
160	210	150	158.9	40
200	250	150	198.9	40
250	300	150	248.9	55
300	360	150	298.9	55
315	360	150	313.8	55
355	410	150	353.8	55
400	460	150	398.8	55
450	510	150	448.8	55

Flexible Silencer



AFC-X



AFC-S

The AFC is a thermally and acoustically insulated duct equipped with a female galvanized duct connector on both ends.

Application
The AFC flexible ducts are used in ventilation, air conditioning, and air handling systems where high mechanical strength, temperature, fire-resistance, and thermal and sound attenuating qualities are required

Composition
Micro-perforated heavy multiple layered corrugated innerduct aluminium/polyester outer jacket, reinforced with fibreglass
Glass wool insulation of thickness: 25mm or 50mm is available
Colour: Aluminium
Galvanized female duct connection on both sides of the flexible duct

Specification
Temperature range: From -30°C till +140°C
Operating over pressure (max): + 2000 Pa
Pressure loss: see diagram

Recommended air velocity (max): 10 m/s
Diameter range: 80 mm - 250 mm (315 on request)

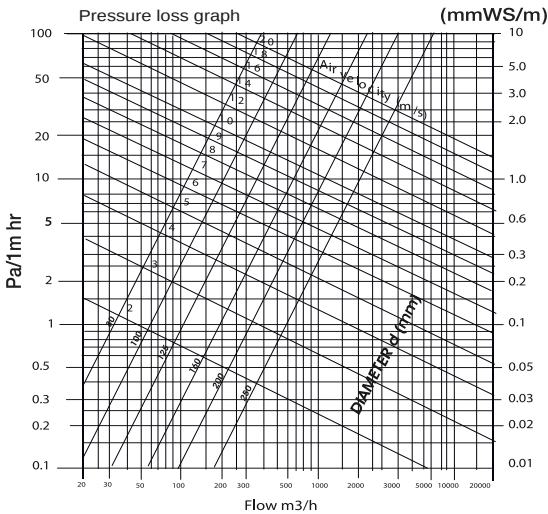
Chemical resistance
Good resistance to many organic solvents
Moderate resistance to acid and base
Not be used for discharge of combustion gases from open fire places or oil-fired boilers

Static properties
The AFC is suitable for applications where static discharges have to be avoided

Accessories
As the AFC has 2 female connections, a male connection can easily be obtained by adding a male duct connection MGM to one or both sides
Other available products
Non-woven version available on request

type	φD[mm]	e[mm]	L
AFC100 L=500	99	36	500
AFC100 L=750	99	36	750
AFC100 L=1000	99	36	1000
AFC100 L=1500	99	36	1500
AFC100 L=2000	99	36	2000
AFC125 L=500	124	36	500
AFC125 L=750	124	36	750
AFC125 L=1000	124	36	1000
AFC125 L=1500	124	36	1500
AFC125 L=2000	124	36	2000
AFC150 L=500	148.9	36	500
AFC150 L=750	148.9	36	750
AFC150 L=1000	148.9	36	1000
AFC150 L=1500	148.9	36	1500
AFC150 L=2000	148.9	36	2000
AFC160 L=500	158.9	36	500
AFC160 L=750	158.9	36	750
AFC160 L=1000	158.9	36	1000
AFC160 L=1500	158.9	36	1500
AFC160 L=2000	158.9	36	2000
AFC200 L=500	198.9	36	500
AFC200 L=750	198.9	36	750
AFC200 L=1000	198.9	36	1000
AFC200 L=1500	198.9	36	1500
AFC200 L=2000	198.9	36	2000
AFC250 L=500	248.9	36	500
AFC250 L=750	248.9	36	750
AFC250 L=1000	248.9	36	1000
AFC250 L=1500	248.9	36	1500
AFC250 L=2000	248.9	36	2000

Flexible Silencer



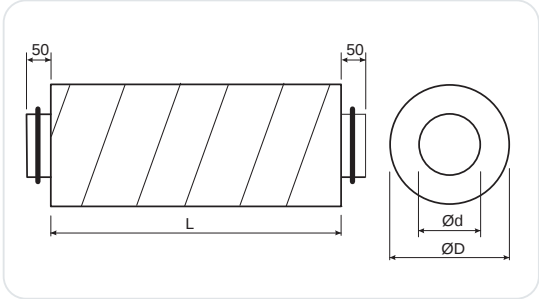
Sound attenuation for 1m duct - Tolerance +/- 2 dB

type	D _n [mm]	Attenuation, dB, -Mid-frequency, Hz								D _i [dB]
		63	125	250	500	1000	2000	4000	8000	
AFC-FF080	080	13.8	20.2	39.3	38.6	36	41.8	52.4	40.2	39
AFC-FF100	100	9.5	14.5	28.6	37.4	35.6	39.8	44.3	29.5	36
AFC-FF125	125	12.4	20.1	33.6	29.8	29.5	33.6	32.1	23.6	32
AFC-FF150	150	11.1	11.8	34.2	28.5	26.3	34.9	27.2	21.8	20
AFC-FF160	160	14.6	19.1	31.1	27	24.7	32.5	24	18.7	29
AFC-FF200	200	11.1	14.6	29.5	20.7	21	30	17.7	13.2	23
AFC-FF250	250	14.2	21.7	23.1	18.9	18.4	25.7	11.4	10.1	20

Circular Sound Attenuators



SA



Circular sound attenuator in galvanized steel with insulation shell thickness between 50 and 100 mm

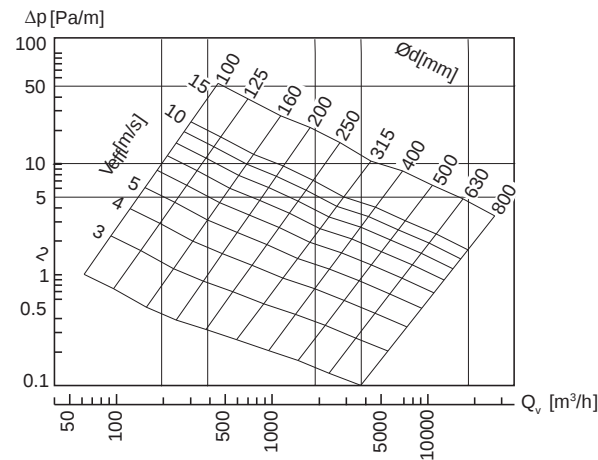
Composition
Circular silencers are designed with an external galvanised duct system
Inner casing is made of perforated sheet steel
Cavity is filled with soundabsorbent mineral wool

Mounting
The attenuators should be mounted using duct suspension clamps, around the duct connection Ød The outside diameter ØD of these attenuators may have small deviations in size

Circular Sound Attenuators

Dimensions

Type	ϕD[mm]	ϕd[mm]	L[mm]
SA100 L=900	200	100	900
SA125 L=600	200	125	600
SA125 L=900	200	125	900
SA150 L=600	250	150	600
SA150 L=900	250	150	900
SA160 L=600	250	160	600
SA160 L=900	250	160	900
SA180 L=600	315	180	600
SA180 L=900	315	180	900
SA200 L=900	315	200	900
SA250 L=900	400	250	900
SA315 L=900	500	315	900
SA355 L=900	500	355	900
SA400 L=900	630	400	900
SA450 L=900	630	450	900
SA500 L=1200	630	500	1200
SA560 L=1200	800	560	1200
SA630 L=1200	800	630	1200



Sound attenuation

Type	Attenuation dB						
	125[Hz]	250[Hz]	500[Hz]	1k[Hz]	2k[Hz]	4k[Hz]	8k[Hz]
SA100 L=900	8	15	27	36	42	47	24
SA125 L=600	6	12	22	28	37	38	22
SA125 L=900	9	18	30	40	48	43	24
SA150 L=600	4	9	17	2	32	29	18
SA150 L=900	7	15	20	35	45	36	20
SA160 L=600	5	10	18	23	33	30	19
SA160 L=900	8	16	27	36	48	37	21
SA180 L=600	6	90	17	22	32	29	18
SA180 L=900	9	15	26	35	46	36	20
SA200 L=900	7	13	24	31	44	31	20
SA250 L=900	8	15	29	34	47	33	17
SA315 L=900	6	12	22	24	36	26	19
SA355 L=900	7	13	21	25	37	27	21
SA400 L=900	6	12	20	26	32	28	24
SA450 L=900	6	9	14	23	21	24	14
SA500 L=1200	7	11	15	24	22	25	16
SA560 L=1200	7	13	16	24	21	24	15
SA630 L=1200	7	14	18	25	21	21	15

Gasket F type - FW

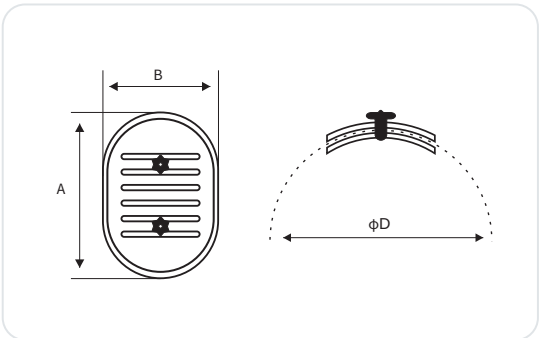


Type	Dia[mm]	Cut Length[mm]	D&A Tolerance onlength[mm]
FW80	80	225	± 2.0
FW100	100	290	± 2.0
FW125	125	352	± 2.0
FW150	150	425	± 3.0
FW160	160	458	± 3.0
FW180	180	513	± 3.0
FW200	200	570	± 3.0
FW250	250	702	± 3.5
FW315	315	884	± 3.5
FW355	355	995	± 3.5
FW400	400	1112	± 3.5
FW450	450	1280	± 4.0
FW500	500	1400	± 4.0
FW630	630	1826	± 4.0
FW710	710	2055	± 4.0
FW800	800	2318	± 5.0
FW900	900	2604	± 5.0
FW1000	1000	2891	± 6.0
FW1250	1250	3660	± 6.0

Access Door



CAD series



Application

For inspection and maintenance of circular ventilation ducts
Galvanized steel
Airtight sealing on the inner part of the sandwich door

Specifications

Conical spring design which enables the two piece door to perform as a single unit
Template for cutting included
Airtight until 2000 Pa in overpressure and 750 Pa in underpressure

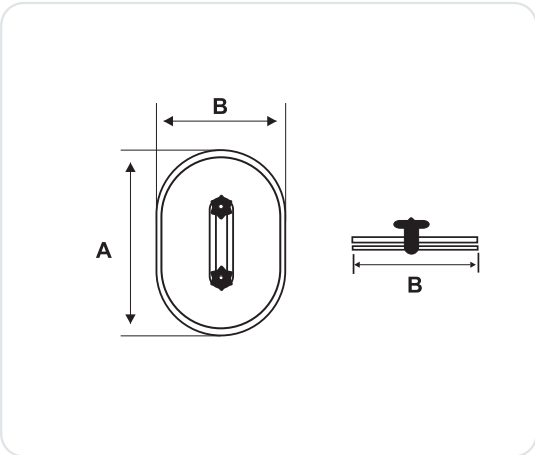
Type	φD(mm)	A(mm)	B(mm)
CAD100	100	180	80
CAD125	125	180	80
CAD160	160	250	150
CAD180	180	250	150
CAD200	200	250	150
CAD250	250	250	150
CAD315	315	250	150
CAD355	355	250	150
CAD400	400	250	150
CAD450	450	250	150
CAD500	500	250	150
CAD315b	315	300	200
CAD355b	355	300	200
CAD400b	400	300	200
CAD450b	450	300	200
CAD500b	500	300	200
CAD400c	400	400	300
CAD450c	450	400	300
CAD500c	500	400	300
CAD560c	560	400	300
CAD630c	630	400	300
CAD710c	710	400	300
CAD800c	800	400	300



FAD series



FAD -1



Application

To give easy access to rectangular duct
Galvanized
Airtight sealing on the inner part of the sandwich door

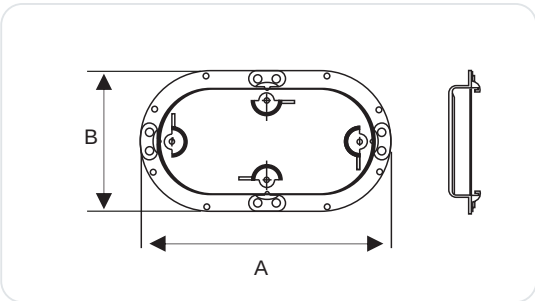
Specifications

Sandwich-type
Template for cutting included
Airtight upto 2000 Pa in overpressure and 750 Pa in underpressure
Oval shape

Type	A(mm)	B(mm)
FAD180	180	80
FAD200	200	100
FAD250	250	150
FAD300	300	200
FAD400	400	300
FAD500	500	400
FAD600	600	450



IAD series



Description

- The IAD range of duct access doors is designed to provide easy and speedy access to smoke, fire and volumecontrol dampers, coils, filters and other air conditioning and ventilation equipment mounted inside ductwork.
- The range of five sizes have been carefully selected to provide different degrees of access from single handed to head and shoulder entry.
- IAD access doors are of double skin "sandwich" construction complete with 20mm thick high density insulation and are sealed to prevent any insulation migration.
- The one piece mounting frames are pressed for accuracy and prepunched on inner and outer flanges.
- This feature allows doors to be installed so that a flush finish is achieved on plain or insulated ductwork.
- All sizes of door are fitted, as standard, with a retaining chain between the door and frame.
- IAD access doors are suitable for high, medium and low pressure applications and meet the requirements of HVCA DW144 Specification classes A and B

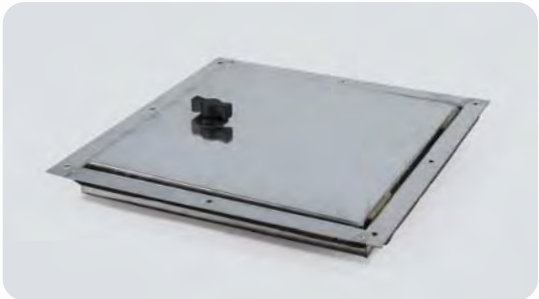
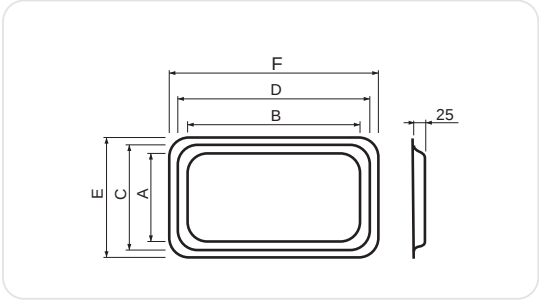
Specification

- Frame,Seamless one piece .07mm galvanized mild steel.
- Door, Outer panel 0.7mm galvanized mild steel
- Inner panel .07mm galvanized mild steel.
- Insulation, 20mm thick fire retardant insulation.
- Gasket, positive seal
- Fasteners, Progressive action camlocks, zinc plated.
- Retaining chain, zinc plated, between door and frame.

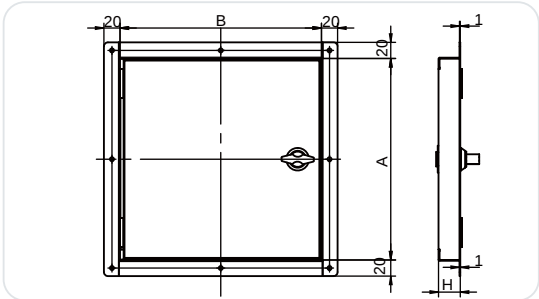
Type	A(mm)	B(mm)
IAD00	200	125
IAD10	300	150
IAD20	460	250
IAD30	530	360
IAD40	635	430



HAD series



RADS series



Description

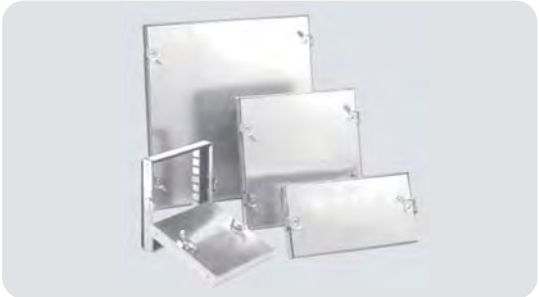
- Access door for rectangular duct.
- The range of rectangular access doors are designed to provide access to all in-duct equipment for inspection, maintenance and duct cleaning.
- All doors are of double skin construction using 0.7mm galvanized steel.
- A PVC compression gasket fixed to the door eliminates air leakage.
- A positive seal is achieved by the use of camlock fasteners.

Specification

- Frame,manufactured from 0.7mm prime galvanized steel.
- Door, double skin construction using 0.7mm prime galvanized steel.
- Inner panel .07mm galvanized mild steel.
- Insulation, 20mm thick fire retardant insulation.
- Gasket, heat welded PVC extrusion gasket ensures a tight seal.
- Camlocks, the cam and latches are zinc coated. Each cam is secured to the door with a rivet.The latch is securely fastened to the frame.

- Installation on square ducts
In galvanized steel
25 mm thick of glass wool as thermal insulation layer
Gasket around the frame makes good sealing
Clasp lock set makes easy opening and closing of access door

						
HAD-0	HAD-1	HAD-2	HAD-3			
Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
HAD-0	463	608	500	649	548	699
HAD-1	327	463	368	500	418	548
HAD-2	198	332	240	375	286	422
HAD-3	116	206	150	240	185	288



RAD

- Installation on square ducts
- In galvanized steel
- 25 mm thick of glass wool as thermal insulation layer
- Gasket around the frame makes good sealing
- Clasp lock set makes easy opening and closing of access door

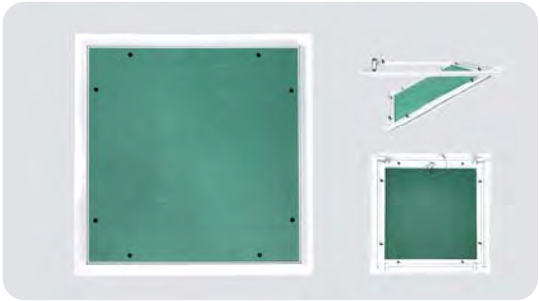


RAD-C1



RAD-C2

Type	Width x Height(mm)	Duct opening size(mm)
RAD1515	110x110	70x70
RAD2020	200x200	160x160
RAD2525	250x250	210x210
RAD3030	300x300	260x260
RAD3535	350x350	310x310
RAD4040	400x400	360x360



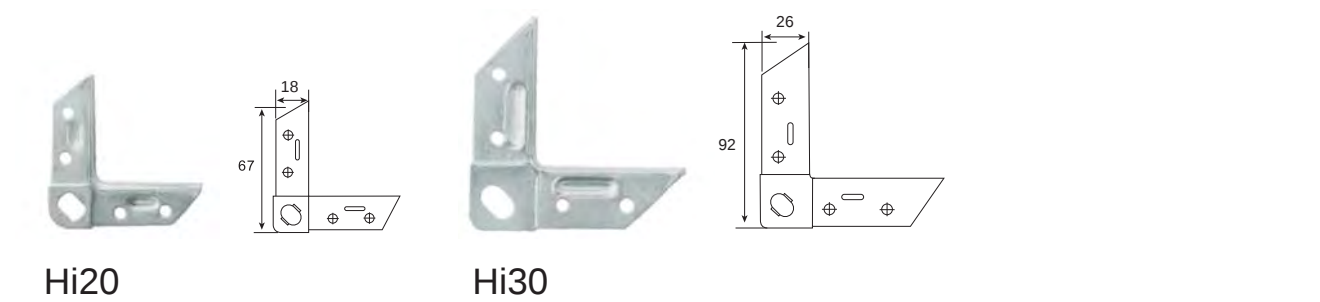
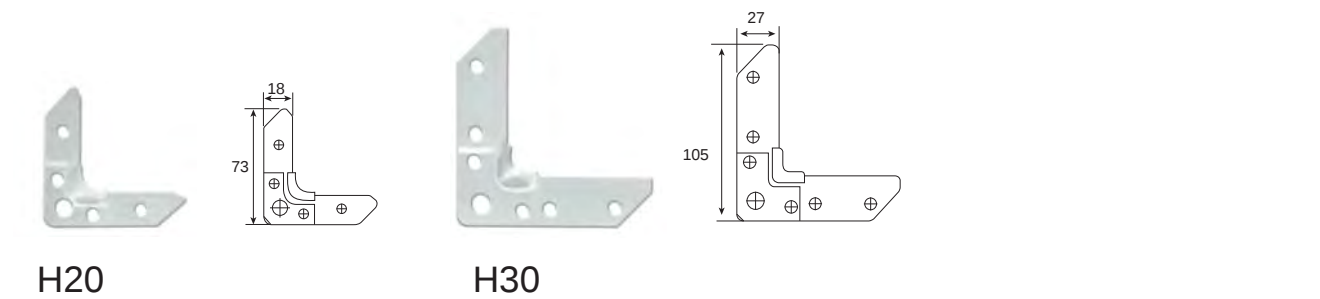
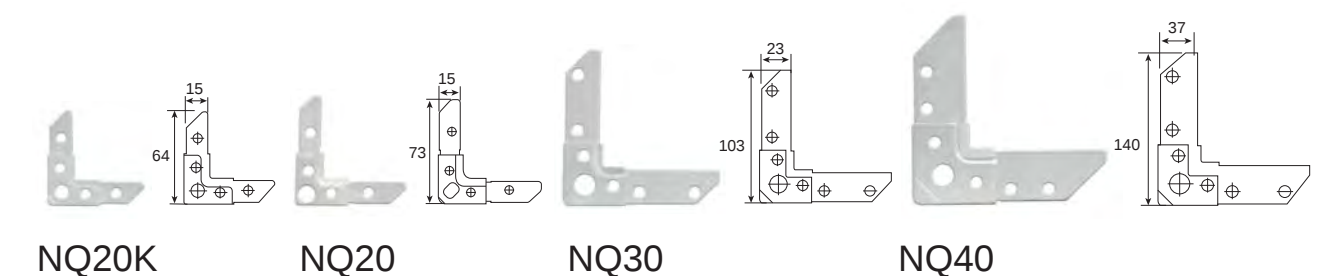
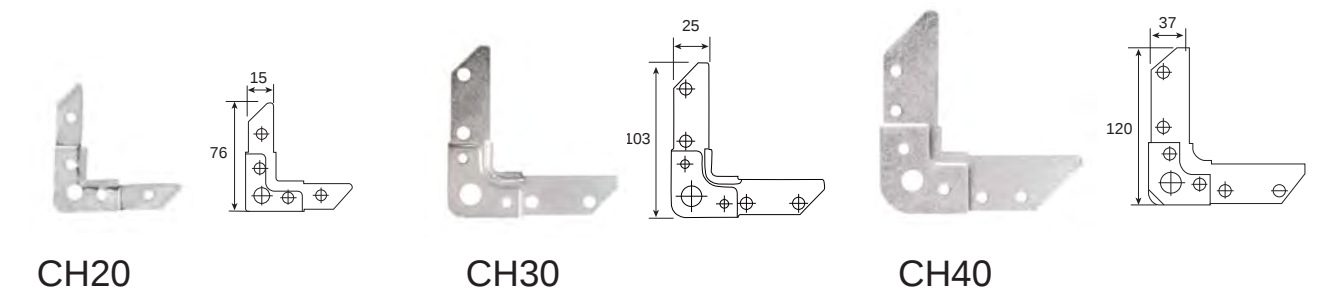
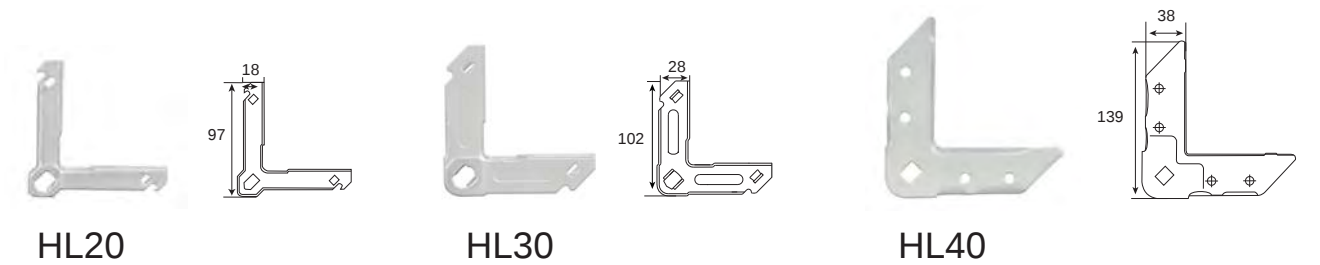
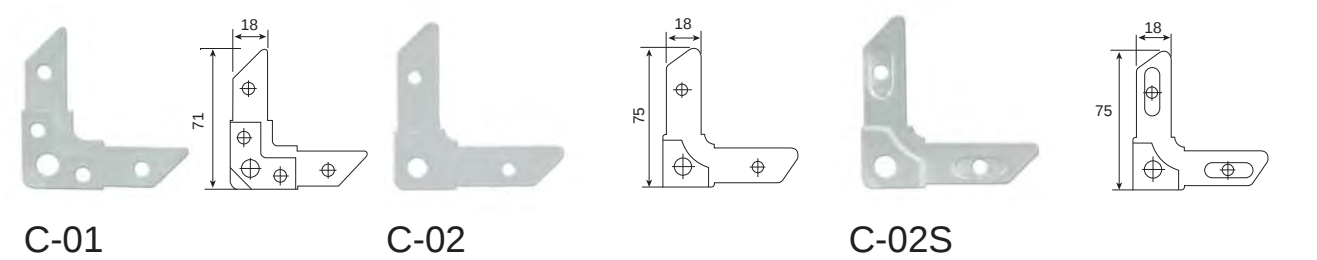
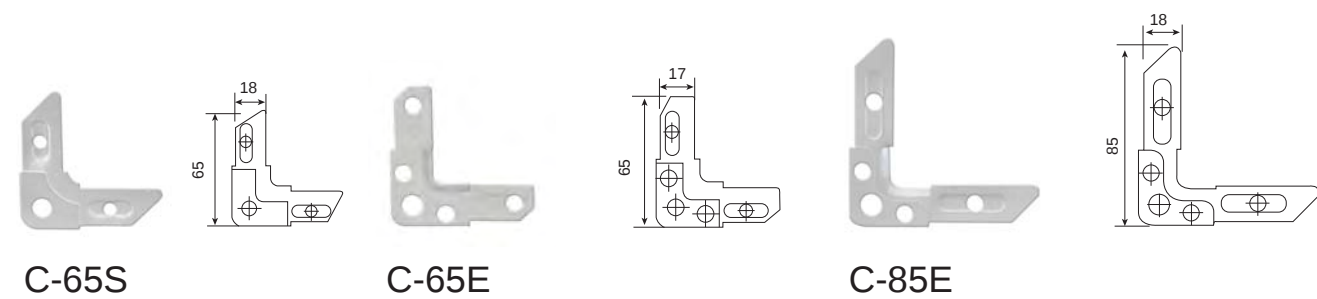
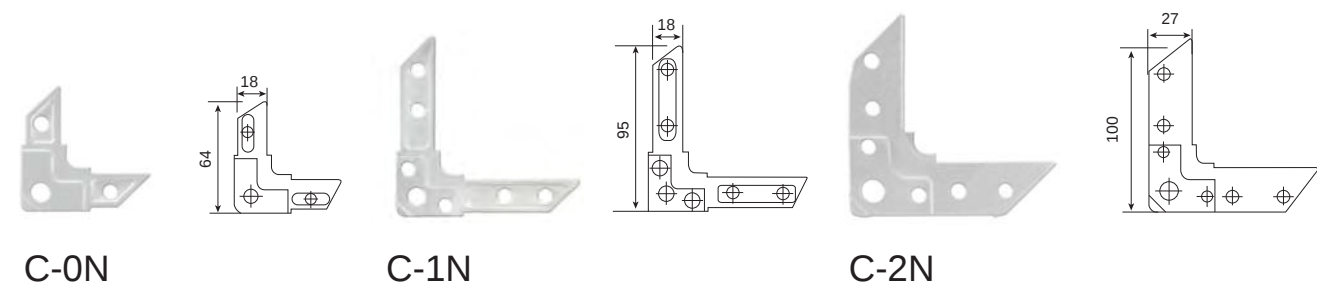
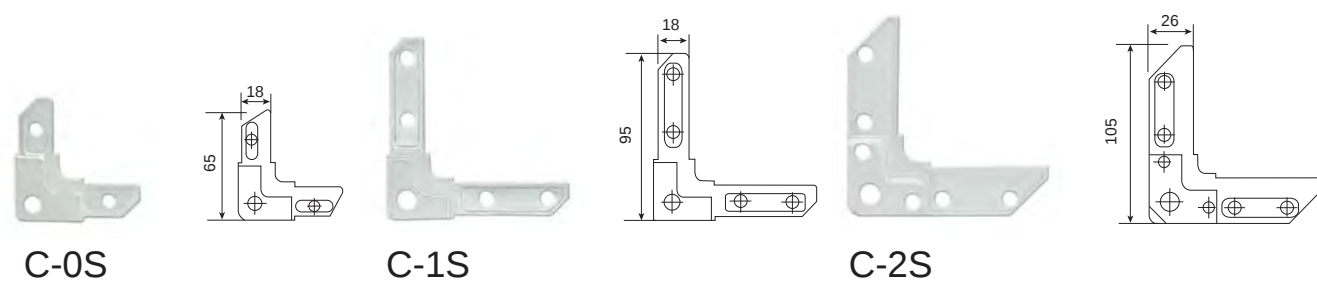
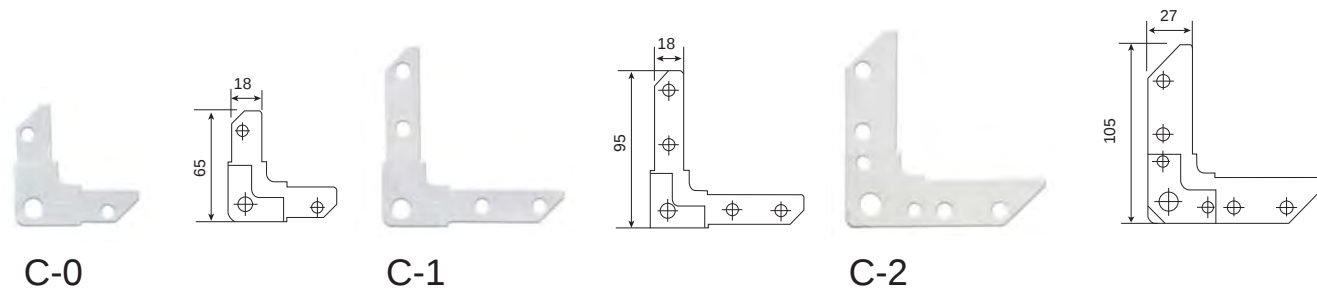
GAD

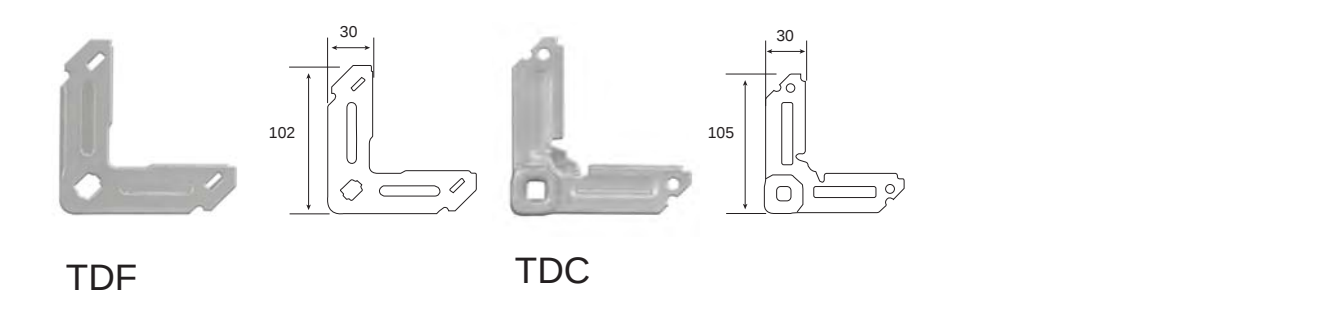
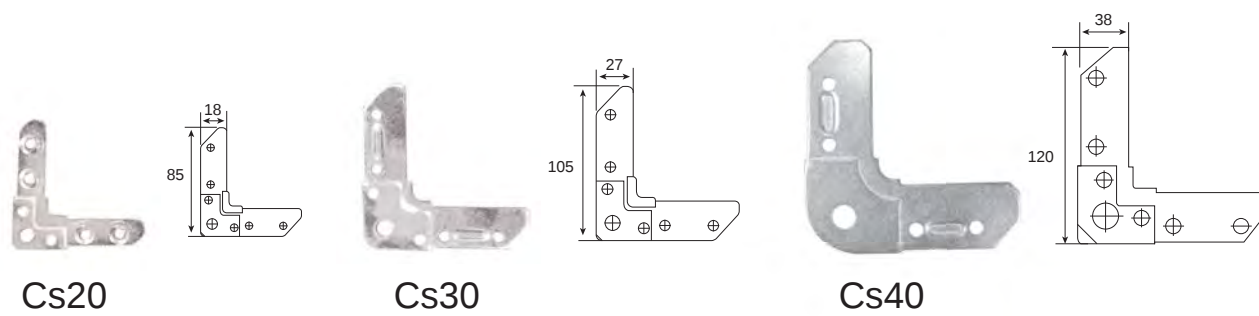
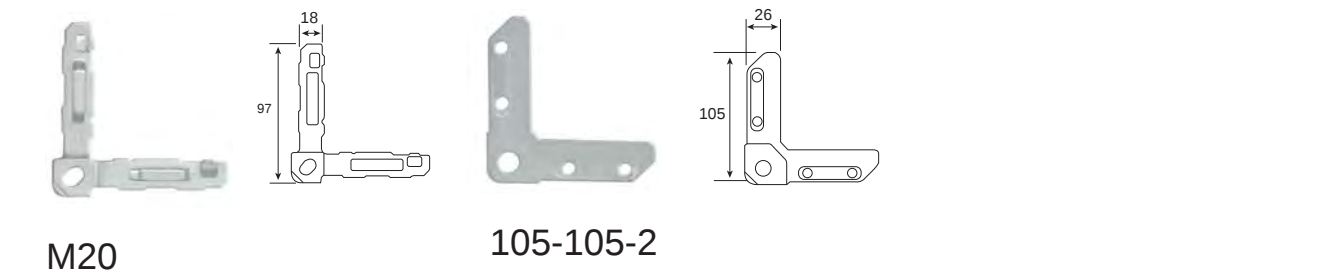
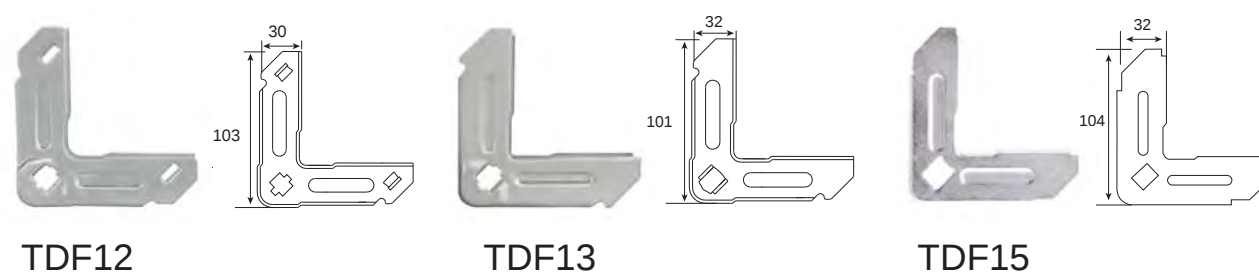
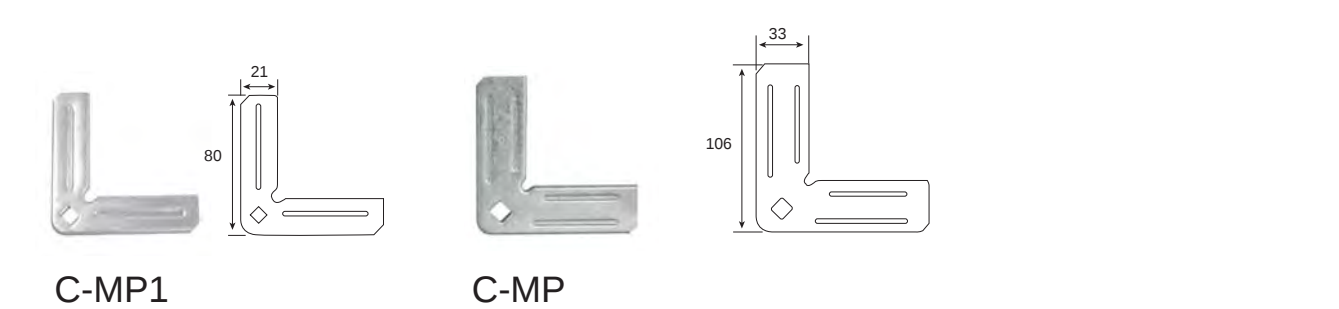
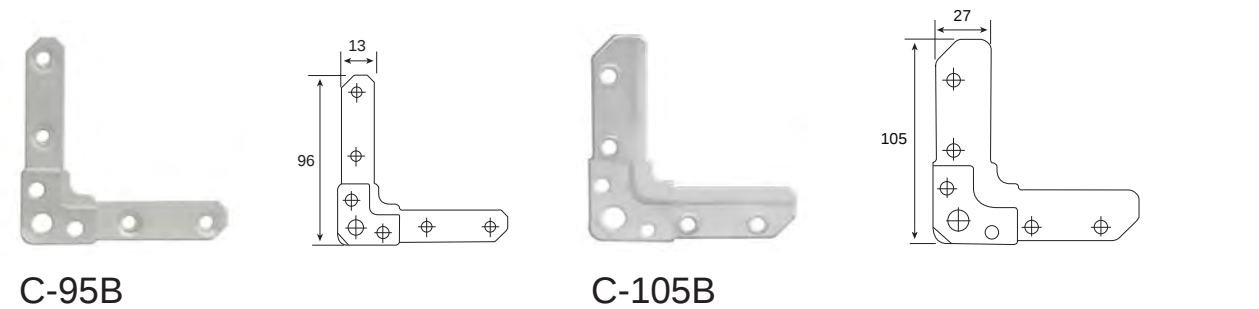
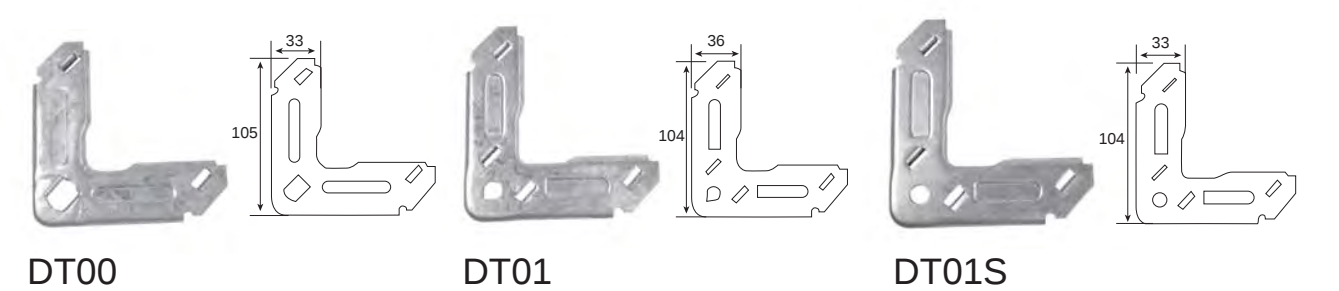
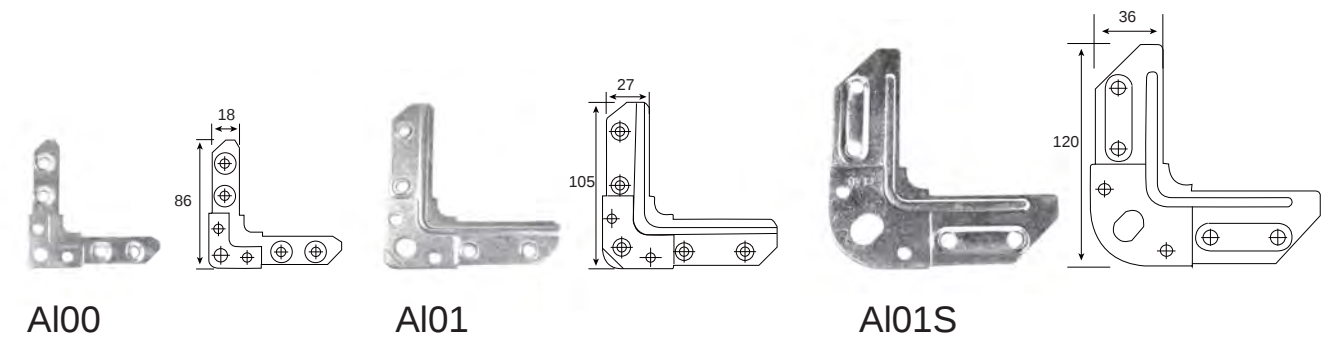
- machine cutting gypsum board,clean and neat push lock,easy remove, easy close
- Colour : White coated or as customized
- Gypsum board thickness: 9mm /12mm/12.5mm/15mm/25mm
- Aluminum profile: strong aluminum profile
- Ways to open:One way open
- Standard size: 20X20cm,30X30cm,40X40cm,45X45cm,50X50cm, 60X60cm, 60X120cm
- Without board:GADW



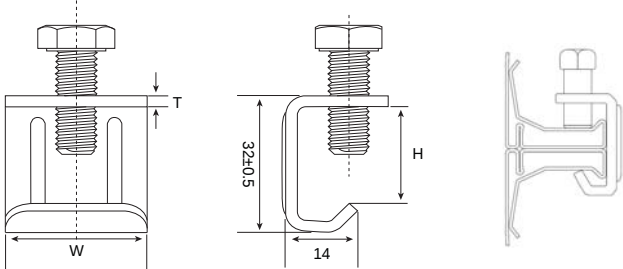
SAD

- Clean and neat push lock,easy remove, easy close
- Colour : White coated or as customized
- Aluminum profile: strong aluminum profile
- Ways to open:One way open
- Standard size:300x300,400x400,600x400,540x540,600x600





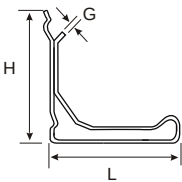
Corner Clamp - CG



The mounting clamp is made of cast iron by casting and equipped with a galvanized steel bolt with which it is securely attached to the supporting structures. She is designed for installation of ducts and other engineering systems.

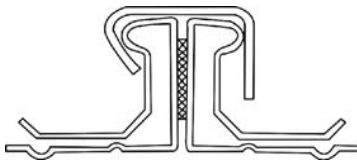
Type	W(mm)	T(mm)	H(mm)	clamping screw
CG-2.5	28	2.5	21	M8x25
CG-2.5L	28	3.0	21	M8x25
CG-3.0	30	2.5	25	M8x25
CG-3.0L	30	3.0	25	M8x25

Flange - FL

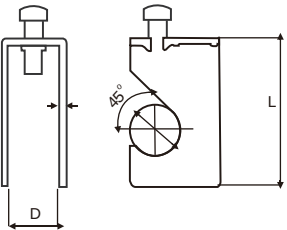


Size	H (mm)	G (mm)	L (mm)
No.20	25	0.7	20
No.30	40	0.8	40

Flange Cleat - FLC



Cross - CFF



Designed for cross connection of big diameters stiffening pipes.
Made of 3mm galvanized steel, which guarantees resistance to high temperatures necessary e.g. for smoke
L=70mm, D=22mm,80g/pc

Multi-Blade Damper Hardware - PBD



For parellel blade dampers
The parallel blade dampers is consisted of:
1 piece of parallel-linkage bracket
1 set (2 piece per set) of strap &set screw
1 set (2 piece per set) of flanged bronze bushing
1 set (2 piece per set) of bearing pin

Model	Rod size	Consist of
PBD14	1/4"	PLB14(1), SSS13(2), BB12(2), BP12(2)
PBD716		

For Opposed Blade Dampers - OBD



The opposed blade dampers is consisted of
1 high bracket
1 low bracket and linkage rod
2 set (2 piece per set) of strap &set screw
2 set (2 piece per set) of flanged bronze bushing
2 set (2 piece per set) of bearing pin

Model	Rod size	Consist of
OBD14	1/4"	HBO14(1), LBO14(1), SSS13(4), BB12(4), BP12(4)
OBD716		

Parallel-Linkage Bracket - PLB



- 16-Gauge Steel Precision Stamping, Zinc Plated
- Narrow Leading Edge Minimizes Airflow Resistance
- Brass Pivot, Steel "Slider" and Special Design Stainless Steel Taper Spring Allows for Self Alignment When Installed
- Minor Readjustments Are Easily Made As the Connecting Rod Remains Smooth
- Clamping Assembly Has Two to Three Times the Holding

Model	Rod size
PLB14	1/4"

Strap &Set Screw - SSS



- precision stamped from 10 gauge cold-rolled steel
- tapped 1/4"-28 to a Class 2 fit
- Set screws with square head, cup point hardened and zinc-plated

Model	Rod size
SSS13	Strap & set screw

High Bracket - HBO



- 16-Gauge Steel Precision Stamping, Zinc Plated
- Narrow Leading Edge Minimizes Airflow Resistance
- Brass Pivot, Steel "Slider" and Special Design Stainless Steel Taper Spring Allows for Self Alignment When Installed
- Used With Low Bracket For All Opposedaction Dampers

Model	Rod size
HBO14	1/4"
HBO716	

Low Bracket And Linkage Rod - LBO



- 16-Gauge Steel Precision Stamping, Zinc Plated
- Material's Narrow, Efficient Design Gives Same Lateral Adjustment as Other Hardware Models
- Brass Pivot Is Tapped to Receive the Threaded End of the Connecting Rod.
- Used With High Bracket For All Opposedaction

Model	Rod size
LBO14	1/4"
LBO716	

Bronze Bushings - BB/PBR/PBS



Model	Description
BB716	Bronze Bushings 7/16" dia.ID
BB12	Bronze Bushings 1/2" dia.ID
BB716-2	Brass Bushings 7/16" dia.ID
BB12-2	Brass Bushings 1/2" dia.ID
PBR14	Plastic Bushings 1/4" dia.ID
PBS14	Plastic Bushings 1/4" sq.ID
PBR38	Plastic Bushings 3/8" dia.ID
PBS38	Plastic Bushings 3/8" sq.ID
PBR12	Plastic Bushings 1/2" dia.ID
PBS12	Plastic Bushings 1/2" sq.ID

Bearing Pin - BP



Model	Size
BP716	7/16" dia.x 2-1/2" long
BP12	1/2" dia.x 2-1/2" long
BP716L	7/16" dia.x 6" long
BP12L	1/2" dia.x 6" long

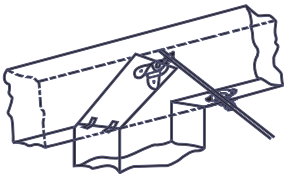
Splitter Damper Bracket - SDB



Splitter damper bracket consists of a 16-gauge zinc-plated stamping, bras pivot, stainless steel spring, steel "Slider" and a compression ring/ locknut assembly. This assembly firmly clamps the control rod in position. Slider allows for self-alignment with the ball joint. Also available with tapped brass pivot

Model	Shaft size
SDB14	1/4"
SDB516	5/16"

Ball Joint Damper Casting - BJ



Model	Shaft size
BJ14	1/4"
BJ516	5/16"

Dial Regulator 0



Our Regulator 0 has unique features and are robust enough to handle both residential and light commercial applications. It includes a forged high quality wing nut. The Regulator 0 is available in ¼" with interior and exterior steel washers and gasket. Also available for non-insulated and insulated applications. Recommended for dampers up to 250mm (10").

Dial Regulator 10



Our Regulator 10 has unique features and are robust enough to handle both residential and light commercial applications. It includes a forged high quality wing nut. The Regulator 10 is available in ¼" with interior and exterior steel washers and gasket. Also available for non-insulated and insulated applications. Recommended for dampers up to 250mm (10").

Dial Regulator 20



Dial Regulator 20 is the most popular model on the market. They minimize air leakage and reduce rattle. A wing nut locks the damper in position, and permits quick readjustment. The dial shows the damper position at a glance. The regulator can be mounted easily on round or

Model	Consists of
20	20 regulator only
20S	20 regulator, spring loc bearing, square end bearing
20RS	20 regulator, round end beraing , square end bearing
20SLL	20 regulator, , long spring loc bearing ,long square end bearing

Dial Regulator 30



Dial regulatro 30 dial regulator are the most popular models on the market. They minimize air leakage and reduce rattle. A wing nut locks the damper in position, yet permits quick readjustment. The dial shows the damper position at a glance. The regulator can be mounted easily on

Model	Consists of
30	30 regulator only
30S	30 regulator, spring loc bearing, square end bearing
30RS	30 regulator, round end beraing , square end bearing
30SLL	30 regulator, , long spring loc bearing ,long square end bearing

Dial Regulator 60



60 Quadrant set are designed with excellent handle action as well as quick wing nut adjustment and locking of the damper. The frame is marked to show the exact position of the damper. It can be used on square and round ducts.

Model	Description
60	60 quadrant only
60S	60 quadrant only, round end bearing,square end bearing
60SS	60 quadrant, spring loc bearing, square end bearing
60SL	60 quadrant, spring loc bearing, long square end bearing
60SLL	60 quadrant, long spring loc bearing, long square end bearing

Dial Regulator 70



75 Quadrant set are designed with excellent handle action as well as quick wing nut adjustment and locking of the damper. The frame is marked to show the exact position of the damper. It can be used on square and round ducts.

Model	Description
70	70 quadrant only
70R	70 quadrant only, round end bearing,square end bearing
70RS	70 quadrant, spring loc bearing, square end bearing
70RL	70 quadrant, spring loc bearing, long square end bearing
70RLL	70 quadrant, long spring loc bearing,long square end bearing

Dial Reguatro 75 Square Hole



Shaft loc Quadrant handle (available in both 1/2" square and round shafts) is unique in that it locks the shaft of the damper to it by a powerful friction holding device strong enough to cut into the damper shaft eliminating damper rattle. The shaft is easy locked with 1/2" open and wrench. Available for both square and round ducts.

Model	Consists of
75S	75 square shaft loc quadrant
75SS	75 round shaft loc quadrant

Stand Off Regulator - MPJ



Damper mechanism on abase
H 17.5mm

Model	Size
MPJS	1/4" damper mechanism on 1" base



Damper mechanism on abase
H 32mm

Model	Size
MPJL	1/4" damper mechanism on 2" base

Spiro Damper Mechanism - SDM



Description
Mechanism made of galvanized steel. It is adjusted with the bar located directly above the mechanism's rotation axis. The set includes bolts, pins and plastic bearing washers. Two screws blocking the damper's knob in the right position guarantee that the setting will not change.

Round Plastic Damper - RPD



Description
Mechanism made of plastic material. It is adjusted with the bar located directly above the mechanism's rotation axis. The set includes bolts, pins and plastic bearing washers. Two screws blocking the damper's knob in the right position guarantee that the setting will not change.
The set includes plastic bars and rubber rilgs.

Plastic Damper Control Precise - BPD



Description
Mechanism made of plastic material. It is adjusted with the bar located directly above the mechanism's rotation axi. The set includes bolts, pins and plastic bearing washers. Two screws blocking the damper's knob in the right position guarantee that the setting will not change.

Stand Off Regulator - SRA



Stand Off Regulator - SRB



Blue Wrapping Film - BWF



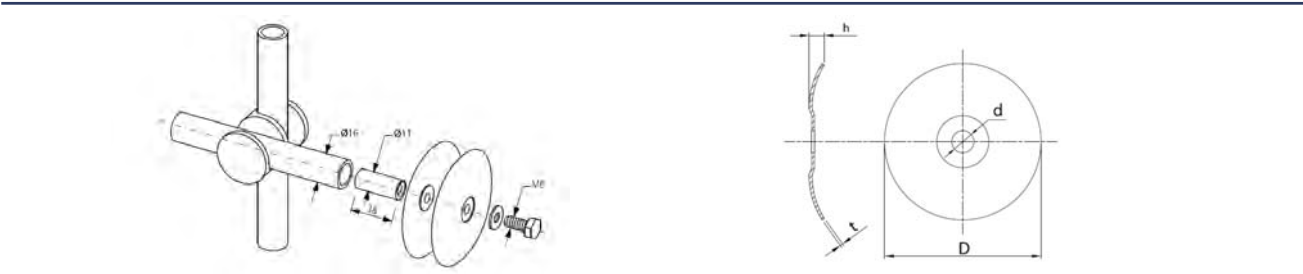
Glue: polyacrylate
Friction force: 28N/25mm
Tensile strength: > 250Mpa
Vertical and horizontal elongation: > 200%
Two way stretching

Rod Size
60mx600mmx0.05mm
60mx300mmx0.05mm
60mx1200mmx0.05mm

Toughening Disks - TDK



the washer serves as a stiffening of rectangular ducts with large cross-sections, in order to eliminate their vibrations of deformation, it is made of 0.8-1.0 mm thick galvanized steel sheet with a screw-in to the nut

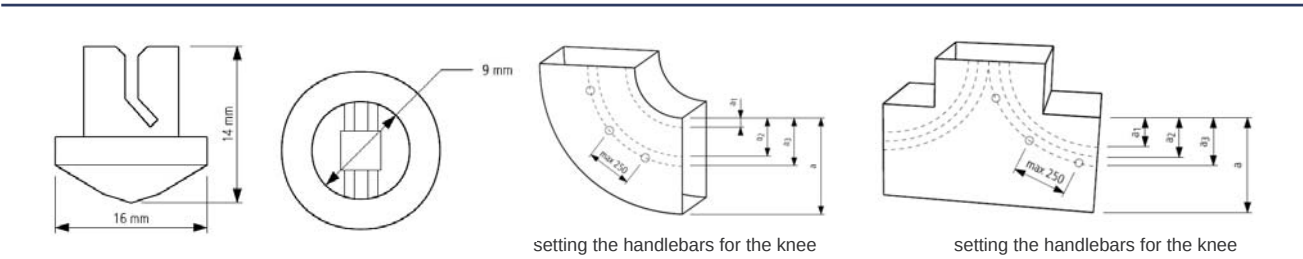


Type	d(mm)	D(mm)	h(mm)	t(mm)
TDK	8.6	75	5	0.7
TDK-60	8.6	60	5	0.8

Cast Pin Holder - CPH



The castiy pin holders guides are designed for mounting the blades in rectangular shapes to direct the air stream. They are made of aluminum zinc alloy. They have a rubber gasket. They are used for mounting sheets with thicknesses from 0, 4 to 1.1 mm. Unlike guide rails, the steering wheels are mounted in fittings according to the Polish Morma and do not function as a separate product.



wire width(mm)	number of steering wheels(mm)	distance between the steering wheels		
		a ₁ (mm)	a ₂ (mm)	a ₃ (mm)
>400≤800	1	a/3	-	-
>800≤1600	2	a/4	a/2	-
>1600≤2000	3	a/8	a/3	a/2

Hanger Type L ,Z



The hangers type L and Z are used for fixing of ventilation tubes. types L and Z are for the rectangular air piping. All these hangers have a damper against noise and vibration.

Technical data:	
Body and washer material:	steel class 5.6 - zinc plated
Damper material:	rubber

Hanger Type V



It is used for fixing on trapezoidal sheets. By means of the mechanism of adjustable bending parts the hanger can be easily adjusted for different profiles of trapezoidal sheets. The hanger can be supplied including an adjusting nut for additional height readjustment. We recommend using a hinge pin of a type of M8×120 for the fixing of the roofing sheet hanger to trapezoidal sheets. The hanger can also be fixed by means of sheet-metal screws or steel rivets. To make holes into trapezoidal sheets use trapezoidal sheet punching pliers.

Technical data:	
Material:	steel class 5.6 - zinc plated

Name	Thread	Hole(mm)	Material thickness(mm)	Safe lad(N)
Hanger type U	8	8	30x2	0.5KN
Trapezial sheet hanger type V regulation nut / M8	M8	-	2.5	1300
Trapezial sheet hanger type V regulation nut / M10	M10	-	2.5	1300
Trapezial sheet hanger type V welding nut / M8	M8	-	2.5	1300
Trapezial sheet hanger type V welding nut / M10	M10	-	2.5	1300
Trapezial sheet hanger type V with hole / 13 mm	-	13	2.5	1300
Trapezial sheet hanger type V with damper /2.5	-	8	2.5	1300

Hanger Type U



Hanger, Type ZV,ZL,ZZ



ZV



ZL

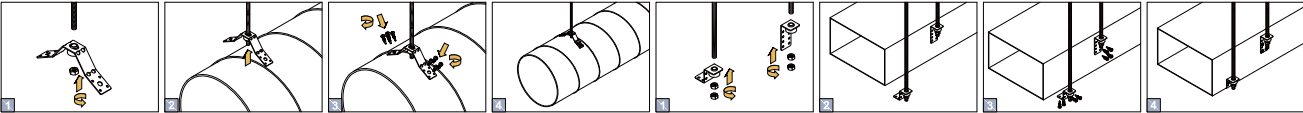


ZZ

The hangers type ZV, ZL and ZZ are used for fi xing of ventilation tubes.
Type ZV is for circular air tubes and types ZL and ZZ are for the rectangular
air piping. All these hangers have noise and vibration damper

Technical data:	
Body and washer material:	steel class 5.6 - zinc plated
Damper material:	Rubber

Name	Hole(mm)	Material(mm)	Safe load(KN)
Hanger type ZV	8	30x2	0.5
Hanger type ZL	8	30x2	0.4
Hanger type ZZ	8	30x2	0.5



Mounting Angle - MA



27-90°



38-90° Z holes



27-45°



38-45°



38-90°



38-90° 3 holes



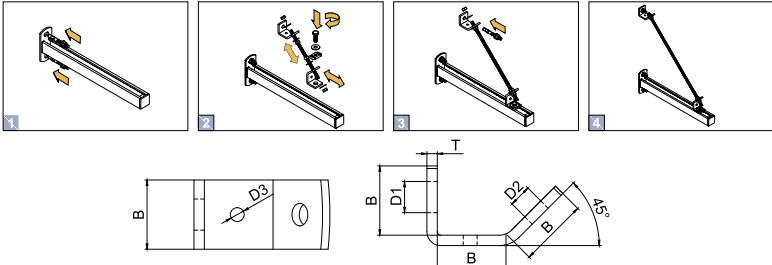
2x2 38-90°



Technical data:	
Body and washer material:	steel class 5.6 - zinc plated

Name	Angle(mm)	Material(mm)	Hole(mm)	Suitable for profile
MA / 27-45°	45°	25x4	25x8.5	27/18,28/30
MA / 27-90°	90°	25x4	25x8.5	27/18,28/30
MA / 38-45°	45°	40x6	10.5	38/40,40/60,ST41/21,41,62,82
MA / 38-90°	90°	40x6	10.5	38/40,40/60,ST41/21,41,62,82
MA with 2 holes / 38-90°	90°	40x6	10.5	38/40,40/60,ST41/21,41,62,82
MA with 3 holes / 38-90°	90°	40x6	10.5	38/40,40/60,ST41/21,41,62,82
MA with 2x2 holes, corner / 38-90°	90°	40x6	10.5	38/40,40/60,ST41/21,41,62,82

Mounting Angle For Bracing - MA40-45°



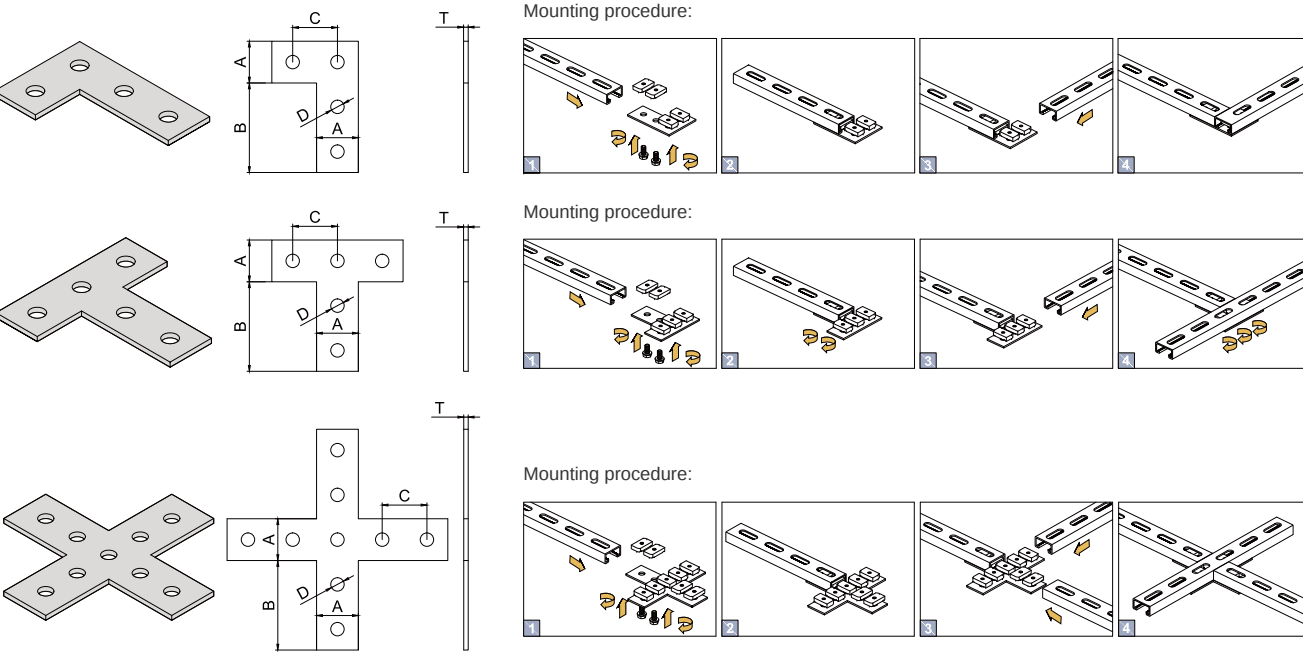
Name	B(mm)	D1(mm)	D2(mm)	D3(mm)	T(mm)	Suitable for profile
Mounting angle for bracing	40	18	13	8	6	38x40, 40x60, ST41x21, 41, 62

Rails Connector - RCL/RCT/RCX



Description:
Rail connectors are designed for right-angled connections of fi xing rails.
Connection fasteners are not a part of rail connectors.
Recommended connection accessories:
1) L/28, T28, X/28:
Metric bolt M6 or M8 - screw length according to fi xing rail height
Washer DIN125-A/washer for fi xing rails/washer DIN440
Slide nut for fi xing rail 27x18, 28x30 M6 or M8
2) L/40, T40, X/40:
Metric bolt M8 or M10 - screw length according to fi xing rail height
Washer DIN125-A/washer for fi xing rails/washer DIN440
Slide nut for fi xing rail 30x40, 40x60 M8 or M10/
slide nut for fi xing rail ST M8 or M10

Name	A(mm)	B(mm)	C(mm)	D(mm)	T(mm)	Suitable for profile
RCL L/28(27x18+28x30)	28	60	30	9	3	27x18,28x30
RCT T/28(27x18+28x30)	28	60	30	9	3	27x18,28x30
RCX X/28(27x18+28x30)	28	60	30	9	4	27x18,28x30
RCL L/40(38x40+40x60)	40	60	30	11	3	38x40,40x60,ST41x21,41,62
RCT T/40(38x40+40x60)	40	60	30	11	3	38x40,40x60,ST41x21,41,62
RCX X/40(38x40+40x60)	40	60	30	11	4	38x40,40x60,ST41x21,41,62

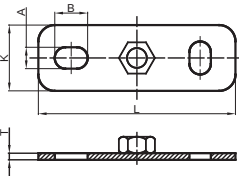


Rectangle Base Plate - WP



It is used for the mounting on walls, ceilings, floors and fixing rails. It is possible to adjust the wall plate within the tolerance of the openings.

Technical data:
Material: 1. steel class 5.6
2. stainless steel A2 (1.4301)
Surface coating: zinc plated



Name	Nut	K(mm)	L(mm)	T(mm)	AxB	Suitable for profile
WP M8 (80 × 30 mm)	M8	30	80	2	9x18	27/18, 28/30
WP M10 (80 × 30 mm)	M10	30	80	2	9x18	27/18, 28/30
WP M8 (120 × 40 mm)	M8	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M10 (120 × 40 mm)	M10	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M12 (120 × 40 mm)	M12	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M16 (120 × 40 mm)	M16	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP 1/2" (120 × 40 mm)	1/2"	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP 3/4" (120 × 40 mm)	3/4"	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP 1" (120 × 40 mm)	1"	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M8 (80 × 30 mm) stainless steel A2	M8	30	80	2	9x18	27/18, 28/30
WP M10 (80 × 30 mm) stainless steel A2	M10	30	80	2	9x18	27/18, 28/30
WP M12 (80 × 30 mm) stainless steel A2	M12	30	80	2	9x18	27/18, 28/30
WP M8 (120 × 40 mm) stainless steel A2	M8	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M10 (120 × 40 mm) stainless steel A2	M10	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M12 (120 × 40 mm) stainless steel A2	M12	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82
WP M16 (120 × 40 mm) stainless steel A2	M16	40	120	4	13x20	38/40, 40/60, ST41/21, 41, 62, 82

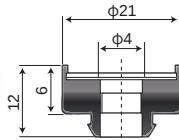
Rubber Antivibrator - RA



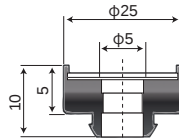
RA-1



RA-2



RA-3



RA shock absorber is used in suspension systems of ventilation ducts, it is made of EPDM rubber and has a pad made of galvanized sheet. The purpose of the RA shock absorber is to dampen vibrations and vibrations



Small buckle



big buckle



Lock



Clips for grilles AG-02

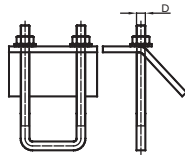


Clips for grilles AG-03

Rail Beam Clamp - RBC



MAGS



MAG



MAGL

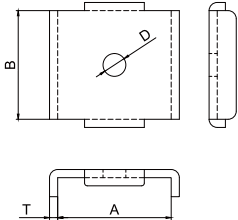
The rail beam clamp is designed for the fixing of fixing rails, pipe lines, air conditioning systems and cable gutters on steel fixing rails. This mounting component is allowed in connection with fire sprinkler systems and needs neither drilling nor welding. Additional moving and aligning of fixing rails can be carried out at any time. Thanks to various lengths of strips the rail beam clamp can be fixed to all common T-profile and I-profile steel bars.

Technical data:
Body and washer material: steel class 5.6 - zinc plated



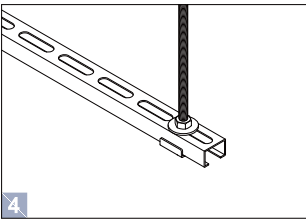
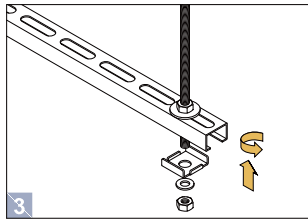
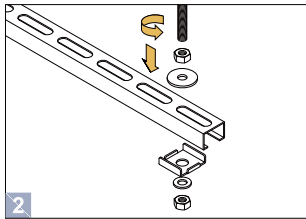
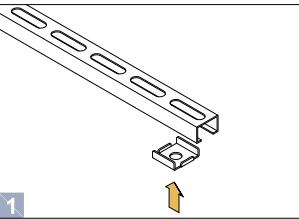
Name	Thread D(mm)	Suitable for profile
Rail beam clamp / 27/18, 28/30	M6	27/18,28/30
Rail beam clamp / 38/40, ST41/21, 41	M8	38/40,ST41/21,41
Rail beam clamp / 40/60, ST41/62	M8	40/60,ST41/21
Rail beam clamp / ST41/82	M10	ST41/82,2*ST41/41
Rail beam clamp / ST41/124	M10	ST41/124,2*ST41/62

U-Washer Type Fix



U-washer is used as washer for anchoring fixing rails or cantilever arms. Thanks to its shape, it prevents deformation of fixing rail, when it is under load. It allows anchoring fixing rails in any positions.

Technical data:
Material: steel class 5.6 - zinc plated



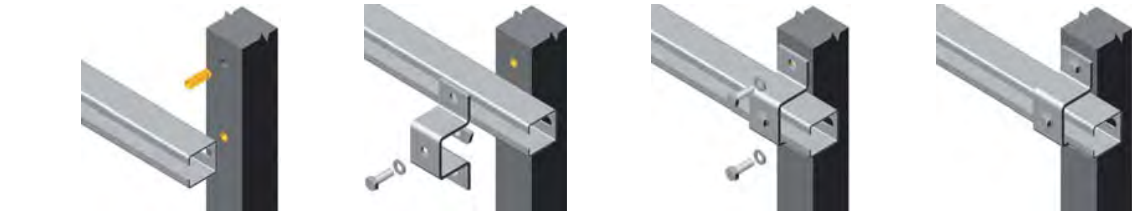
Name	A(mm)	B(mm)	D(mm)	T(mm)	Suitable for profile
U-washer type FIX 27×18,28×30, d.11mm	28.8	27	11.0	1.5	27×18, 28×30
U-washer type FIX 38×40,40×60, d.13mm	40.8	40	13.0	2.0	38×40, 40×60
U-washer type FIX ST d.8,4mm	41.8	40	8.4	3.0	ST 41×21, 41 ,62, 82
U-washer type FIX ST d.10,5mm	41.8	40	10.5	3.0	ST 41×21, 41 ,62, 82
U-washer type FIX ST d.13mm	41.8	40	13.0	3.0	ST 41×21, 41 ,62, 82

Profile-CFA



Fixing rails are used for installation of piping, ventilation ducts and wiring. Fixing rails are designed for indoor installation. For outdoor installation, it is necessary to choose a surface finish of hot-dip galvanizing or stainless steel. Due to the different geometry of the holes, the beam can be attached in many ways to the wall, ceiling and floor. We offer a wide range of accessories for fastening fixing rails. Fixing rail differs in the profile incurvation and toothed edges which enable bigger load of the rail.

Technical data:
Surface coating: zinc plated



Name	Lenght(mm)	Type	Thickness(mm)
CFA 41/21 2000 mm 1,5	2000	41/21	1.5
CFA 41/21 3000 mm 1,5	3000	41/21	1.5
CFA 41/21 6000 mm 1,5	6000	41/21	1.5
CFA 41/21 2000 mm 2,5	2000	41/21	2.5
CFA 41/21 3000 mm 2,5	3000	41/21	2.5
CFA 41/21 6000 mm 2,5	6000	41/21	2.5
CFA 41/41 2000 mm 2	2000	41/41	2
CFA 41/41 3000 mm 2	3000	41/41	2
CFA 41/41 6000 mm 2	6000	41/41	2
CFA 41/41 2000 mm 2,5	2000	41/41	2.5
CFA 41/41 3000 mm 2,5	3000	41/41	2.5
CFA 41/41 6000 mm 2,5	6000	41/41	2.5
CFA 41/62 2000 mm 2,5	2000	41/62	2.5
CFA 41/62 3000 mm 2,5	3000	41/62	2.5
CFA 41/62 6000 mm 2,5	6000	41/62	2.5
CFA 41/82 6000mm 2,0, (2*41/41) (bolted)	6000	2*41/41	2.5
CFA 41/82 6000mm 2,5, (2*41/41) (bolted)	6000	2*41/41	2
CFA ST 41/82 2000mm 2,5	2000	41/82	2.5
CFA ST 41/82 3000mm 2,5	3000	41/82	2.5
CFA ST 41/82 6000mm 2,5	6000	41/82	2.5

Profile-CFB



Fixing rails are used for installation of piping, ventilation ducts and wiring. Fixing rails are designed for indoor installation. For outdoor installation, it is necessary to choose a surface finish of hot-dip galvanizing or stainless steel. Due to the different geometry of the holes, the beam can be attached in many ways to the wall, ceiling and floor. We offer a wide range of accessories for fastening fixing rails.

Technical data:
Surface coating: zinc plated



Name	Lenght(mm)	Type	Thickness(mm)
CFB 27/18x200 mm 1,25	200	27/18	1.25
CFB 27/18x400 mm 1,25	400	27/18	1.25
CFB 27/18x600 mm 1,25	600	27/18	1.25
CFB 27/18x2000 mm 1,25	2000	27/18	1.25
CFB 27/18x3000 mm 1,25	3000	27/18	1.25
CFB 28/30x2000 mm 1,75	2000	28/30	1.75
CFB 28/30x3000 mm 1,75	3000	28/30	1.75
CFB 28/30x6000 mm 1,75	6000	28/30	1.75
CFB 38/40x2000 mm 2,0	2000	38/40	2
CFB 38/40x3000 mm 2,0	3000	38/40	2
CFB 38/40x6000 mm 2,0	6000	38/40	2
CFB 40/60x2000 mm 2,5	2000	40/60	2.5
CFB 40/60x3000 mm 2,5	3000	40/60	2.5
CFB 40/60x6000 mm 2,5	6000	40/60	2.5

Profile-CFH



Perforated channel is used for the fixing of pipe and air conditioning distribution systems and electric paths.

Technical data:
Surface coating: zinc plated

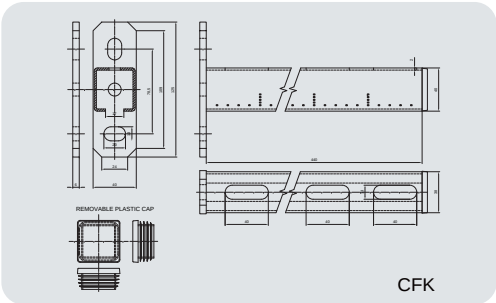
Name	Lenght(mm)	Type	Thickness(mm)
CFH L 30 × 30 × 2000 mm 2,0	200	27/18	1.25
CFH L 30 × 30 × 2000 mm 3,0	400	27/18	1.25
CFH U 30 × 30 × 30 × 2000 mm 2,0	600	27/18	1.25
CFH U 30 × 30 × 30 × 3000 mm 2,0	2000	27/18	1.25
CFH U 30 × 30 × 30 × 2000 mm 3,0			

Profile-CFC



Cantilever arms are used mainly for the fixing of pipes directly to walls. Other applications involve fixing and constructions on ceilings and floors. A wide range of structural designs can be created using the cantilever arms in connection with fixing rails and other components. The cantilever arms include a removable plastic cap.

ADVANTAGE:
Custom production of non-standard lengths.
Massive and stable attachment.
Wide range of dimensions and lengths.
High quality surface finish for long life.



Technical data:
Surface coating: zinc plated



Name	Size of base plate(mm)	Hole spacing	Lenght	Type	Thickness(mm)
CFC 27/18×200 mm 1,25	120x40	74.5	200	27/18	1.25
CFC 27/18×300 mm 1,25	120x40	74.5	300	27/18	1.25
CFC 27/18×500 mm 1,25	120x40	74.5	500	27/18	1.25
CFC 27/18×600 mm 1,25	120x40	74.5	600	27/18	1.25
CFC 28/30×200 mm 1,75	120x40	74.5	200	28/30	1.25
CFC 28/30×300 mm 1,75	120x40	74.5	300	28/30	1.75
CFC 28/30×440 mm 1,75	120x40	74.5	440	28/30	1.75
CFC 28/30×500 mm 1,75	120x40	74.5	500	28/30	1.75
CFC 28/30×600 mm 1,75	120x40	74.5	600	28/30	1.75
CFC 28/30×750 mm 1,75	120x40	74.5	750	28/30	1.75
CFC 28/30×900 mm 1,75	120x40	74.5	900	28/30	1.75
CFC 28/30×1000 mm 1,75	120x40	74.5	1000	28/30	1.75
CFC 38/40×200 mm 2,00	120x40	80	200	38/40	2
CFC 38/40×300 mm 2,00	120x40	80	300	38/40	2
CFC 38/40×400 mm 2,00	120x40	80	400	38/40	2
CFC 38/40×440 mm 2,00	120x40	80	440	38/40	2
CFC 38/40×500 mm 2,00	120x40	80	500	38/40	2
CFC 38/40×600 mm 2,00	120x40	80	600	38/40	2
CFC 38/40×700 mm 2,00	120x40	80	700	38/40	2
CFC 38/40×750 mm 2,00	120x40	80	750	38/40	2
CFC 38/40×800 mm 2,00	120x40	80	800	38/40	2
CFC 38/40×900 mm 2,00	120x40	80	900	38/40	2
CFC 38/40×920 mm 2,00	120x40	80	920	38/40	2
CFC 38/40×950 mm 2,00	120x40	80	950	38/40	2
CFC 38/40×1200 mm 2,00	120x40	80	1200	38/40	2
CFC 38/40×1400 mm 2,00	120x40	80	1400	38/40	2

Profile-CFD



Angle bracket can be miscellaneously used for the anchorage to ceilings and walls. In connection with fixing rails it can work e.g. as angle for pipe fixing, support angle for fixing rails or connecting components. Angle brackets can also be screwed together, which provides considerably higher values with load and bend.

Technical data:
Material: steel class 5.6
Surface coating: zinc plated



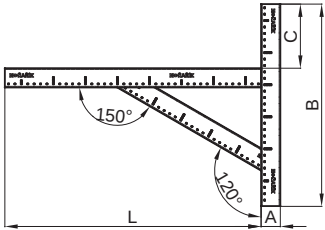
Name	Suitable for profile
CFD 100/100	38/40, 40/60, ST41/21, 41, 62, 82, 124
CFD 200/200	38/40, 40/60, ST41/21, 41, 62, 82, 124
CFD 200/200, adjustable	38/40, 40/60, ST41/21, 41, 62, 82, 124

Profile-CFE



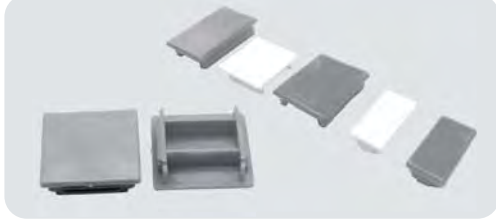
CFE cantilever arms are used for the fixing to the wall. A pair of CFE cantilever arms can also be used for the fixing of various types of aggregates, e.g. air conditioning units, sources of continuous power supply, etc. Other lengths can be manufactured by request of customers. Including a removable plastic cap.

Technical data:
Surface coating: zinc plated



Name	Lenght L (mm)	Size A (mm)	Size B (mm)	Size C (mm)
CFE 28/30x400mm 1,75	400	30	315	100
CFE 28/30x600mm 1,75	600	30	400	100
CFE 38/40x400mm 2,00	400	40	360	55
CFE 38/40x600mm 2,00	600	40	400	55
CFE 38/40x770mm 2,00	770	40	400	55

Safety Cap



usable for all 41x21 and 41x41 rails as well as on the consoles cut in 2 for 41x21 rails

Profile-CFF



The sliding sledge is suitable for the fixing of suspended, laid and vertical pipes on the wall or a fixing rail. This component prevents the action of forces on pipe clamps and fixed points.

Technical data:
Material: steel class 5.6
Surface coating: zinc plated



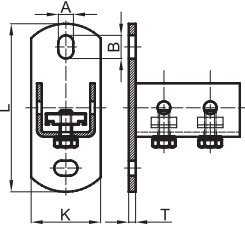
Name	Sliding range	Thread	Max. load
CFF M8	60	M8	1500
CFF M10	55	M10	1500

Universal Saddle Clamp Profile-CFG



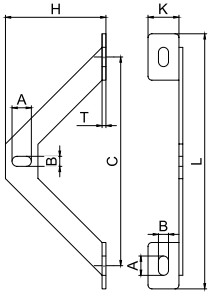
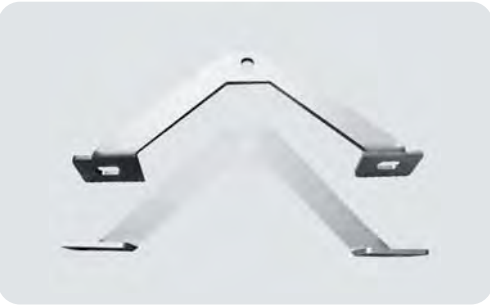
The saddle clamp is a basic element for creation of load bearing structures from fixing rails and other accessories. Saddle clamps are supplied with fasteners. Saddle clamps 27/18, 28/30, 38/40 and 40/60 are supplied with 2pcs of metric bolts DIN933, 2pcs washers and double thread plate. Saddle clamps type ST are supplied with 2pcs of metric bolts DIN933, 2pcs washers and 2pcs slide nuts for fixing rails ST.

Technical data:
Material: steel class 5.6
Surface coating: zinc plated

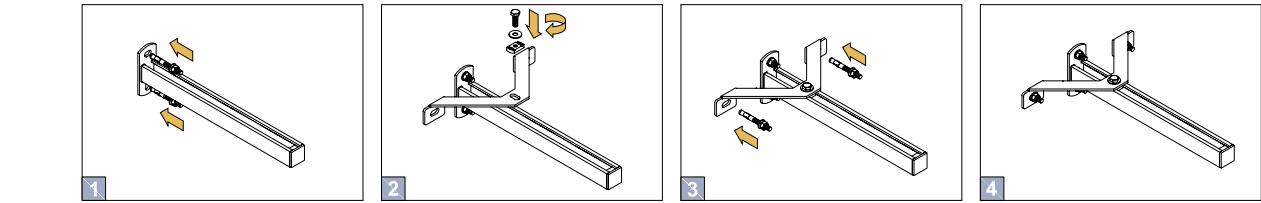


Name	K (mm)	L(mm)	T (mm)	AxB (mm)	Suitable for profile
CFG 27/18, 28/30 UNIVERSAL	40	120	4	11x20	27/18, 28/30
CFG 38/40, 40/60 UNIVERSAL	60	145	6	13x20	38/40, 40/60
CFG ST UNIVERSAL	60	145	6	13x20	ST41/21, 41, 62
CFG heavy duty 38/40 40/60,UNIVERSAL	70	160	8	13x20	38/40, 40/60
CFG heavy duty ST UNIVERSAL	70	160	8	13x20	ST41/21, 41, 62

Horizontal Support 2513



Horizontal support is used if horizontal force act construction. Horizontal support fi xed to the bracket prevents undesirable movements in the horizontal direction. Suitable for all types of fixing rails.



Name	AxB(mm)	C(mm)	H(mm)	K(mm)	L(mm)	T(mm)
Horizontal strut	25x13	270	130	40	330	5

Cutting Wheel - CWM/CWS



Make fast, clean cuts in steel, stainless steel and other ferrous metals with these abrasive cut-off wheels. Tough aluminum oxide abrasive is continuously exposed during use to maintain an aggressive cutting edge. Designed for use with your high speed cutter, these aluminum oxide cut-off wheels are fully reinforced with fiberglass mesh for added safety and controlled performance. Tough aluminum oxide abrasive is continuously exposed during use to maintain an aggressive cutting edge. Fully reinforced with fiberglass mesh for added safety and controlled performance

Commodity description	Size (mm)
Metal cut off wheels	CWM 115x1.2x22
	CWM 115x1.6x22
	CWM 125x1.2x22
	CWM 125x1.6x22
	CWM 150x2.5x22
	CWM 180x2.5x22
	CWM 230x2.5x22
	CWM 300x3x32
Stone cut off wheels	CWS 355x3x25.4
	CWS 125x2.5x2
	CWS 230x2.5x22

Silicone Sealant- SS



Description:
Acetic General Purpose Silicone Sealant is one-part room temperature acetoxysilicone sealant. It has excellent weather ability, waterproof and good adhesion to most construction materials. It is suitable for sealing, repairing, glazing and mending of glass, auto windscreen, glazing for window panels and other general building materials bonding.

Characteristics:

- 1. One-component, acetic cured, RTV, low-modulus;
- 2. Easy to use, cured quickly, good weatherability;
- 3. Good adhesion to many building materials;
- 4. Colors include transparent, white, grey and black, or other colors as per customers' requirements.
- 5. Acidity or Neutral

Model: SS-DTK

Technical data:
Time of curing-10-20 minutes
Deformation-20%
Used temperature from +5 till +40 degrees
Temperature of operation is from -40 till +100 degrees

Injecting Gun



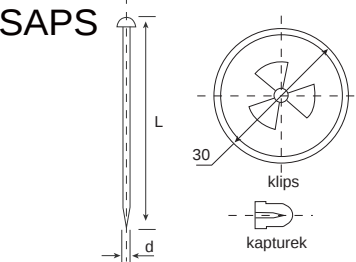
Name: Injecting gun /150-300 ml. hobby
Injecting gun /150-300 ml. profi

Gloves



Material: Cotton, and PVC dotting.
Size: Produced as per your needs.

Self-adhesive Pins



They are used to attach thermal insulation to a surface ventilation ducts. It is equipped with metal PVC clip and cap. SAPS-N: without washer



SAPD



SAP-W



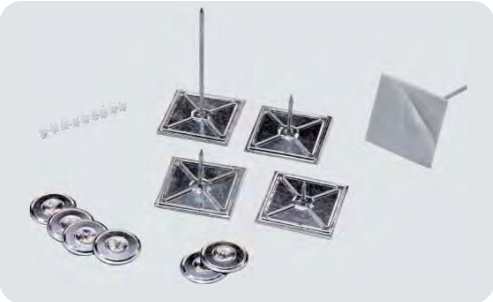
SAP-RW



SAPS-W

type	L (mm)	d (mm)
SAPS-25	25	2.2
SAPS-33	33	2.2
SAPS-43	43	2.2
SAPS-53	53	2.2
SAPS-63	63	2.2

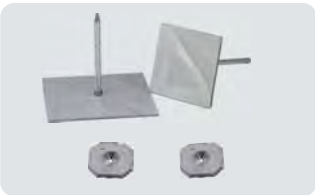
Self-adhesive Pins



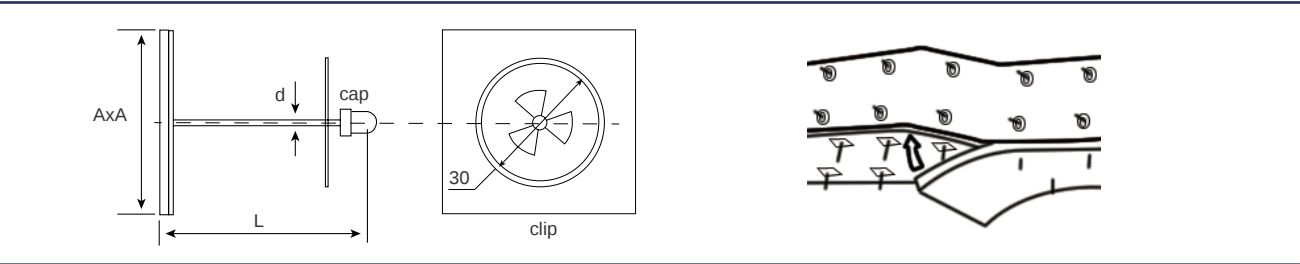
SAP

Technical data
SAH self-adhesive nail
-steel pins, diameter 2.7mm
-self-adhesive, galvanized steel base (50/50mm)
-solid, synthetic resin rubber glue made of compact cells filled with polyurethane foam
-length 19-165mm
-nail surface is knurled which prevents the blade from sliding
-EC pressing blades
-galvanized steel elastic blades
-external diameter 30 or 40 mm. protective EP nylon hood
-plastic hood protecting the nail tip

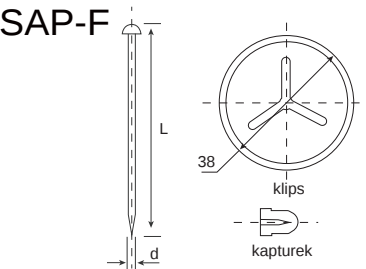
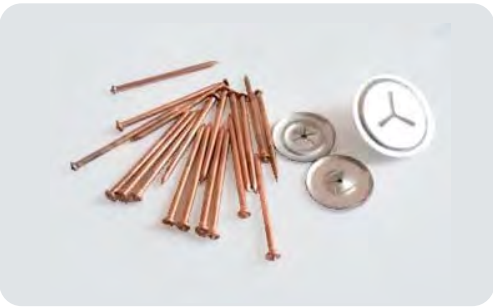
Use
Self-adhesive nails are used for mechanical fixing of insulation materials on smooth surfaces of ventilation ducts. To be used within temperature range from -40 °C to +80 °C (for a short time up to 100 °C)



SAP-R



Type	L (mm)	D (mm)	AXA (mm)
SAP-25	25	2.7	50/35
SAP-33	33	2.7	50/35
SAP-43	43	2.7	50/35
SAP-53	53	2.7	50/35
SAP-63	63	2.7	50/35
SAP-76	76	2.7	50/35
SAP-103	103	2.7	50/35
SAP-115	115	2.7	50/35



type	L (mm)	d (mm)
SAP-F	110	3

Duct Hardware

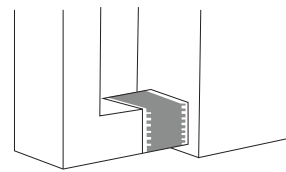
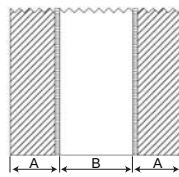
Flexible Connector - FC



Application

For absorbing vibrations in connections between air handling units and ductwork providing an airtight joint.
For applications in high temperature
Galvanized steel sheet of 0.4 mm thick
Color: Black, grey, etc.

FC-PVC	FC-CC	FC-PU
PVC+Galvanized steel	CANVAS+Galvanized steel	PU+Galvanized steel
Temp -30°C / +70°C	Temp -40°C / +280°C	Temp -50°C / +200°C
Length of 25 m	Length = 25m	Length = 25m



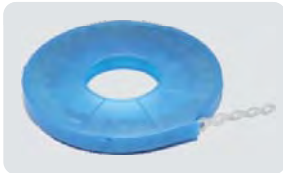
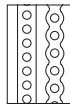
Type	component A (mm)	component B (mm)
FC-35-60-35	35	60
FC-42-60-42	42	60
FC-45-60-45	45	60
FC-45-70-45	45	70
FC-35-75-35	35	75
FC-45-75-45	45	75
FC-45-100-45	45	100
FC-70-100-70	70	100
FC-75-100-75	75	100

Perforated banding



PD

conventional and rounded edges
10M crown supplied in a box
roll perforated band with can be collected and handled easily
protection: hot dip galvanized



PDC

Type	width	length	thickness
PD12-10-0.6	12	10	0.6
PD17-10-0.6	17	10	0.6

Stud guards



Stud Guards provide protection for pipes and wiring installations from nails or screws, and are self-nailing for fast and easy installation.

- Stud guards have special self-nailing feature
- Made of 1.2mm steel
- Provides protection for pipes and wiring
- Galvanized

Stud Guards 1-1/2" x 3"

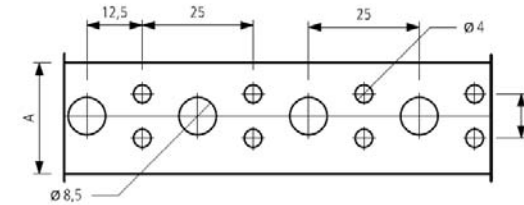
Stud Guards 1-1/2" x 5"

5-025

Multihole Suspension Band - MSB



Made of gavalized perforated steel with assorted holes, which according to the type selected, allow fixing of threaded rods, threaded clamps, bolts, etc.
The small holes can be used with rivets, screws or nails

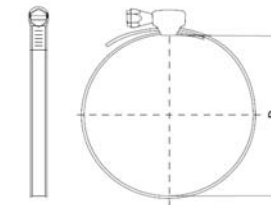


Type	A(mm)	thickness(mm)	length(m)
MSB17-0.6/0.5	17	0.6	25
MSB20-0.6/0.5	20	0.6	25
MSB25-0.6/0.5	25	0.6	25
MSB25-0.8	25	0.8	25

Hose Clamp For Flexible Ducts - HC



This clamping band is made of a strip of galvanized sheet.
The band is necessary for connecting elastic wires with moldings, connections, nozzles, etc. Pre-shaped edges of the band tape prevent damage during its installation and assembly.
The band has a worm clamp that guarantees a tight and durable connection.
Hose clamp for flexible ducts stainless: HC-201



Type	Range of diameters(mm)
HC90	Ø 70-90
HC110	Ø 90-110
HC135	Ø 120-135
HC165	Ø 145-165
HC215	Ø 200-215
HC270	Ø 250-270
HC315	Ø 295-315
HC325	Ø 310-325
HC380	Ø 360-380
HC525	Ø 500-525
HC660	Ø 640-660

5-026

Clamp Band



Stainless steel clamping strip on roll of 30m.
To use with band quickconnector

Application
Band for quick and easy-fixing off air tubes and hoses
On roll with marking for a quick en efficient cut off

Composition
Roll of 30 m stainless steel AISI 430 EN 1.4016 with a width of 9 mm and tickness of 0,6 mm in plastic holder

Accessories
Quick fastener, band

Clip



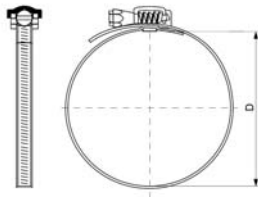
Lockscrews for camp band

Composition
Usable for clamp fitting thickness 0,6 mm and width 9 mm
Housing in plated steel
Locking mechanism: stainless steel AISI 304
Screwhead: 7 mm with a galvanised steel slot
DIN 3017

Clamping strips - CS



The cable tie is made of stainless steel tape.
The band is necessary for connecting elastic wires with moldings, connections, nozzles, etc. Pre-shaped edges of the band tape prevent from being damaged during its installation and assembly.
The band has a screw clamp that guarantees a tight and durable connection.
The entire length of the band has notches thanks to which it is possible to use the band even for small diameters.



Type	Range of diameters(mm)
CS90	φ50-90
CS110	φ50-110
CS135	φ50-135
CS165	φ50-165
CS215	φ50-215
CS270	φ50-270
CS315	φ50-315
CS325	φ50-325
CS380	φ50-380
CS525	φ50-525
CS660	φ50-660

The Wire Tightening Collar - WTC



Type	Length	Type	Length
WTC63	163	WTC315	954
WTC80	216	WTC355	1080
WTC100	279	WTC400	1221
WTC125	358	WTC450	1378
WTC150	436	WTC500	1535
WTC160	467	WTC560	1723
WTC200	593		
WTC250	750		

Suspension systems with cable type FC-1



Hanging system with loop finishing

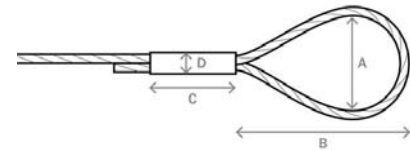
Application
• For suspension by wrapping around building features.

Specifications
• Absorption of vibration of 77%(cfr thread rods 52%)
• Diameter thread:1.5mm
• Breaking force included safety margin is calculated 1 on 5
• With quick suspension:30kg
• Packaging of 10 cables with 10 quick locks

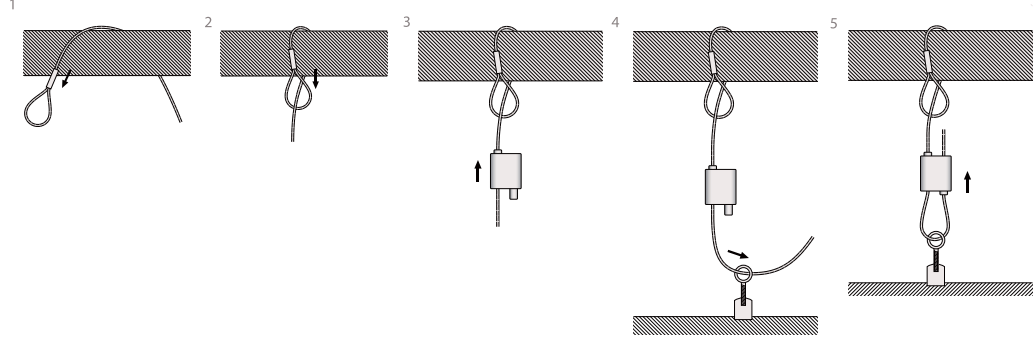
Models
• Available in standard lengths of 2m and 5m
• Upon request available in other lengths

Other available products
• Dia 3 mm:max.90 kg available on demand
• Also available with stainless steel cable, on demand

Text for Tender
• Steel galvanized wire cable suspension system with quick locking device for suspension of HVAC devices, ducts,... The end of the cable is provided with a loop end for fixing to the ceiling or on any upper building part



Assembly diagrams



Type	A [+/-mm]	B [+/-mm]	C [mm]	D [mm]
FC-1	17	35	12.50	6



Suspension systems with cable type FC-2



Suspension system with thread-ending; delivered with concrete anchors

Application

- For fast suspension in concrete

Specifications

- Absorption of vibration of 77%(cfr thread rods 52%)
- Diameter thread:1.5mm
- Breaking force included safety margin is calculated 1 on 5
- With quick suspension:30kg
- Delivered with concrete anchors
- Packaging of 10 cables with 10 quick locks

Models

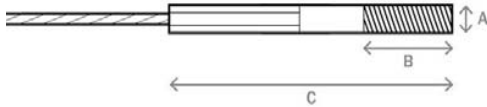
- Available in standard lengths of 2m and 5m
- Threads in M6 and M8
- Upon request available in other lengths

Other available products

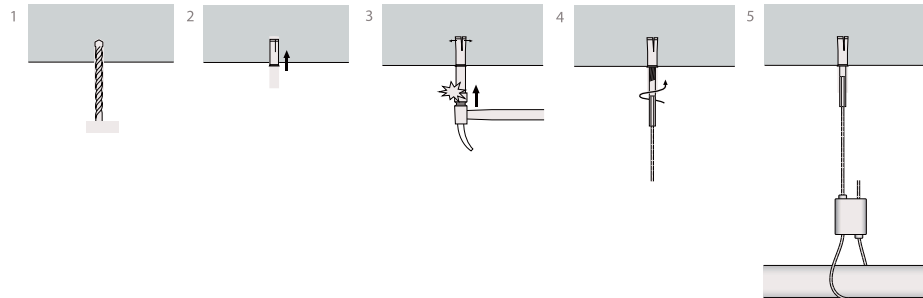
- Dia 3 mm:max.90 kg available on demand
- Also available with stainless steel cable, on demand

Text for Tender

- Steel galvanized wire cable suspension system with quick locking device for suspension of HVAC devices, ducts,... The end of the cable is provided with a loop end for fixing into a ceiling concrete anchor or into a beam clamp.



Assembly diagrams



Type	A [+/-mm]	B [+/-mm]	C [mm]
FC-2-6	M6	20	50
FC-2-8	M8	45	70



Suspension systems with cable type FC-3



Suspension with toggle anchor

Application

- For quick suspension in steeldec

Specifications

- Absorption of vibration of 77%(cfr thread rods 52%)
- Diameter thread:1.5mm
- Breaking force included safety margin is calculated 1 on 5
- With quick suspension:30kg
- Packaging of 10 cables with 10 quick locks

Models

- Available in standard lengths of 2m and 5m
- Upon request available in other lengths

Other available products

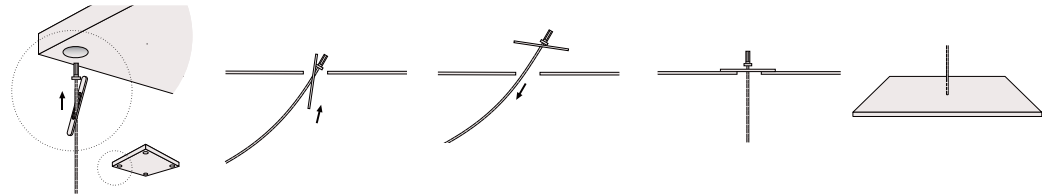
- Dia 3 mm:max.90 kg available on demand
- Also available with stainless steel cable, on demand

Text for Tender

- Steel galvanized wire cable suspension system with quick locking device for suspension of HVAC devices, ducts,... The end of the cable is provided with a loop end for fixing to the ceiling or on any upper building part



Assembly diagrams



Type	A [+/-mm]	B [+/-mm]	C [mm]	D [mm]
FC-3	4.20	5.70	12	40



Suspension systems with cable and musqueton type FC-4



Suspension with musqueton fixation

Application

- Fixing on eye hook

Specifications

- Absorption of vibration of 77%(cfr thread rods 52%)
- Diameter thread:1.5mm
- Breaking force included safety margin is calculated 1 on 5
- With quick suspension:30kg
- Delivered with concrete anchors
- Packaging of 10 cables with 10 quick locks

Models

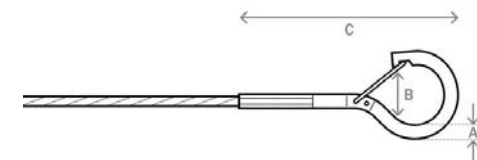
- Available in standard lengths of 2m and 5m
- Upon request available in other lengths

Other available products

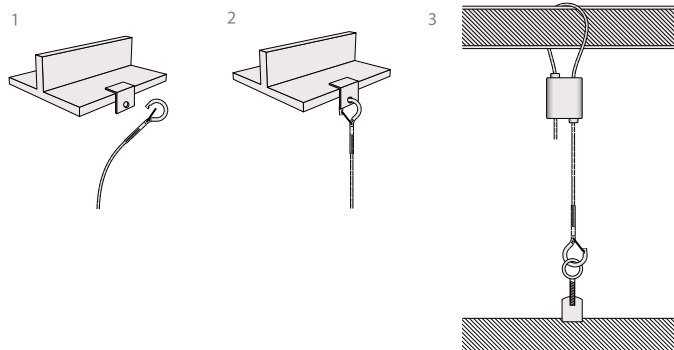
- Dia 3 mm:max.90 kg available on demand
- Also available with stainless steel cable, on demand

Text for Tender

- Steel galvanized wire cable suspension system with quick locking device for suspension of HVAC devices, ducts,... The end of the cable is provided with a loop end for fixing to the ceiling or on any upper building part.



Assembly diagrams



Type	A [+/-mm]	B [+/-mm]	C [mm]
FC-4	6.25	16	75



Suspension systems with cable type FC-5



Suspension with eyelet end fixing

Application

- For suspension by wrapping around building features.
- Suitable for fixation on different appliances

Specifications

- Absorption of vibration of 77%(cfr thread rods 52%)
- Diameter thread:1.5mm
- Breaking force included safety margin is calculated 1 on 5
- With quick suspension:30kg
- Packaging of 10 cables with 10 quick locks

Models

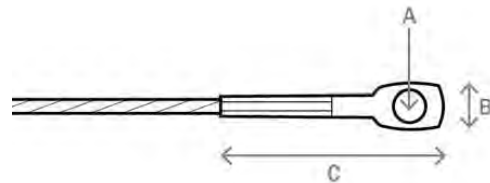
- Available in standard lengths of 2m and 5m
- Upon request available in other lengths

Other available products

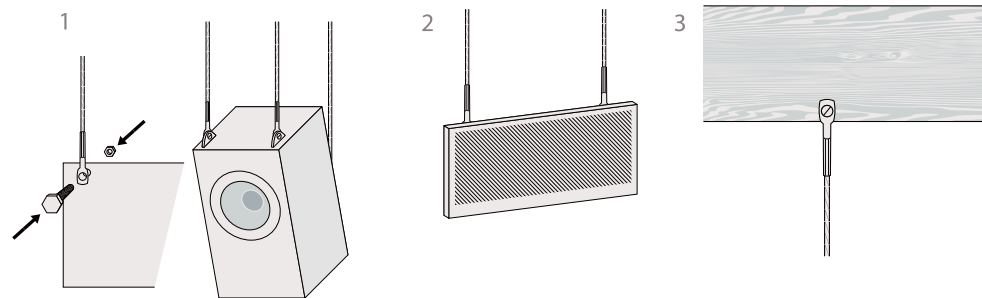
- Dia 3 mm:max.90 kg available on demand
- Also available with stainless steel cable, on demand

Text for Tender

- Steel galvanized wire cable suspension system with quick locking device for suspension of HVAC devices, ducts,... The end of the cable is provided with an straight eye end for fixing to the ceiling or on any upper building part.



Assembly diagrams



Type	A [mm]	B [mm]	C [mm]
FC-5	6.5	10	45



Suspension systems with cable type FC-6



Suspension system with thread-ending; delivered with concrete anchors

Application

- For fast suspension in concrete

Specifications

- Absorption of vibration of 77%(cfr thread rods 52%)
- Diameter thread:1.5mm
- Breaking force included safety margin is calculated 1 on 5
- With quick suspension:30kg
- Delivered with concrete anchors
- Packaging of 10 cables with 10 quick locks

Models

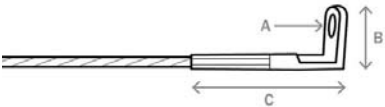
- Available in standard lengths of 2m and 5m
- Threads in M6 and M8
- Upon request available in other lengths

Other available products

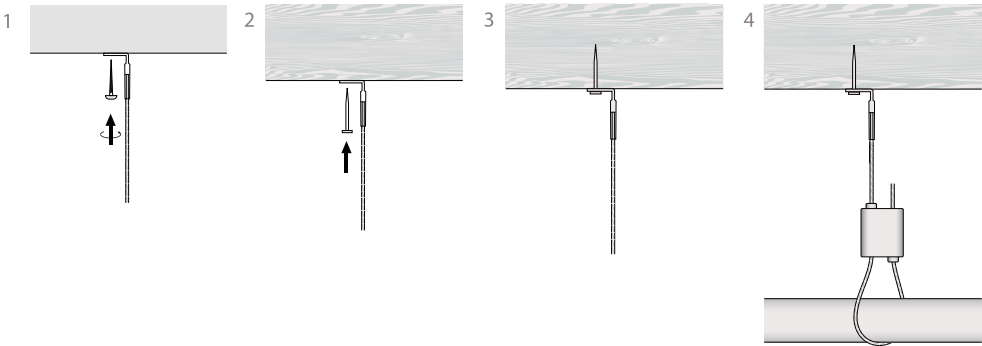
- Dia 3 mm:max.90 kg available on demand
- Also available with stainless steel cable, on demand

Text for Tender

- Steel galvanized wire cable suspension system with quick locking device for suspension of HVAC devices, ducts,... The end of the cable is provided with a loop end for fixing into a ceiling concrete anchor or into a beam clamp.



Assembly diagrams



Type	A [mm]	B [mm]	C [mm]
FC-6	7.5	29	38



Self-Drilling Screws



Size	
4.2 x 13	4.2 x 41
4.2 x 16	4.2 x 50
4.2 x 19	4.2 x 57
4.2 x 25	4.2 x 64
4.2 x 31	4.2 x 75

Drilling Screws



Size	
4.2 x 13	4.2 x 41
4.2 x 16	4.2 x 50
4.2 x 19	4.2 x 57
4.2 x 25	4.2 x 64
4.2 x 31	4.2 x 75

Double Threaded Screw



Size	
M8 x 60	M10 x 100
M8 x 80	M10 x 120
M8 x 100	M10 x 140
M8 x 120	
M8 x 140	

Washer-9021



Size		
M5	M14	M24
M6	M16	M30
M8	M18	
M10	M20	
M12	M22	

Washer-125a



Size		
M5	M14	M24
M6	M16	M30
M8	M18	
M10	M20	
M12	M22	

Nut with/without Spring



Size
M6 x 6: 35 x 20 x 31-32mm
M8 x 6: 35 x 20 x 31-32mm
M10 x 8: 35 x 20 x 31-32mm
M12 x 9.5: 35 x 20 x 31-32mm

Bolt



threading	L											
	20	25	30	35	40	45	50	60	70	80	90	
M6	X	X	X	X	X	X	X	X	X	X	X	
M8	X	X	X	X	X	X	X	X	X	X	X	
M10	X	X	X	X	X	X	X	X	X	X	X	
M12	X	X	X	X	X	X	X	X	X	X	X	
M14	X	X	X	X	X	X	X	X	X	X	X	
M16	X	X	X	X	X	X	X	X	X	X	X	
M18	X	X	X	X	X	X	X	X	X	X	X	
M20	X	X	X	X	X	X	X	X	X	X	X	

Expand Nails



Size		
M5	M14	M24
M6	M16	M30
M8	M18	
M10	M20	
M12	M22	

Hammer drive with plastic anchor



Size		
M5	M14	M24
M6	M16	M30
M8	M18	
M10	M20	
M12	M22	

Rivet



Size	Material
3.2 x 6	Alu./Steel
3.2 x 8	Steel/Steel optional
3.2 x 12	
4.0 x 8	
4.0 x 12	

Metric bolt Din 571



threading	L				
	60	70	80	100	120
M6	X	X	X	X	X
M8	X	X	X	X	X
M10	X	X	X	X	X

Hex Nuts



Size		
M4	M12	M22
M5	M14	M24
M6	M16	M30
M8	M18	
M10	M20	

Connection Nuts



Size	
M6 x 10 x 18	M16 x 24 x 48
M8 x 13 x 24	M20 x 30 x 60
M10 x 17 x 30	
M12 x 19 x 36	
M14 x 22 x 42	

Revit Nuts



Size
M5
M6
M8
M10

Threaded Rod



threading	1M	Long	2M	90mm	Short	100mm
M6	X		X	X		X
M8	X		X	X		X
M10	X		X	X		X
M12	X		X	X		X
M14	X		X	X		X
M16	X		X	X		X
M18	X		X	X		X
M20	X		X	X		X
M22	X		X	X		X
M30	X		X	X		X
M36	X		X	X		X

Beam clamps



Diescription:
-The beam clamp enables the fixing of components on profile without drilling and welding.
- The screw in the tip is designed in such a way that it eliminates slipping of the clamp form the profile.
Material:
malleable cast iron, zinc plated
size: M6 M8 M10 M12

Name	D(mm)	T(mm)	Safe load(mm)
Beam clamp M8 0-18 mm	6.3	2-3	0.7
Beam clamp M8 0-20 mm	6.3	3-8	0.9
Beam clamp M10 0-26mm	6.3	8-14	0.9
Safety holder for beam clamp M8, M10, M12	6.3	14-20	0.9

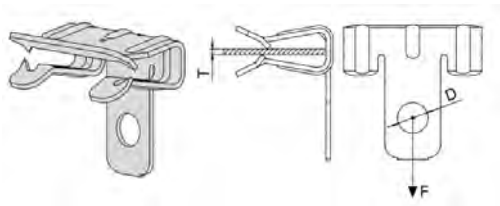
Mounting procedure:



Hammer clip typeh

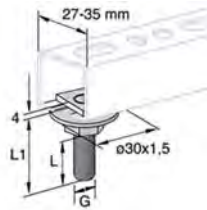


Hammer clip is made from special spring steel. The installation is carried out simply by hitting the hammer to clip on the cross-sections I, IPE, HEA, HEB, U, UPE.



Name	D(mm)	T(mm)	Safe load(mm)
Hammer clip type H 2H4	6.3	2-3	0.7
Hammer clip type H 4H24	6.3	3-8	0.9
Hammer clip type H 4H58	6.3	8-14	0.9
Hammer clip type H 4H912	6.3	14-20	0.9

Sliding nuts with bolt



Size	G	L	L1
M8/30	M8	16	30
M8/50	M8	36	50
M10/30	M10	15	30
M10/50	M10	35	50

Steel Anchor



Size
M6 8 x 25
M8 10 x 30
M10 12 x 40
M12 16 x 50

Brass Anchor



Size
M6 8 x 25
M8 10 x 30
M10 12 x 40
M12 16 x 50
M16 20 x 65
M20 25 x 80

FA-1



Size
M6 x 8 x 45
M8 x 10 x 85
M6 x 8 x 60
M10 x 12 x 65
M6 x 8 x 80
M10 x 12 x 100
M8 x 10 x 55
M8 x 10 x 80

FA-2



Size
M6 x 8 x 40
M6 x 8 x 65
M6 x 8 x 85
M8 x 10 x 40
M8 x 10 x 50
M8 x 10 x 77
M8 x 10 x 95
M10 x 12 x 60
M10 x 12 x 100
M10 x 12 x 130
M12 x 16 x 110
M12 x 16 x 150
M16 x 20 x 110
M16 x 20 x 150

FA-3



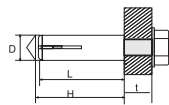
Size
M6 x 40
M6 x 95
M8 x 50
M8 x 80
M8 x 105
M10 x 65
M10 x 95
M12 x 100
M12 x 120
M16 x 105
M16 x 140
M20 x 125
M20 x 160

FA-4



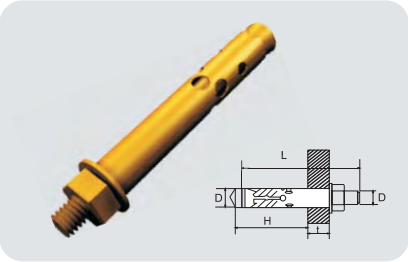
Size
M8 x 52
M8 x 72
M8 x 92
M8 x 112
M8 x 132
M8 x 152
M8 x 172
M10 x 52
M10 x 72
M10 x 92
M10 x 112
M10 x 132
M10 x 152
M10 x 182
M10 x 202

FADC deive anchor



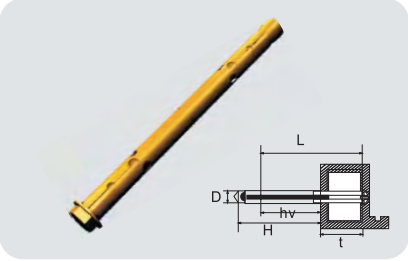
Standard Size	L	D	H	T msx
M6	25	8	25	11
M8	30	10	30	13
M10	40	12	40	17
M12	50	15	50	18
M16	60	20	65	21

FADG multifonctional anchor



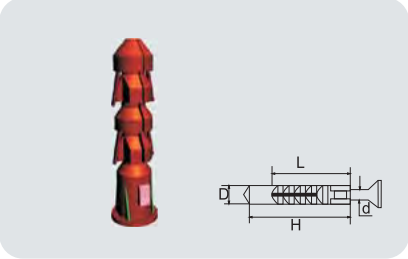
Standard Size	L	D	H	T max
M6 x 50	46	8	55	8
M6 x 65	65	8	75	30
M8 x 55	55	10	65	10
M8 x 75	75	10	80	35
M10 x 70	70	12	80	15
M10 x 85	85	12	95	40
M12 x 75	75	16	85	15
M12 x 90	90	16	100	50
M12 x 100	110	16	120	70

FADZ anchor for asemlly of window frames



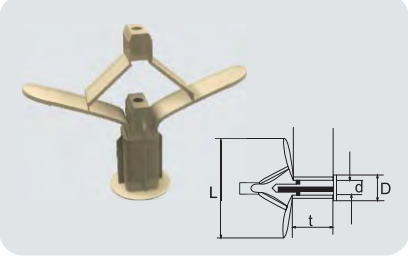
threading	L	D	H	T
M6	72	10	48	42
M6	92	10	48	42
M6	112	10	48	42

FADL plastic dowel for trapping screw



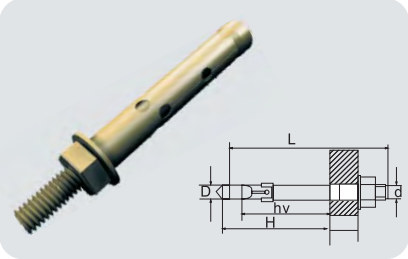
Standard Size	L	D	H
M6	30	6	40
M7	35	7	45
M8	40	8	50
M10	45	10	55
M12	55	12	65

FADL plastic dowel for trapping screw



Standard Size	L	D	H	t
M4 x 50	37	10	4	12

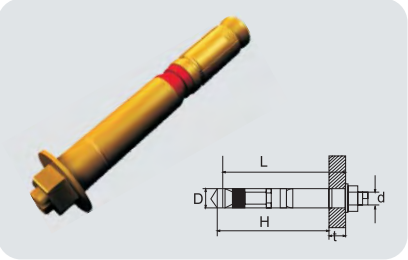
FADK pin anchor



Standard Size	L	D	H	hv
M8 x 75	75	8	60	45
M10 x 90	90	10	80	55
M12 x 110	110	12	100	65
M16 x 145	145	16	130	85

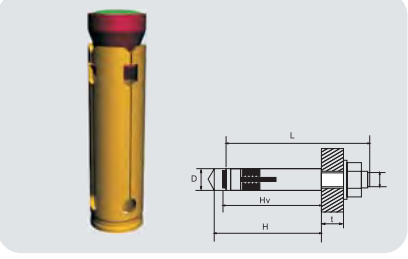
6-005

FADY heavy load thrust anchor



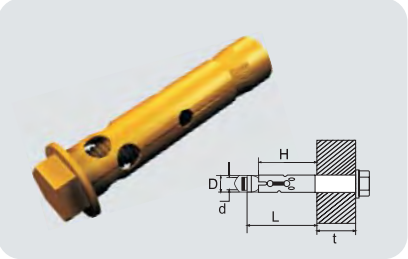
Standard Size	L	D	H	t
M12	140	14	85	45
M12	130	18	100	25
M12	160	24	125	40
M20	200	28	150	60

FADE anchor(wedgind)



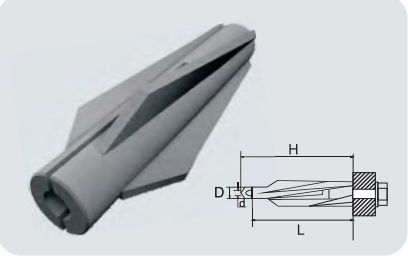
Standard Size	L	D	H	Hv
M6	260	10	50	45
M8	300	12	60	57
M10	360	15	70	63
M12	460	18	85	78
M16	520	24	110	90

FADD bolt anchor



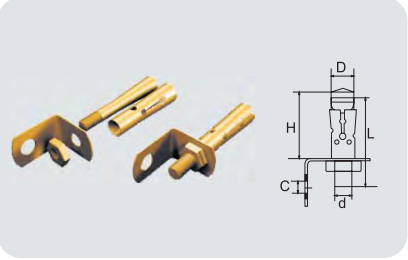
Standard Size	d	L	D	H	t
M8 x 45	M8	45	10	40	10
M10 x 70	M8	70	10	55	30
M12 x 100	M8	100	10	55	55

FADA dowel for assembly in aerated



Standard Size	L	D	H	d
M8	50	8	60	5
M10	55	10	65	7

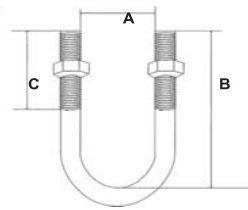
FADT anchor for assembly of counter ceilings



Standard Size	L	D	H	C
M6	46	8	55	7

6-006

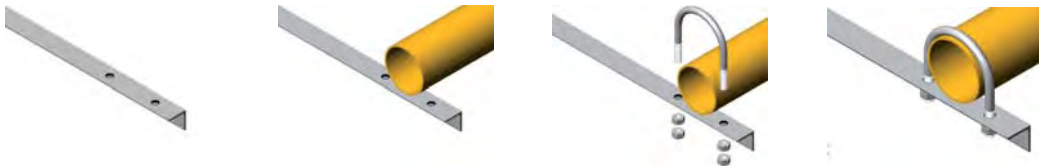
U-bolt - UB



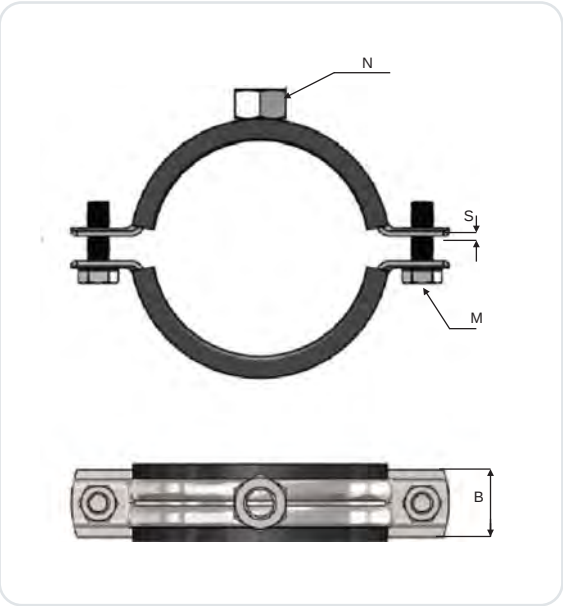
U-Bolts can be used with a crosspiece that spans both threaded arms to make it more secure in specific settings and uses.
U bolts are also designed to be inserted through holes which have been pre-drilled drilled or punched or to hand objects from pipes or beams.
-Used for mounting of pipes to the walls (vertical/horizontal). ceilings and floors.
-Plastic plug should be used for fixing.
-Easy and safe assembly through Philips combi side screws.
-Side screws are protected against loss during assemble with the help of plastic washers.
-Model: UB-F, UB-T, UB-A

Size	A	B	C	Size	A	B	C
UB M6x1/2"	22	52	22	UB M10x5/8"	25	55	30
UB M6x5/8"	25	55	30	UB M10x3/4"	28	58	30
UB M6x3/4"	28	58	30	UB M10x1"	35	65	35
UB M6x1"	35	65	35	UB M10x1-1/4"	43	73	45
UB M6x1-1/4"	43	73	45	UB M10x1-1/2"	50	80	50
UB M6x1-1/2"	50	82	50	UB M10x2"	61	95	55
UB M6x2"	61	95	55	UB M10x2-1/2"	78	110	60
UB M6x2-1/2"	78	110	60	UB M10x3"	92	125	60
UB M6x3"	92	125	60	UB M10x4"	116	115	50
UB M8x1/2"	22	52	32	UB M10x5"	142	185	50
UB M8x5/8"	25	55	30	UB M10x6"	170	215	50
UB M8x3/4"	28	58	30	UB M12x2"	61	95	55
UB M8x1"	35	65	35	UB M12x2-1/2"	78	110	60
UB M8x1-1/4"	43	73	45	UB M12x3"	92	125	60
UB M8x1-1/2"	50	80	50	UB M12x4"	116	155	50
UB M8x2"	61	95	55	UB M12x5"	142	185	50
UB M8x2-1/2"	78	110	60	UB M12x6"	170	215	50
UB M8x3"	92	125	60	UB M12x8"	222	265	50
UB M8x4"	116	155	50	UB M12x10"	275	325	50
UB M10x1/2"	22	52	22	UB M12x12"	325	390	50

Mounting procedure:



Pipe clamp with rubber - NSC

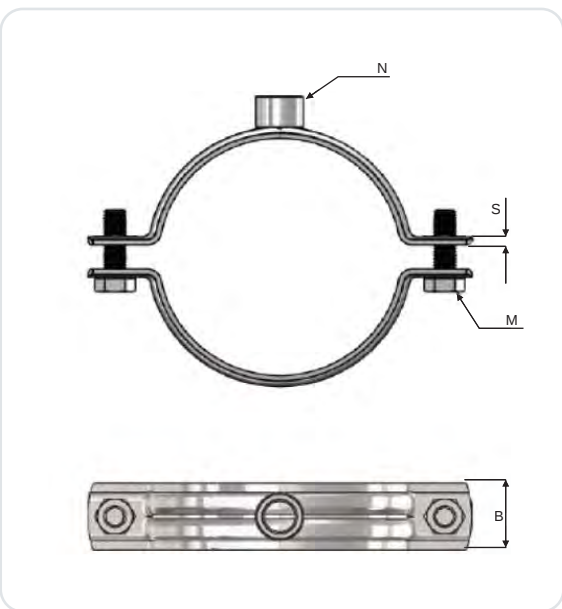
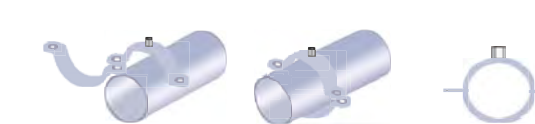


Specifications

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors
- Handing type is M8/M10 combi nut
- EPMD lining for;
 - noise reduction level up to 15dB according to DIN 4109
 - vibration reduction
 - partial compensation of thermal expansion
- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assemble with the help of plastic washers
- Electro galvanized of corrosion resistance(Plastic thickness 8-10 micron)

Code	Size	Clamping rang(mm)	M	N
NSC 1/4"	1/4"	12-16	M5	M8
NSC 3/8"	3/8"	16-20	M5	M8
NSC 1/2"	1/2"	20-24	M5	M8
NSC 3/4"	3/4"	25-30	M5	M8
NSC 1"	1"	32-37	M5	M8
NSC 1 1/4"	1 1/4"	39-46	M5	M8
NSC 1 1/2"	1 1/2"	47-53	M5	M8
NSC 53-59	53-59	53-59	M5	M8
NSC 2"	2"	59-66	M5	M10
NSC66-73	66-73	66-73	M6	M10
NSC 2 1/2"	2 1/2"	74-81	M6	M10
NSC 82-89	82-89	82-89	M6	M10
NSC 3"	3"	85-92	M6	M10
NSC 93-100	93-100	93-100	M6	M10
NSC 101-108	101-108	101-108	M6	M10
NSC 4"	4"	107-117	M6	M10
NSC 120-130	120-130	120-130	M6	M10
NSC 126-136	126-136	126-136	M6	M10
NSC 5"	5"	133-143	M6	M10
NSC 149-159	149-159	149-159	M6	M10
NSC 6"	6"	156-168	M6	M10
NSC 191-203	191-203	191-203	M6	M12
NSC 8"	8"	210-220	M6	M12

Pipe clamp without rubber - NSCL

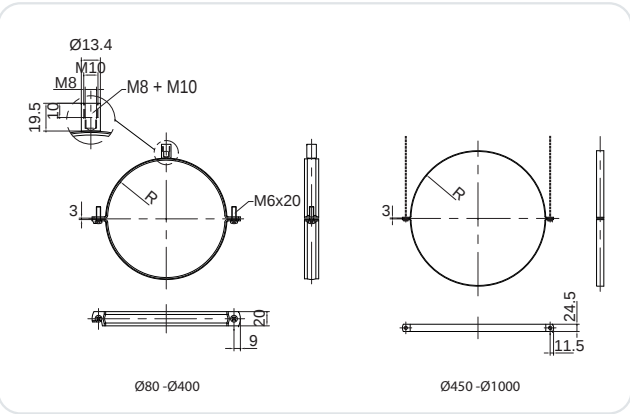


Specifications

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors
- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assemble with the help of plastic washers
- Electro galvanized of corrosion resistance (Plastic thickness 8-10 micron)

Code	Size	Clamping rang(mm)	M	N
NSCL 3/8"	3/8"	15-19	M5	M8
NSCL 1/2"	1/2"	18-22	M5	M8
NSCL 22-26	22-26	22-26	M5	M8
NSCL 3/4"	3/4"	26-30	M5	M8
NSCL 1"	1"	31-36	M5	M8
NSCL 1 1/4"	1 1/4"	38-43	M5	M8
NSCL 1 1/2"	1 1/2"	45-52	M5	M8
NSCL 53-59	53-59	53-59	M5	M8
NSCL 2"	2"	59-66	M5	M8
NSCL 66-73	66-73	66-72	M6	M10
NSCL 2 1/2"	2 1/2"	74-81	M6	M10
NSCL 82-89	82-89	82-89	M6	M10
NSCL 3"	3"	90-97	M6	M10
NSCL 93-100	93-100	93-100	M6	M10
NSCL 101-108	101-108	101-108	M6	M10
NSCL 4"	4"	109-114	M6	M10
NSCL 115-125	115-125	115-125	M6	M10
NSCL 128-138	128-138	128-138	M6	M10
NSCL 5"	5"	134-144	M6	M10
NSCL 141-151	141-151	141-151	M6	M10
NSCL 6"	6"	157-167	M6	M10
NSCL 164-176	164-176	164-176	M6	M10
NSCL 199-211	199-211	199-211	M6	M12
NSCL 8"	8"	218-228	M6	M12

Spiral duct clamp with rubber - NKSC



Application

Used for suspension of circular ducts
the Clamps are especially designed for vibration
attenuation
Dia 80 up to 400 mm with screw M6 on either side,
1-point suspension with M8/M10 nut on top
Dia 450 up to 1000 mm with 2-point suspension with M10
hole on either side

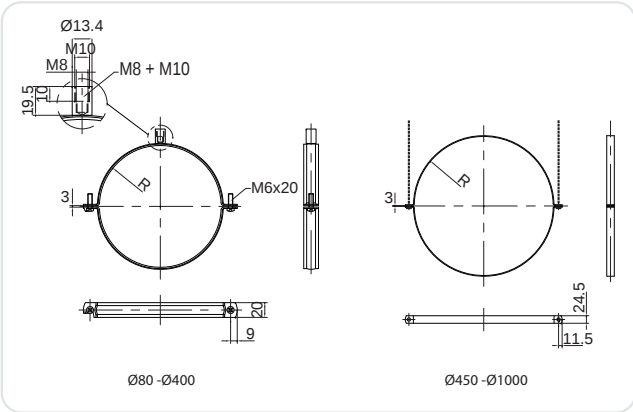
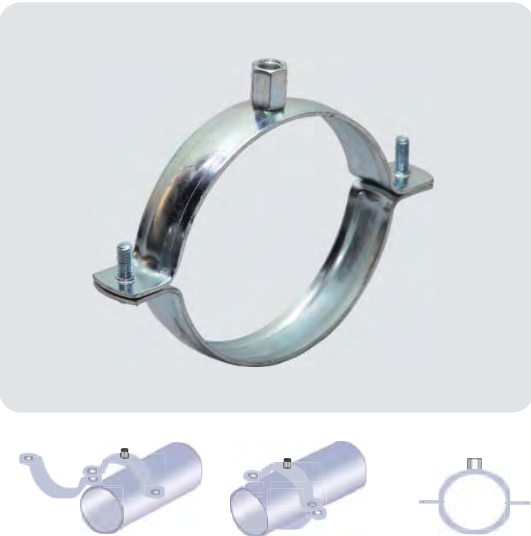
Composition

Made of hot dipped sendzimir zinc plated steel
Maximum suspended weight: 500 kg

Width is 20 mm for Dia 80 - 400 mm and 25 mm above Dia 400 mm
Thickness is 1.8 mm under Dia 400 mm and 2.3 mm above
Dia 400 mm
Rubber inlay:
Working temperature:
-40°C + 120°C
Material hardness: HS 60° +/-3°
Accessories
Threaded rods, type THA (not included)
NKSCW: Spiral duct clamp with rubber without nut

Code	Fixing Range(mm)	Bolt	Steel Section(mm)	Nut
NKSC80	82.4	M6	1.8x20	M8/M10
NKSC100	103.6	M6	1.8x20	M8/M10
NKSC125	128.6	M6	1.8x20	M8/M10
NKSC140	143.6	M6	1.8x20	M8/M10
NKSC150	153.6	M6	1.8x20	M8/M10
NKSC160	163.6	M6	1.8x20	M8/M10
NKSC180	183.6	M6	1.8x20	M8/M10
NKSC200	203.6	M6	1.8x20	M8/M10
NKSC224	227.6	M6	1.8x20	M8/M10
NKSC250	253.6	M6	1.8x20	M8/M10
NKSC280	284.8	M6	1.8x20	M8/M10
NKSC300	304.6	M6	1.8x20	M8/M10
NKSC315	319.8	M6	1.8x20	M8/M10
NKSC355	359.8	M6	1.8x20	M8/M10
NKSC400	404.8	M6	1.8x20	M8/M10
NKSC450	456.4	M10	2.0x25	M8/M10
NKSC500	504.8	M10	2.0x25	M8/M10
NKSC560	564.8	M10	2.0x25	M8/M10
NKSC600	604.8	M10	2.0x25	M8/M10
NKSC630	636.0	M10	2.0x25	M8/M10
NKSC710	716.0	M12	2.0x25	M8/M10
NKSC800	806.0	M12	2.0x25	M8/M10
NKSC900	906.0	M12	2.0x25	M8/M10
NKSC1000	1007.2	M12	2.0x25	M8/M10
NKSC1120	1127.2	M12	2.0x25	M8/M10
NKSC1250	1257.2	M12	2.0x25	M8/M10

Spiral duct clamp without rubber - NKSCL



Application

Used for suspension of circular ducts
the Clamps are especially designed for vibration
attenuation
Dia 80 up to 400 mm with screw M6 on either side,
1-point suspension with M8/M10 nut on top
Dia 450 up to 1000 mm with 2-point suspension with M10
hole on either side

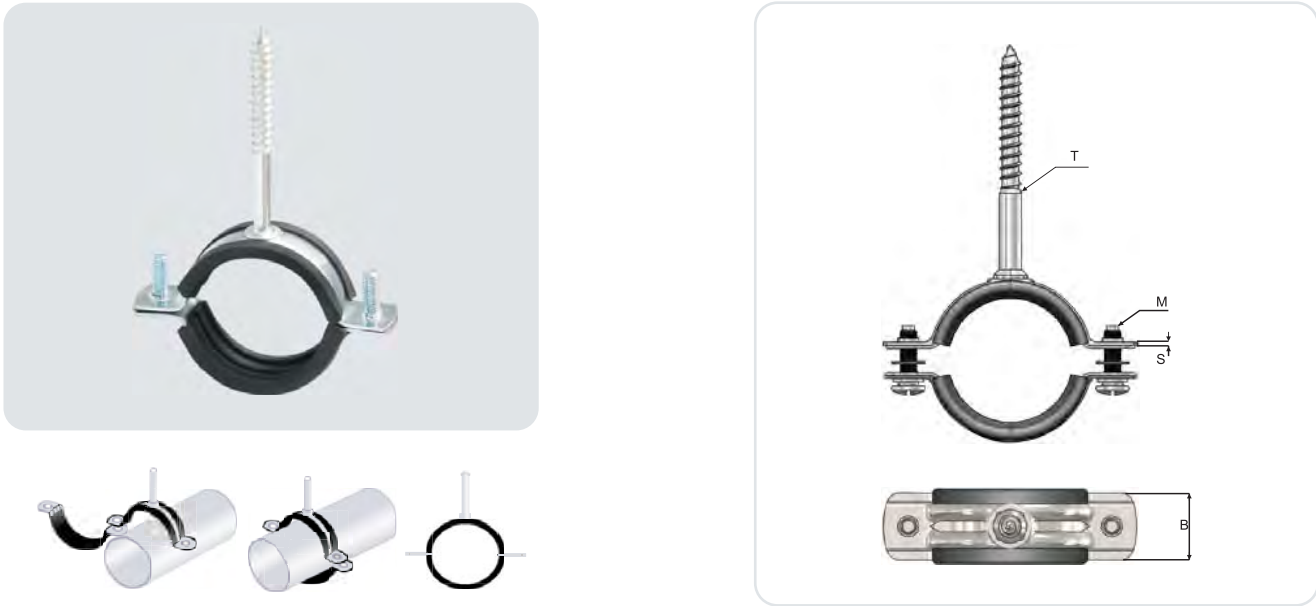
Composition

Made of hot dipped sendzimir zinc plated steel
Maximum suspended weight: 500 kg

Width is 20 mm for Dia 80 - 400 mm and 25 mm above Dia 400 mm
Thickness is 1.8 mm under Dia 400 mm and 2.3 mm above Dia 400 mm
Rubber inlay:
Working temperature:
-40°C + 120°C
Material hardness: HS 60° +/-3°
Accessories
Threaded rods, type THA (not included)
NKSCLW: Spiral duct clamp without rubber without nut

Code	Fixing Range(mm)	Bolt	Steel Section(mm)	Nut
NKSCL80	82.4	M6	1.8x20	M8/M10
NKSCL100	103.6	M6	1.8x20	M8/M10
NKSCL125	128.6	M6	1.8x20	M8/M10
NKSCL140	143.6	M6	1.8x20	M8/M10
NKSCL150	153.6	M6	1.8x20	M8/M10
NKSCL160	163.6	M6	1.8x20	M8/M10
NKSCL180	183.6	M6	1.8x20	M8/M10
NKSCL200	203.6	M6	1.8x20	M8/M10
NKSCL224	227.6	M6	1.8x20	M8/M10
NKSCL250	253.6	M6	1.8x20	M8/M10
NKSCL280	284.8	M6	1.8x20	M8/M10
NKSCL300	304.6	M6	1.8x20	M8/M10
NKSCL315	319.8	M6	1.8x20	M8/M10
NKSCL355	359.8	M6	1.8x20	M8/M10
NKSCL400	404.8	M6	1.8x20	M8/M10
NKSCL450	456.4	M10	2.0x25	M8/M10
NKSCL500	504.8	M10	2.0x25	M8/M10
NKSCL560	564.8	M10	2.0x25	M8/M10
NKSCL600	604.8	M10	2.0x25	M8/M10
NKSCL630	636.0	M10	2.0x25	M8/M10
NKSCL710	716.0	M12	2.0x25	M8/M10
NKSCL800	806.0	M12	2.0x25	M8/M10
NKSCL900	906.0	M12	2.0x25	M8/M10
NKSCL1000	1007.2	M12	2.0x25	M8/M10
NKSCL1120	1127.2	M12	2.0x25	M8/M10
NKSCL1250	1257.2	M12	2.0x25	M8/M10

Pipe clamp with combi nut with rubber - NTC

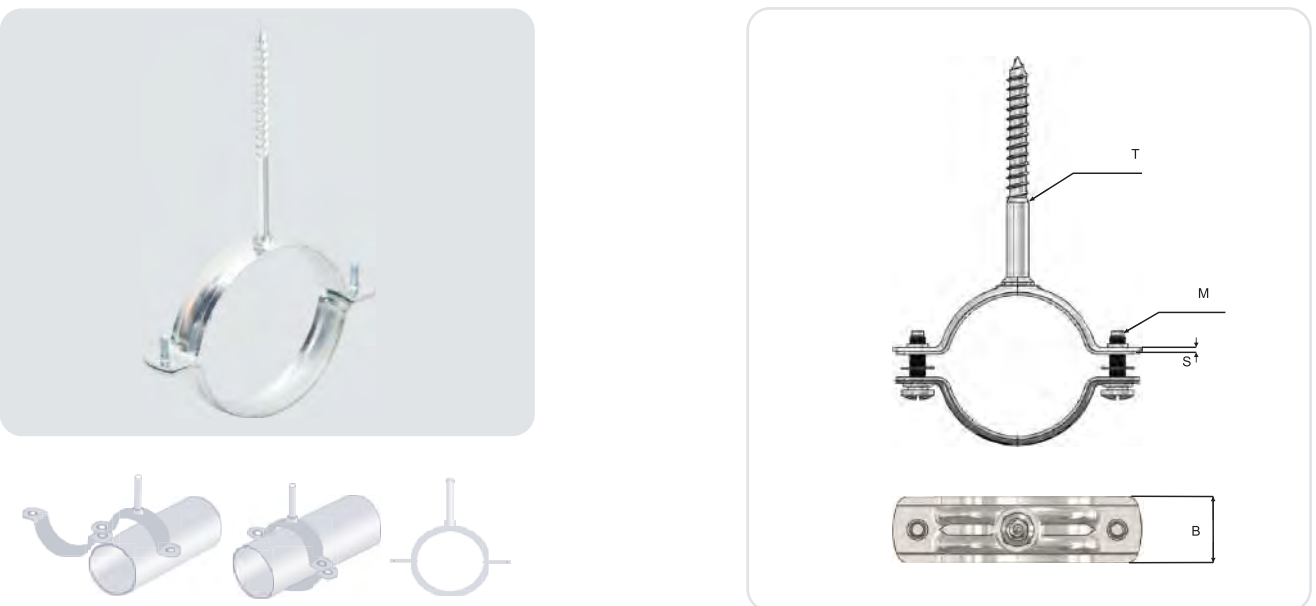


Specifications

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.
 - Plastic plug should be used for fixing.
 - EPDM lining for;
 - noise reduction level up to 15dB according to DIN 4109
 - Vibration reduction
 - partial compensation of thermal expansion.
- Easy and safe assembly through Philips combi side screws.
 - Side screws are protected against loss during assemble with the help of plastic washers.
 - Electro galvanized for corrosion resistance(Plating thickness 8-10 micron)

Code	Size	Clamping rang(mm)	M	T(mm)
NTC008	1/4"	12-16	M5	7*70
NTC010	3/8"	16-20	M5	7*70
NTC015	1/2"	20-24	M5	7*70
NTC020	3/4"	25-30	M5	7*70
NTC025	1"	32-37	M5	7*70
NTC032	1 1/4"	39-46	M5	7*70
NTC040	1 1/2"	47-53	M5	7*70
NTC047	53-59	53-59	M5	7*70
NTC050	2"	59-66	M5	7*70
NTC060	66-73	66-73	M6	7*70
NTC065	2 1/2"	74-81	M6	7*70
NTC075	82-89	82-89	M6	7*70
NTC080	3"	85-92	M6	7*70
NTC085	93-100	93-100	M6	7*70
NTC095	101-108	101-108	M6	7*70
NTC100	4"	107-117	M6	7*70
NTC110	120-130	120-130	M6	7*70

Pipe clamp with triphone without rubber - NTCL

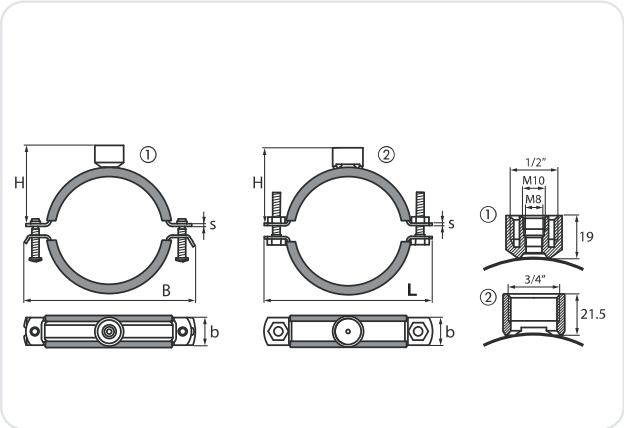


Specifications

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.
 - Plastic plug should be used for fixing.
 - Easy and safe assembly through Philips combi side screws.
 - Side screws are protected against loss during assemble with the help of plastic washers.
- Electro galvanized of corrosion resistance (Plastic thickness 8-10 micron)

Code	Size	Clamping rang(mm)	M	T(mm)
NTCL010	3/8"	15-19	M5	7*70
NTCL015	1/2"	18-22	M5	7*70
NTCL017	22-26	22-26	M5	7*70
NTCL020	3/4"	26-30	M5	7*70
NTCL025	1"	31-36	M5	7*70
NTCL032	1 1/4"	38-43	M5	7*70
NTCL040	1 1/2"	45-52	M5	7*70
NTCL047	53-59	53-59	M5	7*70
NTCL050	2"	59-66	M5	7*70
NTCL060	66-73	66-72	M6	7*70
NTCL065	2 1/2"	74-81	M6	7*70
NTCL075	82-89	82-89	M6	7*70
NTCL080	3"	90-97	M6	7*70
NTCL085	93-100	93-100	M6	7*70
NTCL095	101-108	101-108	M6	7*70
NTCL100	4"	109-114	M6	7*70
NTCL110	115-125	115-125	M6	7*70
NTCL120	128-138	128-138	M6	7*70

Ventilation pipe clamp with nut - NPA

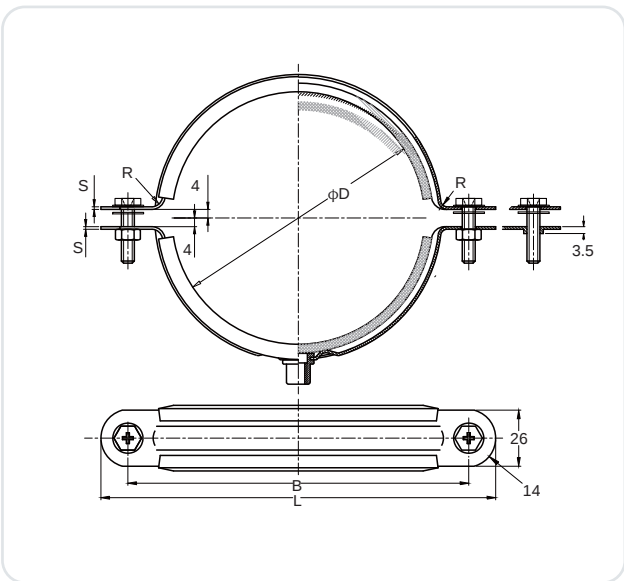


Specifications

- It's safe assembly clamp that used for mounting of cylindrical air channel.(vertical/horizontal),ceilings and floors.
 - EPMD lining for;
 - Noise reduction level up to 15 dB according to DIN 4109
 - Vibration reduction
 - Partial compensation of thermal expansion.
- Easy and safe assembly through Philips combi side screws.
 - Electro galvanized for corrosion resistance (8-10 micron)

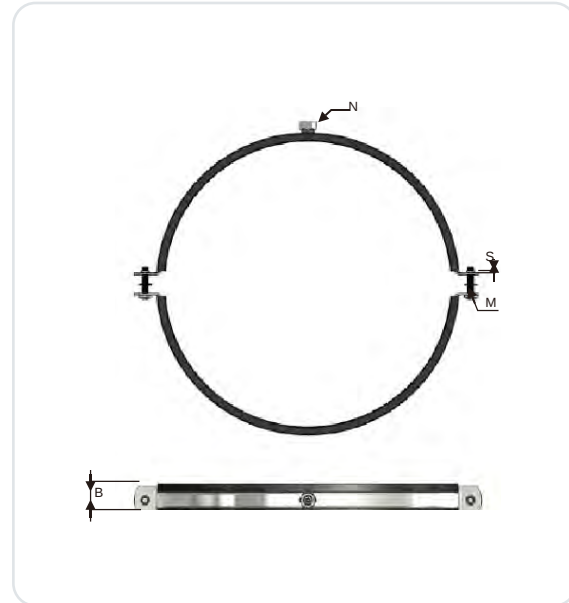
Size	Fixing Range(mm)	Bolt	Steel Section(mm)	Nut
80	82.4	M6	2.0x25	M8/M10
100	103.6	M6	2.0x25	M8/M10
125	128.6	M6	2.0x25	M8/M10
140	143.6	M6	2.0x25	M8/M10
150	153.6	M6	2.0x25	M8/M10
160	163.6	M6	2.0x25	M8/M10
180	183.6	M6	2.0x25	M8/M10
200	203.6	M6	2.0x25	M8/M10
224	227.6	M6	2.0x25	M8/M10
250	253.6	M6	2.0x25	M8/M10
280	284.8	M6	2.0x25	M8/M10
300	304.6	M6	2.0x25	M8/M10
315	319.8	M6	2.0x25	M8/M10
355	359.8	M6	2.0x25	M8/M10
400	404.8	M6	2.0x25	M8/M10
450	456.4	M10	2.0x25	M8/M10
500	504.8	M10	2.0x25	M8/M10
560	564.8	M10	2.0x25	M8/M10
600	604.8	M10	2.0x25	M8/M10
630	636.0	M10	2.0x25	M8/M10
710	716.0	M12	2.0x25	M8/M10
800	806.0	M12	2.0x25	M8/M10
900	906.0	M12	2.0x25	M8/M10
1000	1007.2	M12	2.0x25	M8/M10
1120	1127.2	M12	2.0x25	M8/M10
1250	1257.2	M12	2.0x25	M8/M10

Ventilation pipe clamp - PAG



Code	D(mm)	S(mm)	B(mm)	R(mm)	L(mm)
PAG100	100	1.5	145	5	170
PAG125	125	1.5	170	5	195
PAG150	150	1.5	186	2	211
PAG160	160	1.5	200	5	225
PAG180	180	1.5	211	3	236
PAG200	200	1.5	263	5	288
PAG225	225	1.5	260	3	285
PAG250	250	1.5	285	3	310
PAG280	280	1.5	324	3	347
PAG315	315	1.5	350	5	375
PAG355	355	1.5	390	3	415
PAG400	400	2	435	5	460
PAG450	450	2	485	3	510
PAG500	500	2	535	5	560
PAG560	560	2	595	3	620
PAG630	630	2	665	3	690
PAG710	710	2	745	3	770
PAG800	800	2	835	3	860
PAG900	900	2	935	3	960
PAG1000	1000	2	1035	3	1060
PAG1120	1120	2	1155	3	1180
PAG1250	1250	2	1285	3	1310
PAG1400	1400	2	1435	3	1460

Heavy duty pipe clamp with muff-NAM



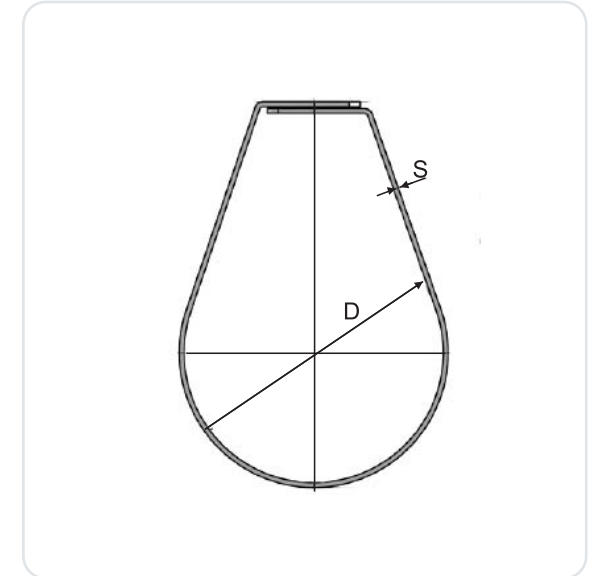
Specifications

- Heavy duty pipe clamps for used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.
- EPMD lining for;
- Noise reduction level up to 15dB according to DIN 4109
- Vibration reduction
- Partial compensation of thermal expansion.

- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.
- Electro galvanized for corrosion resistance (Plating thickness 8-10 micron)

Code No	Size	Clamping Range(mm)	L(mm)	H(mm)	M	SxB(mm)	Sleeve
NAM15015	1/2"	20-24	84	35	M8	2.5x30	1/2
NAM15020	3/4"	25-32	90	38	M8	2.5x30	1/2
NAM15025	1"	32-38	98	42	M8	2.5x30	1/2
NAM15032	1 1/4"	39-46	106	46	M8	2.5x30	1/2
NAM15040	1 1/2"	48-53	114.5	50	M8	2.5x30	1/2
NAM15050	2"	59-66	127	56	M8	2.5x30	1/2
NAM15065	2 1/2"	74-80	152	65	M10	3.0x30	1/2
NAM15080	3"	87-94	163	70	M10	3.0x30	1/2
NAM15100	4"	108-116	188	83	M10	3.0x30	1/2
NAM15125	5"	135-143	230	98	M12	4.0x30	1/2
NAM15150	6"	162-170	258	105	M12	4.0x30	1/2
NAM15200	8"	216-224	316	132	M12	4.0x30	1/2
NAM15250	10"	260-274	365	159	M12	4.0x30	1/2
NAM15300	12"	324	421	187	M16	5.0x30	1/2
NAM15350	14"	355.6	453	202	M16	5.0x30	1/2
NAM15400	16"	406.4	504	228	M16	5.0x30	1/2
NAM15450	18"	547	564	245	M16	7.0x70	1/2
NAM15500	20"	508	621	275	M16	7.0x70	1/2

Sprinkler pipe clamp- NSP



Specifications

- Used for freely hanging of horizontal pipe lines
- Used for sprinkler system installations
- Used for fire extinguishing system

- Electro galvanized for corrosion resistance (Plating thickness 8-10 micron)

Code No	Size	D(mm)	SxB(mm)	d(mm)
NSP 3/4"	3/4"	30	1.0*25	10.5
NSP 1"	1"	36	1.0*25	10.5
NSP 1 1/4"	1 1/4"	46	1.2*25	10.5
NSP 1 1/2"	1 1/2"	52	1.2*25	10.5
NSP 2"	2"	66	1.2*25	10.5
NSP 2 1/2"	2 1/2"	78	1.5*25	10.5
NSP 3"	3"	92	1.5*25	10.5
NSP 4"	4"	116	1.5*25	10.5
NSP 5"	5"	142	2.5*25	13
NSP 6"	6"	170	2.5*25	13
NSP 8"	8"	222	2.5*30	17

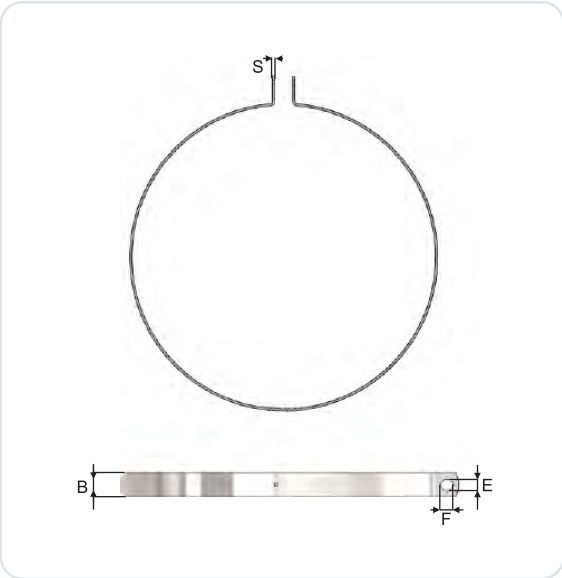
PRTE-1



PRTE-1 is a rapid straps of galvanized steel, PVC-rubber. Compatible with 1 mm galvanized piping

Type	φ(mm)	Type	φ(mm)
PRTE-1 080	81.5	PRTE-1 275	276.5
PRTE-1 100	101.5	PRTE-1 280	281.5
PRTE-1 120	121.5	PRTE-1 300	301.5
PRTE-1 125	126.5	PRTE-1 315	316.5
PRTE-1 140	141.5	PRTE-1 350	351.5
PRTE-1 150	151.5	PRTE-1 400	401.5
PRTE-1 160	161.5	PRTE-1 450	451.5
PRTE-1 180	181.5	PRTE-1 500	501.5
PRTE-1 200	201.5	PRTE-1 550	551.5
PRTE-1 220	221.5	PRTE-1 600	601.5
PRTE-1 225	226.5	PRTE-1 630	631.5
PRTE-1 250	251.5		

Clamp for fixing tube, pipes and air ducts- NHVYKL



- It's safe means of assembling cylindrical air channel
- Philips combi side screws are protected against loss during assembly and delivery
- Electro galvanized for corrosion (plating thickness 9-10 micron)

Code No.	Size	Clamping Range(mm)	ExF(mm)	R	SxB
NHVYKL0091	71	73.4	7x8	M6	M6
NHVYKL0080	80	82.4	7x8	M6	M6
NHVYKL0090	90	92.6	7x8	M6	M6
NHVYKL0100	100	103.6	7x8	M6	M6
NHVYKL0112	112	115.6	7x8	M6	M6
NHVYKL0125	125	128.6	7x8	M6	M6
NHVYKL0140	140	143.6	7x8	M6	M6
NHVYKL0150	150	153.6	7x8	M6	M6
NHVYKL0160	160	163.6	7x8	M6	M6
NHVYKL0180	180	183.6	7x8	M6	M6
NHVYKL0200	200	203.6	7x8	M6	M6
NHVYKL0225	224	227.6	7x8	M6	M6
NHVYKL0250	250	253.6	7x8	M6	M6
NHVYKL0280	280	284.8	7x8	M6	M6
NHVYKL0300	300	304.8	7x8	M6	M6
NHVYKL0315	315	319.8	7x8	M6	M6
NHVYKL0355	355	359.8	7x8	M6	M6
NHVYKL0400	400	404.8	7x8	M6	M6
NHVYKL0450	450	454.8	7x8	M6	M6
NHVYKL0500	500	504.8	7x8	M6	M6
NHVYKL0560	560	564.8	11x13	M10	M10
NHVYKL0600	600	604.8	11x13	M10	M10
NHVYKL0630	630	636	11x13	M10	M10
NHVYKL0710	710	716	11x13	M10	M10
NHVYKL0800	800	806	11x13	M10	M10
NHVYKL0900	900	906	11x13	M10	M10
NHVYKL1000	1000	1007.2	11x13	M10	M10
NHVYKL1120	1120	1127.2	11x13	M10	M10
NHVYKL1250	1250	1257.2	11x13	M10	M10
NHVYKL1400	1400	1407.2	11x13	M10	M10

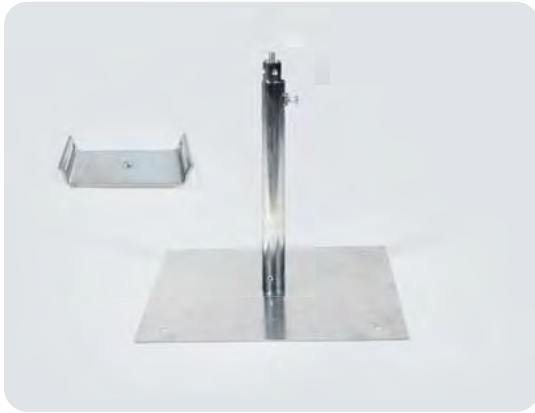
Clamp With Rubber-Epdm



- Supressing bands for fan installation in round ducts.
- twin screw connector
 - for all SML-type pipes according to EN 877 (up to this DIN 19522)
 - can be used with internal pressure up to 0.5 bar
 - also suitable for repair purposes

Type	Diameter (mm)	Type	Diameter (mm)
Om100	100	Om250	250
Om125	125	Om315	315
Om150	150	Om355	355
Om160	160	Om400	400
Om200	200	Om500	500

Telescopic support - RFT



- Telescoping round tubes $\phi 22$ and $\phi 27$ mm adjustable from 27 to 470mm
lLocked with M8 bolt
Galvanized steel base, with M8 nut flush mounting for foot lBase 150x150mm, and 300x300mm available

Plastic Tie - PTW/PTB

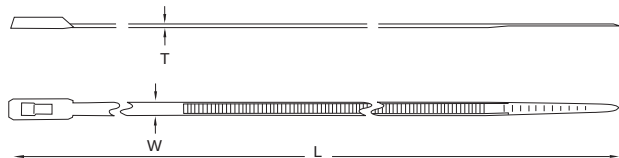


Application
To fix and connect flexible ducts Allround fixing purposes

Composition
Made of high strength nylon
self -extinguishing, fungus inert
Working temperature from -15 to 85°C

Colours
White(PTW) : only to be used indoor
Black (PTB) : to be used both indoor and outdoor

Accessories
To use with Plastic Tie Gun for tighten and cut off nylon clamps.



Dimensions

Type	L[mm]	T [mm]	W [mm]
PTW-0-100	432	1.8	4.8
PTW-0-125	450	2	8
PTW-0-185	610	2	9
PTW-0-246	812	2	9
PTW-0-270	914	2	9
PTW-0-380	1219	2	9
PTW-0-46	160	1.6	4.7
PTW-0-55	200	1.6	4.7
PTW-0-89	310	1.6	4.7
PTB-0-46	160	1.6	4.7
PTB-0-55	200	1.6	4.7
PTB-0-89	310	1.6	4.7

Minimum Tensile strength values

Type	21 C [N]	+ 80 C [N]	- 40 C [N]
PTW-0-100	220	165	165
PTW-0-125	530	416	413
PTW-0-185	800	600	600
PTW-0-246	800	600	600
PTW-0-270	800	600	600
PTW-0-380	800	600	600
PTW-0-46	220	165	165
PTW-0-55	220	165	165
PTW-0-89	220	165	165
PTB-0-46	220	165	165
PTB-0-55	220	165	165
PTB-0-89	220	165	165

Plastic Tack



Description: Ties UL approved nylon 66 material, fire rating 94V-2, acid resistance, corrosion resistance, good insulation, not aging, light weight, safe and non-toxic to withstand strong.

The operating temperature of minus 40 to 90 degrees. Lashing fast cable tie products with good insulation, self-locking ban solid, easy-to-use features.

Size: 3x100 4x200 4x300 5x200 5x300 5x400 8x400 8x500 9x920 9x550 9x650 9x760 9x800 9x1020 9x1188 10x700 10x750

Plastic Tie Gun



Application
To tighten and cut nylon clamps with thickness up to 2,3 mm and width up to 9 mm

Composition
Loaded with spring and comfortable hand force



Spring Mounts - SM



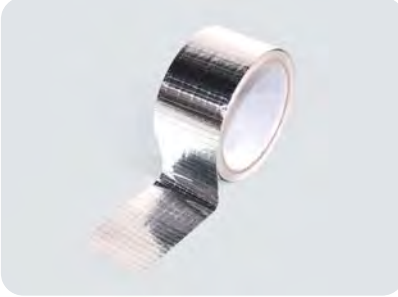
dia of wire 4.5mm;
dia of spring 51mm,
6.5cycles of wire; length 66mm
Sizes can be customized

Aluminum Foil Duct Tape - AFDT



Aggressive acrylic adhesive offers good performance in a wide range of temperatures
High heat reflectivity and thermal conductivity provides heating and cooling efficiency
Resistant to flame, moisture, UV and chemicals for long- term durability
Heat and light reflectivity protects heat-sensitive components
Malleable foil conforms well to irregular shapes and surfaces
Can be torn by hand for easy application
Thickness: 20micron,25micron,30micron, 40micron, 50micron
Width: 50mm, 100mm
Length:30m, 50m, 30Yds, 40Yds, 50Yds
Temperature Range: -10 C ~ 90 C

Aluminum Tape With Glassfiber Mesh - AGMT



Aluminium foil coated with fireproof adhesive tape.
High pressure aluminium foil.
Application:
Designed for sealing joints and seams of foil jacket facings in air-conditioning duct. work and for fixing copper tubing in refrigerators.
Glassfiber mesh: 3x3mm, 5x5mm
Width: 50mm, 100mm
Length:30m, 50m, 30Yds, 40Yds, 50Yds

Aluminum Reinforced Tape - ART



Aluminum backing provides excellent reflection of both heat and light.
High quality adhesive with super strong adhesion and holding power offers reliable and durable Foil-Scrim-Kraft Facing joints and seams sealing in HVAC ductwork application.
Applications:
HVAC industry for joining and sealing Foil-Scrim-Kraft Facing laminated fiberglass blanket/duct board joints and seams; joining and sealing flexible air duct seams and connections. May also be used for other industrial uses requiring a tape with these characteristics and benefits.
Width: 50mm, 100mm

Aluminum -Glass Cloth Tape - AGCT



Fiberglass cloth aluminum foil tape products are made of fiberglass cloth composite aluminum foil veneers, coated with high-performance solvent / synthetic rubber pressure-sensitive adhesives, and isolated papers of compounded single sided polyethylene and silicone.
Features:
Excellent water vapor barrier property, high mechanical strength and antioxidant property, strong cohesion, corrosion resistance, and resistance to weak acid and alkali.
Application:
It is suitable for splicing pipeline hermetically, heat insulation and water vapor barrier of HVAC air duct, warm and cool water pipe, especially for pipeline sealing in the shipping industry.
Width: 48mm, 50mm, 63mm, 73mm, 75mm, 98mm, 100mm
Length:30m, 30Yds, 40Yds, 50Yds
Temperature Range: -20 C ~120 C

EVA tape



EVA tapes Suitable to increase the tightness of the joints during the flange connection of elements and individual sections of ventilation systems, as well as supply and exhaust systems. The use of an interflange tape can significantly reduce noise and vibration of the duct.

Thickness (mm)	width (mm)	length (m)
5	10	10
5	15	10
5	20	10

Sizes can be customized

PE tape - PE-T/PET-T



PE foam with waterproof suitable for all floating, laminate and engineered wood floors, gasket seal liner.

Specifications can be customized

Thickness (mm)	width (mm)	length (m)
3	15	10
4	19	10
5	20	10
5	25	10
6	19	10
6	25	10
8	25	5
8	30	5
10	25	5

Sizes can be customized

Insulating Self-adhesive Tape - NBR/NBRM



NBRM

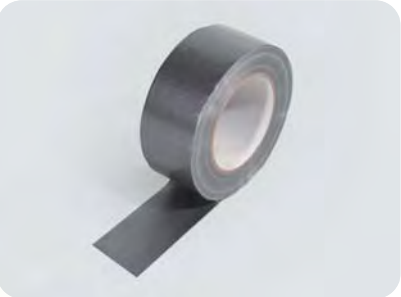
Speically made with reinforced polyester net to give extra strength to the insulation
High Quality Rubber Foam tape in Rolls Light weight, good elasticity
Weatherproof and waterproof
Flame retardant
Sound absorption
Heat isolation
Elastic and flexibiltity
Conductive
Color: white,black
With mesh or without mesh



NBR

Code No	Article
14CF101	rolls of 10mt x 50mm x 3mm
14CF102	rolls of 15mt x 50mm x 3mm
14CF103	rolls of 25mt x 50mm x 3mm
14CF104	rolls of 10mt x 100mm x 3mm
14CF105	rolls of 15mt x 100mm x 3mm
14CF106	rolls of 25mt x 100mm x 3mm

Cloth Duct Tape - CDT



Ideal solution for many applications in the construction, HVAC and automotive industries, A high strength tape with a moisture resistant design that is meant to be durable enough to hold up for an extended period of time and can handle outdoor conditions.
Mesh density: 27,35, 50, 70 mesh

Product Description	Backing	Adhesive	Colors	Adhesion To Backing
Cloth Tape	Polyethylene,textile base	Natural Caoutchouc	available in many colors	synthetic rubber

PVC Duct Tape - PVCT



Uses:All purpose tape suitable for ventilation ducts.
Design:Ventilation tape with good air and diffusion tightness.extensible in longitudinal direction.good resistance to heat and cold. Tearable.
Material: PVC
Adhesive material: Rubber-based.
Thickness: 0,13mm, 0.15, 0.18
Width: mm50mm, 100mm

- PVC tape with an adhesive coat on one side.
- Usage temperature -10 °C/+80 °C
- Available in grey, white or black color and more

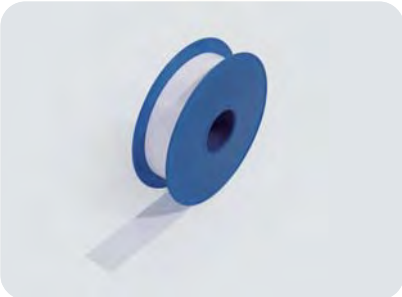
PVC Without Adhesion Wrapping Tape - PVCWT



Feature:
1. for refrigeration pipe, air conditioner pipe protection, electrical insulation protection, wrap air conditioner connecting tube
2. good tensible, fireproof
3. air conditioner parts, duct tape
color: white, grey, etc.
width: 50mm, 100mm, etc.

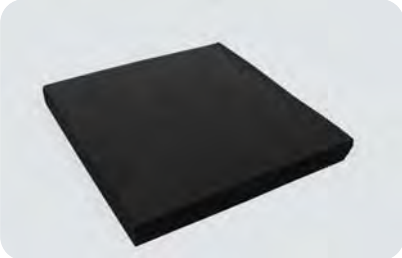
Color	Length	Width	Thickness	Material	Tensile Strength	Use Temperature	Package
White,grey or customized	10m,15m, 18m,20m	45mm,50mm, 60mm,75mm, 80mm,100mm etc.	0.14mm, 0.18mm, etc others available	PVC film	20~30N/10mm	0~80 °C	100Rolls/ Carton or customized

PTFE Seal Tape - PTFET



PTFE tape is widely applied in construction, building sealing and other areas, especially in pipe linking systems.And are characteristics of thread sealing, insulation, corrosion resistance and antiaging, using in oxidizing agent for long term

Rubber insulation sheet (Standart) - RAS



Type	Thickness (mm)	width (m)	length (m)
RAS06	6	1	30
RAS10	10	1	20
RAS13	13	1	14
RAS19	19	1	10
RAS25	25	1	8

Rubber insulation sheet (self-adhesive) - RASS



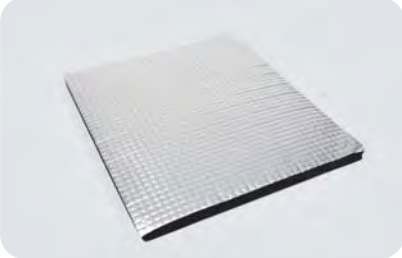
Type	Thickness (mm)	width (m)	length (m)
RASS06	6	1	30
RASS10	10	1	20
RASS13	13	1	14
RASS19	19	1	10
RASS25	25	1	8

Rubber insulation sheet (self-adhesive+ ALU) - RASA



Type	Thickness (mm)	width (m)	length (m)
RASA06	6	1	30
RASA10	10	1	20
RASA13	13	1	14
RASA19	19	1	10
RASA25	25	1	8

Rubber insulation sheet(self adhesive+MESH ALU) - RASAM

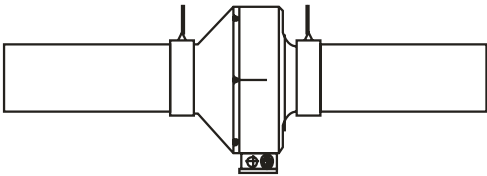
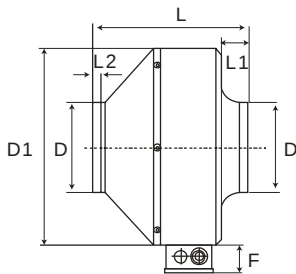


Type	Thickness (mm)	width (m)	length (m)
RASAM06	6	1	30
RASAM10	10	1	20
RASAM13	13	1	14
RASAM19	19	1	10
RASAM25	25	1	8



GDF Series Duct Fan

GDF series is a new fan designed to combine advanced technology at home and abroad, with the same size of air inlet and outlet, the fan directly connected with air pipe,see installation diagram, it can signigicantly saves the piping design and installation costs; new design of the chassis, as well as the impeller designed according to aerodynamic, can reduce vibration and noise. Application: the air supply, ventilation, return air, make up air and filtering for hotels, guesthouses, senior hall, supermarket, storage room, toilets, etc. The weight of a single circular pipe fan does not exceed 10kgs, only one person can easily move circular pipe fan, and install it easily.



Model	D(mm)	D1(mm)	L(mm)	L1(mm)	L2(mm)	F(mm)
GDF100	100	237	204	25	25	42
GDF125	125	237	193	25	31	42
GDF150	150	278	195	25	25	42
GDF160	160	278	195	25	25	42
GDF200	200	333	210	25	25	42
GDF250	250	333	210	29	29	42
GDF315	315	402	265	30	25	42

Technical parameter

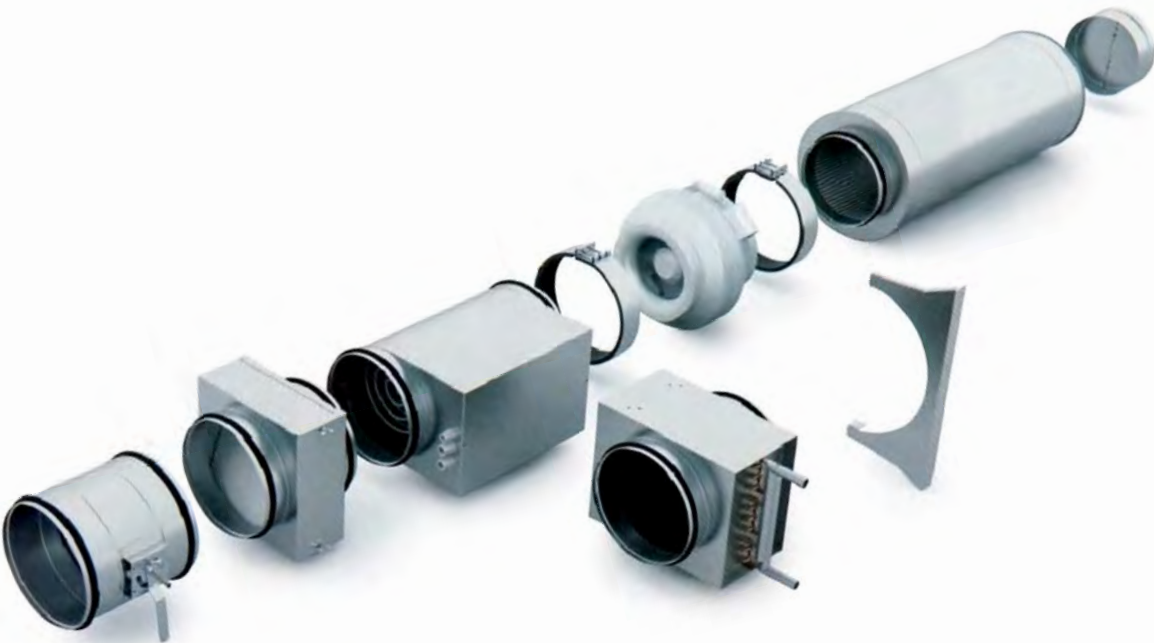
Model	Voltage V/Hz	Power W	Current A	Flow m3/h	Speed rpm	Pressure Pa	Noise dB(A)	International Protection IP	Insulation Grade	Max Temperature C	Weight kg
GDF100A	230/50	60	0.18	170-40	2550	72-251	48	44	F	85	3
GDF100B	230/50	67	0.27	210-75	2650	87-252	50	44	F	85	3
GDF125A	230/50	62	0.25	200-75	2550	72-227	48	44	F	85	3
GDF125B	230/50	70	0.17	275-80	2650	98-272	50	44	F	85	3
GDF150A	230/50	64	0.26	350-120	2550	73-302	49	44	F	85	4
GDF150B	230/50	65	0.27	370-100	2670	93-302	51	44	F	85	4
GDF160A	230/50	72	0.29	390-100	2500	68-261	49	44	F	85	4
GDF160B	230/50	112	0.92	590-110	2600	102-308	51	44	F	85	4
GDF200A	230/50	101	0.45	600-110	2550	142-451	52	44	F	85	4.5
GDF200B	230/50	161	0.66	800-150	2620	120-476	53	44	F	85	4.5
GDF250A	230/50	156	0.73	700-200	2450	135-376	52	44	F	85	5
GDF250B	230/50	175	0.66	800-200	2550	142-426	53	44	F	85	5
GDF315A	230/50	225	0.69	1200-315	2450	126-451	52	44	F	85	5.5
GDF315B	230/50	303	0.99	1500-300	2550	117-546	53	44	F	85	5.5

Clamp With Rubber - OM



- Supressing bands for fan installation in round ducts.
- twin screw connector
 - for all SML-type pipes according to EN 877 (up to this DIN 19522)
 - can be used with internal pressure up to 0.5 bar
 - also suitable for repair purposes

Type	Diameter (mm)	Type	Diameter (mm)
Om100	100	Om250	250
Om125	125	Om315	315
Om150	150	Om355	355
Om160	160	Om400	400
Om200	200	Om500	500

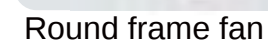




Mounting
holes

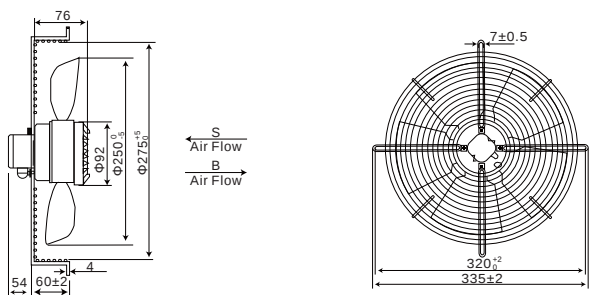


Mounting
holes

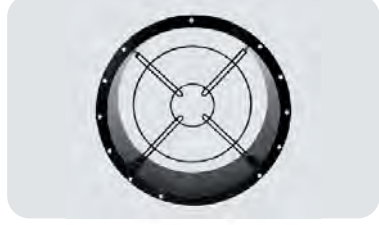
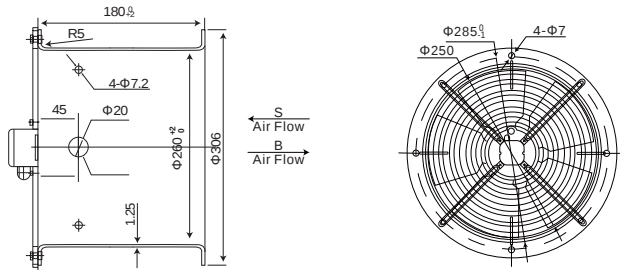
m³/hm³/h



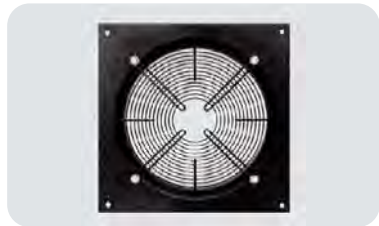
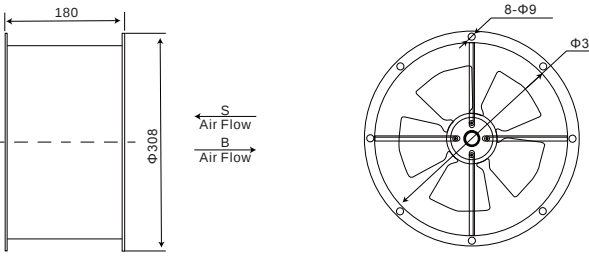
YWF250



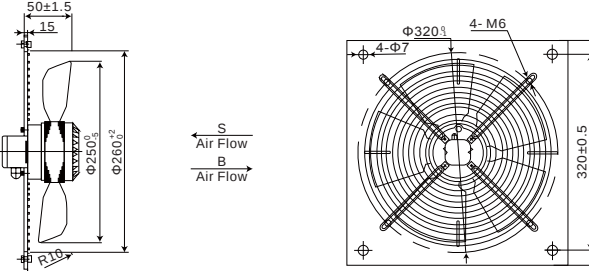
Round frame fan



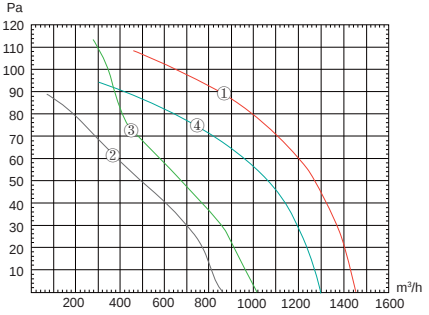
Cylinder fan



Square frame fan



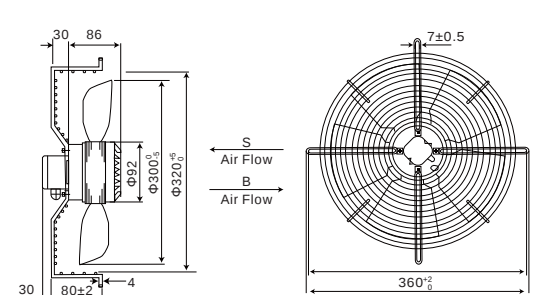
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF2E-250-5	220	50	0.50	110	2400	4	3.0	60	1300	④
YWF2E-250-9	220	50	0.50	110	2400	4	3.0	60	1450	①
YWF2D-250-5	380	50	0.21	100	2400	/	3.0	60	1300	④
YWF2D-250-9	380	50	0.21	100	2400	/	3.0	60	1450	①
YWF4E-250	220	50	0.22	45	1400	2	3.0	55	860	③
YWF4E-250	220	60	0.25	55	1700	2	3.0	56	1015	②
YWF4D-250	380	50	0.17	45	1400	/	3.0	56	860	③
YWF4D-250	380	60	0.15	45	1700	/	3.0	56	1015	②



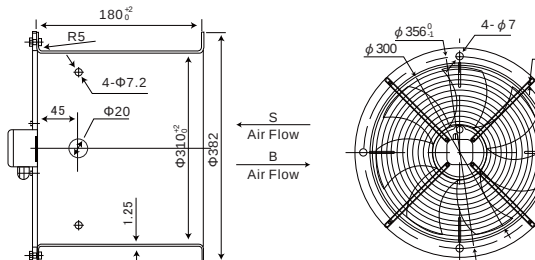
YWF300



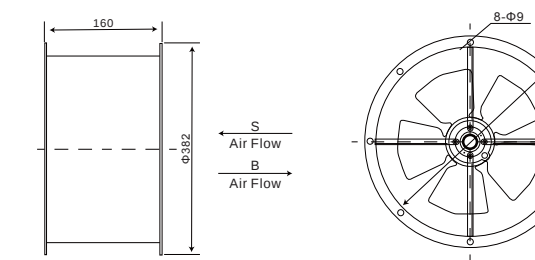
Grid fan



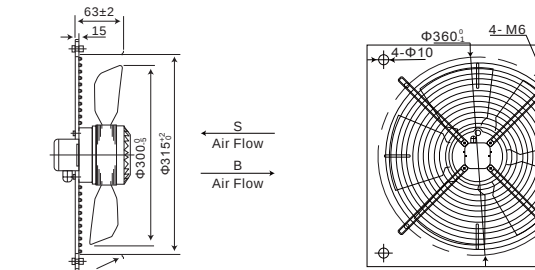
Round frame fan



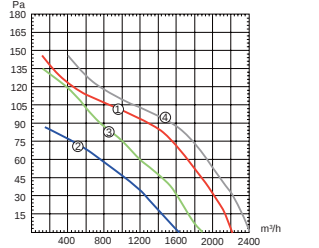
Cylinder fan



Square frame fan



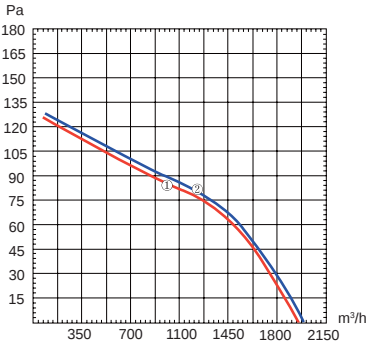
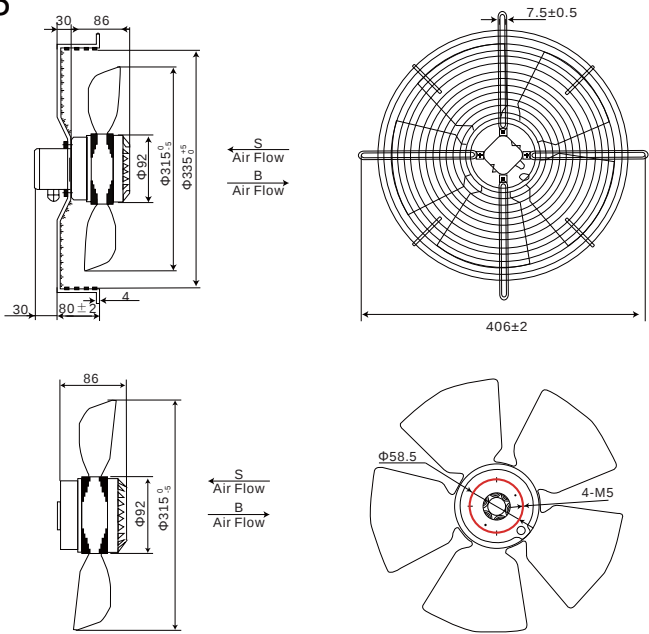
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF2E-300-5	220	50	0.65	140	2500	4	3.3	60	2200	①
YWF2E-300-7	220	50	0.65	140	2500	4	3.4	60	2400	④
YWF2D-300-5	380	50	0.28	150	2500	/	3.3	60	2200	①
YWF2D-300-7	380	50	0.28	150	2500	/	3.4	60	2400	④
YWF4E-300	220	50	0.38	80	1350	3	3.3	53	1845	②
	220	60	0.45	95	1550	3	3.3	55	1460	②
YWF4D-300	380	50	0.24	75	1380	/	3.3	53	1835	②
	380	60	0.24	90	1550	/	3.3	55	1600	③



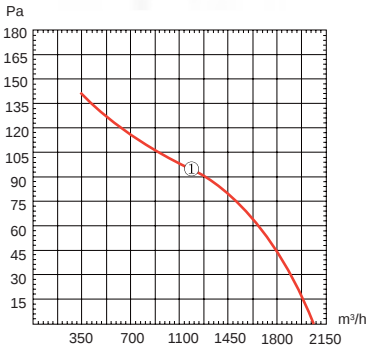
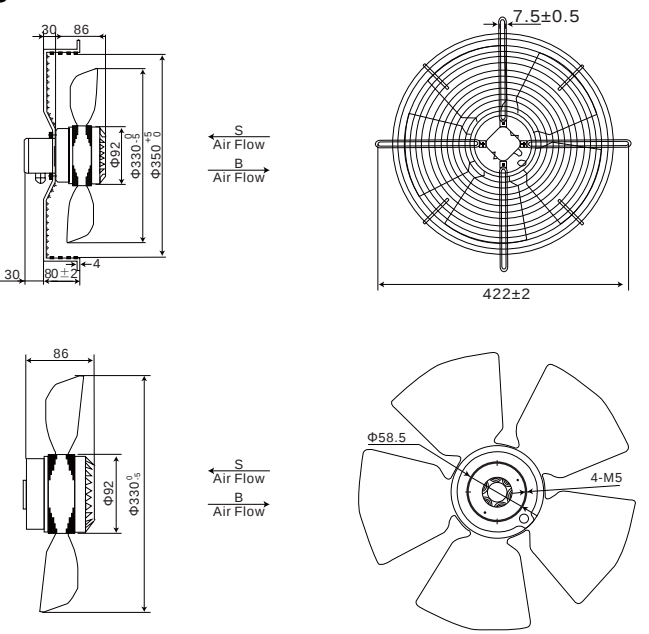
YWF315



Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF4E-315	220	50	0.45	90	1350	4	3.5	58	1800	①
YWF4D-315	380	50	0.25	85	1350	/	3.5	58	1920	②



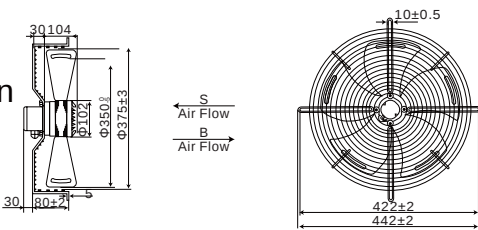
YWF330



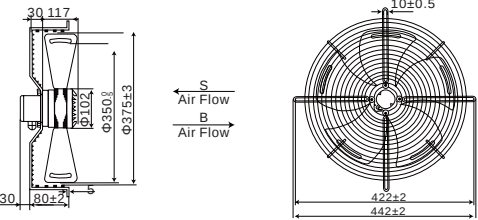
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF4E-330	220	50	0.50	100	1300	4	3.5	61	2060	①
YWF4D-330	380	50	0.26	95	1300	/	3.5	61	2060	②



YWF350
Standard fan



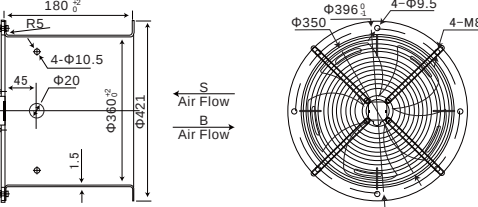
Air cooler fan ex series



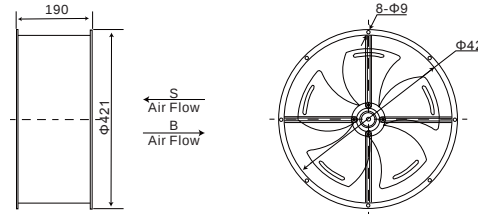
Grid fan



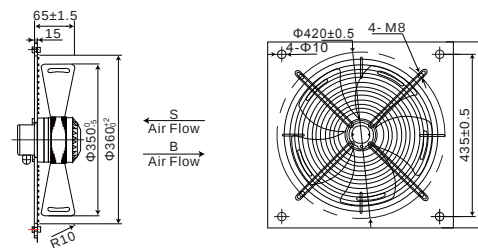
Round frame fan



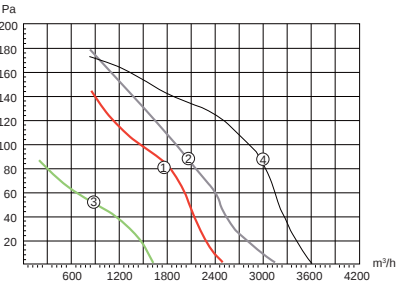
Cylinder fan



Square frame fan



Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃

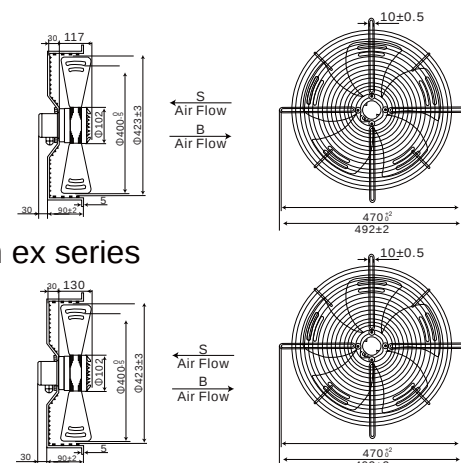


Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF4E-350	220	50	0.65	135	1380	4	4.8	62	2450	①
YWF4E-350	220	60	0.78	170	1600	4	4.8	62	2830	②
YWF4D-350	380	50	0.38	140	1380	/	4.8	62	2480	①
YWF4D-350	380	60	0.35	180	1600	/	4.8	62	2810	②
YWF6E-350	220	50	0.38	80	920	3	4.8	56	1630	③
YWF6D-350	380	50	0.30	80	920	/	4.8	56	1610	③
YWF4E-350EX	220	50	0.80	180	1380	6	5.5	60	3280	④
YWF4D-350EX	380	50	0.45	180	1380	/	5.5	60	3290	④



YWF400
Standard fan

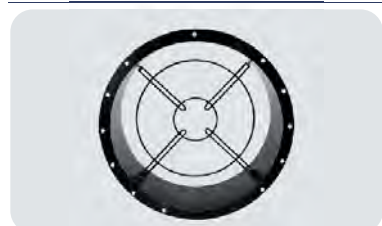
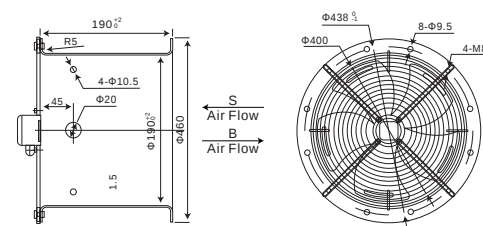
Air cooler fan ex series



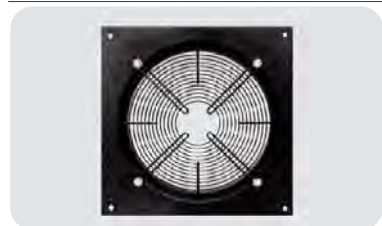
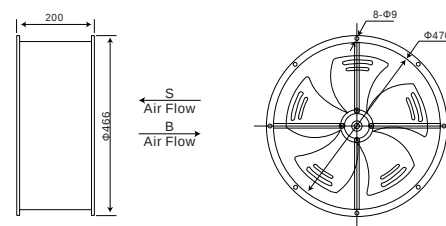
Grid fan



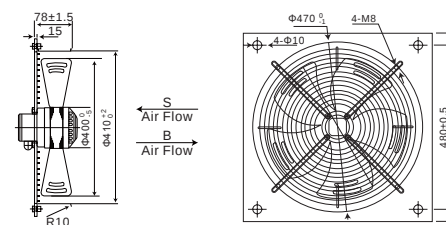
Round frame fan



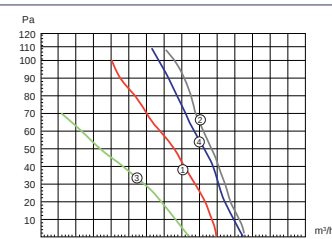
Cylinder fan



Square frame fan



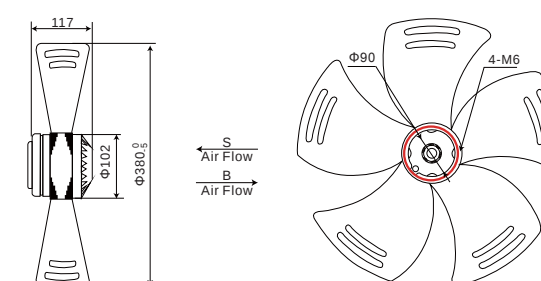
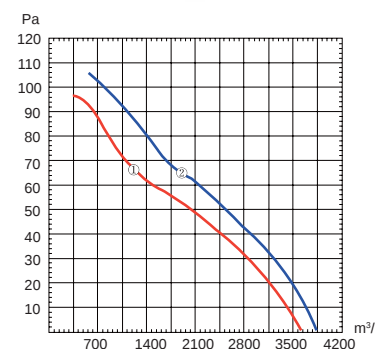
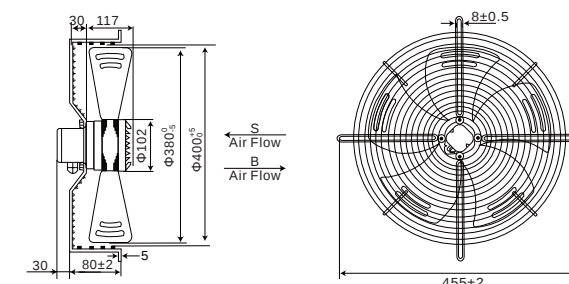
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μ F	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF4E-400	220	50	0.82	180	1380	6	5.7	66	3980	①
YWF4E-400	220	60	1.20	250	1550	6	5.7	66	4670	②
YWF4D-400	380	50	0.47	180	1380	/	5.7	66	3960	①
YWF4D-400	380	60	0.47	250	1550	/	5.7	66	4590	②
YWF6E-400	220	50	0.48	100	920	4	5.7	58	3275	③
YWF4D-400	380	50	0.38	105	920	/	5.7	58	3250	③
YWF4E-400EX	220	50	1.10	230	1350	8	6.9	66	4530	④
YWF4D-400EX	380	50	0.58	230	1380	/	6.9	66	4600	④



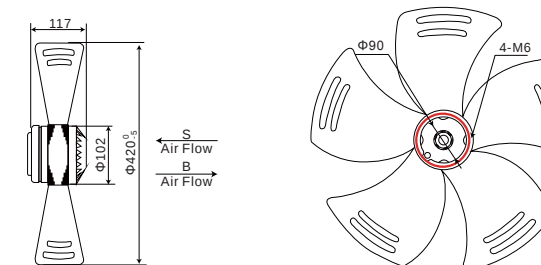
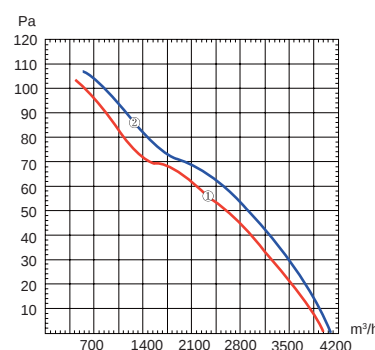
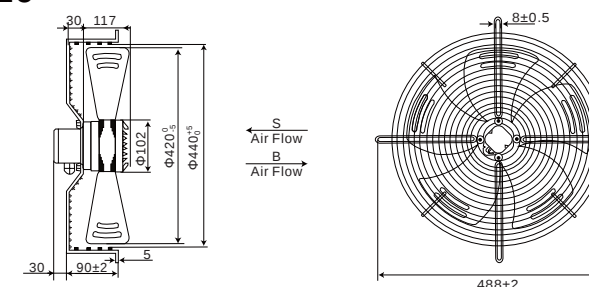
YWF380



Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μ F	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF4E-380	220	50	0.75	160	1400	6	5.5	65	3650	①
YWF4D-380	380	50	0.45	160	1400	/	5.5	65	3830	②



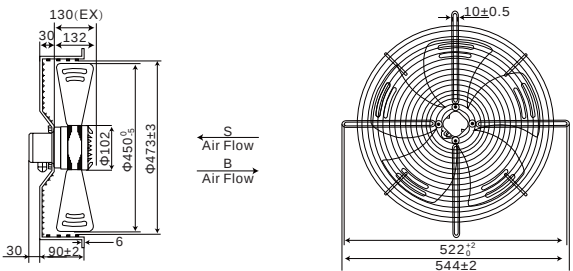
YWF420



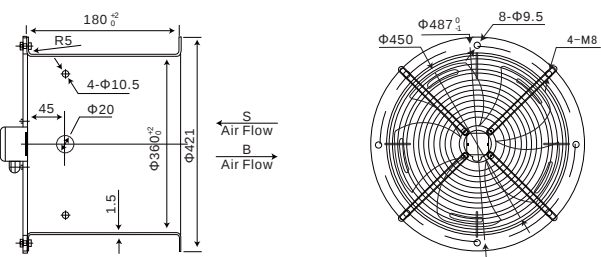
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μ F	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF4E-420	220	50	0.9	195	1350	6	6.3	67	4020	①
YWF4D-420	380	50	0.5	190	1350	/	6.3	67	4180	②



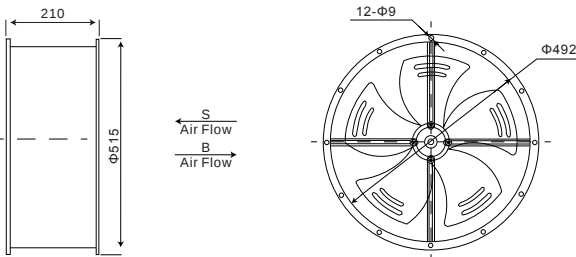
YWF450



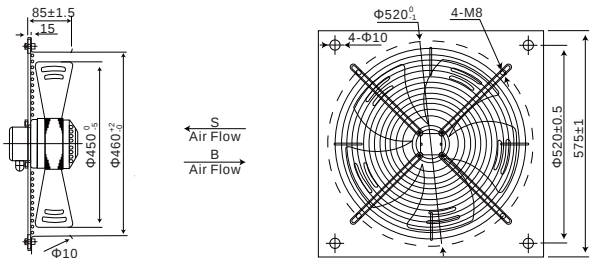
Round frame fan



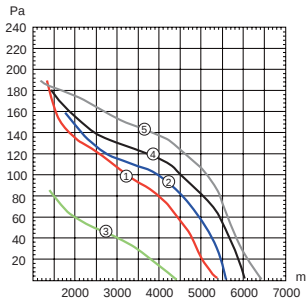
Cylinder fan



Square frame fan



Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃

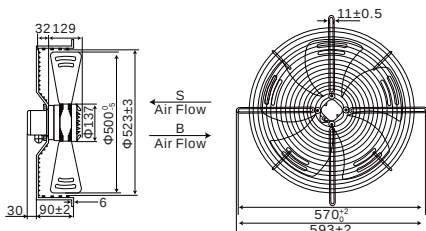


Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μ F	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF4E-450	220	50	1.20	250	1350	8	7.5	68	5380	①
YWF4E-450	220	60	1.52	330	1500	8	7.5	68	5600	②
YWF4D-450	380	50	0.60	250	1360	/	7.5	68	5390	①
YWF4D-450	380	60	0.60	330	1500	/	7.5	68	5620	②
YWF6E-450	220	50	0.70	150	920	6	7.5	60	440	③
YWF6D-450	380	50	0.42	150	900	/	7.5	60	4410	③
YWF4E-450EX	220	50	1.68	365	1330	10	8.6	69	5930	④
YWF4E-450EX	220	60	2.50	550	1600	14	8.6	70	6390	④
YWF4D-450EX	380	50	1.20	330	1350	/	8.6	69	5950	⑤
YWF4D-450EX	380	60	1.50	480	1550	/	8.6	70	6320	⑤

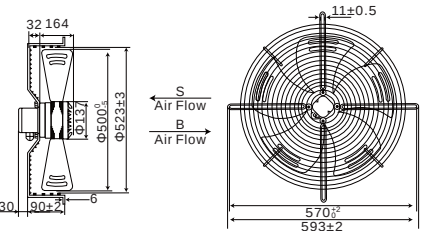
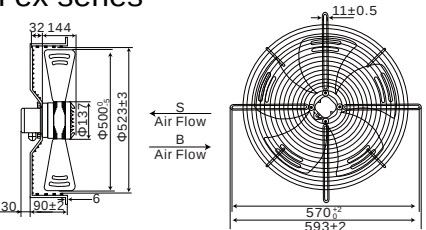


Grid fan

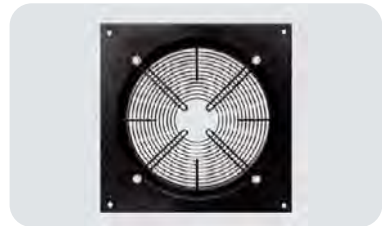
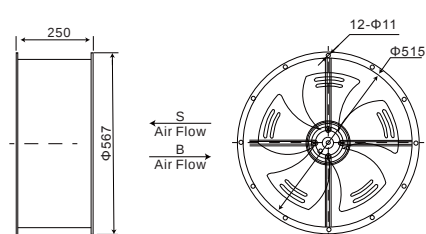
YWF500
Standard fan



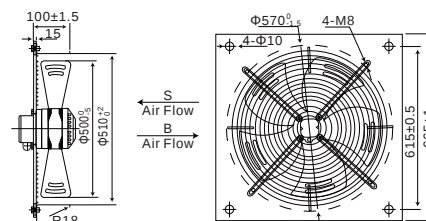
Air cooler fan ex series



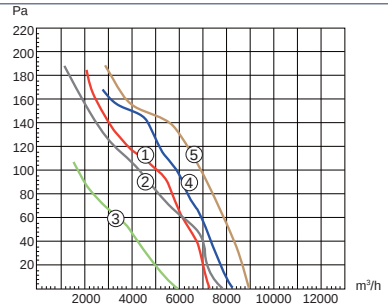
Cylinder fan



Square frame fan



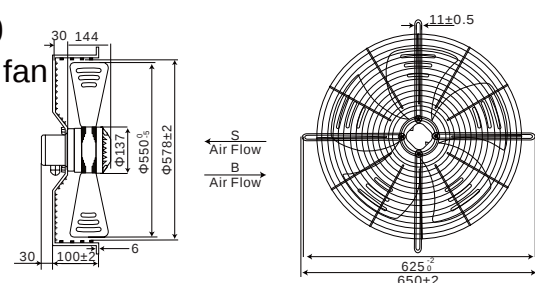
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



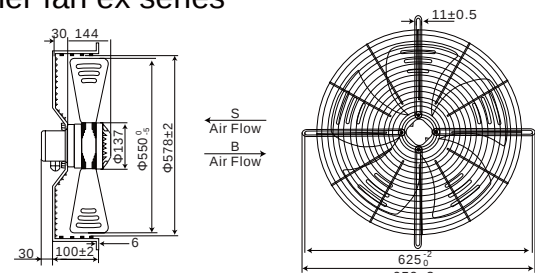
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μ F	Net weighe kg	Noise dBA	M air volume m³/h	Curve
YWF4E-500	220	50	1.90	420	1300	10	9	72	7155	①
YWF4E-500	220	60	2.55	560	1550	14	9	72	7950	②
YWF4D-500	380	50	0.90	450	1300	/	9	72	7190	①
YWF4D-500	380	60	0.95	520	1500	/	9	72	7805	②
YWF6E-500	220	50	1.10	220	900	10	9	68	5800	③
YWF6D-500	380	50	0.55	220	900	/	9	68	5820	③
YWF4E-500EX1	220	50	2.55	550	1300	12	10.5	72	8150	④
YWF4D-500EX1	380	50	1.20	570	1300	/	10.5	72	7950	④
YWF4E-500EX2	220	50	3.20	700	1350	16	12.6	76	8900	⑤
YWF4D-500EX2	380	50	1.60	700	1360	/	12.6	76	8900	⑤



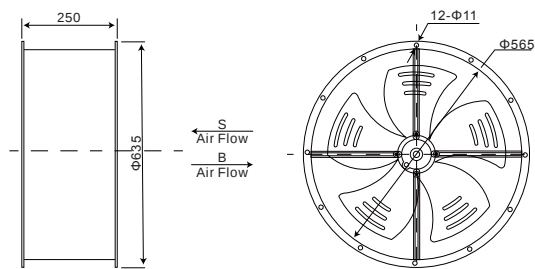
YWF550
Standard fan



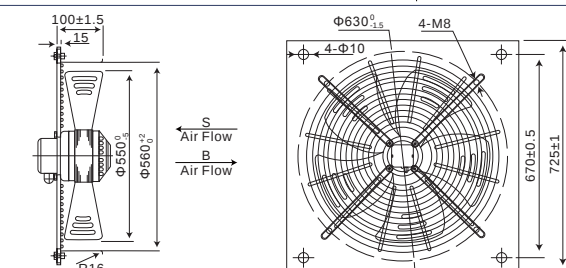
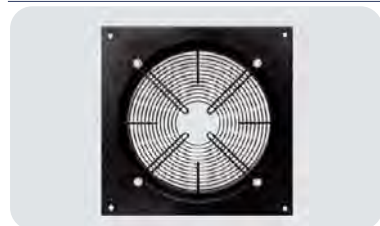
Air cooler fan ex series



Grid fan

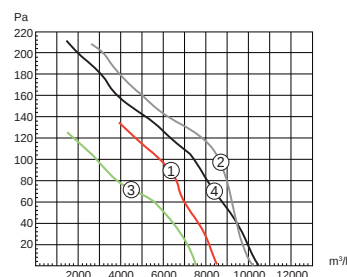


Cylinder fan



Square frame fan

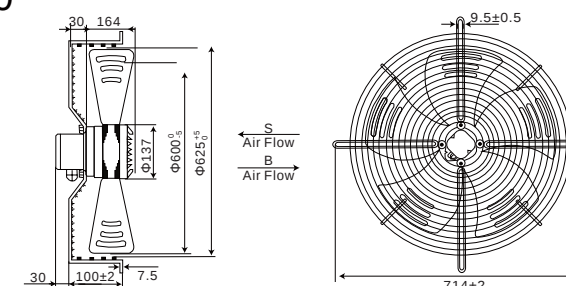
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



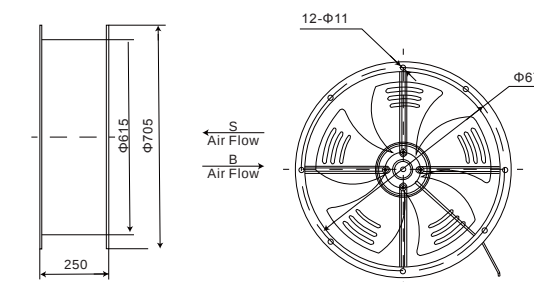
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF4E-550	220	50	2.55	550	1300	12	10.5	75	8550	①
YWF4E-550	220	60	2.85	650	1600	14	10.5	75	10160	②
YWF4D-550	380	50	1.20	600	1300	/	10.5	75	8600	①
YWF4D-550	380	60	1.45	750	1550	/	10.5	75	10100	②
YWF6E-550	200	50	1.65	320	900	10	10.5	70	1290	③
YWF6D-550	380	50	0.85	320	900	/	10.5	70	1280	③
YWF4E-550EX	220	50	3.40	750	1350	16	13	78	10250	④
YWF4D-550EX	380	50	1.60	780	1360	/	13	78	10260	④



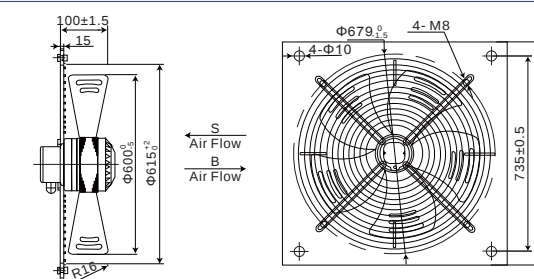
YWF600



Grid fan

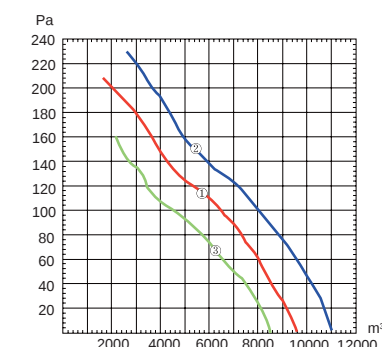


Cylinder fan



Square frame fan

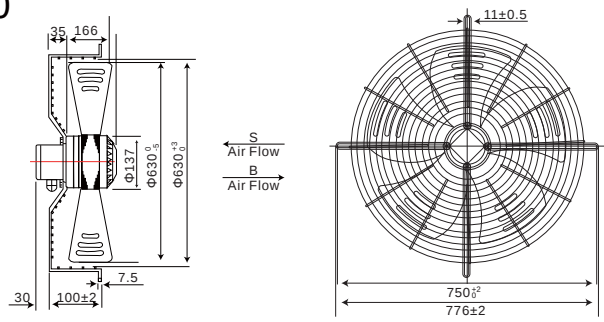
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



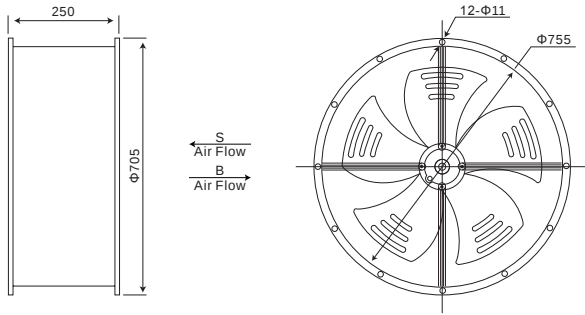
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF4E-600	220	50	3.20	700	1360	16	14	77	9500	①
YWF4E-600	220	60	3.85	800	1600	16	14	77	11000	②
YWF4D-600	380	50	1.60	780	1350	/	14	77	9500	①
YWF4D-600	380	60	1.70	820	1600	/	14	77	11000	②
YWF6E-600	200	50	2.30	480	900	10	14	61	8500	③
YWF6D-600	380	50	1.50	500	900	/	14	61	8500	③



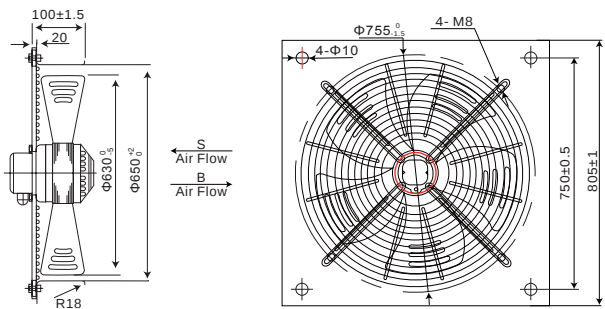
YWF630



Grid fan

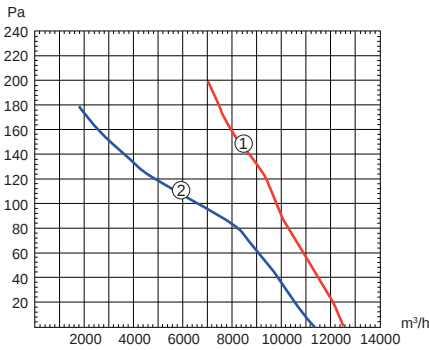


Cylinder fan



Square frame fan

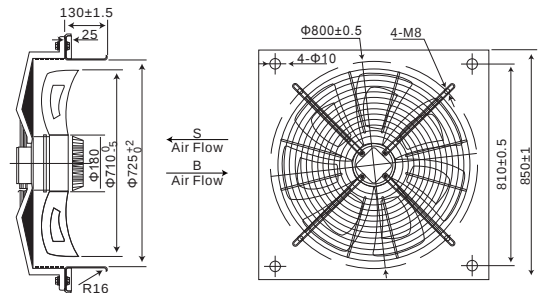
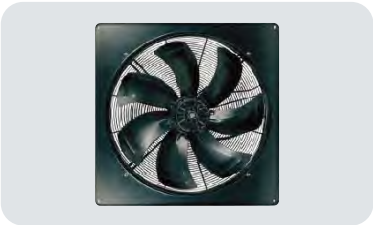
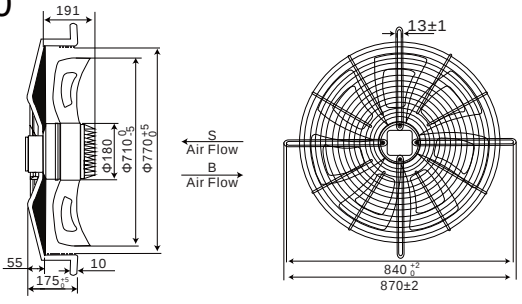
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



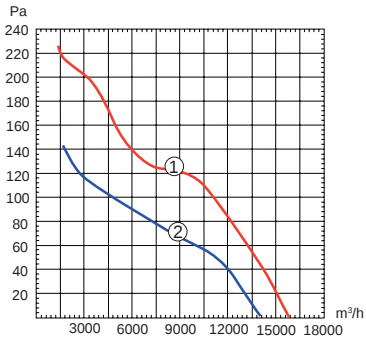
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF4E-630	220	50	3.50	750	1360	16	15.4	75	12560	①
YWF4D-630	380	50	1.60	800	1350	/	15.4	75	12610	①
YWF6E-630	200	50	2.40	520	900	10	15.4	71	11380	②
YWF6D-630	380	50	1.60	550	900	/	15.4	71	11460	②



YWF710



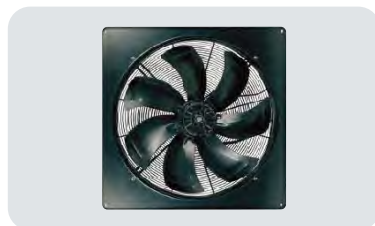
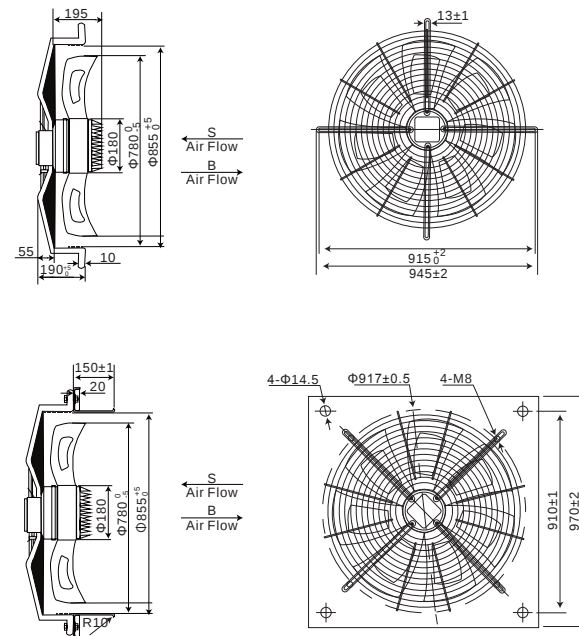
Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30℃ ~60℃



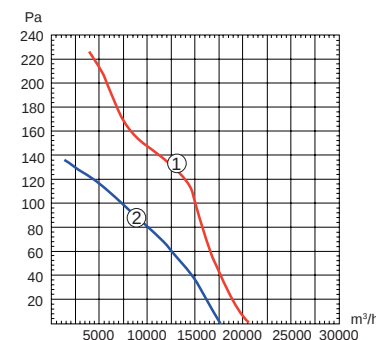
Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF6D-710	380	50	2.00	1100	910	/	25	76	15380	①
YWF6D-710	380	50	1.40	750	600	/	25	73	13560	②



YWF800



Working mode:S1
Insulation class: Class B. F
Protection level:IP44、 IP54
Ambient temperature:-30 °C ~60 °C

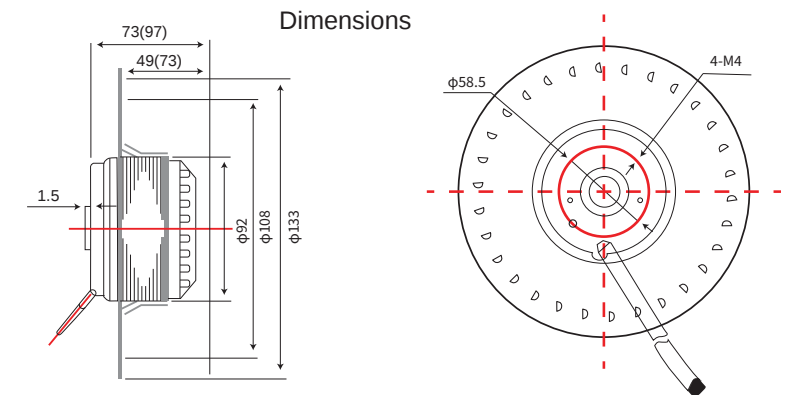
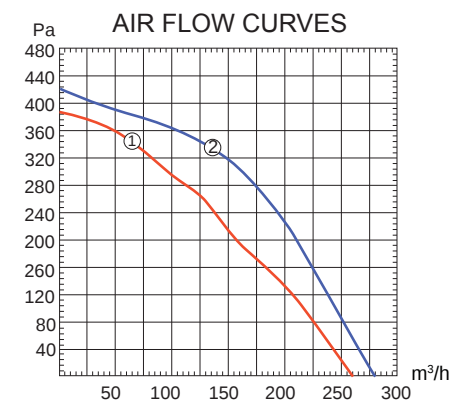


Type	Voltage V	Frequency Hz	Rated current A	Input W	Speed r/min	Capacitor μF	Net weight kg	Noise dBA	M air volume m³/h	Curve
YWF6D-800	380	50	3.25	1300	920	/	35	75	21550	①
YWF6D-800	380	50	1.68	930	770	/	35	74	17780	②



YWF-L92F-133

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 °C ~60 °C

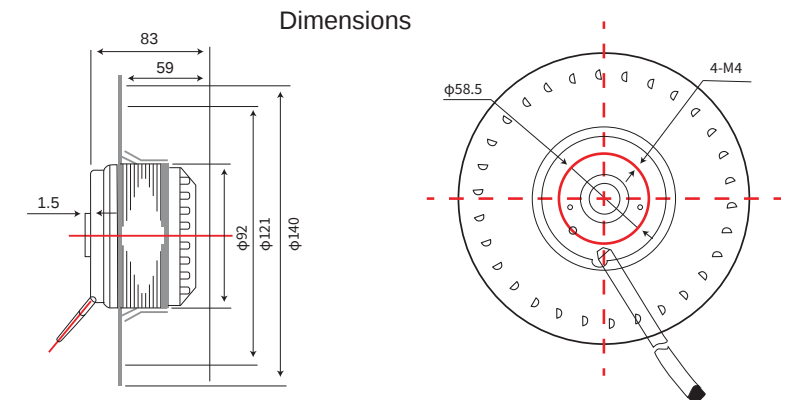
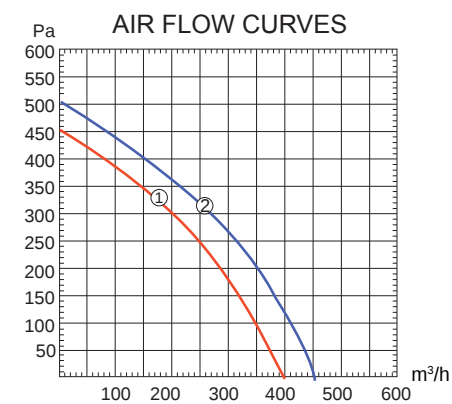


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92F-2E-133	220	50	0.35	77	2680	3	2.3	63	256	1
YWF-L92F-2E-133	220	60	0.52	110	2950	3	2.3	65	285	2



YWF-L92F-140

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 °C ~60 °C

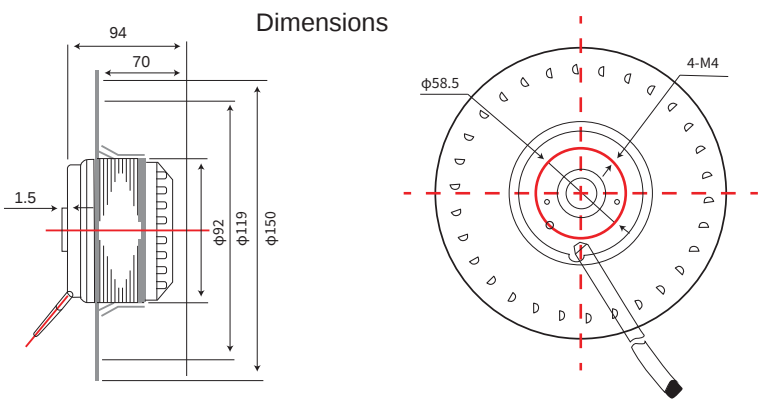
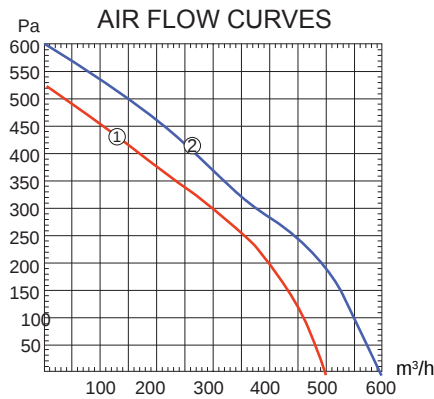


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92F-2E-140	220	50	0.40	80	2600	3	3.0	65	410	1
YWF-L92F-2E-140	220	60	0.58	120	2900	3	3.0	66	460	2



YWF-L92F-150

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

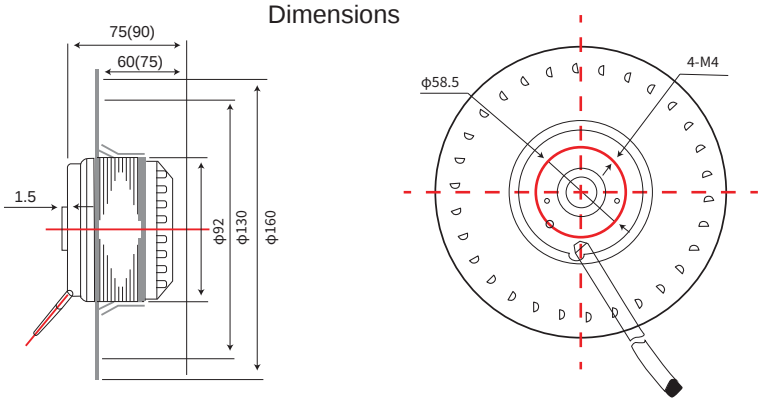
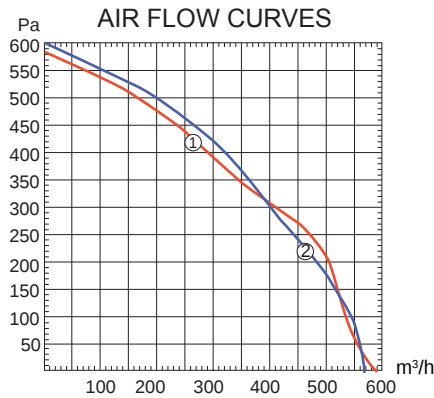


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92F-2E-150	220	50	0.75	165	2600	6	3.5	66	494	1
YWF-L92F-2E-150	220	60	1.07	232	3040	6	3.5	68	578	2



YWF-L92F-160

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

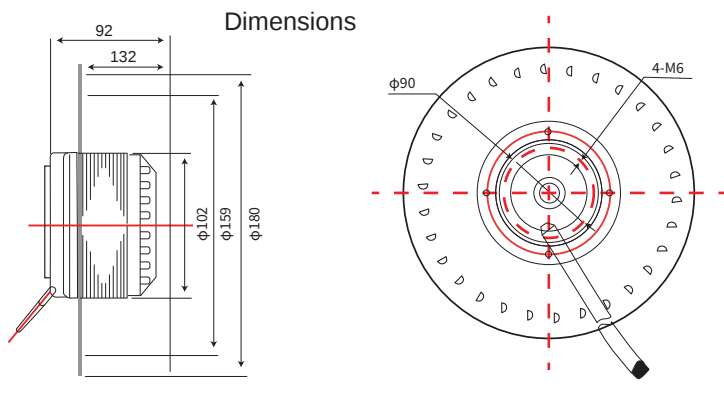
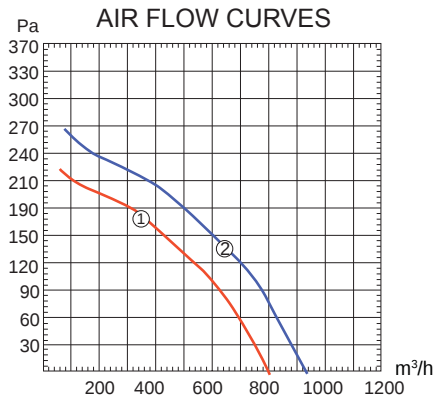


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92F-2E-160	220	50	0.90	200	2450	5	4.0	67	600	1
YWF-L92F-2E-160	220	60	1.10	250	2470	5	4.0	68	570	2



YWF-L102F-180

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

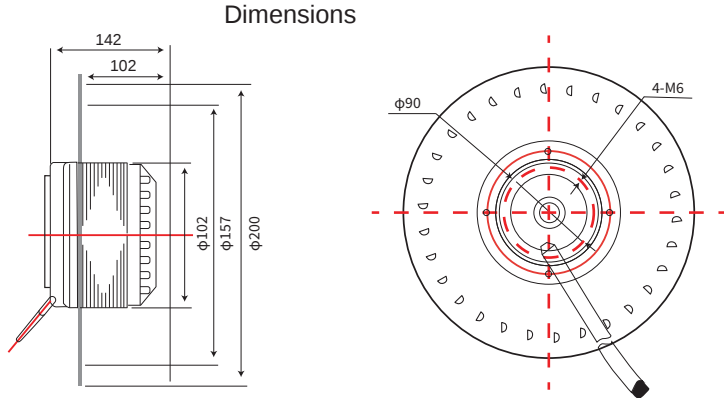
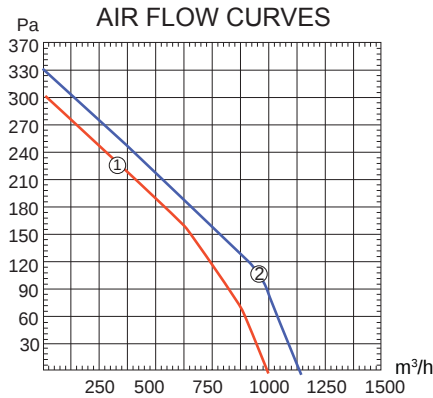


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L102F-4E-180	220	50	0.60	130	1400	3.5	4.5	65	800	1
YWF-L102F-4E-180	220	60	0.70	135	1600	3.5	4.5	66	920	2



YWF-L102F-200

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

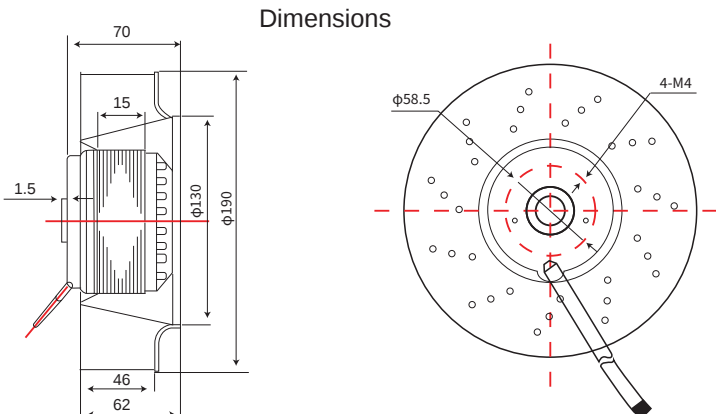
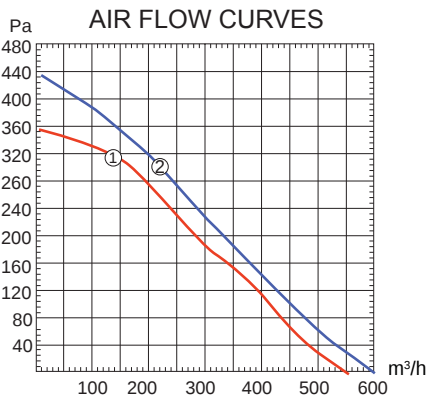


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L102F-4E-200	220	50	0.75	165	1400	6	5.5	68	1000	1
YWF-L102F-4E-200	220	60	1.20	240	1600	6	5.5	69	1150	2



YWF-L92BP-190

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 °C ~60 °C

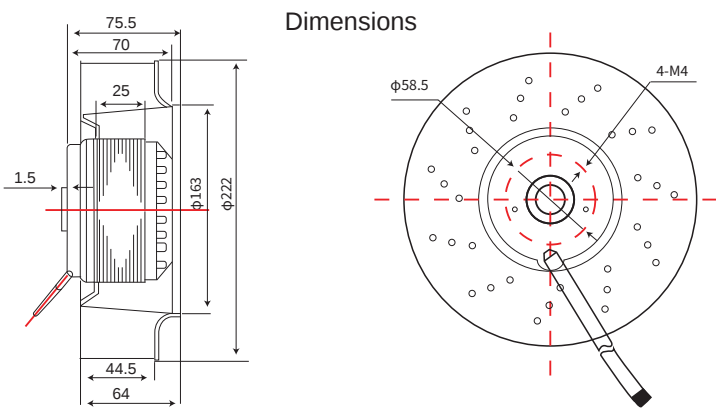
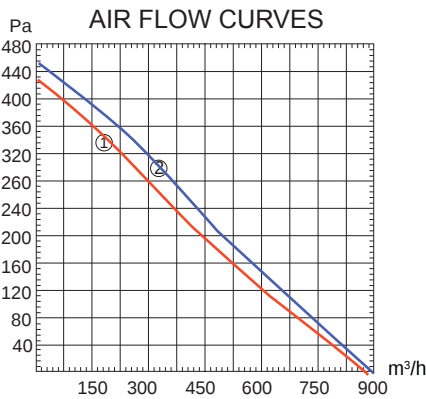


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92BP-2E-190	220	50	0.27	62	2200	3	2.8	65	550	1
YWF-L92BP-2E-190	220	60	0.30	68	2350	3	2.8	66	580	2



YWF-L92BP-220

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 °C ~60 °C

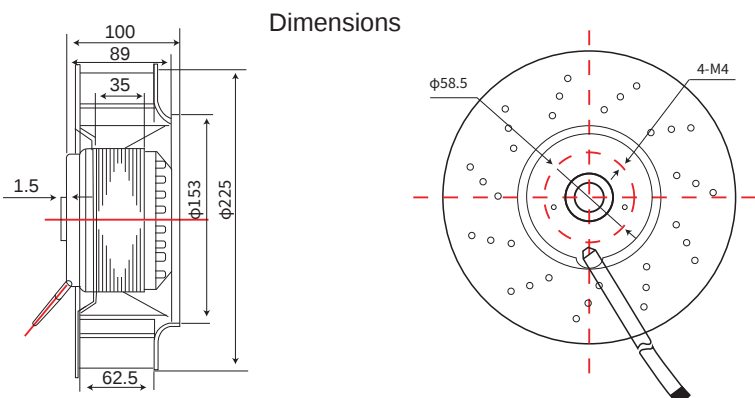
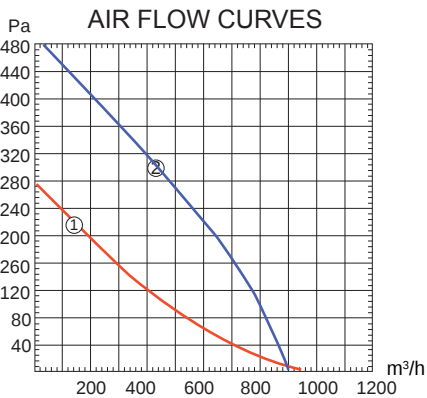


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92BP-2E-220	220	50	0.42	100	2480	3	3.5	68	870	1
YWF-L92BP-2E-220	220	60	0.55	127	2540	3	3.5	70	880	2



YWF-L92BP-225

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 °C ~60 °C

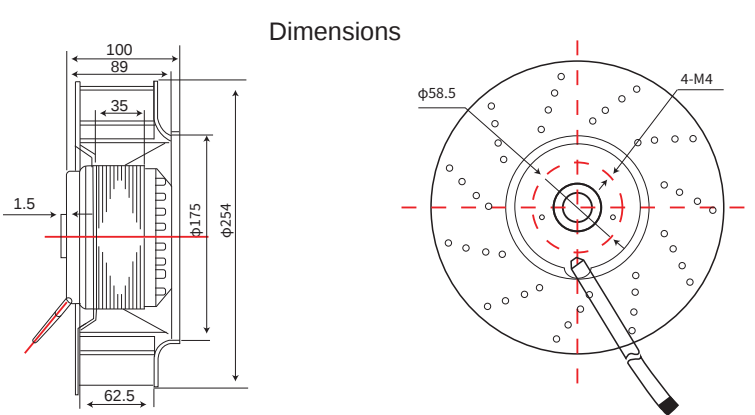
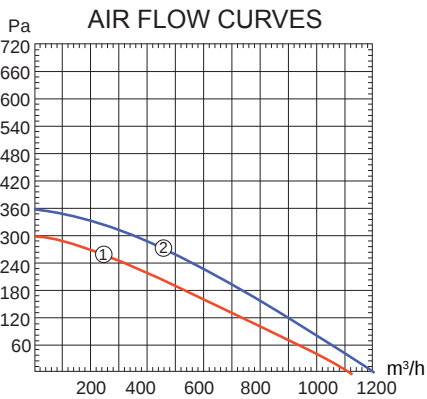


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92BP-2E-225	220	50	0.70	150	2700	5	3.3	68	950	1
YWF-L92BP-2E-225	220	60	0.52	115	2500	5	3.3	67	900	2

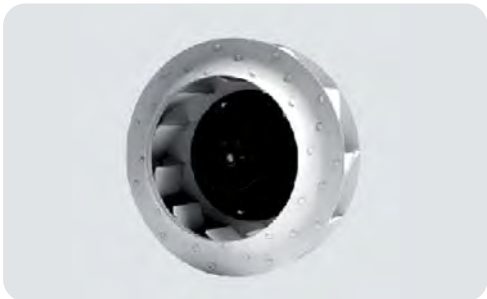


YWF-L92BP-250

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 °C ~60 °C

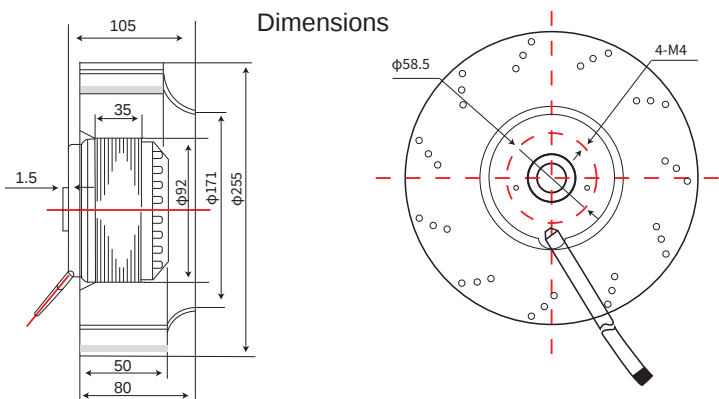
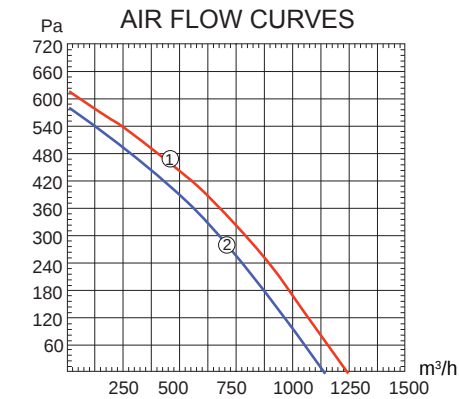


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92BP-250	220	50	0.75	170	2400	5	3.5	74	1200	1
YWF-L92BP-250	220	60	0.72	120	2200	5	3.5	72	1100	2



YWF-L92B-250

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

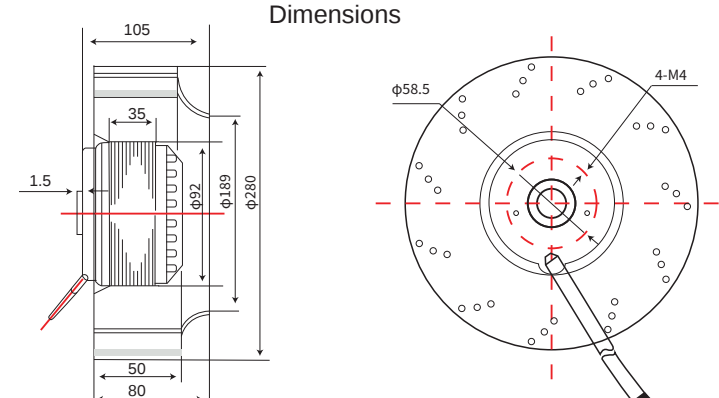
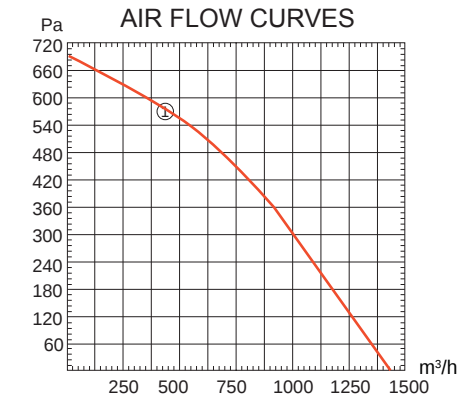


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92B-250	220	50	0.75	165	2500	5	3.2	74	1258	1
YWF-L92B-250	220	60	0.78	170	2350	5	3.2	75	1172	2

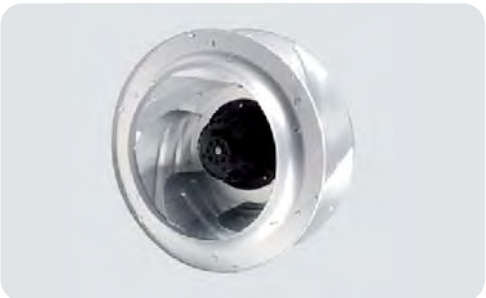


YWF-L92B-280

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

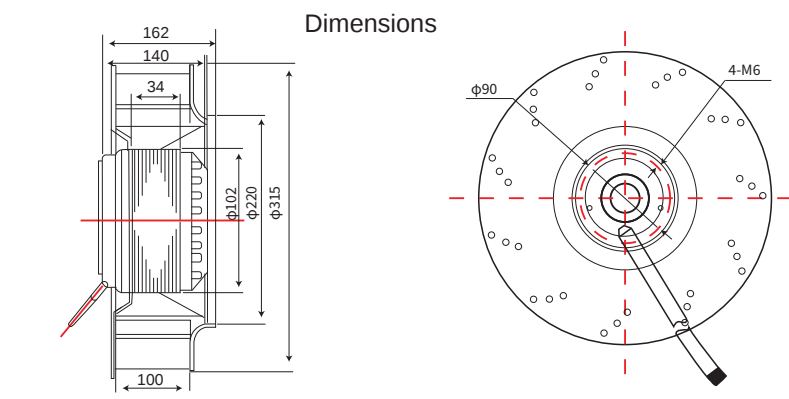
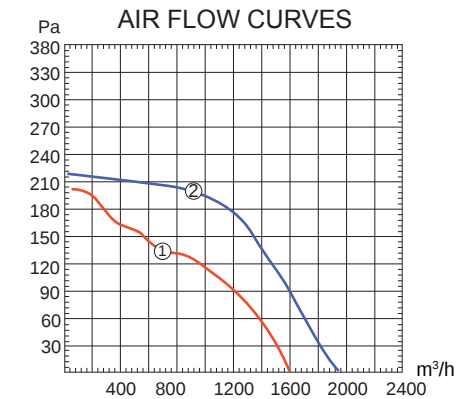


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L92B-2E-280	220	50	0.90	210	2200	6	3.3	75	1440	1



YWF-L102B-315

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

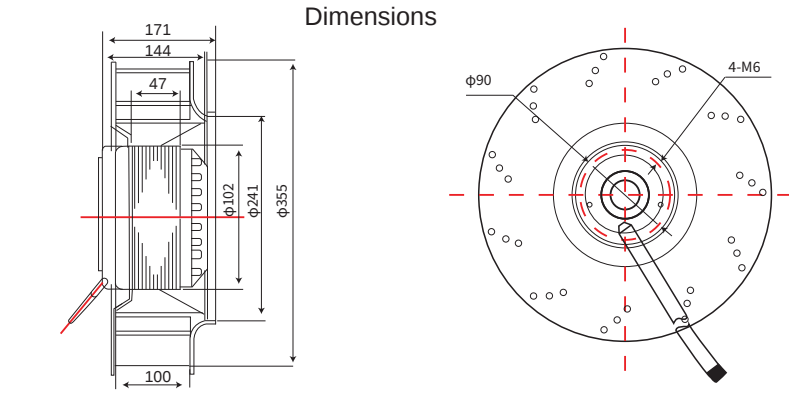
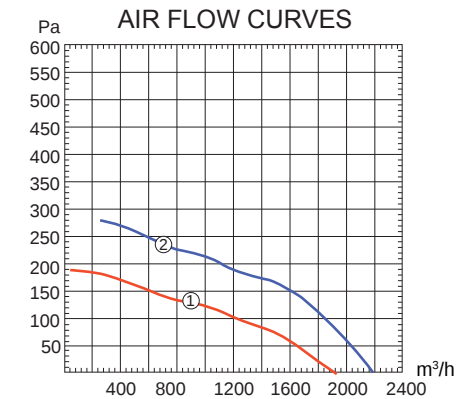


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L102B-4E-315	220	50	0.60	125	1400	3.5	3.7	65	1590	1
YWF-L102B-4E-315	220	60	0.70	150	1600	3.5	3.7	67	1835	2



YWF-L102B-355

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C

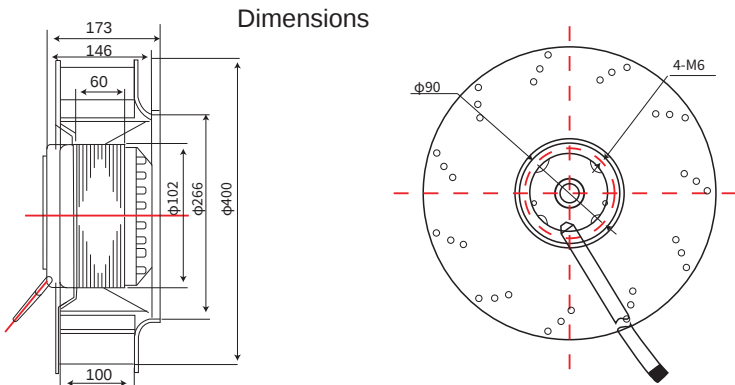
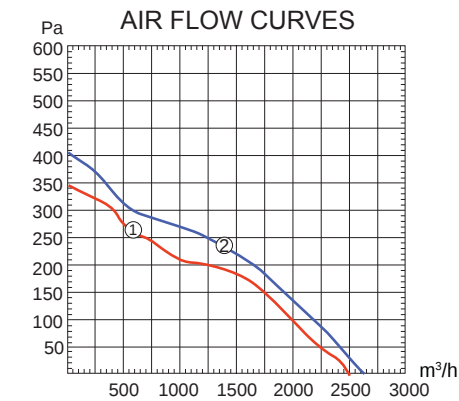


Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L102B-4E-355	220	50	0.75	155	1400	6	4.6	60	1900	1
YWF-L102B-4E-355	220	60	1.20	245	1600	6	4.6	62	2200	2



YWF-L102B-400

Operating type: S1
Insulation class: B Class F grade
Ambient temperature: -30 ° C ~60 ° C



Type	Voltage V	Frequency HZ	Current A	Input W	Speed r/min	Capacitor μF	Net kg	Noise dBA	Air Volume m³/h	Curve
YWF-L102B-4E-400	220	50	1.20	260	1350	7	5.8	68	2470	1
YWF-L102B-4E-400	220	60	1.50	330	1450	7	5.8	70	2650	2

2Nm ON/OFF General Damper Actuator



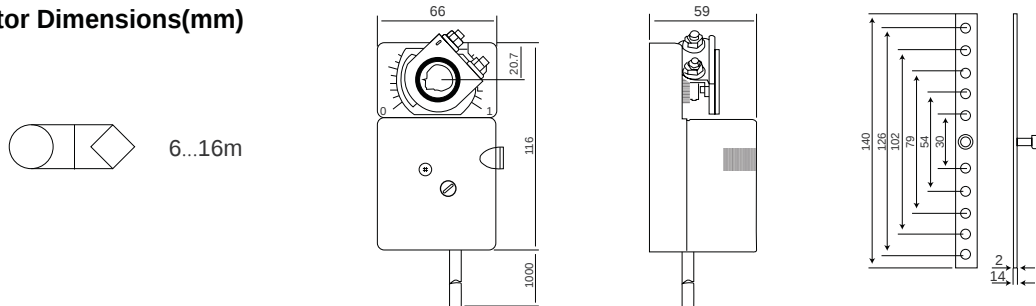
For operation of air control dampers in HVAC system.
Torque: 2Nm
Nominal voltage: AC/DC 24V, AC100...240V
Control: ON/OFF, 2/3-Point
-DS type include 1 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
2 Nm	<30s	24VAC/DC	None	DA2MU24-D
2 Nm	<30s	24VAC/DC	1-SPDT	DA2MU24-DS



Actuator Dimensions(mm)



Technical parameter

DA2MU24-D/DS		
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V
Electrical data	Power consumption	3W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²
Function data	Torque	2Nm
Function data	Damper size	0.5m ²
Function data	Direction of rotation	Manual regulation
Function data	Manual override	Gearing latch disengaged by push button, self-resetting
Function data	Angle of rotation	Max90°
Function data	Running time	<30S(90°)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	III (safety low voltage)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 °C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 °C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 50mm
Weight Dimensions	Weight	< 0.5kg

2Nm Modulating General Damper Actuator



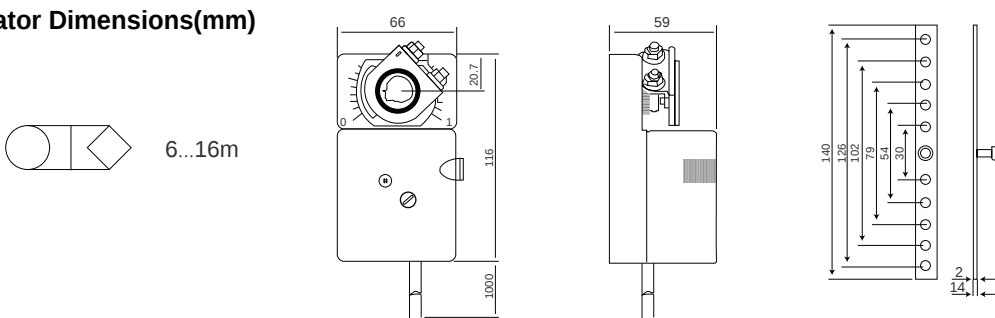
For operation of air control dampers in HVAC system.
Torque: 2Nm
Nominal voltage: AC/DC 24V, AC100...240V
Control: 0(2)...10VDC/0(4)...20mA
Feedback: 0(2)...10VDC/0(4)...20mA
-AS type include 1 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
2 Nm	<30s	24VAC/DC	None	DA2MU24-A
2 Nm	<30s	24VAC/DC	1-SPDT	DA2MU24-AS



Actuator Dimensions(mm)



Technical parameter

DA2MU24-A/AS		
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V
Electrical data	Power consumption	3W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²
Function data	Torque	2Nm
Function data	Damper size	0.5m ²
Function data	Direction of rotation	Manual regulation
Function data	Manual override	Gearing latch disengaged by push button, self-resetting
Function data	Angle of rotation	Max90°
Function data	Running time	<30S(90°)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	III (safety low voltage)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 °C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 °C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 50mm
Weight Dimensions	Weight	< 0.5kg

4Nm/6Nm ON/OFF General Damper Actuator

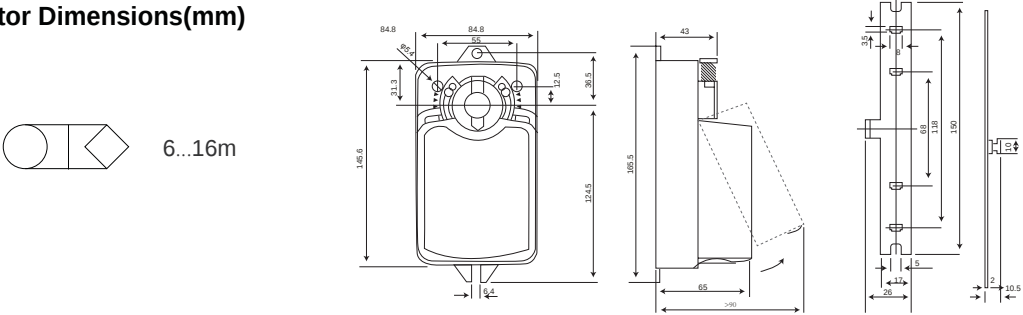


For operation of air control dampers in HVAC system.
Torque: 4Nm/6Nm
Nominal voltage: AC/DC 24V, AC100...240V
Control: ON/OFF, 2/3-Point
-DS type include 2 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
4 Nm	<50s	24VAC/DC	None	DA4MU24-D
4 Nm	<50s	24VAC/DC	1-SPDT	DA4MU24-DS
6 Nm	<70s	24VAC/DC	None	DA6MU24-D
6 Nm	<70s	24VAC/DC	1-SPDT	DA6MU24-DS

Actuator Dimensions(mm)



Technical parameter

		DA2MU24-D/DS	DA2MU24-D/DS
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V
Electrical data	Power consumption	3W@Nominaltoque/0.5W@holding	3W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²	0.5mm ²
Function data	Torque	4Nm	6Nm
Function data	Damper size	0.8m ²	1.2m ²
Function data	Direction of rotation	Manual regulation	Manual regulation
Function data	Manual override	Gearing latch disengaged by push button, self-resetting	Gearing latch disengaged by push button, self-resetting
Function data	Angle of rotation	Max90°	Max90°
Function data	Running time	<50S(90°)	<70S(90°)
Function data	Sound power level	45dB	45dB
Function data	Position indication	Mechanical	Mechanical
Working conditions	Protection class	III (safety low voltage)	III (safety low voltage)
Working conditions	Protection level	IP44	IP44
Working conditions	Ambient temperature	-20...+50 °C /IEC 721-3-3	-20...+50 °C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 °C /IEC 721-3-2	-30...+80 °C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"	See "Dimensions"
Weight Dimensions	Shaft length	> 50mm	> 50mm
Weight Dimensions	Weight	< 0.75kg	< 0.75kg

4Nm/6Nm Modulating General Damper Actuator

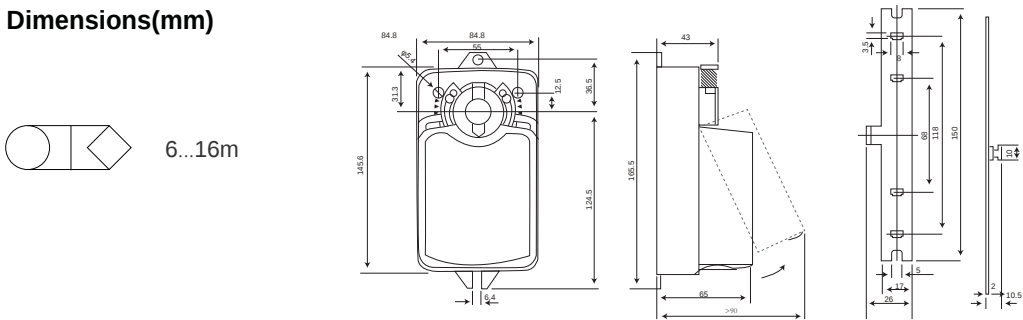


For operation of air control dampers in HVAC system.
Torque: 4Nm/6Nm
Nominal voltage: AC/DC 24V, AC100...240V
Control: 0(2)...10VDC/0(4)...20mA
Feedback: 0(2)...10VDC/0(4)...20mA
-AS type include 2 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
4 Nm	<50s	24VAC/DC	None	DA4MU24-A
4 Nm	<50s	24VAC/DC	2-SPDT	DA4MU24-AS
6 Nm	<70s	24VAC/DC	None	DA6MU24-A
6 Nm	<70s	24VAC/DC	2-SPDT	DA6MU24-AS

Actuator Dimensions(mm)



Technical parameter

		DA4MU24-A/AS	DA6MU24-A/AS
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V
Electrical data	Power consumption	3W@Nominaltoque/0.5W@holding	3W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²	0.5mm ²
Function data	Torque	4Nm	6Nm
Function data	Damper size	0.8m ²	1.2m ²
Function data	Direction of rotation	Manual regulation	Manual regulation
Function data	Manual override	Gearing latch disengaged by push button, self-resetting	Gearing latch disengaged by push button, self-resetting
Function data	Angle of rotation	Max90°	Max90°
Function data	Running time	<50S(90°)	<70S(90°)
Function data	Sound power level	45dB	45dB
Function data	Position indication	Mechanical	Mechanical
Working conditions	Protection class	III (safety low voltage)	III (safety low voltage)
Working conditions	Protection level	IP44	IP44
Working conditions	Ambient temperature	-20...+50 °C /IEC 721-3-3	-20...+50 °C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 °C /IEC 721-3-2	-30...+80 °C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"	See "Dimensions"
Weight Dimensions	Shaft length	> 50mm	> 50mm
Weight Dimensions	Weight	< 0.75kg	< 0.75kg

8Nm/16Nm/24Nm ON/OFF General Damper Actuator



For operation of air control dampers in HVAC system.
Torque: 8Nm/16Nm/24Nm
Nominal voltage: AC/DC 24V
Control: ON/OFF, 2/3-Point
-DS type include 2 auxiliary switch.

Type Selection Table:

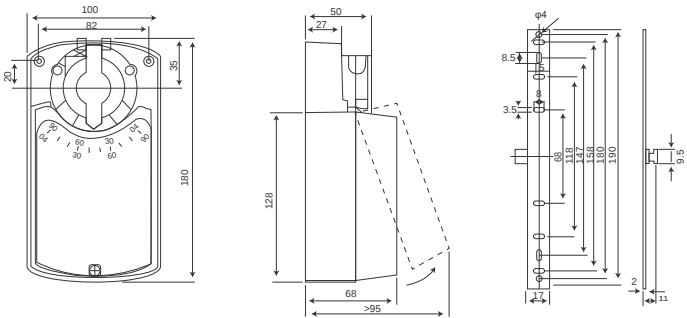
Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
8 Nm	<55s	24VAC/DC	None	DA8MU24-D
8 Nm	<55s	24VAC/DC	2-SPDT	DA8MU24-DS
16 Nm	<100s	24VAC/DC	None	DA16MU24-D
16 Nm	<100s	24VAC/DC	2-SPDT	DA16MU24-DS
24 Nm	<160s	24VAC/DC	None	DA24MU24-D
24 Nm	<160s	24VAC/DC	2-SPDT	DA24MU24-DS



Actuator Dimensions(mm)



10...20m



Technical parameter

		DA8MU24-D/DS	DA16MU24-D/DS	DA24MU24-D/DS
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V	AC24V 50/60Hz DC24V	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V
Electrical data	Power consumption	4.5W@Nominaltoque/0.5W @holding	4.5W@Nominaltoque/0.5W @holding	4.5W@Nominaltoque/0.5W @holding
Electrical data	Wire sizing	0.5mm ²	0.5mm ²	0.5mm ²
Function data	Torque	8Nm	16Nm	24Nm
Function data	Damper size	1.5m ²	3m ²	4.5m ²
Function data	Direction of rotation	Manual regulation	Manual regulation	Manual regulation
Function data	Manual override	Gearing latch disengaged by pushbutton, self-resetting	Gearing latch disengaged by pushbutton, self-resetting	Gearing latch disengaged by pushbutton, self-resetting
Function data	Angle of rotation	Max90°	Max90°	Max90°
Function data	Running time	<55S(90°)	<100S(90°)	<160S(90°)
Function data	Sound power level	45dB	45dB	45dB
Function data	Position indication	Mechanical	Mechanical	Mechanical
Working conditions	Protection class	III (safety low voltage)	III (safety low voltage)	III (safety low voltage)
Working conditions	Protection level	IP44	IP44	IP44
Working conditions	Ambient temperature	-20...+50 °C /IEC 721-3-3	-20...+50 °C /IEC 721-3-3	-20...+50 °C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 °C /IEC 721-3-2	-30...+80 °C /IEC 721-3-2	-30...+80 °C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"	See "Dimensions"	See "Dimensions"
Weight Dimensions	Shaft length	> 50mm	> 50mm	> 50mm
Weight Dimensions	Weight	< 1.3kg	< 1.3kg	< 1.3kg

8Nm/16Nm/24Nm ON/OFF, 2/3-Point



For operation of air control dampers in HVAC system.
Torque: 8Nm/16Nm/24Nm
Nominal voltage: AC100...240V
Control: ON/OFF, 2/3-Point
-DS type include 2 auxiliary switch.

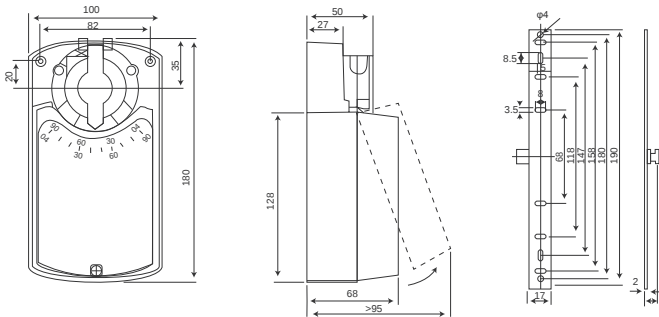
Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
8 Nm	45-55s	100-240VAC/DC	None	DA8MU230-D
8 Nm	45-55s	100-240VAC/DC	2-SPDT	DA8MU230-DS
16 Nm	80-100s	100-240VAC/DC	None	DA16MU230-D
16 Nm	80-100s	100-240VAC/DC	2-SPDT	DA16MU230-DS
24 Nm	140-160s	100-240VAC/DC	None	DA24MU230-D
24 Nm	140-160s	100-240VAC/DC	2-SPDT	DA24MU230-DS

Actuator Dimensions(mm)



6...16m



Technical parameter

		DA8MU230-D/DS	DA16MU230-D/DS	DA24MU230-D/DS
Electrical data	Nominal voltage	AC100...240V 50/60Hz	AC100...240V 50/60Hz	AC100...240V 50/60Hz
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V
Electrical data	Power consumption	4.5W@Nominaltoque/0.7W @holding	4.5W@Nominaltoque/0.7W @holding	4.5W@Nominaltoque/0.7W @holding
Electrical data	Wire sizing	0.5mm ²	0.5mm ²	0.5mm ²
Function data	Torque	8Nm	8Nm	8Nm
Function data	Damper size	1.5m ²	1.5m ²	1.5m ²
Function data	Direction of rotation	Manual regulation	Manual regulation	Manual regulation
Function data	Manual override	Gearing latch disengaged by pushbutton, self-resetting	Gearing latch disengaged by pushbutton, self-resetting	Gearing latch disengaged by pushbutton, self-resetting
Function data	Angle of rotation	Max90°	Max90°	Max90°
Function data	Running time	<55S(90°)	<55S(90°)	<55S(90°)
Function data	Sound power level	45dB	45dB	45dB
Function data	Position indication	Mechanical	Mechanical	Mechanical
Working conditions	Protection class	III (safety low voltage)	III (safety low voltage)	III (safety low voltage)
Working conditions	Protection level	IP44	IP44	IP44
Working conditions	Ambient temperature	-20...+50 °C /IEC 721-3-3	-20...+50 °C /IEC 721-3-3	-20...+50 °C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 °C /IEC 721-3-2	-30...+80 °C /IEC 721-3-2	-30...+80 °C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"	See "Dimensions"	See "Dimensions"
Weight Dimensions	Shaft length	> 50mm	> 50mm	> 50mm
Weight Dimensions	Weight	< 1.3kg	< 1.3kg	< 1.3kg

3Nm ON/OFF Spring Return



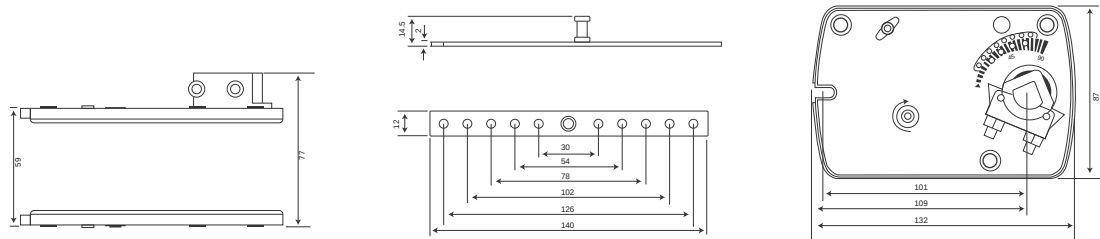
For operation of air control dampers in HVAC system.
Torque:3Nm
Nominal voltage: AC/DC24V, AC100-240V
Control: ON/OFF, 2-Point
-DS type include 2 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
3 Nm	<75s/<25s	24VAC/DC	None	DA3FU24-D
3 Nm	<75s/<25s	24VAC/DC	2-SPDT	DA3FU24-DS



Actuator Dimensions(mm)



Technical parameter

DA3MU24-D/DS		
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V
Electrical data	Power consumption	5W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²
Function data	Torque	3Nm
Function data	Damper size	0.6m ²
Function data	Direction of rotation	Selected by mounting L/R
Function data	Manual override	Yes
Function data	Angle of rotation	Max95° ,adjustable by mechanical stop
Function data	Running time	<75S/<20S(Spring reset)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	III (safety low voltage)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 ℃ /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 ℃ /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm
Weight Dimensions	Weight	< 1.3kg

5Nm ON/OFF Spring Return



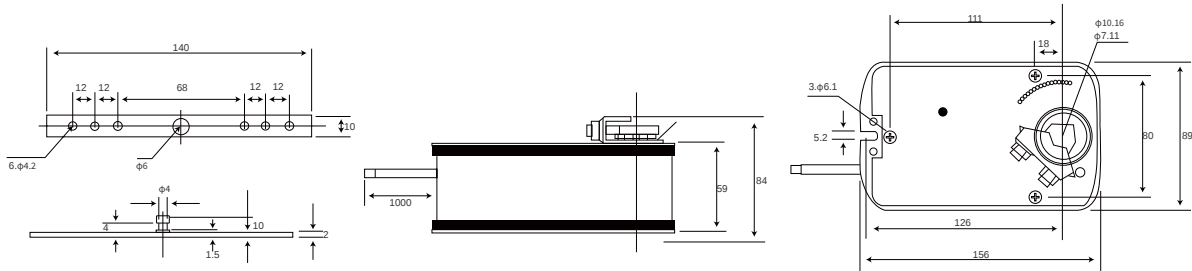
For operation of air control dampers in HVAC system.
Torque:5Nm
Nominal voltage: AC/DC24V, AC100-240V
Control: ON/OFF, 2-Point
-DS type include 2 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
5 Nm	<70s/<20s	24VAC/DC	None	DA5FU24-D
5 Nm	<70s/<20s	24VAC/DC	2-SPDT	DA5FU24-DS



Actuator Dimensions(mm)



Technical parameter

DA5FU24-D/DS		
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V
Electrical data	Power consumption	5W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²
Function data	Torque	5Nm
Function data	Damper size	1.0m ²
Function data	Direction of rotation	Selected by mounting L/R
Function data	Manual override	None
Function data	Angle of rotation	Max95° ,adjustable by mechanical stop
Function data	Running time	<70S/<20S(Spring reset)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	III (safety low voltage)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 ℃ /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 ℃ /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm
Weight Dimensions	Weight	< 1.9kg

5Nm Modulating Spring Return



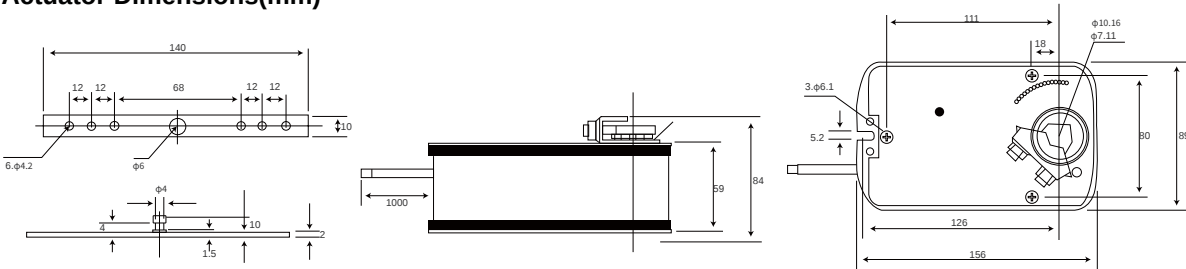
- For operation of air control dampers in HVAC system.
- Torque:5Nm
- Nominal voltage: AC/DC24V
- Control: 0(2)...10VDC/0(4)...20mA
- Feedback: 0(2)...10VDC/0(4)...20mA
- DS type include 2 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
5 Nm	<150s/<20s	24VAC/DC	None	DA5FU24-A
5 Nm	<150s/<20s	24VAC/DC	2-SPDT	DA5FU24-AS



Actuator Dimensions(mm)



Technical parameter

DA2MU24-D/DS		
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V
Electrical data	Power consumption	5W@Nominaltoque/0.5W@holding
Electrical data	Wire sizing	0.5mm ²
Function data	Torque	5Nm
Function data	Damper size	1.0m ²
Function data	Direction of rotation	Selected by mounting L/R
Function data	Manual override	None
Function data	Angle of rotation	Max95° ,adjustable by mechanical stop
Function data	Running time	<150S/<20S(Spring reset)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	III (safety low voltage)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm
Weight Dimensions	Weight	< 1.9kg

10Nm/15Nm/20Nm ON/OFF Spring Return



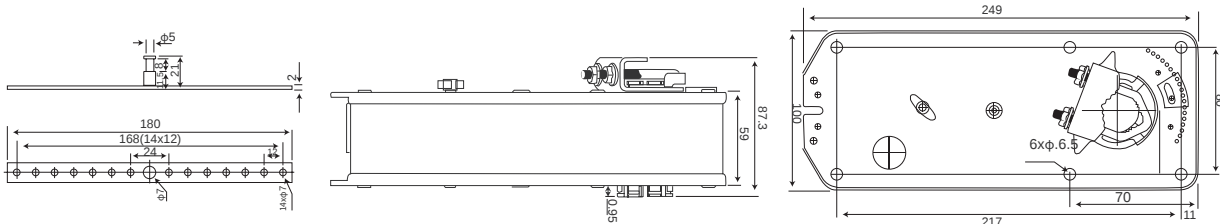
- For operation of air control dampers in HVAC system.
- Torque: 10Nm/15Nm/20Nm
- Nominal voltage: AC/DC24V, AC100-240V
- Control: ON/OFF, 2-Point
- DS type include 2 auxiliary switch.

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	Model/Type
10 Nm	<100S/<25S	24VAC/DC	None	DA10FU24-D
10 Nm	<100S/<25S	24VAC/DC	2-SPDT	DA10FU24-DS
15 Nm	<150S/<25S	24VAC/DC	None	DA15FU24-D
15 Nm	<150S/<25S	24VAC/DC	2-SPDT	DA15FU24-DS
20 Nm	<180S/<30S	24VAC/DC	None	DA20FU24-D
20 Nm	<180S/<30S	24VAC/DC	2-SPDT	DA20FU24-DS



Actuator Dimensions(mm)



Technical parameter

		DA10FU24-D/DS	DA15FU24-D/DS	DA20FU24-D/DS
Electrical data	Nominal voltage	AC100...240V 50/60Hz	AC100...240V 50/60Hz	AC100...240V 50/60Hz
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V
Electrical data	Power consumption	5W/10W/10W@Nominal toque /3W@holding	5W/10W/10W@Nominal toque /3W@holding	5W/10W/10W@Nominal toque /3W@holding
Electrical data	Wire sizing	0.5mm ²	0.5mm ²	0.5mm ²
Function data	Torque	10Nm	15Nm	20Nm
Function data	Damper size	1.5m ²	3m ²	4m ²
Function data	Direction of rotation	Selected by mounting L/R	Selected by mounting L/R	Selected by mounting L/R
Function data	Manual override	Yes	Yes	Yes
Function data	Angle of rotation	Max95° ,adjustable by mechanical stop	Max95° ,adjustable by mechanical stop	Max95° ,adjustable by mechanical stop
Function data	Running time	<100S/<25S(Spring reset)	<150S/<25S(Spring reset)	<180S/<30S(Spring reset)
Function data	Sound power level	45dB	45dB	45dB
Function data	Position indication	Mechanical	Mechanical	Mechanical
Working conditions	Protection class	III (safety low voltage)	III (safety low voltage)	III (safety low voltage)
Working conditions	Protection level	IP54	IP54	IP54
Working conditions	Ambient temperature	-20...+50 C /IEC 721-3-3	-20...+50 C /IEC 721-3-3	-20...+50 C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 C /IEC 721-3-2	-30...+80 C /IEC 721-3-2	-30...+80 C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"	See "Dimensions"	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm	> 90mm	> 90mm
Weight Dimensions	Weight	< 2.3kg	< 2.6kg	< 2.6kg

3Nm ON/OFF, 2-Point



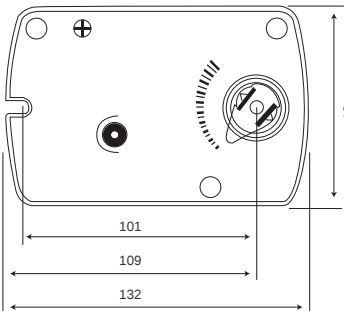
For operation of air control dampers in HVAC system.
Torque: 3Nm
Nominal voltage: AC/DC24V, AC100...240V
Control: ON/OFF, 2-Point
-DST type include SAF72 thermal sensor

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	SAF72 Thermal Sensor	Model/Type
3 Nm	<75S/<25S	100...240VAC	2-SPDT	None	SA2FU230-DS
3 Nm	<75S/<25S	100...240VAC	2-SPDT	Yes	SA2FU230-DST



Actuator Dimensions(mm)



Technical parameter

SA3FU230-DS/DST		
Electrical data	Nominal voltage	AC100...240V 50/60Hz
Electrical data	Nominal voltage range	AC85...265V
Electrical data	Power consumption	5W@Nominal toque/ 3W@holding
Electrical data	Wire sizing	0.5mm²
Function data	Torque	3Nm
Function data	Damper size	0.6m²
Function data	Direction of rotation	Selected by mounting L/R
Function data	Manual override	None
Function data	Angle of rotation	Max90°
Function data	Running time	<75S/<25S(Spring reset)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	II (totally insulated)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm
Weight Dimensions	Weight	< 1.3kg

5Nm ON/OFF, 2-Point



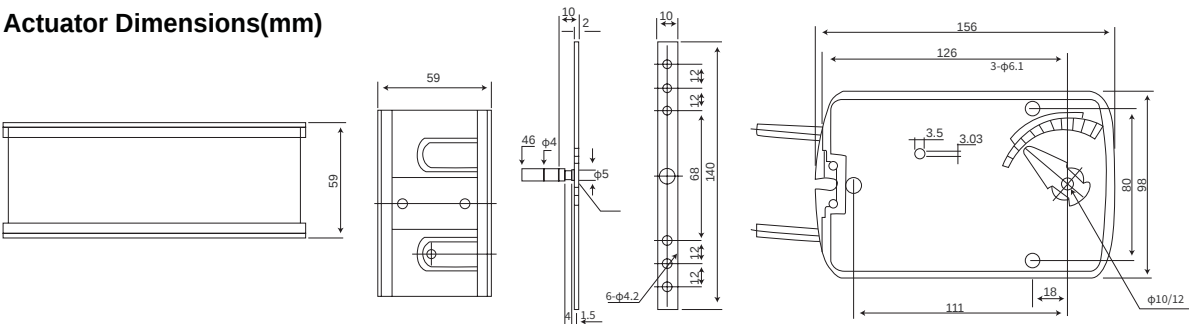
For operation of air control dampers in HVAC system.
Torque: 5Nm
Nominal voltage: AC/DC24V, AC100...240V
Control: ON/OFF, 2-Point
-DST type include SAF72 thermal sensor

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	SAF72 Thermal Sensor	Model/Type
5 Nm	<70S/<20S	24VAC/DC	2-SPDT	None	DA5FU24-D
5 Nm	<70S/<20S	24VAC/DC	2-SPDT	Yes	DA5FU24-DST



Actuator Dimensions(mm)



Technical parameter

SA5FU24-DS/DST		
Electrical data	Nominal voltage	AC/DC 24V 50/60Hz
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V
Electrical data	Power consumption	5W@Nominaltoque/3W@holding
Electrical data	Wire sizing	0.5mm²
Function data	Torque	5Nm
Function data	Damper size	1.0m²
Function data	Direction of rotation	Selected by mounting L/R
Function data	Manual override	Yes
Function data	Angle of rotation	Max95°
Function data	Running time	<70S/<20S(Spring reset)
Function data	Sound power level	45dB
Function data	Position indication	Mechanical
Working conditions	Protection class	III (safety low voltage)
Working conditions	Protection level	IP54
Working conditions	Ambient temperature	-20...+50 C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing(EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm
Weight Dimensions	Weight	< 2.0kg

Damper Actuators

10Nm/15Nm/20Nm ON/OFF, 2-Point



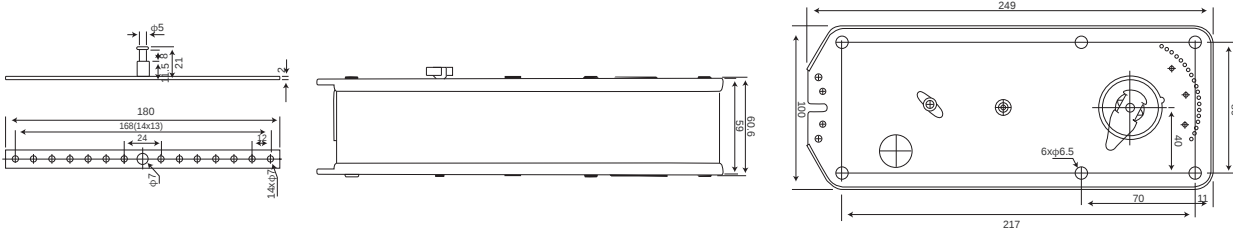
For operation of air control dampers in HVAC system.
Torque: 10Nm/15Nm/20Nm
Nominal voltage: AC/DC24V, AC100...240V
Control: ON/OFF, 2-Point
-DST type include SAF72 thermal sensor

Type Selection Table:

Torque	Running Time	Power Supply	Auxiliary Switch	SAF72 Thermal Sensor	Model/Type
10 Nm	<100S/<25S	24VAC/DC	2-SPDT	None	SA10FU24-DS
10 Nm	<100S/<25S	24VAC/DC	2-SPDT	Yes	SA10FU24-DST
15 Nm	<150S/<25S	24VAC/DC	2-SPDT	None	SA15FU24-DS
15 Nm	<150S/<25S	24VAC/DC	2-SPDT	Yes	SA15FU24-DST
20 Nm	<180S/<30S	24VAC/DC	2-SPDT	None	SA20FU24-DS
20 Nm	<180S/<30S	24VAC/DC	2-SPDT	Yes	SA20FU24-DST



Actuator Dimensions(mm)



Technical parameter

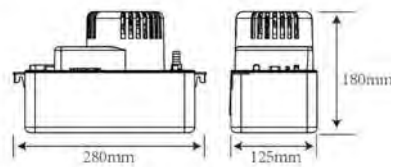
		SA10FU24-DS/DST	SA15FU24-DS/DST	
Electrical data	Nominal voltage	AC24V 50/60Hz DC24V	AC24V 50/60Hz DC24V	AC24V 50/60Hz DC24V
Electrical data	Nominal voltage range	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V	AC/DC 19.2...28.8V
Electrical data	Power consumption	5W/10W/10W@Nominal toque /3W@holding	5W/10W/10W@Nominal toque /3W@holding	5W/10W/10W@Nominal toque /3W@holding
Electrical data	Wire sizing	0.5mm²	0.5mm²	0.5mm²
Function data	Torque	10Nm	15Nm	20Nm
Function data	Damper size	1.5m²	3.0m²	4.0m²
Function data	Direction of rotation	Selected by mounting L/R	Selected by mounting L/R	Selected by mounting L/R
Function data	Manual override	Yes	Yes	Yes
Function data	Angle of rotation	Max95°	Max95°	Max95°
Function data	Running time	<100S/<25S(Spring reset)	<150S/<25S(Spring reset)	<180S/<30S(Spring reset)
Function data	Sound power level	45dB	45dB	45dB
Function data	Position indication	Mechanical	Mechanical	Mechanical
Working conditions	Protection class	III (safety low voltage)	III (safety low voltage)	III (safety low voltage)
Working conditions	Protection level	IP54	IP54	IP54
Working conditions	Ambient temperature	-20...+50 C /IEC 721-3-3	-20...+50 C /IEC 721-3-3	-20...+50 C /IEC 721-3-3
Working conditions	Inventory temperature	-30...+80 C /IEC 721-3-2	-30...+80 C /IEC 721-3-2	-30...+80 C /IEC 721-3-2
Working conditions	Humidity test	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)	95%RH,non condensing (EN60730-1)
Weight Dimensions	Dimensions(L×W×H)	See "Dimensions"	See "Dimensions"	See "Dimensions"
Weight Dimensions	Shaft length	> 90mm	> 90mm	> 90mm
Weight Dimensions	Weight	< 2.3kg	< 2.6kg	< 2.6kg



PUMP



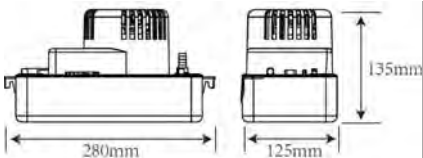
Tank Pump-V



Tank capacity:2.2L



Tank Pump-L



Tank capacity:1.1L

This condensate draining pump is able to drain huge volume of condensation.
It is easy to install and suitable for installations in all spaces.
Multiple colors to choose from:



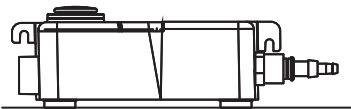
Model	Voltage(V)	Frequency(HZ)	Current(A)	Power(W)	Water flow rate at			Discharge head
					0.3m(L/H)	1.5m(L/H)	2.7m(L/H)	
RTP15WS115V RTP15WS115L	115	60	1.0	60	250	200	150	15'/4.6M
RTP20WS115V RTP20WS115L	115	60	1.5	85	303	265	208	20'/6.1M
RTP22WS115V RTP22WS115L	115	60	1.85	100	550	500	430	22'/6.7M
RTP24WS115V RTP24WS115L	115	60	2.2	110	580	520	470	24'/7.3M
RTP15WS230V RTP15WS230L	230	50/60	0.6/0.45	60/50	260/250	230/200	170/150	15'/4.6M
RTP20WS230V RTP20WS230L	230	50/60	0.7/0.55	85/75	260/303	230/265	180/208	17'/5.2M
RTP22WS230V RTP22WS230L	230	50/60	1.2/1.0	115/100	500/550	460/500	400/430	22'/6.7M
RTP24WS230V RTP24WS230L	230	50/60	1.3/1.1	125/110	530/580	480/520	420/470	24'/7.3M

Mute Tank

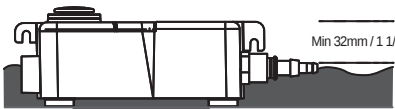


Silent and compact condensate draining pump, perfect for installation on air conditioning units with limited space inside. The small size, the easy installation and the low noise level make it suitable for installations in all places. The pump is designed for power and alarm cable and supplied with tank ventilation pipe, double-sided tape to fix the pump-tank, pump-split connection pipe, tank and 6x9 mm pump-tank connecting pipe. For the flow pipe use the standard 6x9 mm hose (not supplied as standard equipment).

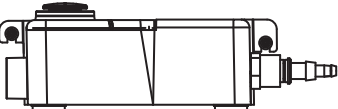
1、 FLOOR MOUNT / PIED DE SUPPORT



2、 PLACE IN DRIP TRAY



3、 WALL MOUNTED



Mute Tank-40

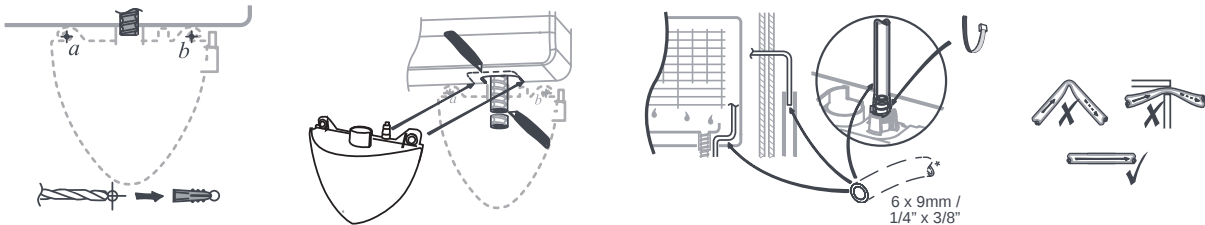
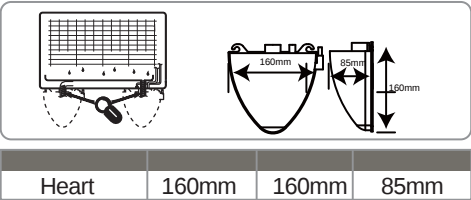
Technical Data	
Power supply: 100-240V AC 50/60Hz<4W	Discharge tube: 6mmID
Max.flow: 40 L/h @ 0 head	Class: II appliance
Sound level: <19dB(A) @ 1m	Rated: continuous
Max.recommended head: 20m	IP Protection: IPX7
Max.unit output: 46kw/157000Btu/h	Thermal protection: √
Safety switch: 5A Normally closed	Fully potted: √
Max.water temperature: 70 °C	LxWxH:155mmx69mmx60mm
Tank capacity: 260ml	

Mute Tank-20

Technical Data	
Power supply: 100-240V AC 50/60Hz<4W	Discharge tube: 6mmID
Max.flow: 20 L/h @ 0 head	Class: II appliance
Sound level: <19dB(A) @ 1m	Rated: continuous
Max.recommended head: 20m	IP Protection: IPX7
Max.unit output: 28kw/95550Btu/h	Thermal protection: √
Safety switch: 5A Normally closed	Fully potted: √
Max.water temperature: 70 °C	LxWxH:155mmx69mmx60mm
Tank capacity: 260ml	

Heart Box

Heart pump for aesthetic installation under the split inside, complete with power cable and internal reservoir with 300ml overflow

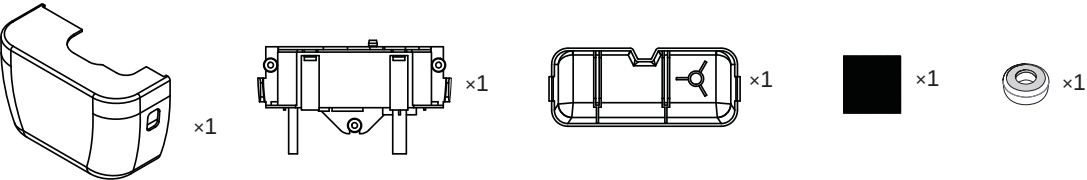
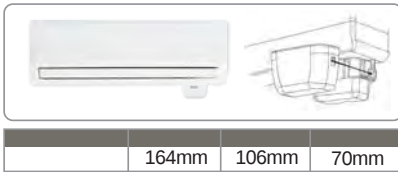


Technical Data

Power supply: 230V AC 50/60Hz	Max.water temperature: 40 C
Max.flow: 38L/h @ 0 head	Discharge tube: 6mmID
Sound level: <30dB(A) @ 1m	Class: II appliance
Max.recommended head: 2.5m	Rated: Non continuous
Max.unit output: 28kw/95550Btu/h	IP Protection: IPX1
Safety switch:3A Normally closed	Thermal protection: ✓
Tank capacity: 300ml	Fully potted: ✓
Able to drain water by siphoning	LxWxH:160mmx160mmx85mm

Mute Wedge

Mute wedge pump for aesthetic and silent installation under the internal split. Complete with alarm cable and power supply for integratd reservoir with 230 ml overflow



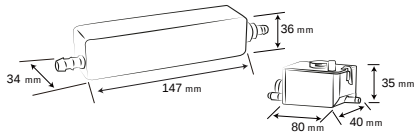
Technical Data

Power supply: 100-240V AC 50/60Hz	Discharge tube:6mmID
Max.flow: 20L/h @ 0 head	Class: II appliance
Sound level: <19dB(A) @ 1m	Rated: continuous
Max.recommended head: 20m	IP Protection: IPX5
Max.unit output: 28kw/95550Btu/h	Thermal protection: ✓
Tank capacity: 230ml	Fully potted: ✓
Safety switch: 3A Normally closed	L x W x H:164mm x 70mm x102mm
Max.water temperature:70 C	

11-003

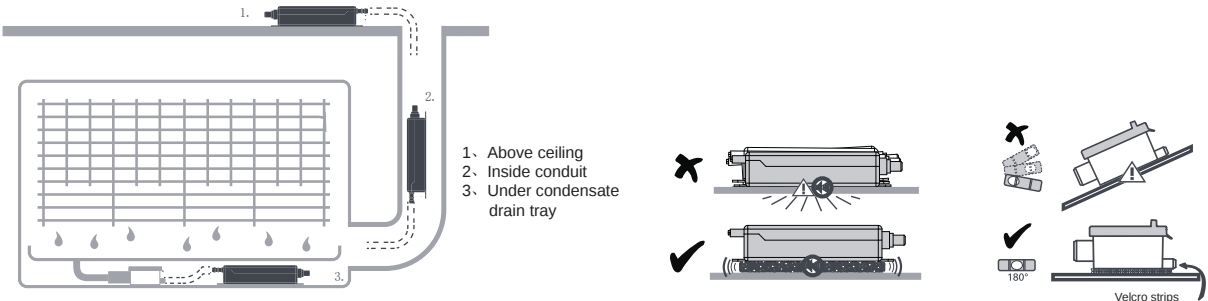
Mute Box

Silent and compact condensate draining pump, perfect for installation on air conditioning units with limited space inside. The small size, the easy installation and the low noise level make it suitable for installations in all places. The pump is designed for power and alarm cable and supplied with tank ventilation pipe, double-sided tape to fix the pump-tank, pump-split connection pipe, tank and 6x9 mm pump-tank connecting pipe. For the flow pipe use the standard 6x9 mm hose (not supplied as standard equipment).



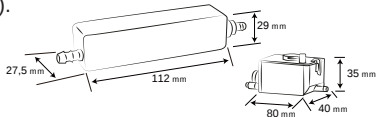
Technical Data

Power supply: 100-240V AC 50/60Hz	Discharge tube: 6mmID
Max.flow: 22L/h @ 0 head	Class: II appliance
Sound level: <19dB(A) @ 1m	Rated: continuous
Tank capacity: 40ml	IP Protection: IPX5
Max.recommended head: 20m	Thermal protection: ✓
Max.unit output: 28kw/95550Btu/h	Fully potted: ✓
Safety switch: 3A Normally closed	LxWxH: 185mmx36mmx34mm
Max.water temperature: 70 C	



Slim Box

Silent and compact condensate draining pump, perfect for installation on air conditioning units with limited space inside. The small size, the easy installation and the low noise level make it suitable for installations in all places. The pump is designed for power and alarm cable and supplied with tank ventilation pipe, double-sided tape to fix the pump-tank, pump-split connection pipe, tank and 6x9 mm pump-tank connecting pipe. For the flow pipe use the standard 6x9 mm hose (not supplied as standard equipment).



Technical Data

Power supply: 230V AC 50/60Hz	Discharge tube: 6mmID
Max.flow: 15L/h @ 0 head	Class: II appliance
Sound level: <19dB(A) @ 1m	Rated: Non continuous
Tank capacity: 40ml	IP Protection: IPX5
Max.recommended head: 12m	Thermal protection: ✓
Max.unit output: 16kw/54600Btu/h	Fully potted: ✓
Safety switch: 3A Normally closed	LxWxH: 150mmx29mmx29mm
Max.water temperature: 40 C	

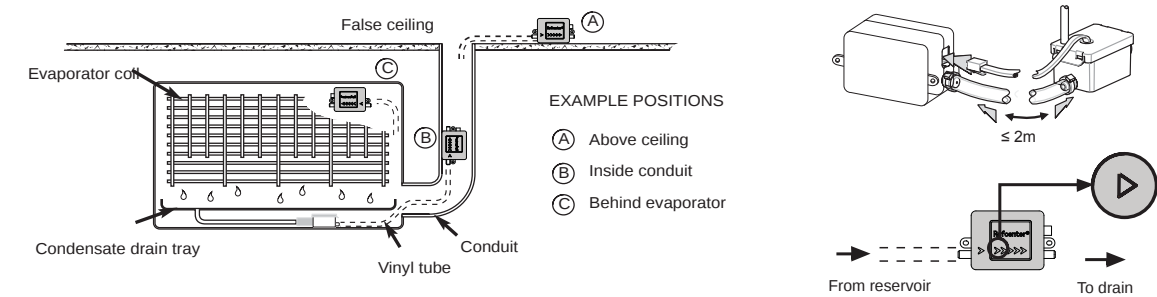
11-004



Mini Box

The mini box is a very compact pump that we have introduced, a variety of installation methods, simple and practical, ultra-quiet working mode gives a very comfortable feeling

Technical Data	
Power supply: 230V AC 50/60Hz	Discharge tube: 6mmID
Max.flow: 15L/h @ 0 head	Class: II appliance
Sound level: <19dB(A) @ 1m	Rated: Non continuous
Tank capacity: 40ml	IP Protection: IPX1
Max.recommended head: 12m	Thermal protection: √
Max.unit output: 16kw/54600Btu/h	Fully potted: √
Safety switch: 3A Normally closed	LxWxH: 90mmx52mmx32mm
Max.water temperature: 40 C	



Maxi Box

Maxi box is an upgraded version of mini box, mini appearance, a variety of installation methods, simple and practical, ultra-quiet working mode gives a very comfortable feeling

Technical Data	
Power supply: 230V AC 50/60Hz	Discharge tube: 6mmID
Max.flow: 38L/h @ 0 head	Class: II appliance
Sound level: <21dB(A) @ 1m	Rated: Non continuous
Tank capacity: 40ml	IP Protection: IPX1
Max.recommended head: 12m	Thermal protection: √
Max.unit output: 46kw/15700Btu/h	Fully potted: √
Safety switch: 3A Normally closed	LxWxH: 100mmx58mmx44mm
Max.water temperature: 40 C	



Mute Corner

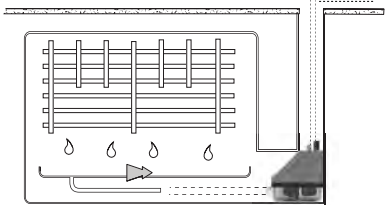
Designed around a 'total system approach' and includes many features to create a truly silent system. Perfect for offices and meeting rooms.

FEATURES

- Anti-vibration damper
- Pump sits in trunking elbow
- Left or right install

SUITABILITY

- Up to 16kW / 54,000Btu/h
- High wall split systems



Mute Corner - 40

Technical Data	
Power supply: 100-240V AC 50/60Hz	Tank capacity: 65ml
Max.flow: 40L/h @ 0 head	Discharge tube: 6mmID
Sound level: <19dB(A) @ 1m	Class: II appliance
Max.recommended head: 20m	Rated: continuous
Max.unit output: 46kw/157000Btu/h	IP Protection: IPX5
Safety switch: 5A Normally closed	Thermal protection: √
Max.water temperature: 70 C	Fully potted: √

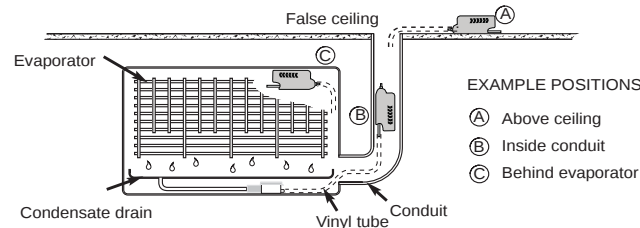
Mute Corner - 20

Technical Data	
Power supply: 100-240V AC 50/60Hz	Tank capacity: 65ml
Max.flow: 20L/h @ 0 head	Discharge tube: 6mmID
Sound level: <19dB(A) @ 1m	Class: II appliance
Max.recommended head: 20m	Rated: continuous
Max.unit output: 28kw/95550Btu/h	IP Protection: IPX5
Safety switch: 5A Normally closed	Thermal protection: √
Max.water temperature: 70 C	Fully potted: √



MPC

Mpc pump is the best selling mini pump offers unrivalled reliability and performance
Able to drain water by siphoning

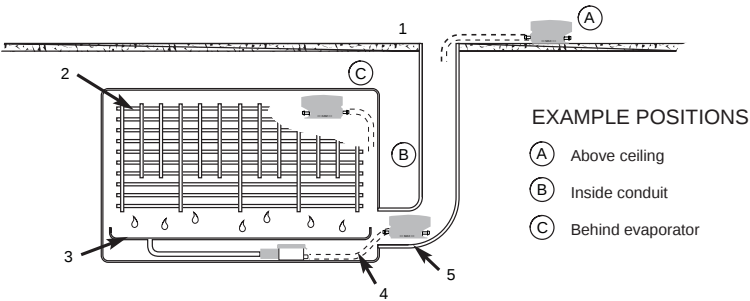


Technical Data	
Power supply: 230V AC 50/60Hz	Discharge tube:6mmID
Max.flow:10L/h @ 0 head	Class: II appliance
Sound level:<21dB(A) @ 1m	Rated:continuous
Tank capacity:40ml	IP Protection:IPX1
Max.recommended head:10m	Thermal protection:√
Max.unit output:16kw/54600Btu/h	Fully potted:√
Safety switch:3A Normally closed	LxWxH:130mmx50mmx40mm
Max.water temperature:40 C	



MAX

Designed for larger units, the Max pump gives you the extra power when you need it.



EXAMPLE POSITIONS

- (A) Above ceiling
- (B) Inside conduit
- (C) Behind evaporator

Technical Data

Power supply: 230V AC 50/60Hz	Max.water temperature:40 C
Max.flow:38L/h @ 0 head	Discharge tube:6mmID
Sound level:<21dB(A) @ 1m	Class: II appliance
Tank capacity:40ml	Rated:continuous
Max.recommended head:12m	IP Protection:IPX1
Max.unit output:46kw/157000Btu/h	Thermal protection:√
Safety switch:3A Normally closed	Fully potted:√
Able to drain water by siphoning	LxWxH:110mmx60mmx45mm

Accessories

Inline Reservoir



Features

- Assembled inline reservoir could include
- a. lid & sensor cable
- b. float
- c. filter
- d. reservoir

Anti-Siphon Joint



Characteristic

Prevent siphon; suitable for pump MUTE series

Reducing Connetor



Characteristic

Adaptors / Straight Connectors

Pump Float



Characteristic

Compatible with all most pumps

Inlet Filter



Characteristic

Prevent dirt entering the pump directly

Inlet Hose



Characteristic

Length: as per request

Fast Clip



Characteristic

Clips onto the fixed rail inside ducts

Vinyl Tubing



Characteristic

Flexible, durable and non toxic
we have the most extensive range on the market

Float switch



Characteristic	
Model	FS1
Max Contac Rating	50W/70VA
Max Switch Voltage	AC300V/DC350V
Min Breakdown Voltage	DC600V
Max Switch Current	AC0.5A/DC0.7A
Max Carry Current	2.5A
Size	3.09"x 2.1" x2.08"

ON guard



Characteristic	
Model:	OG-G1
When water is present a Piezo alarm is activated and power by a 9-volt battery.	
The OG-01 is to make alarm when water is present powered by a 9-volt battery.	
It works for hot water heater pans, behind washing machines, under sinks, in bathrooms, etc	

Revolution Wet Cycle Rotor Switch



Characteristic	
Model:	WCS-01

Vacuum pump



SVPA

The pump has reasonable design, safe and reliable, high pumping speed, ultimate vacuum height, low noise, no fuel injection, no oil leakage, convenient maintenance and beautiful appearance.



SVPB

Float switch



FS2

Characteristic	
Model	FS2
Max Contac Rating	50W/70VA
Max Switch Voltage	AC300V/DC350V
Min Breakdown Voltage	DC600V
Max Switch Current	AC0.5A/DC0.7A
Max Carry Current	2.5A

Detects clogged A/C condensate drains and shuts off the system Inline, low voltage condensate overflow shutoff switch. Install vertically or horizontally in primary drain or can be plugged on auxilliary pans. Pre-wired with 60inch, 20AWG wires. Float Switch model Fs2 can be installed horizontally or vertically, inline or on the primary pan's auxiliary drain outlet by using the included 3/4" adapter, bushing and cap, it can be installed on a sloping line and does not need to be level or plumb. The switch and cap on the FS2 are easily removed for cleaning and for servicing condensate drain lines.



FS3

Characteristic	
Model	FS3
Max Contac Rating	50W/70VA
Max Switch Voltage	AC300V/DC350V
Min Breakdown Voltage	DC600V
Max Switch Current	AC0.5A/DC0.7A
Max Carry Current	2.5A

Detects clogged A/C condensate drains and shuts off the system. Steel mounting bracket clips firmly over the edge of most drain pans. Slim profile can be installed on primary or auxiliary drain pans. Slim profile can be installed on primary or auxiliary drain pans. Pre-wired with 60inch, 20AWG wires.

Clear trap kit



Characteristic	
CTK1	
1" Standard Switched Cross Trap Kit offers the most comprehensive range of tranparent condensate traps available in a variety of styles for many applications.	
This thinner walled trap can be used for light duty applications and is our most economical option.	

CTK2
3/4" Standard Switched Cross Trap Kit Suitable for many applications, the Clear Trap line offers the most comprehensive range of transparent condensate traps with float switch overflow protection. This trap can be used for most applications requiring a automatic shut down. Includes a standard clear u-bend for inspection and access ports for easy cleaning

Single stage vacuum pump

Model	SVP-2		SVP-3		SVP-4		SVP-6		SVP-8		SVP-10		SVP-12	
Frequency(Hz)	50	60	50	60	50	60	50	60	50	60	50	60	50	60
Flow Rate(CFM)	1.5	1.8	2.5	3.0	3.0	3.6	4.5	5.5	6.5	7.5	8.0	9.5	10	12
(l/min)	42	50	70	85	85	100	128	156	185	212	226	270	283	340
Ultimate Vacuum (micron)	150		150		150		150		150		150		150	
Motor Power(HP)	1/4		1/4		1/3		1/3		1/2		3/4		1	
Oil Capacity(ml)	430		400		400		450		480		730		730	
Net Weight(kg)	4.6		5.7		5.8		8.2		8.3		11		11	
Dimensions(mm)	290x125x235		290x125x235		290x125x235		350x135x235		325x135x250		360x155x270		360x155x270	

Dual stage vacuum pump

Model	2SVP-2		2SVP-3		2SVP-4		2SVP-6		2SVP-8		2SVP-10		2SVP-12	
Frequency(Hz)	50	60	50	60	50	60	50	60	50	60	50	60	50	60
Flow Rate(CFM)	1.5	1.8	2.5	3.0	3.0	3.6	4.5	5.5	6.5	7.5	8.0	9.5	10	12
(l/min)	42	50	70	85	85	100	128	156	185	212	226	270	283	340
Ultimate Vacuum (micron)	150		150		150		150		150		150		150	
Motor Power(HP)	1/3		1/3		3/4		1		3/4		4/3		3/2	
Oil Capacity(ml)	430		400		400		450		480		730		600	
Net Weight(kg)	6.12		6.5		9.0		8.82		13.7		13.9		13.9	
Dimensions(mm)	290x125x235		290x125x235		325x135x250		325x155x270		360x155x270		360x155x270		360x155x270	

High performance vacuum pump



HVP

The pump has reasonable design, safe and reliable, high pumping speed, ultimate vacuum height, low noise, no fuel injection, no oil leakage, convenient maintenance and beautiful appearance.

New series for R32

Single Stage Vacuum Pump

Model		HVP115 (HVP-1)	HVP125 (HVP-1.5)	HVP135 (HVP-2)	HVP145 (HVP-2.5)	HVP160 (HVP-3)	HVP180 (HVP-4)	HVP1100 (HVP-5)
Flow Rate	50HZ	1.5CFM	2.5CFM	3.5CFM	4.5CFM	6CFM	8CFM	10CFM
		42L/min	70L/min	100L/min	128L/min	170L/min	226L/min	283L/min
	60HZ	1.8CFM	3CFM	4CFM	5CFM	7CFM	9CFM	12CFM
Ultimate Vacuum		50L/min	84L/min	114L/min	142L/min	198L/min	254L/min	340L/min
		5pa	5pa	5pa	5pa	5pa	5pa	5pa
		150microns	150microns	150microns	150microns	150microns	150microns	150microns
Power		1/4HP	1/4HP	1/3HP	1/3HP	1/2HP	3/4HP	1HP
Inlet Port		1/4"Flare	1/4"Flare	1/4"Flare	1/4"Flare	1/4"&3/8"Flare	1/4"&3/8"Flare	1/4"&3/8"Flare
Oil Capacity		320ml	300ml	350ml	350ml	450ml	700ml	800ml
Dimensions		270x119x216	270x119x216	278x119x216	278x119x216	320x134x232	370x140x250	290x140x250
Weight		5.3kg	5.5kg	6.5kg	6.8kg	10kg	5.5kg	14.5kg

Dual Stage Vacuum Pump

Model		HVP215 (2HVP-0.5)	HVP225 (2HVP-1)	HVP235 (2HVP-1.5)	HVP245 (2HVP-2)	HVP260 (2HVP-3)	HVP280 (2HVP-4)	HVP2100 (2HVP-5)
Flow Rate	50HZ	1.5CFM	2.5CFM	3.5CFM	4.5CFM	6CFM	8CFM	10CFM
		42L/min	70L/min	100L/min	128L/min	170L/min	226L/min	283L/min
	60HZ	1.8CFM	3CFM	4CFM	5CFM	7CFM	9CFM	12CFM
Ultimate Vacuum		50L/min	84L/min	114L/min	142L/min	198L/min	254L/min	340L/min
		3x10 ⁻¹ pa	3x10 ⁻¹ pa	3x10 ⁻¹ pa	3x10 ⁻¹ pa	3x10 ⁻¹ pa	3x10 ⁻¹ pa	3x10 ⁻¹ pa
		25microns	25microns	25microns	25microns	150microns	150microns	25microns
Power		1/4HP	1/3HP	1/3HP	1/2HP	3/4HP	1HP	1HP
Inlet Port		1/4"Flare	1/4"Flare	1/4"&3/8"Flare	1/4"&3/8"Flare	1/4"&3/8"Flare	1/4"&3/8"Flare	1/4"&3/8"Flare
Oil Capacity		180ml	280ml	360ml	350ml	700ml	600ml	700ml
Dimensions		270x119x216	278x119x216	320x134x232	278x119x216	370x140x250	370x140x250	390x140x250
Weight		6kg	7kg	11kg	11.8kg	15kg	15.5kg	16kg

Recovery machine



RM12A

- Economical recovery with 1/2HP, oil-less compressor
- Suitable for all commonly used refrigerants including R410A
- ARI&CE certification approved
- 80% overfilling protection
- The unit will automatically stop when the weight of recovered refrigerant reaches 80% capacity of the tank.
- Low pressure protection
- The unit will automatically stop once the recover is complete, which reduces the need to monitor the whole process.
- Oil separator device
- Purification and recycling of the refrigerants.



RM12C



Filter drier



10cm(4")
Connection hose

Technical Data

Refrigerants	Category III : R12, R134a, R401c, R406A, R500 Category IV : R22, R401A, R401B, R402B, R407C,R407D, R408A, R409A, R411A, R411B, R412A, R502, R509 Category V : R402A, R404A, R407A, R407B, R410A, R507			
Power Supply	220v/50–60Hz		220v/50–60Hz	220v/50–60Hz
Motor	1/2HP			
Motor Speed	1450rpm@50Hz		1750rpm@60Hz	
Maximal Current Draw	4A@220v		8A@100v/110v	
Compressor	Oil-less ,Air-cooled , Piston style			
Automatic safety Shut-off	38.5 bar/3850kPa(558psi)			
Recovery Rate		Category III	Category IV	Category V
	Vapor	0.23kg/min	0.25kg/min	0.26kg/min
	Liquid	1.57kg/min	1.81kg/min	1.85kg/min
	Push/pull	4.64kg/min	5.57kg/min	6.22kg/min
Operating Temperature	0 C ~40 C			
Dimensions (VRR12A)	500mm x 220mm x 340mm			
Weight (VRR12A)	16kg			

Transparent condensation pipe



- 25/50 meter per roll
- Great resistance to the atmospheric agents
- The tube stands temeratures from-10 to 60
- We can produce the sizes and length according to the requirement from the customers

Code	Article
35CF101	DIA.6/9
35CF102	DIA.10/14
35CF103	DIA.15/20
35CF104	DIA.25/31
35CF105	DIA.4/6

Condensation drain pipe



We can produce the sizes according to the requirement from the customers 20 or 25 meter per roll.

Code	Article
31CF301	D16
31CF302	D20
31CF303	D19
31CF304	D25
31CF305	D12

Pvc re - inforced pipe



We can produce the sizes according to the requirement from the customers 20 or 25 meter per roll.

Code	OD(mm)	ID(mm)	Wall(mm)	Colour
81CF101	16	13	2	white
81CF102	20	16	2	white
81CF103	25	20	2	white
81CF104	32	28	2	white
81CF105	40	36	2	white
81CF201	16	13	2	Grey
81CF202	20	16	2	Grey
81CF203	25	20	2	Grey
81CF204	32	28	2	Grey
81CF205	40	36	2	Grey

Corrugated pipe



- Polyethylen of low density ivory colour or white colour
- Stretches of 1 meter / Stretches of 0.5 meter
- With a male/ female sleeve for 101, 104, 107, 108
- Packed in single carton in rolls of 50m

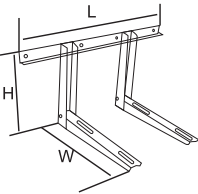
Code	Article
31CF101	DIA.16 &18 single layer PE
31CF102	DIA.18 &20 single layer PE
31CF103	DIA.16 &16/DIA.18 &18 single layer PE
31CF104	DIA.18 &18/DIA.20 &20 single layer PE
31CF105	DIA.16 &18 double layer PE
31CF106	DIA.18 &20 double layer PE
31CF107	DIA.16 &16/DIA.18 &18 double layer PE
31CF108	DIA.18 &18/DIA.20 &20 double layer PE
31CF109	DIA.16 &16/DIA.18 &18 single layer PP
31CF110	DIA.18 &18/DIA.20 &20 single layer PP
31CF111	DIA.16&18 double layer PE

Supports for condensation units



ACB-A

- Features**
- Strong secure support
 - Galvanized steel / SPCC
 - Wall fixing screws can be included also

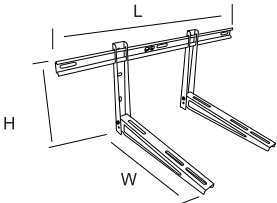


Code	Article			
	H	W	L	thickness
ACB-A01	450	x 560	x 850	(2.0mm)
ACB-A02	450	x 600	x 850	(2.0mm)



ACB-B

- Features**
- Strong secure support
 - Galvanized steel / SPCC
 - Wall fixing screws can be included also
 - The thickness of cross bar is available in 1.0mm, 1.2mm, 1.5mm, 1.8mm.

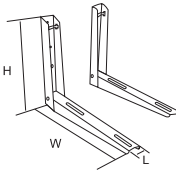


Code	Article				Material
	H	W	L	thickness	
ACB-B01	350	x 420	x 800	(1.5mm)	Galvanized Steel (Powder coated)
ACB-B02	350	x 450	x 800	(1.5mm)	Galvanized Steel (Powder coated)
ACB-B03	350	x 460	x 800	(1.5mm)	Galvanized Steel (Powder coated)
ACB-B04	350	x 550	x 800	(1.5mm)	Galvanized Steel (Powder coated)
ACB-B05	350	x 420	x 800	(1.8mm)	Galvanized Steel (Powder coated)
ACB-B06	350	x 450	x 800	(1.8mm)	Galvanized Steel (Powder coated)
ACB-B07	350	x 460	x 800	(1.8mm)	Galvanized Steel (Powder coated)
ACB-B08	350	x 550	x 800	(1.8mm)	Galvanized Steel (Powder coated)
ACB-B09	450	x 550	x 800	(1.8mm)	Galvanized Steel (Powder coated)
ACB-B10	450	x 550	x 850	(1.8mm)	Galvanized Steel (Powder coated)
ACB-B11	450	x 550	x 850	(2.0mm)	Galvanized Steel (Powder coated)
ACB-B12	350	x 450	x 800	(1.5mm)	Stainless Steel #304
ACB-B13	450	x 550	x 850	(1.8mm)	Stainless Steel #304



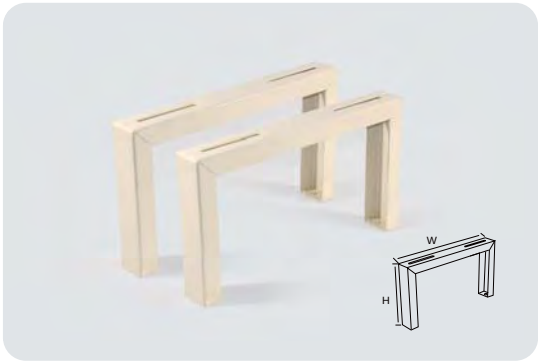
ACB-C

- Features**
- Strong secure support
 - Galvanized steel / SPCC
 - Wall fixing screws can be included also



Code	Article			
	H	W	L	thickness
ACB-C01	390	x 450	x 50	(1.5mm)
ACB-C02	450	x 550	x 50	(2.0mm)
ACB-C03	450	x 550	x 50	(2.0mm)



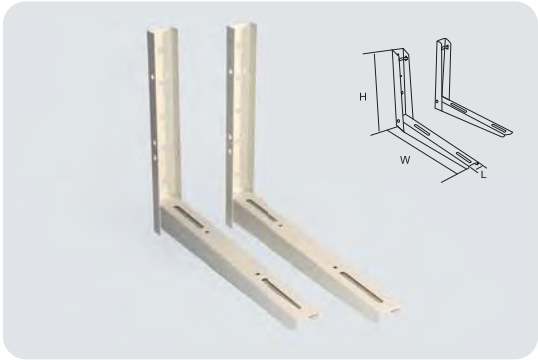


ACB-D

Features

- Painted in ivory epoxy poliester
- Thickness 2mm
- Galvanized steel / SPCC
- Combines with antivibrator Sg40 (51CF201)allows leveling of gradient of sloped surface

Code	Article	
	W	H
ACB-D01	Small model 400 x 250mm	
ACB-D02	Medium model 460 x 250mm	

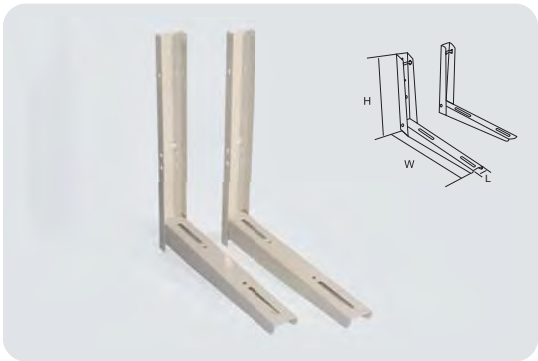


ACB-E

Features

- Strong secure support
- Galvanized steel / SPCC
- Includes level for convenience

Code	Article			
	H	W	L	thickness
ACB-E01	450	500	50	(1.8mm)
ACB-E02	500	400	50	(1.8mm)
ACB-E03	500	450	50	(1.8mm)
ACB-E04	500	500	50	(1.8mm)
ACB-E05	500	550	50	(1.8mm)
ACB-E06	500	400	50	(1.5mm)
ACB-E07	500	450	50	(1.5mm)
ACB-E08	500	500	50	(1.5mm)
ACB-E09	500	550	50	(1.5mm)
ACB-E10	400	400	50	(1.5mm)
ACB-E11	400	450	50	(1.5mm)
ACB-E12	400	500	50	(1.5mm)
ACB-E13	400	550	50	(1.5mm)
ACB-E14	450	450	50	(1.5mm)
ACB-E15	450	500	50	(1.5mm)
ACB-E16	450	500	50	(2.0mm)



ACB-F

Features

- Strong secure support
- Galvanized steel / SPCC
- Includes level for convenience

Code	Article			
	H	W	L	thickness
ACB-F01	500	400	60	(1.5mm)
ACB-F02	500	500	60	(1.5mm)
ACB-F03	600	500	60	(1.8mm)
ACB-F04	1000	600	60	(3.0mm)

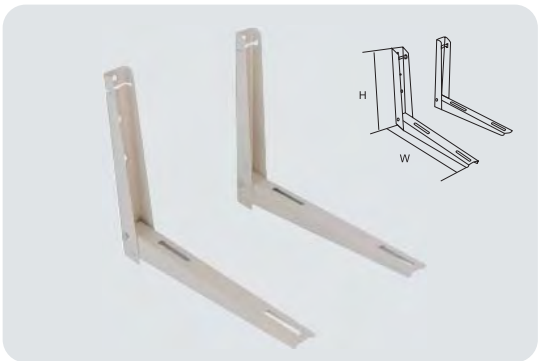


ACB-G

Features

- Strong secure support
- Galvanized steel / SPCC
- Wall fixing screws can be included also

Code	Article			
	H	W	L	thickness
ACB-G01	400	400		(1.5mm)
ACB-G02	450	450		(1.5mm)
ACB-G03	500	500		(2.0mm)



ACB-H

Features

- Strong secure support
- Galvanized steel / SPCC
- Wall fixing screws can be included also

Code	Article		
	H	W	thickness
ACB-H01	450	350	(1.5mm)
ACB-H02	550	450	(1.8mm)

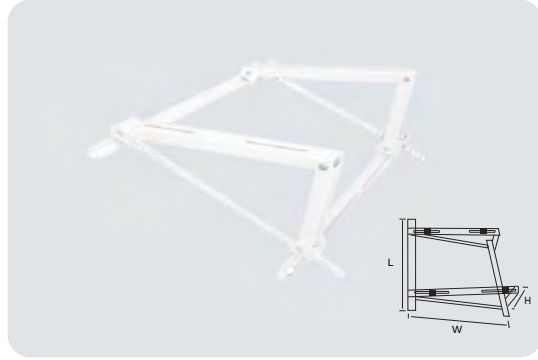


ACB-J

Features

- Strong secure support
- Galvanized steel / SPCC
- Includes level for convenience

Code	Article		
	H	W	L
ACB-J01	380	400	850
ACB-J02	480	400	850
ACB-J03	550	400	1000
ACB-J04	600	400	1000



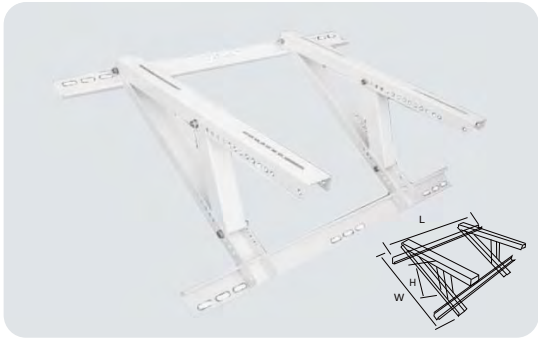
21CF71

Code	Article		
	H	W	L
21CF711	250	450	800
21CF712	250	550	800



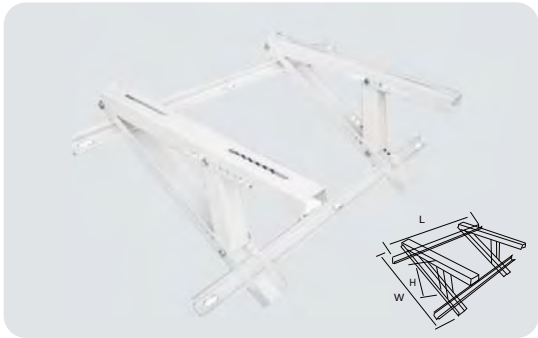
21CF72

Code	Article		
	H	W	L
21CF721	250	450	800
21CF722	250	550	800



21CF73

Code	Article		
	H	W	L
21CF731	250 x 450 x 800		
21CF732	250 x 550 x 800		



21CF74

Code	Article		
	H	W	L
21CF741	250 x 450 x 800		
21CF742	250 x 550 x 800		

Square Bubble Level - BLS



Round Bubble Level - BLR



Accessories for recommended supports

AG35



Features	
Code	Article
51CF101	AG35 M8
51CF102	AG35-23 M8
51CF103	AG35-24 M8

AG45



Features	
Code	Article
51CF104	AG45 M8
51CF105	AG45-19 M8

SG40



Features	
Code	Article
51CF201	SG40 M8
51CF202	SG40-25 M8
51CF203	SG40-22 M10

SG60



Features	
Code	Article
51CF204	SG60 M10

S30



Features	
Code	Article
51CF501	S30 35x20
51CF502	S26 40x40

AA30/40



Features	
Code	Article
51CF401	AA30 MM 30x20
51CF402	AA40 MM 40x40

AGB35/45



Features	
Code	Article
51CF301	AGB35 M8
51CF302	AGB45 M8

AT



Features	
Code	Article
51CF601	AT Series

Rubber wedge

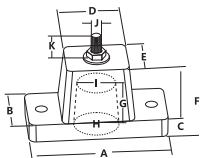


Features	
Code	Article
51CF701	AG 43x25

Supports For Condensation Units



ACR-A



Model	A	B	C	D	E	F	G	H	I	J	K	Applicable Scope
ACR-A01	100	48	17	45	42	42	33	35	30	8	20	7500Btu-24000Btu A/C

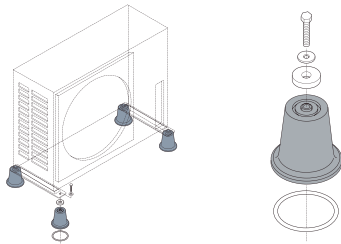


ACR-C

Model	Article
ACR-C01	7500Btu-24000Btu A/C



ACR-DT

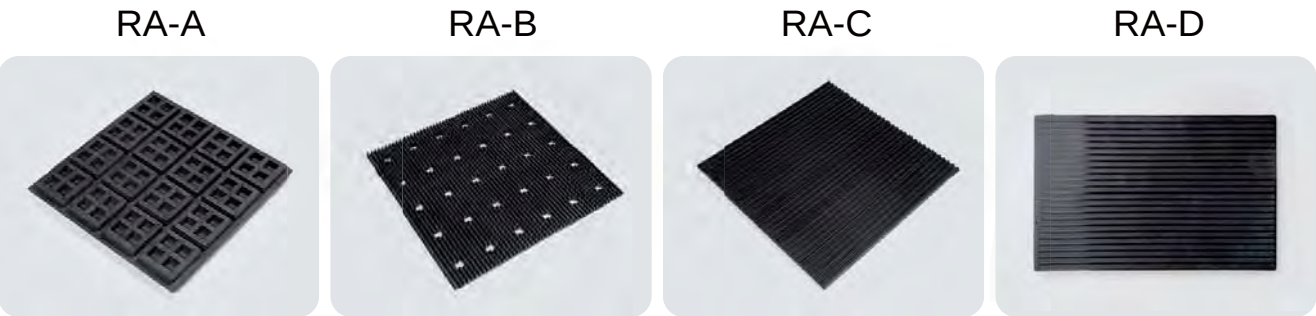


Model	Article
ACR-D02	7500Btu-24000Btu A/C
ACR-D01	7500Btu-24000Btu A/C



ACR-D

Rubber Antivibrator Sheet



Features	Features	Features	Features
Article(mm) 210x210x20	Code 19CF-W61012	Code 51CF-W6805	Article(mm) 295x195x5.6

Supports For Condensation Units - FST



Floor Support FST-1

- Hard PVC color black or ivory
- Allowable load up to 140kg per foot
- Includes: 2 screws M10 *32
2 nuts M10
2 washers M10
- Could be with Foam Tape or rubber

Code	Article
22CF101	Length 350 mm black
22CF102	Length 450 mm black
22CF103	Length 1000 mm black
22CF104	Length 350 mm Ivory
22CF105	Length 420 mm Ivory
22CF106	Length 1000 mm Ivory



Floor Support FST-2A

- Allowable load up to 140kg
- Light weight, easy storage and good vibration and shock - absorbtion

Code	Article
22CF201A	Length 400 mm black
22CF202A	Length 420 mm black
22CF203A	Length 400 mm Ivory
22CF204A	Length 420 mm Ivory



Floor Support FST-2B

- Allowable load up to 140kg
- Light weight, easy storage and good vibration and shock - absorbtion

Code	Article
22CF201B	Length 400 mm black
22CF202B	Length 420 mm black
22CF203B	Length 400 mm Ivory
22CF204B	Length 420 mm Ivory
22CF205B	Length 450 mm Ivory



Floor Support FST-3

- Allowable load up to 140kg
- Light weight, easy storage and good vibration and shock - absorbtion

Code	Article
22CF301	Length 350 mm black
22CF302	Length 450 mm black
22CF303	Length 1000 mm black
22CF304	Length 350 mm Ivory
22CF305	Length 450 mm Ivory
22CF306	Length 1000 mm Ivory

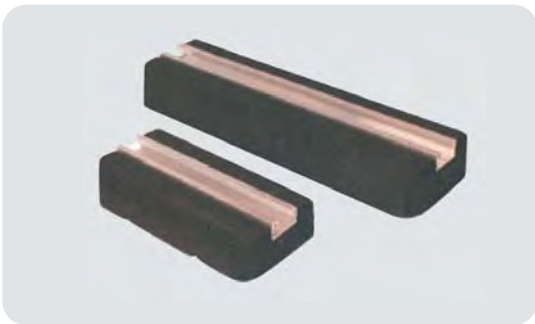
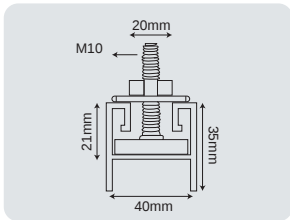
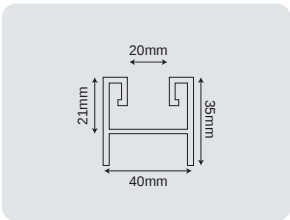
Supports For Condensation Units



Floor Support FST- 4A

- Ideal for rooftop support of equipment & systems
- Weather resistant
- Recycled crumb rebber pad
- Recessed underside permits solid stance
- Aluminum track permits the use of standard strut hardwarw(not included)
- Max load capacity: 22CF401A-356lbs \ 22CF402A-572lbs \ 22CF403A - 1045lbs \ 22CF404A - 1420lbs

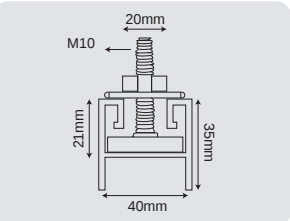
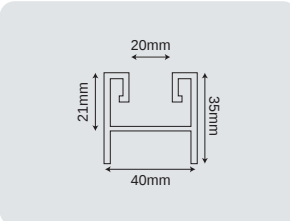
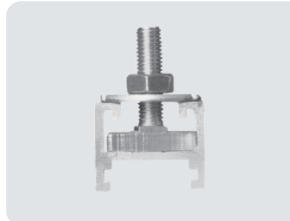
Code	Article
22CF401A	Fix - it - Foot 10"
22CF402A	Fix - it - Foot 16"
22CF403A	Fix - it - Foot 24"
22CF404A	Fix - it - Foot 40"



Floor Support FST- 4B

- Ideal for rooftop support of equipment & systems
- Weather resistant
- Recycled crumb rebber pad
- Recessed underside permits solid stance
- Aluminum track permits the use of standard strut hardwarw(not included)
- Max load capacity: 22CF401B-356lbs \ 22CF402B-572lbs

Code	Article
22CF401B	Fix - it - Foot 10"
22CF402B	Fix - it - Foot 16"



Protection Cloths For External Unit A - PCEA

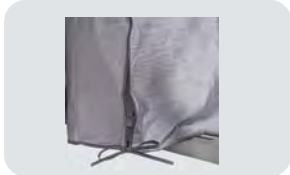


Item No	Description(LxWxH)
PCEA760	760x270x560
PCEA800	800x300x600
PCEA850	860x400x700
PCEA950	950x400x850

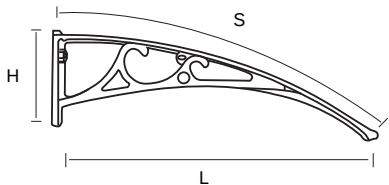
Protection Cloths For External Unit B - PCEB



Item No	Description(LxWxH)
PCEB700	700x250x550
PCEB810	810x290x560
PCEB840	840x340x640
PCEB860	860x325x840
PCEB945	945x310x610
PCEB970	970x370x750



Pvc Air Conditioner Outdoor Cover - PACOC



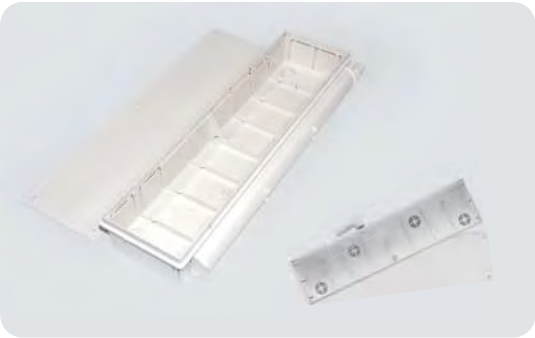
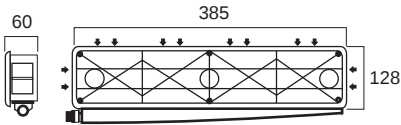
Item No	S(mm)	H(mm)	L(mm)
PACOC650	650	150	600
PACOC800	800	220	770
PACOC1080	1080	280	1000
PACOC1550	1550	290	1500

Box to fit installation



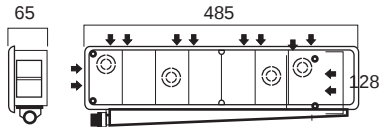
32CF101

- Box to fit in ABS with white over
- Dimension: 385x128x60mm
- Horizontal outlet
- Can be with elbow

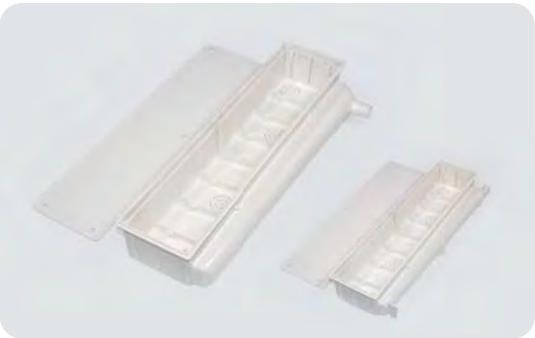


32CF106 & 32CF107

- Box to fit in ABS with white over
- Including svrew kit (6 screws)
- Can be with elbow

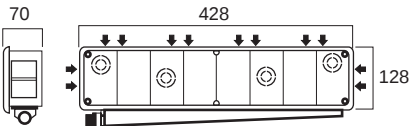


Code	Article	Outlet
32CF106	485x128x65mm	Horizontal outlet
32CF107	485x128x65mm	Indirect elbow



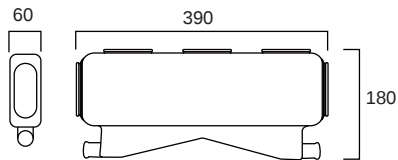
32CF102 & 32CF103

- Box to fit in ABS with white over
- Including svrew kit (6 screws)
- Can be with elbow



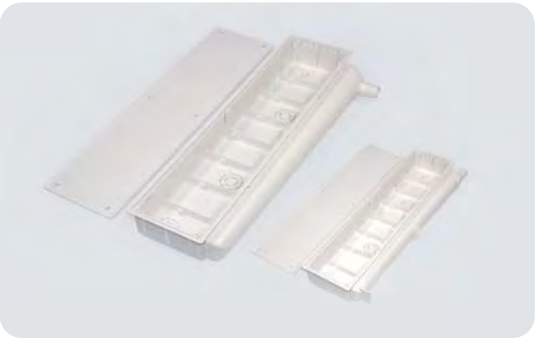
32CF108

- Box to fit in ABS with black cover
- Including screw kit



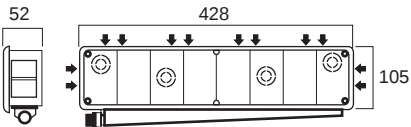
Code	Article	Outlet
32CF102	428x128x70mm	Horizontal outlet
32CF103	428x128x70mm	Vertical outlet

Code	Article	Outlet
32CF108	390x180x60mm	Horizontal outlet



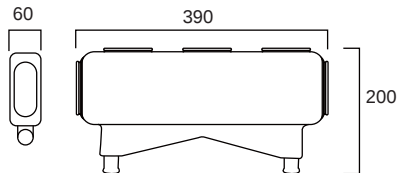
32CF104 & 32CF105

- Box to fit in ABS with white over
- Including svrew kit (6 screws)
- Can be with elbow



32CF109

- Box to fit in ABS with black cover
- Including screw kit

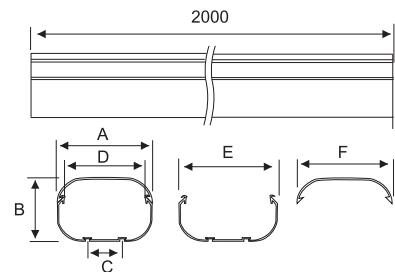


Code	Article	Outlet
32CF104	428x105x52mm	Horizontal outlet
32CF105	428x105x52mm	Vertical outlet

Code	Article	Outlet
32CF109	390x200x60mm	Vertical outlet

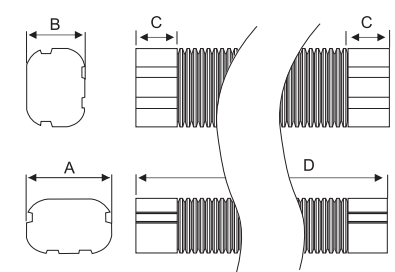
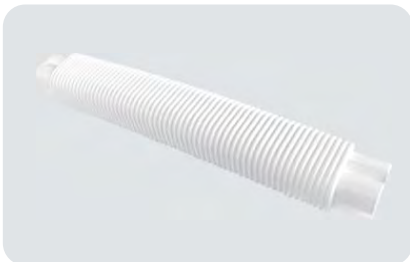
Slim Duct

Straight Duct



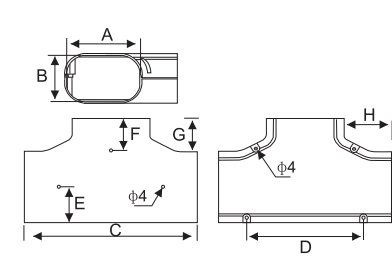
Features						
Model	A	B	C	D	E	F
SD01	80	63		56	79	74
SD02	110	78	40	90	118	108
SD03	150	100	55	126	158	150

Flexible Joint



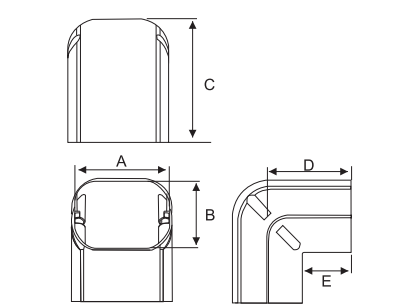
Features				
Model	A	B	C	D
FJ01	76	60	50	750
FJ02	106	73	50	750
FJ03	146	97	50	750

T Joint



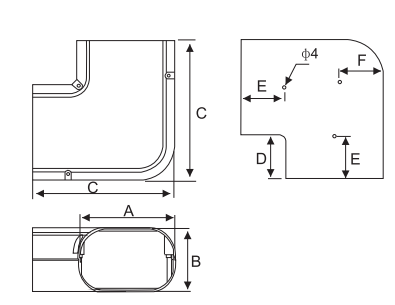
Features								
Model	A	B	C	D	E	F	G	H
TJ01	110	76	260	176	58	52	53	72
TJ02	150	100	340	210	78	65	64	92

Elbow(Vertical)



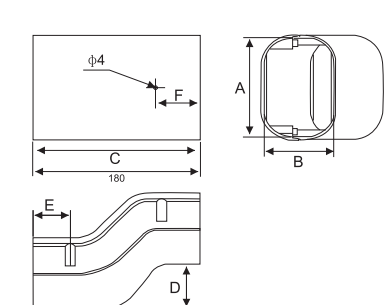
Features					
Model	A	B	C	D	E
VE01	80	63	114	80	48
VE02	110	78	138	95	57
VE03	150	100	183	126	78

Elbow(Horizontal)



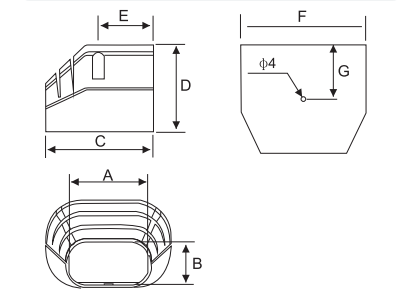
Features						
Model	A	B	C	D	E	F
EH01	80	63	124	40	35	40
EH02	110	78	170	54	52	52
EH03	150	100	228	72	70	70

Bridge Bend



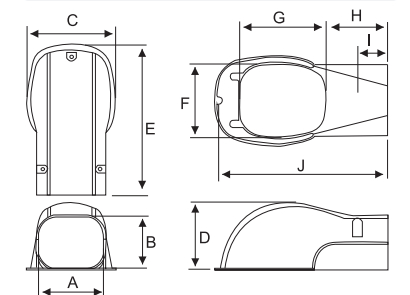
Features						
Model	A	B	C	D	E	F
BB01	80	63	180	50	35	35
BB02	110	78	180	50	40	48
BB03	150	100	180	50	50	50

End Socket



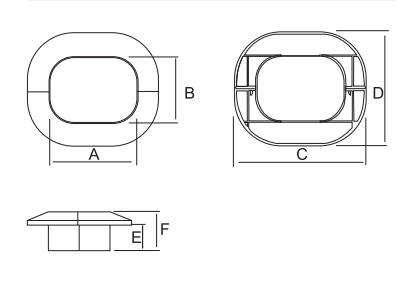
Features							
Model	A	B	C	D	E	F	G
ES01	56	31	70	67	35	85	35
ES02	73	40	100	80	50	116	50
ES03	135	54	130	105	65	156	63

Outlet Cover



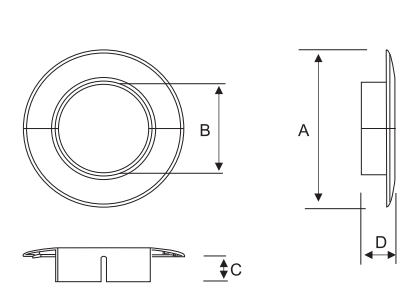
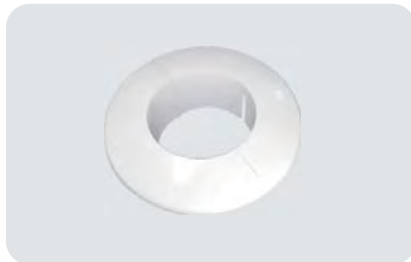
Features										
Model	A	B	C	D	E	F	G	H	I	J
OC01	80	63	110	82	200	88	100	71	35	195
OC02	110	76	150	100	250	118	125	88	42	247
OC03	150	100	200	130	290	158	140	111	65	286

Wall Flange



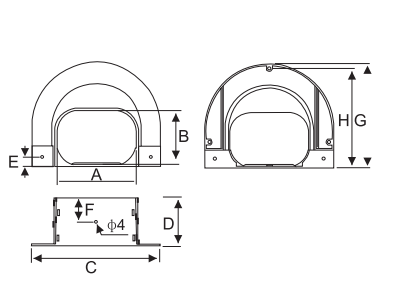
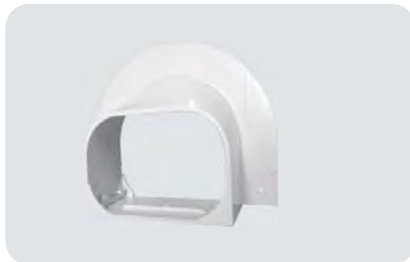
Features						
Model	A	B	C	D	E	F
WF01	80	63	123	105	20	32
WF02	110	76	166	132	15	45
WF03	150	100	220	170	20	50

Wall Cover



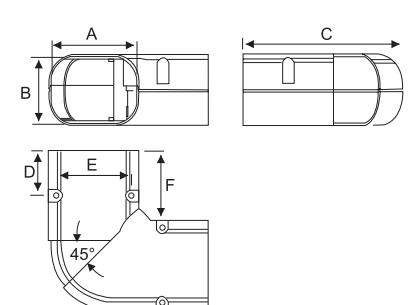
Features				
Model	A	B	C	D
WC01	110	59	20	30
WC02	127	71	20	27

Ceiling Plate



Features								
Model	A	B	C	D	E	F	G	H
CP01	80	63	124	45	11	23	105	100
CP02	100	76	180	66	13	33	142	137
CP03	150	100	230	86	14	43	186	180

Universal Elboe
(Horizontal)



Features						
Model	A	B	C	C	C	C
UE01	80	63	150	43	70	65
UE02	110	76	200	65	98	82
UE03	150	100	280	80	132	121



Refrigerant

Uses and Features

- Wide use in household and commercial refrigeration, and automotive air-conditioning. Properties make R134a suitable for use in medium temperature food cabinets, water chillers and fountainsheat pumps and dehumidifiers.
- Increasing use as a replacement for CFC-12.
- Blowing agent for various foams.
- Propellant for aerosol pharmaceuticals, lacquers, deodourants, perfumes, mousses, air fresheners, insecticides, cleaning and other household products.

Material Compatibility

Most common materials are suitable for use under normal conditions in a dry system, At high temperatures, use stainless steel or Inconel to resist corrosive breakdown products. Avoid using alloys with more than 2% magnesium (i.e some aluminium alloys) especially when moisture is present. May react violently with sodium. potassium, barium and other alkali or alkaline earth metals. Flexible hoses or gaskets should not contain natural rubber as rapid withdrawals of gas/liquid can extract compounding ingredients and it also suffers from excessive swelling.



A colourless, non-flammable gas at atmospheric pressure with slight ethereal odour. Supplied at low pressure in metal cylinders. Also available premixed with UV dye.

Classifications	
H.S.Code	3824780000
UN Number	3159
Class	2.2

Package:
Non-refillable cylinder of 6.8Kgs,10.9kg,11.3kg,13.6Kgs. 22.7Kgs.
Ton cylinder of 1000Kgs
Can of 340g, 750g, 800g
ISO Tank of 18ton
General type:
R22, R134, R404, R407, R410, R507

Physical Properties	
Chemical Formula	1,1,1,2-tetrafluoroethane
Boiling Point	
C @101.3kPa	-26.1
F @14.7psia	-14.9
Critical Temperature	
C	101.1
F	214.0
Purity	99.9
% by weight(min)	
Water Content	10
ppm by weight(max)	
Acidity	1.0
ppm by weight(max) (as HCL)	
Non Condensable Gasses	1.5
Content measured on vapour phase	
% by volums(max)	
Residues at High Boiling Point	0.01
% by volume(max)	
Chloride	pass
No visible turbidity	

Refrigeration tubes as per en12735-1, in coils, soft temper (R220)



ENDS CAPPED, IN SHRINKING WRAPPED BAG IN CARDBOARD BOX

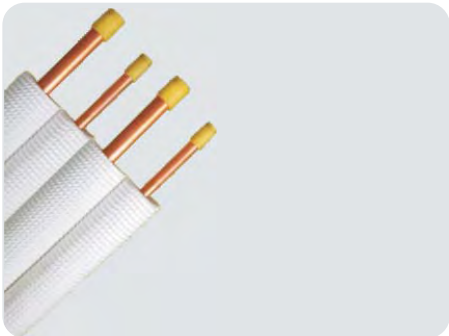
Outside Diameter (inch)	Outside Diameter (mm)	Wall Thickness(mm)	Nominal Weight(kgs)		Packing Carton Dimension(cm3)	Colis per Carton
			(15 Meters)	(15.24 Meters)		
3/16	4.76	0.8	1.33	1.35	40x40x18.5	16
1/4	6.35	0.8	1.86	1.89	40x40x18.5	12
1/4	6.35	1.0	2.25	2.28	40x40x18.5	12
5/16	7.94	0.8	2.40	2.44	40x40x18.5	10
5/16	7.94	1.0	2.91	2.96	40x40x18.5	10
3/8	9.52	0.8	2.93	2.98	45x45x18.5	8
3/8	9.52	1.0	3.58	3.64	45x45x18.5	8
1/2	12.70	0.8	4.00	4.06	50x50x18.5	6
1/2	12.70	1.0	4.91	4.99	50x50x18.5	6
5/8	15.88	1.0	6.25	6.35	55x55x18.5	5
3/4	19.05	1.0	7.58	7.70	60x60x18.5	4
7/8	22.22	1.0	8.91	9.06	65x65x18.5	3
8	8	0.8	2.42	2.46	40x40x18.5	10
8	8	1.0	2.94	2.99	40x40x18.5	10
10	10	0.8	3.09	3.14	45x45x18.5	8
10	10	1.0	3.78	3.84	45x45x18.5	8
12	12	1.0	4.62	4.69	50x50x18.5	6
15	15	1.0	5.88	5.97	55x55x18.5	5
18	18	1.0	7.14	7.25	60x60x18.5	4
22	22	1.0	8.82	8.89	65x65x18.5	3

Insulated copper tube



- Inside cleaned copper tubes for refrigerant gas and closed at the extremities.
- Phosphorus deoxidized soft temper copper pipe DHP99.9(C12200).
- Dimensions and features according to ASTM B280,EN 12735-1, As1571 Kent pair coil specifications
- Color:white, grey blac

Copper tube Outside(inch)	Diameter × Wallthickness(mm)	Pair colls Per catron	Pair colls Length	
			(20m)	(30m)
1/4-3/8	6.35x0.81-9.52x0.81	1	57x18x57	68x18x68
1/4-1/2	6.35x0.81-12.70x0.81	1	59x19x59	70x19x70
1/4-5/8	6.35x0.81-15.88x1.02	1	72x20x72	83x22x83
3/8-1/2	9.52x0.81-12.70x0.81	1	61x19x61	72x19x72
3/8-5/8	9.52x0.81-15.88x1.02	1	72x20x70	83x22x83
3/8-3/4	9.52x0.81-19.05x1.14	1	75x22x75	87x22x87
1/2-3/4	12.70x0.81-19.05x1.14	1	75x22x75	87x22x87



Single coil specifications

Corlor: white,black,grey

Copper tube Outside(inch)	Diameter × Wallthickness(mm)	Palr colls Per catron	Palr colls Length		
			(20m)	(30m)	(50m)
1/4"	6.35x0.81	1	46x15x46	53x15x53	59x19x59
3/8"	9.52x0.81	1	51x15x57	58x15x58	65x20x65
1/2"	12.7x0.81	1	53x16x53	61x16x61	70x22x70
5/8"	15.88x1.02	1	65x19x65	70x20x70	80x24x80
3/4"	19.05x1.14	1	67x19x67	74x20x74	85x24x85



Aluminum foil combined insulation

Made of insulation roll with aluminum foil, aluminum foil combined insulation provide perfect properties for avoid of vapor penetration and wxcellent reflection.
Size same as normal insulation roll



Rubber insulation properties

Extruded and closed cell synthetic rubber with external protection.
DENSITY (KG/M3):70-90
THERMAL CONDUCTIVITY:
-20 C 0 C 40 C
[W(M.K)] 0.031 0.034 0.038

- * Working temperature from -50 C until + 110 C (Flat surfaces +85 C)
- * Reaction to fire: self-wxtinguishing GB 8624B1 (oxygen index>34%) nonflammable
- * Vapour resistance: μ>5000
- * White external non toxic and resistance to external chemical agents and ultraviolat rays
- *RoHS Certificate approved

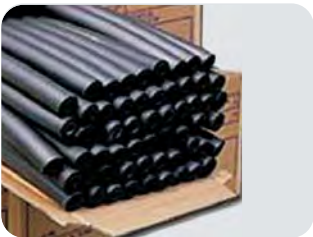


Rubber insulation pipe - RIP

* Characterized by totally closed cell structure and based on high synthetic rubber
* Widely used for the insulation of pipework and ducting
Standard Carton Size: 1850mm*395mm*330mm (6ft ppe) 115ctns/ 20'Fcl; 230ctns / 40'FCL; 270ctns / 40' HQ

Insulation material & cutting part

Polyolefins - - PE XPE(water cross linked PE)
IPE(ELECTRIC CROSS LINKED PE)
Elastomers - - Nltrile Foam(closed cell PVC/NBR foam) (open cell PVC/NBR)
EPDM Foam
PVC - - - - - PVC Foam
Polyurethanes
Textitles Fiber



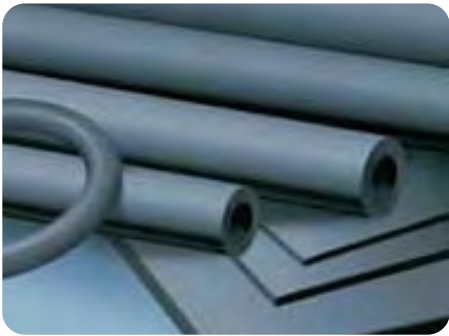
Fire retardant insulation pipe

Insulation Properties

- * Extruded and closed cell white polyethylene with a white outside PE-protection layer
- * Fire retardant certification: M1 VHF-1
- * Heating conduction at 0 C ≤0.033 W/mK
- * Average Density: 33Kg/m³

- * Working temperature from -40 C until +105 C
- * Vapour resistance: μ>5000
- * White external non toxic and resistance to external chemical agents and ultra-violat rays
- * RoHS Certificate approved

	Processing	Application
	Die-Cutting	Vibration Dampening
	Laminating	Sound Abaorption
	Slitting	Cushioning
	Sheeting	Insulation
	Sealing	Gasketing
	Bonding	Shock Absorption
	Assembly	Pakaging



Rubber insulation sheet

Standard Size
TK: 3mm, 6mm,9mm,13mm,16mm,19mm,25mm
Width: 1m; Length:1.2,10m

ID Mm(inch)	3/8" (10MM) Pcs/ctn	1/2" (13MM) Pcs/ctn	3/4" (19MM) Pcs/ctn	1" (19MM) Pcs/ctn
6(1/4")	168	120	48	30
10(3/8")	120	100	36	28
13(1/2")	100	80	30	24
16(5/8")	90	63	30	20
19(3/4")	72	56	26	20
22(7/8")	65	42	24	18
25(1")	49	36	20	18
28(1 1/8")	49	36	20	16
32(1 1/4")	42	30	20	15
35(1 3/8")	36	30	18	12
42(15/8")	30	25	16	10
48(1 17/8")	28	20	12	9
51(2")	24	20	12	9
54(21/8")	20	18	12	9
60(23/8")	20	18	9	8
67(25/8")	18	13	8	8
73(27/8")	18	13	8	8
76(3")	18	12	8	8
79(31/8")	15	12	6	6
89(31/2")	15	12	6	6

90°SR Elbow-CxC



ASME B16.22	EN1254-1
SL1/4	L6
SL5-16	L8
SL3-8	L10
SL1-2	L12
SL5/8	L15
SL3/4	L18
SL7/8	L22
SL1	L25
SL1 1/8	L28
SL1 1/4	L32
SL1 3/8	L35
SL1 1/2	L38
SL1 5/8	L42
SL1 3/4	L45
SL2	L50
SL2 1/8	L54
SL2 5/8	L67
SL3	L76
SL3 5/8	L92
SL4 1/8	L105
SL5 1/8	L130

90°SR Street Elbow-FxC



ASME B16.22	EN1254-1
SF3/8	CCL 10
SF1/2	CCL 12
SF5/8	CCL 15
SF3/4	CCL 18
SF7/8	L 22
SF1	L 25
SF1 1/8	L 28
SF1 1/4	L 32
SF1 3/8	L 35
SF1 1/2	L 38
SF1 5/8	L 42
SF1 3/4	L 45
SF2	L 50
SF2 1/8	L 54
SF2 5/8	L 67
SF3	L 76

90°Reducing Elbow-CxC



ASME B16.22	EN1254-1
RL5/8x3/8	L15x10
RL5/8x1/2	L15x12
RL7/8x1/2	L22x12
RL7/8x5/8	L22x15
RL1 1/8x7/8	L28x22
RL1 1/8x5/8	L28x15
RL1 3/8x7/8	L35x22
RL1 3/8x1 1/8	L35x28
RL1 5/8x1 1/8	L42x28
RL1 5/8x1 3/8	L42x35
RL2 1/8x1 5/8	L54x42
RL2 1/8x1 3/8	L54x35

Coupling Rolled Stop-CxC



ASME B16.22	EN1254-1
S1/4	S6
S5/16	S8
S3/8	S10
S1/2	S12
S5/8	S15
S3/4	S18
S7/8	S22
S1	S25
S1 1/8	S28
S1 1/4	S32
S1 3/8	S35
S1 1/2	S38
S1 5/8	S42
S1 3/4	S54
S2	S50
S2 1/8	S54
S2 5/8	S67
S3	S76
S3 5/8	S92
S4 1/8	S105
S5 1/8	S130
S6 1/8	S155

Reducing Coupling-CxC



ASME B16.22	EN1254-1
S3/8x1/4	S10x6
S1/2x1/4	S12x6
S5/8x3/8	S15x10
S5/8x1/2	S15x12
S1 1/8x5/8	S28x15
S1 1/8x7/8	S28x22
S1 3/8x5/8	S35x15
S1 3/8x7/8	S35x22
S1 3/8x1 1/8	S42x28
S1 5/8x1 1/8	S42x35
S1 5/8x1 3/8	S54x28
S2 1/8x1 3/8	S54x35
S2 1/8x1 5/8	S54x42
S2 1/8x1 5/8	S67x22
S2 5/8x7/8	S67x28
S2 5/8x1 1/8	S67x35
S2 5/8x1 3/8	S67x42
S2 5/8x2 5/8	S67x54
S3 1/8x1 1/8	S76x28
S3 1/8x1 3/8	S76x35
S3 1/8x1 5/8	S76x42
S3 1/8x2 1/8	S76x54
S3 1/8x2 5/8	S76x67

Reducing Coupling-FxC



ASME B16.22	EN1254-1
CCS5/8x3/8	CCS15x10
CCS5/8x1/2	CCS15x12
CCS1 1/8x5/8	CCS28x15
CCS1 1/8x7/8	CCS28x22
CCS1 3/8x5/8	CCS35x15
CCS1 3/8x7/8	CCS35x22
CCS1 3/8x1 1/8	CCS35x28
CCS1 5/8x7/8	CCS42x22
CCS1 5/8x1 1/8	CCS42x28
CCS1 5/8x1 3/8	CCS42x35
CCS2 1/8x1 1/8	CCS54x28
CCS2 1/8x1 3/8	CCS54x35
CCS2 1/8x1 5/8	CCS54x42
CCS2 5/8x1 1/8	CCS67x28
CCS2 5/8x1 3/8	CCS67x35
CCS2 5/8x1 5/8	CCS67x42
CCS2 5/8x2 1/8	CCS67x54
CCS3 1/8x1 3/8	CCS76x35
CCS3 1/8x1 5/8	CCS76x42
CCS3 1/8x2 1/8	CCS76x54
CCS3 1/8x2 5/8	CCS76x67

90°LR Elbow-CxC



ASME B16.22	EN1254-1
LC1/4	L6
LC5/16	L8
LC3/8	L10
LC1/2	L12
LC5/8	L15
LC3/4	L18
LC7/8	L22
LC1	L25
LC1 1/8	L28
LC1 1/4	L32
LC1 3/8	L35
LC1 1/1	L38
LC1 5/8	L42
LC1 3/4	L45
LC2	L50
LC2 1/8	L54
LC2 5/8	L67
LC3	L76
LC3 5/8	L92
LC4 1/8	L105

Equal Tee(CxCxC)



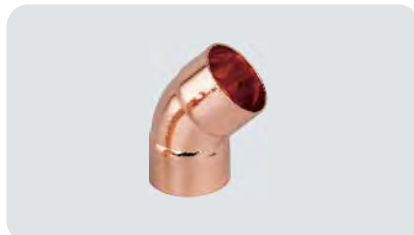
ASME B16.22	EN1254-1
T1/4	L6
T5/16	L8
T3/8	L10
T1/2	L12
T5/8	L15
T3/4	L18
T7/8	L22
T1	L25
T1 1/8	L28
T1 1/4	L32
T1 3/8	L35
T1 1/2	L38
T1 5/8	L42
T1 3/4	L45
T2	L50
T2 1/8	L54
T2 5/8	L67
T3	L76
T3 5/8	L92
T4 1/8	L105
T5 1/8	L130
T6 1/8	L155

Reducing Tee(CxCxC)



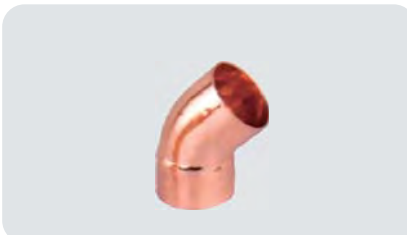
ASME B16.22	EN1254-1
T7/8x7/8x5/8	T22X22X15
T1 1/8x1 1/8x7/8	T28X28X22
T1 3/8x1 3/8x7/8	T35X35X22
T1 3/8x1 3/8x1 1/8	T35X35X28
T1 5/8x1 5/8x1 1/8	T42X42X28
T1 5/8x1 5/8x1 3/8	T42X42X35
T2 1/8x2 1/8x7/8	T54X54X22
T2 1/8x2 1/8x1 1/8	T54X54X28
T2 1/8x2 1/8x1 3/8	T54X54X35
T2 1/8x2 1/8x1 5/8	T54X54X42
T2 5/8x2 5/8x1 3/8	T67X67X35
T2 5/8x2 5/8x1 5/8	T67X67X42
T2 5/8x2 5/8x2 1/8	T67X67X54
T3 1/8x3 1/8x1 5/8	T76X76X42
T3 1/8x3 1/8x2 1/8	T76X76X54
T3 1/8x3 1/8x2 5/8	T76X76X67
T4 1/8x4 1/8x3 1/8	T108X108X76
T5 1/8x5 1/8x4 1/8	T133X133X108
T6 1/8x6 1/8x3 1/8	T159X159X108
T6 1/8x6 1/8x5 1/8	T159X159X133

45°Elbow-CxC



ASME B16.22	EN1254-1
45L 1/4	45L 6
45L 5/15	45L 8
45L 3/8	45L 10
45L 1/2	45L 12
45L 5/8	45L 15
45L 3/4	45L 18
45L 7/8	45L 22
45L 1	45L 25
45L 1 1/8	45L 28
45L 1 1/4	45L 32
45L 1 3/8	45L 35
45L 1 1/2	45L 38
CCL 1 5/8	CCL 42
CCL 1 3/4	CCL 45
CCL 2	CCL 50
CCL 2 1/8	CCL 54
CCL 2 5/8	CCL 67
CCL 3	CCL 76
CCL 3 5/8	CCL 92
CCL 4 1/8	CCL 105

45° Street Elbow-FxC



ASME B16.22	EN1254-1
45CCCL5/8	45CCCL15
45CCCL3/4	45CCCL18
45CCCL7/8	45CCCL22
45CCCL1	45CCCL25
45CCCL1 1/8	45CCCL28
45CCCL1 1/4	45CCCL32
45CCCL1 3/8	45CCCL35
45CCCL1 1/2	45CCCL38
45CCCL1 5/8	45CCCL42
45CCCL1 3/4	45CCCL45
45CCCL2	45CCCL50
45CCCL2 1/8	45CCCL54
45CCCL2 5/8	45CCCL67
45CCCL3	45CCCL76

U Bend-CxC



ASME B16.22	EN1254-1
UL 1/4	UL 6
UL 3/8	UL 10
UL 1/2	UL 12
UL 5/8	UL 15
UL 3/4	UL 18
UL 7/8	UL 22
UL 1	UL 25
UL 1 1/8	UL 28
UL 1 1/4	UL 32
UL 1 3/8	UL 35
UL 1 1/2	UL 38
UL 1 5/8	UL 42
UL 1 3/4	UL 45
UL 2	UL 50
UL 2 1/8	UL 54
UL 2 5/8	UL 67

P Trap-CxC



ASME B16.22	EN1254-1
P 1/2	12
P 5/8	15
P 7/8	22
P 1 1/8	28
P 1 3/8	35
P 1 5/8	42
P 2 1/8	54

Cross Over-FxC



EN1254-1
G15
G18
G22
G28

Tube Cap



ASME B16.22	EN1254-1
GM 5/8	GM 16
GM 7/8	GM 22
GM 1 1/8	GM 28
GM 1 3/8	GM 35
GM 1 5/8	GM 42
GM 2 1/8	GM 54
GM 2 5/8	GM 67
GM 3 1/8	GM 76
GM 4 1/8	GM 105

Copper Tripod



ASME B16.22	EN1254-1
1/4"	6mm
3/8"	7mm
1/2"	

Copper Y-Tee



ASME B16.22
1/2"x1/2"x1/2"
5/8"x5/8"x5/8"
3/4"x3/4"x3/4"
1 1/8"x1 1/8"x1 1/8"
1 5/8"x1 5/8"x1 5/8"
2 1/8"x2 1/8"x2 1/8"

VRV joint pipe



Model	Number	A Side	B Side	C Side
KHRJ26M-22T	Gas Side	19.05/15.88/12.7	19.05/15.88/12.7	15.88/12.7
KHRJ26M-22T	Liquid Side	9.52	9.52/6.35	9.52/6.35
KHRJ26M-33T	Gas Side	22.2/19.05/15.88	22.2/19.05/15.88	15.88/12.7
KHRJ26M-33T	Liquid Side	12.7/9.52	9.52/6.35	9.52/6.35
KHRJ26M-72T	Gas Side	34.9/28.6	28.6/22.2/19.05/15.88	19.05/15.88/12.7
KHRJ26M-72T	Liquid Side	15.8/12.7	15.88/12.7/9.52	12.7/9.52/6.35
KHRJ26M-73T	Gas Side	41.3/34.9	34.9/28.6/22.2	28.6/22.2/19.05
KHRJ26M-73T	Liquid Side	19.05/15.88	19.05/15.88/12.7	15.88/12.7
KHRJ26M-75T	Gas Side	44.5/38.1	38.1/31.8/25.4	31.8
KHRJ26M-75T	Liquid Side	22.2/19.05	19.05/15.88/12.7	19.05
KHRJ26M-C135	Gas Side	38.1/31.8	28.6/31.8	25.4
KHRJ26M-C135	Liquid Side	22.2/19.05	15.88/19.05	15.88
KHRJ26M-C135	Gas Side	31.8/28.6	28.6/25.4/22.2/19.05	25.4
KHRJ26M-C135	Liquid Side	19.05/15.88	12.7/9.52	15.88
KHRJ26M-C90	Gas Side	31.8/28.6	28.6/25.4/22.2/19.05	15.88
KHRJ26M-C90	Liquid Side	22.2/19.05/15.88	12.7/9.52	25.4



Model	Number	A Side	B Side	C Side
TY-KHRP26NC-22T	Gas Side	19.05/15.88/12.7	19.05/15.88/12.7	15.88/12.7
TY-KHRP26NC-22T	Liquid Side	9.52	9.52/6.35	9.52/6.35
TY-KHRP26NC-33T	Gas Side	22.2/19.05/15.88	22.2/19.05/15.88	15.88/12.7
TY-KHRP26NC-33T	Liquid Side	12.7/9.52	9.52/6.35	9.52/6.35
TY-KHRP26NC-72T	Gas Side	34.9/28.6	28.6/22.2/19.05/15.88	19.05/15.88/12.7
TY-KHRP26NC-72T	Liquid Side	15.8/12.7	15.88/12.7/9.52	12.7/9.52/6.35
TY-KHRP26NC-73T	Gas Side	41.3/34.9	34.9/28.6/22.2	28.6/22.2/19.05
TY-KHRP26NC-73T	Liquid Side	19.05/15.88	19.05/15.88/12.7	15.88/12.7



Model	Number	A Side	B Side	C Side
FGZHN-01C	Gas Side	19.05/15.88/12.7	15.88/12.7	15.88/12.7
FGZHN-01C	Liquid Side	12.7/9.52	9.52/6.35	8.52/6.35
FGZHN-02C	Gas Side	19.05/22.2/25.4	19.05/15.88	15.88/12.7
FGZHN-02C	Liquid Side	12.7/9.52	9.52/6.35	9.52/6.35
FGZHN-03C	Gas Side	25.4/28.6/31.8/34.9	25.4/19.05/15.88	19.05/15.88/12.7
FGZHN-03C	Liquid Side	15.88/12.7	12.7/9.52	12.7/9.52/6.35
FGZHN-04C	Gas Side	31.8/38.1/42	31.8/28.6/25.4	25.4/19.05/15.88/12.7
FGZHN-04C	Liquid Side	22.2/19.05/15.88	19.05/38.1/41.3	15.88/12.7/9.52/6.35
FGZHN-05C	Gas Side	54.44.5	34.9/38.1/41.3	41.3/34.5
FGZHN-05C	Liquid Side	25.4/22.2	22.2/19.05/15.88	19.05/15.88/12.7



Model	Number	A Side	B Side	C Side
FQ01	Gas Side	15.88/19.05/22.2	19.05/15.88/12.7/9.52	19.05/15.88/12.7
FQ01	Liquid Side	9.6/12.7/15.9	12.7/9.6/6.4	12.7/9.52/6.35
FQ02	Gas Side	22.2/25.4/28.6	28.6/25.4/22.2/19.05	19.05/15.88/12.7/9.25
FQ02	Liquid Side	9.05/12.7/15.88	12.7/9.52/6.35	15.88/12.7/9.52
FQ03	Gas Side	31.8/34.9/41.3	41.3/38.1/22.2	28.6/19.05/9.52
FQ03	Liquid Side	12.7/15.9/19.05	15.88/12.7/6.35	19.05/15.88/12.7/9.52
FQ04	Gas Side	41.3/54	35.4/41.3/54	25.4/28.6/34.9
FQ04	Liquid Side	19.05/22.2	19.05/22.2	12.7/15.88/19.05



Model	Number	A Side	B Side	C Side
E-102SN	Gas Side	22.2/19.05/15.88	22.2/19.05/15.88/12.7	15.88/12.7
E-102SN	Liquid Side	12.7/9.52/6.35	9.52/6.35	9.52/6.35
E-162SN	Gas Side	28.6/25.4	28.6/25.4/19.05/12.7	22.2/19.05/15.88/12.7
E-162SN	Liquid Side	12.7	12.7/9.52	12.7/9.52/6.35
E-242SN	Gas Side	28.6/25.4	28.6/25.4/22.2/12.7	22.2/19.05/15.88/12.7
E-242SN	Liquid Side	22.2/15.88	19.05/15.88/12.7/9.52	19.05/15.88/12.7/6.35
E-302SN	Gas Side	38.1/34.9/31.8	38.1/34.9/31.8/28.6/22.2	28.6/22.2/15.88/12.7
E-302SN	Liquid Side	22.2/19.05	22.2/19.05/15.88/9.52	15.88/12.7/9.52/6.35



Model	Number	A Side	B Side	C Side
RMB-BY55E	Gas Side	15.9	15.9	15.9
RMB-BY55E	Liquid Side	9.52	9.52	9.52
RMB-BY105E	Gas Side	22.2	22.2	22.2
RMB-BY105E	Liquid Side	15.9	15.9	15.9
RMB-BY205E	Gas Side	31.8	28.6	28.6
RMB-BY205E	Liquid Side	15.9	15.9	15.9
RMB-BP305E	Gas Side	38.1	38.1	38.1
RMB-BP305E	Liquid Side	22.2	22.2	22.2



Model	Number	A Side	B Side	C Side
CMY-Y102SS-G2	Gas Side	19.05/15.88	19.05/15.88	15.88/12.7
CMY-Y102SS-G2	Liquid Side	9.52	9.52	9.52/6.35
CMY-Y102LS-G2	Gas Side	28.6/25.4/22.2/19.05	28.6/25.4/22.2/19.05	22.2/19.05/15.88/12.7
CMY-Y102LS-G2	Liquid Side	12.7/9.52	12.7/9.52	9.52/6.35
CMY-Y202S-G2	Gas Side	28.6/25.4	28.6/25.4	25.4/22.2/15.88/12.7
CMY-Y202S-G2	Liquid Side	15.88/12.7	15.88/12.7	12.7/9.52/6.35
CMY-Y302S-G2	Gas Side	41.3/35/31.75	41.3/35/31.75	28.6/25.4/22.2/19.05/15.88/12.7
CMY-Y302S-G2	Liquid Side	19.05/15.88	19.05/15.88	15.88/12.7/9.52/6.35



Model	Number	A Side	B Side	C Side
TY-DIS22-1	Gas Side	12.7/15.88/19.05	19.05/12.7/9.52	19.05/12.7/9.52
TY-DIS22-1	Liquid Side	9.52	9.52/6.35	9.52/6.35
TY-DIS180-1	Gas Side	15.88/19.05/22.2	19.05/15.88/12.7/9.52	19.05/15.88/12.7/9.52
TY-DIS180-1	Liquid Side	9.52/12.7/15.88	12.7/9.53/6.35	12.7/9.52/6.35
TY-DIS370-1	Gas Side	25.4/28.6/31.8	25.4/22.2/19.05	25.4/22.2/19.05
TY-DIS370-1	Liquid Side	12.7/15.88	15.88/12.7/9.52/6.35	15.88/12.7/9.52/6.35
TY-DIS540-1	Gas Side	28.6/31.8/38.1	31.8/28.6/25.4/19.05	31.8/28.6/25.4/19.05
TY-DIS540-1	Liquid Side	12.7/15.88/22.2	19.05/15.88/9.52	19.05/15.88/12.7/9.52
ARBLN01621	Gas Side	12.7/15.88	12.7/15.88	12.7/15.88
ARBLN01621	Liquid Side	9.52/6.35	6.35/6.52	9.52/6.35



Model	Number	A Side	B Side	C Side
ARBLN03321	Gas Side	22.2/19.05	15.88/19.05/12.7	15.88/19.05/12.7
ARBLN03321	Liquid Side	12.7/9.52	9.52/12.7/6.35	9.52/12.7/6.35
ARBLN07121	Gas Side	31.8/28.6	22.2/19.05/15.88	19.05/15.88/12.7
ARBLN07121	Liquid Side	12.7/19.05/15.88	15.88/19.05/12.7	15.88/19.05/12.7
ARBLN14521	Gas Side	34.9/38.1/41.3	38.1/34.9/28.6	34.9/28.6/22.2
ARBLN14521	Liquid Side	15.88/22.2/19.05	22.2/19.05/15.88	19.05/15.88/12.7



Model	Number	A Side	B Side	C Side
FQG-B335A	Gas Side	22.2/2.2/18.05/15.88/12.7	19.05/15.88/12.7	25.4/22.2/19.05/15.88
FQG-B335A	Liquid Side	95.52/9.52/6.35	9.52/9.52/6.35	12.7/9.52
FQG-B506A	Gas Side	22.2/25.4/28.6	22.2/22.4/19.05/15.88/12.7	25.4/25.4/28.6
FQG-B506A	Liquid Side	9.52/12.79/9.52	9.52/12.7/9.52/6.35	12.7/12.9
FQG-B730A	Gas Side	22.2/25.4/28.6	22.2/22.2/19.05/15.88/12.7	25.4/28.6
FQG-B730A	Liquid Side	19.05/15.88/12.7/9.52	15.88/12.7/9.52/6.35	25.4/15.88
FQG-B1350A	Gas Side	31.75/32/38.1	28.6/28.8	31.75/32/38.1
FQG-B1350A	Liquid Side	22.2/2.4/19.05/15.88/12.7	19.05/15.88/12.7/9.52/6.35	25.4/22.4/19.05



Model	A Side	B Side	C Side
MDS-Y1	22.2/25.4/28.7	28.6/25.4/22.2/19.05	19.05/15.88/12.7/9.52
MDS-Y2	9.52/12.7/15.88	12.7/9.52/6.35	12.7/9.52/6.35
MDS-Y3	9.52/12.7/15.88	12.7/9.52/6.35	15.88/12.7/9.52
MDS-Y4	15.88/19.05/22.2	19.05/15.88/12.7/9.52	19.05/15.88/12.7
MDS-Y5	31.8/34.9/38.1	41.3/38.1/31.8/28.6	28.6/25.4/22.2/19.05
MDS-Y6	31.8/34.9/38.1/41.3	25.4/28.6/31.8/34.9	25.4/22.2/19.05/15.888

Union Tee



Code	Size
05CF601	1/4"
05CF602	3/8"
05CF603	1/2"
05CF604	5/8"
05CF605	3/4"

Reducing union



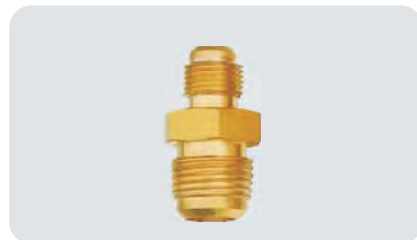
Code	Measure
05CF121	5/16X1/4
05CF122	3/8X1/4
05CF123	1/2X1/4
05CF124	1/2X3/8
05CF125	5/8X3/8
05CF126	5/8X1/2
05CF127	3/4X5/8

Nut



Code	Size
05CF201	1/4"
05CF202	3/8"
05CF203	1/2"
05CF204	5/8"
05CF205	3/4"

Reducing union



Code	Measure
05CF301	1/4"
05CF302	3/8"
05CF303	1/2"
05CF304	5/8"
05CF305	3/4"

Flare & solder union with nut



Code	Measure	Code	Measure
05CF401	1/4"×1/4"	05CF405	1/2"×1/2"
05CF402	3/8"×3/8"	05CF406	1/2"×3/8"
05CF403	3/8"×5/16"	05CF407	5/8"×5/8"
05CF404	3/8"×1/2"	05CF408	3/4"×3/4"

Conversion connector



Flare tube& Male set	Male	Flare tube
05CF901	7/8"	5/8" Straight
05CF902	7/8"	5/8" 90Elbow(L=25)
05CF903	7/8"	5/8" 90Elbow(L=25)
05CF1404	1/4"	M.F. M14 1.5

Refrigeration fittings



Code	Size
05CF1000	ϕ 3×0.5×1000
05CF1200	ϕ 3×0.5×1200
05CF1500	ϕ 3×0.5×1500

Union Elbow



Code	Size
05CF101	1/4"
05CF102	3/8"
05CF103	1/2"
05CF104	5/8"

Union



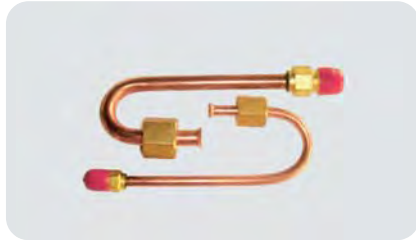
Code	Size
05CF111	1/4"
05CF112	5/16"
05CF113	3/8"
05CF114	1/2"
05CF115	5/8"
05CF116	3/4"

Access valve



Measure
1/8"
3/16"
1/4"
5/16"
3/8"

100 reversing 180



Measure
1/4-3/8
1/4-1/2
1/4-5/8
3/8-5/8

Cylinder adapter



Code	Measure	Code	Measure
05CF501	1/4"×1/8"	05CF505	3/8"×1/4"
05CF502	1/4"×1/4"	05CF506	3/8"×3/8"
05CF503	1/4"×3/8"	05CF507	1/2"×1/4"
05CF504	3/8"×1/8"	05CF508	1/2"×3/8"

Valve core



Measure

1/4"

Flare cap



Measure

1/4"

Charging fitting



Measure

1/4"x1/8" flare with valve core

Multi size solder union charging



Measure

For 1/8"

3/6"

1/4"

5/16"

3/8"

1/2" O.D.

Tubing with valve core



Measure

1/4"x1/8" NPT

1/4"x1/4" NPT

with valve core

Sight valve



Flare tube

1/4"

3/8"

1/2"

5/8"

3/4"

Thread

7/16"

5/8"

3/4"

7/8"

1-1/16"

SFare Union



EN1254-1

15x1/2F

22x3/4F

22x1/2F

28x1M

35x1 1/2M

5002AG bend union adaptor



D-G

H

W

H1

W1

15x1/2"

34

43.5

23.5

34

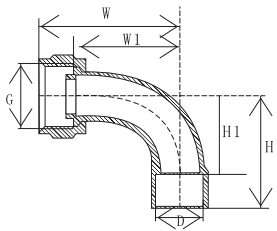
22x1"

48

47.5

32.5

36.5



Plug



Measure

1/4"

1/2"

5/16"

5/8"

3/8"

3/4"

Reducer



Measure

1/4"x3/8"

5/8"x3/4"

3/8"x1/4"

3/8"x1/2"

1/2"x3/8"

5/8"x3/8"

1/2"x5/8"

3/8"x5/8"

5/8"x1/2"

1/4"x1/2"

3/4"x5/8"

1/2"x1/4"

3/4"x1/2"

Rotalock valve



Female Thread

1"x14UNF

1-3/4" x12UNF

1-1/4" x12UNF

1-3/4" x12UNF

1" x14UNF

1-1/4" x12UNF

1-1/4" x12UNF

Soldertube

3/8"

1-1/8"

3/4"

7/8"

1/2"

7/8"

5/8"

Refrigeration fittings
Self-Flaring Connector



Flare tube

1/4*0.8SAE

3/8*0.8SAE

1/2*0.8SAE

5/8*1SAE

3/4*1SAE

Flare to solder union



Measure

1/4"

1/2"

3/8"

5/8"

Cap nut



Measure

1/4"

1/2"

5/16"

5/8"

3/8"

3/4"

Piercing Valve



Size

Flare tube

3/16"-3/8"

1/4"

Split a/c valve



Flare tube

1/4"

5/16"

3/8"

1/2"

5/8"

3/4"

Thread

7/16"

9/16"

5/8"

3/4"

7/8"

1-1/16"

Flare tube



Measure

1/4"

3/8"

1/2"

5/8"

3/4"

Hand Valve



Flare tube	Thread
1/4"	7/16"
3/8"	5/8"
1/2"	3/4"
5/8"	7/8"
3/4"	1-1/16"

Solder



Measure
1/4"
3/8"
1/2"
5/8"
3/4"

DSF series 4-way reversing valve



Port size	Connection(MM)		O.P.D(Mpa)		(ML/min)INTE RNAL LEAKAGE P=1.0Mpa at 70 C	Power(HP)
	D	E.S.C	Min	Max		
8	8.1	9.6	0.25	2.5	<1000	0.75-1.5
11	9.6	12.8	0.34	2.25	<1500	2-3
11.5	12.8	16	0.34	2.25	<2000	2.5-4
13	12.8	19.2	0.34	2.25	<4000	4-8

Can top valve



CF-340 can top valves

Suitable for any flat or screw type cans; 1/4SAE outlet connection

CF-339 can top valves for 134A

Design for cans with 12mm×1.5mm thread; 10mm outlet connection

CF-338 can top valves for R12

Design for cans with 12mm×1.5mm thread; 1/4" SAE outlet connection

Expansion valve



R12	R22	DN(mm)	Connect tube(mm)	R12	R22
212EV01A	222EV01A	φ1	10×12	0.4	0.65
212EV15A	222EV15A	φ1.5	10×12	0.65	1.02
212EV02A	222EV02A	φ2	10×12	0.8	1.3
212EV03A	222EV03A	φ3	10×12	1.65	2.8
212EV04A	222EV04A	φ4	10×12	2.2	3.8
212EV05A	222EV05A	φ5	10×12	3.9	6.5
212EV07A	222EV07A	φ7	16×16	6.5	9.2
212EV09A	222EV09A	φ9	16×16	11	18.5
212EV09A	222EV011A	φ11	19×19	13	22

Vibration absorber

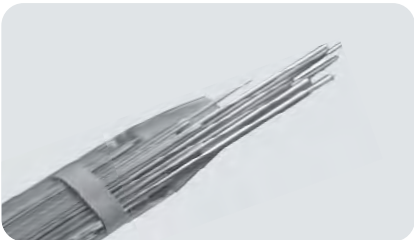


Application

The shock absorber is suitable for commercial refrigeration systems,civil and industrial air conditioning equipment, and is installed on the connection of the compressor suction V exhaust line to prevent the vibration and noise transmitted by the compressor through the refrigerant pipeline.

Size(in)	Length	Max.working pressure(Mpa)	Max.ultimate pressure(Mpa)
3/8	210	3.1	15.5
1/2	230	3.1	15.5
5/8	250	3.1	15.5
3/4	260	3.1	15.5
7/8	300	3.1	15.5
1-1/8	330	2.8	14.0
1-3/8	400	2.8	14.0
1-5/8	400	2.7	13.5
2-1/8	520	2.7	13.5
2-5/8	620	2.5	12.5
3-1/8	680	2.0	10.0
3-5/8	820	2.0	10.0

Silver solder



SOLDERING ALLOYS

AWS A5.8	Ag	Cu	Zn	SOLIDUS(℃)	LIQUIDUS(℃)
BcuP-2		92.9		710	802
BcuP-6	2	91		643	788
BcuP-3	5	89		643	816
BcuP-5	15	80		643	804
BAG-20	30	38	32	677	766
BAG-35	35	32	33	677	732
BAG-5	45	30	25	663	743
BAG-6	50	34	16	688	774
BAG--13	54	40	5	718	587
BAG--7	56	22	17	618	652
BAG--8	72	28		779	779

Manifold

4-Valve test & charging manifold - °F/ °C



The new 4-Valve Test and Charging Manifold has been trimmed down for lighter weight but with the same powerful performance of the original model. This streamlined unit continues to provide the flow that's proven faster than any conventional manifold. And even though sleeker and more compact, the aluminum alloy is forged for strength and reliability with 3/8" bores through the body to speed the job. Forged aluminum alloy body with full 3/8" bore for faster vacuum and charging

- Fourth hose enables connection to HI/LO sides, refrigerant tank, and recovery unit or vacuum pump for diagnostics. evacuation and charging without switching hoses
- 1/4" hi/lo sides with 3/8" vacuum port for regular jobs
- 3/8" hi/lo sides with 1/2" vacuum port for larger systems
- Front access for easy field recalibration
- Proven, double "O"-ring piston for reliability and long service life
- Exclusive 100-mesh filter in-line on all flare fittings helps keep out particulate material and extend the life of the seat
- Contoured easy-grip handles for positive control; color coded for ready identification
- Sight glass to easily view refrigerant movement and condition during charging and recovery
- Heavy-duty hook won't pull out

Also available with 3-1/8" (80 mm) red and blue liquid-filled gauges

Refrigerants	ITEM	Vac. Port	Hi/Lo Charge	Gauge	Hoses
4-VALVE with 3/8" Vacuum Port					
R-410A	3000	3/8"	1/4"	Red/Blue	Manifold Only
R-410A	3001	3/8"	1/4"	Liquide	Manifold Only
R-410A	3002	3/8"	1/4"	Red/Blue	60" Compact Ball Valve - RYB & 3/8" x 45°
R-22/R-404A/R-410A/R-134a	3003	3/8"	1/4"	Red/Blue	Manifold Only
R-22/R-404A/R-410A/R-134a	3004 *	3/8"	1/4"	Red/Blue	Manifold Only
R-22/R-404A/R-410A/R-134a	3005	3/8"	1/4"	Liquid	Manifold Only
R-22/R-404A/R-410A/R-134a	3006	3/8"	1/4"	Red/Blue	60" Compact Ball Valve - RYB & 3/8" x 45°
R-12/R-22/R-502	3007	3/8"	1/4"	Red/Blue	Manifold Only
R-12/R-22/R-502	3008 *	3/8"	1/4"	Red/Blue	Manifold Only
R-12/R-22/R-502	3009	3/8"	1/4"	Liquid	Manifold Only
R-12/R-22/R-502	3010	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-12/R-22/R-502	3011	3/8"	1/4"	Liquid	72" RYB & 3/8" x 45°
4-VALVE COMMERCIAL with increased capacity-larger ports					
R-12/R-22/R-502	3012	3/8"	3/8"	Red/Blue	Manifold Only
R-12/R-22/R-502	3013	1/2"	3/8"	Liquid	Manifold Only
R-12/R-22/R-502	3014	3/8"	3/8"	Red/Blue	4 @ 3/8" x 60" Heavy Duty - Str. x 45°
R-12/R-22/R-502	3015	1/2"	3/8"	Liquid	3 @ 3/8" x 60" Heavy Duty - Str. x 45° 1 @ 1/2" x 60" Heavy Duty - Str. x Str.
4-VALVE with 3/8" Vacuum Port					
R-22/R-134a/R-404A/R-407C	3016	3/8"	1/4"	Red/Blue	Manifold Only
R-22/R-134a/R-404A/R-407C	3017	3/8"	1/4"	Liquid	Manifold Only
R-22/R-134a/R-404A/R-407C	3018	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A/R-407C	3019	3/8"	1/4"	Liquid	72" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3020	3/8"	1/4"	Red/Blue	Manifold Only
R-22/R-134a/R-404A	3021	3/8"	1/4"	Liquid	Manifold Only
R-22/R-134a/R-404A	3022	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3024	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3025	3/8"	1/4"	Liquid	72" RYB & 3/8" x 45°
4-VALVE with 3/8" Vacuum Port					
R-22/R-134a/R-404A/R-407C	3016	3/8"	1/4"	Red/Blue	Manifold Only
R-22/R-134a/R-404A/R-407C	3017	3/8"	1/4"	Liquid	Manifold Only
R-22/R-134a/R-404A/R-407C	3018	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A/R-407C	3019	3/8"	1/4"	Liquid	72" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3020	3/8"	1/4"	Red/Blue	Manifold Only
R-22/R-134a/R-404A	3021	3/8"	1/4"	Liquid	Manifold Only
R-22/R-134a/R-404A	3022	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3024	3/8"	1/4"	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3025	3/8"	1/4"	Liquid	72" RYB & 3/8" x 45°

4-Valve test & charging manifold - °F/ °C



manifold replancement parts



4-VALVE FEATURES/BENEFITS

Fourth hose to enable connection to hi/lo sides, refrigerant tank, and recovery unit or vacuum pump for diagnostics, evacuation and charging without switching hoses 3/8" vacuum port for use with larger hose to cut evacuation time by up to 33 % (all other fittings on unit are 1/4") Also available with 3-1/8" (80 mm) red and blue liquid-filled gauges

Refrigerants	ITEM	Gauge	Hoses
R-410A	3030	Red/Blue	No hose
R-410A	3031	Liquide	No hose
R-410A	3032	Red/Blue	60" Compact Ball Valve - RYB & 3/8" x 45°
R-410A	3033	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-404A/R-410A/R-134a	3034	Red/Blue	No hose
R-22/R-404A/R-410A/R-134a	3035 *	Red/Blue	No hose
R-22/R-404A/R-410A/R-134a	3036	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-404A/R-410A/R-134a	3037	Red/Blue	60" Compact Ball Valve - RYB & 3/8" x 45°
R-22/R-404A/R-410A/R-134a	3038	Liquid	No hose
R-22/R-404A/R-410A/R-134a	3039	Liquid	60" RYB & 3/8" x 45°
R-12/R-22/R-502	3040	Red/Blue	No hose
R-12/R-22/R-502	3041	Red/Blue	60" RYB & 3/8" x 45°
R-12/R-22/R-502	3042	Liquid	No hose
R-12/R-22/R-502	3043	Liquid	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A/R-407C	3044	Red/Blue	No hose
R-22/R-134a/R-404A/R-407C	3045	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A/R-407C	3046	Liquid	No hose
R-22/R-134a/R-404A/R-407C	3047	Liquid	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3048	Red/Blue	No hose
R-22/R-134a/R-404A	3049	Red/Blue	60" RYB & 3/8" x 45°
R-22/R-134a/R-404A	3050	Liquid	No hose
R-22/R-134a/R-404A	3051	Liquid	60" RYB & 3/8" x 45°

Aluminum manifolds - class 1 (1% accuracy) gauges



manifold replancement parts



Two Valve Manifolds

- Anodized aluminum block body
- One full turn open/close valve
- Oversized sight glass for easy viewing
- Excellent vacuum characteristics
- No-flutter gauge design, class 1.0, suitable for HCFC, CFC, HFC, 68mm/2-1/2" or 80mm/3-1/2" gauges; psi & bar unit; °F/°C;
- High quality stainless steel liquid filled gauge
- Easy-to-grip knobs

1. Unique swivel stem design reduces wear
2. Excellent vacuum characteristics
3. 100% virgin Teflon diaphragms
4. Full porting for maximum refrigerant flow

Refrigerants: Allrefrigerants available, max 4 different refrigerants in each gauge
Temperature: °F or °C
Pressure: Psi, Bar, Kg/cm2, mmHg, max 2 units in each gauge
Gauge Size/Type: 68mm or 80mm / Dry or Oil-Filled

Refrigerants	Description	No hose	500~2500psi	600~3000psi	800~4000psi
R-12/R-22/R-502	No hose	3052	-	-	-
R-12/R-22/R-502	with 36" hose	-	3054	3057	3060
R-12/R-22/R-502	with 60" hose	-	3055	3058	3061
R-22/R-134a/R-404A	with 72" hose	3053	3056	3059	3062
R-22/R-134a/R-404A	with 36" hose	-	-	-	-
R-22/R-134a/R-404A	with 60" hose	-	-	-	-

Manifold

2-valve diaphragm manifolds with sightglass & 1/4" sae fittings



manifold replancement parts



- Two Valve Manifolds
- Anodized aluminum block body
 - One full turn open/close valve
 - Oversized sight glass for easy viewing
 - Excellent vacuum characteristics
 - No-flutter gauge design, class 1.0, suitable for HCFC, CFC, HFC, 68mm/ 2-1/2"or 80mm/3-1/2" gauges; psi & bar unit; °F/°C;
 - High quality stainless steel liquid filled gauge
 - Easy-to-grip knobs

Refrigerants: Allrefrigerants available, max 4 different refrigerants in each gauge
Temperature: °F or °C
Pressure: Psi, Bar, Kg/cm2, mmHg, max 2 units in each gauge
Gauge Size/Type: 68mm or 80mm / Dry or Oil-Filled

1. Unique swivel stem design reduces wear
2. Excellent vacuum characteristics
3. 100% virgin Teflon diaphragms
4. Full porting for maximum refrigerant flow

ITEM	Description
CF-4432	2-valve aluminum manifold with 68mm gauges.No hoses.
CF-4433	2-valve aluminum manifold with 80mm gauges.No hoses.

2-Valve test & charging manifold -°F/°C



Forged aluminum alloy body and large easy-to-read gauges
The new Test and Charging Manifold is the first forged aluminum manifold in the industry. The special aluminum alloy construction of the manifold body makes this unit lightweight for handling ease with the durability and reliability required for repeated, rugged use.
Features/Benefits

- Large, easy-to-read 3-1/8" (80 mm) steel case red and blue, 1% accuracy (Class 1) gauges; front access for easy field recalibration; optional protective gauge boots available
- Proven, double "O"-ring piston for reliability and long service life
- Exclusive 100 mesh filter in-line on all flare fittings helps keep out particulate material and extend the life of the seats
- Contoured easy-grip handles for positive control; color coded for ready identification
- Sight glass to easily view refrigerant movement and condition during charging and recovery
- Heavy duty hook won't pull out

Refrigerants	ITEM	Gauge	Hoses
R-410A	3066	Red/Blue	No hose
R-410A	3067	Red/Blue	60" - RYB
R-410A	3068	Red/Blue	60" Compact Ball Valve - RYB
R-22/R-404A/R-410A	3069	Red/Blue	No hose
R-22/R-404A/R-410A	3070 *	Red/Blue	No hose
R-22/R-404A/R-410A	3071	Red/Blue	60" - RYB
R-22/R-404A/R-410A	3072	Red/Blue	60" Compact Ball Valve - RYB
R-12/R-22/R-502	3073	Red/Blue	No hose
R-12/R-22/R-502	3074 *	Red/Blue	No hose
R-12/R-22/R-502	3075	Red/Blue	60" - RYB
R-22/R-134a/R-404A/R-407C	3076	Red/Blue	60" Compact Ball Valve - RYB
R-22/R-134a/R-404A/R-407C	3077	Red/Blue	No hose
R-22/R-134a/R-404A/R-407C	3078	Red/Blue	60" - RYB
R-22/R-134a/R-404A/R-407C	3079	Red/Blue	60" Compact Ball Valve - RYB
R-22/R-134a/R-404A	3080	Red/Blue	No hose
R-22/R-134a/R-404A	3081	Red/Blue	60" - RYB
R-22/R-134a/R-404A	3082	Red/Blue	60" Compact Ball Valve - RYB
R-134a	3083	Red/Blue	72" Compact Ball Valve - RYB
R-12/R-22/R-502	3084	Red & blue gauges	Boxed
R-12/R-22/R-502	3085	Red & blue gauges	Clamshell
R-12/R-22/R-502	3086	Brass gauges	Boxed
R-12/R-22/R-502	3087	Brass gauges	Clamshell
R-134a/R-404A/R-507	3088	Red & blue gauges	Boxed
R-134a/R-404A/R-507	3089	Red & blue gauges	Clamshell
R-134a/R-404A/R-507	3090	Brass gauges	Boxed
R-134a/R-404A/R-507	3091	Brass gauges	Clamshell
R-410A	3092	Red & blue gauges	Boxed
R-410A	3093	Red & blue gauges	Clamshell

Manifolds with 2-1/2" gauges



manifold replancement parts



NOTES: Manifolds with some other hose combinations available.
* Special R410A hose - R&B hose is 1/4" x 45° 5/16" end;
Y hose is 1/4" x 45° 1/4" end.
R-410A manifolds with 5/16" hose holder fittings.

- 1 Manifold with 68MM gauge boots
- 2 Manifold with standard fittings
- 3 Manifold with 68MM oil gauges
- 4 Manifold with 80MM Dry gauges
- 5 Manifold with compact ball valve hoses

Refrigerants	Description	No hose	1	2	3	4	5
-	Basic unit: manifold, gauges, hook and anchors	3094	-	-	-	-	-
R-12/R-22/R-502	36" RYB hoses	-	3095	3100	3105	3110	3115
R-12/R-22/R-502	48" RYB hoses	-	3096	3101	3106	3111	-
R-12/R-22/R-502	60" RYB hoses	-	3097	3102	3107	3112	3116
R-12/R-22/R-502	72" RYB hoses	-	3098	3103	3108	3113	3117
R-12/R-22/R-502	36" RYB hoses and case	-	3099	3104	3109	3114	-
-	Basic unit: manifold, gauges, hook and anchors	3118	-	-	-	-	-
R-134a/R-404A/R-507	36" RYB hoses	-	3119	3124	3129	3134	3139
R-134a/R-404A/R-507	48" RYB hoses	-	3120	3125	3130	3135	-
R-134a/R-404A/R-507	60" RYB hoses	-	3121	3126	3131	3136	3140
R-134a/R-404A/R-507	72" RYB hoses	-	3122	3127	3132	3137	-
R-134a/R-404A/R-507	36" RYB hoses and case	-	3123	3128	3133	3138	-
-	Basic unit: manifold, gauges, hook and anchors	3141	-	-	-	-	-
R-410A	60" RYB hoses	-	-	3142	-	3145	3146
R-410A	60" RYB hoses special*	-	-	3143	-	-	-
R-410A	HCA 60" hose	-	-	3144	-	-	-

2-Valve ball valve manifolds with sightglass &1/4 sae fittings



manifold replancement parts



Ball Valve Structure Feature

- With brass ball and Teflon seal
- Brass stem
- Simple and convenient for use
- Full porting for maximum refrigeration flow
- Excellent vacuum characteristics
- Oversized sight glass for ea.sy viewing
- No-flutter gauge design, class 1.0, suitable for various kinds of refrigerants, 80mm/3.5" liquid filled gauges; psi & bar unit, °F/°C;

Manifold

2-Valve ball valve manifolds with sightglass & 1/4 sae fittingdgs

Refrigerants	Description	No hose	1	2	3	4	5
-	Basic unit: manifold, gauges, hook and anchors	3047	-	-	-	-	-
R-12/R-22/R-502	36" RYB hoses	-	3148	3153	3158	3163	3168
R-12/R-22/R-502	48" RYB hoses	-	3149	3154	3159	3164	-
R-12/R-22/R-502	60" RYB hoses	-	3150	3155	3160	3165	3169
R-12/R-22/R-502	72" RYB hoses	-	3151	3156	3161	3166	3170
R-12/R-22/R-502	36" RYB hoses and case	-	3152	3157	3162	3167	-
-	Basic unit: manifold, gauges, hook and anchors	3171	-	-	-	-	-
R-134a/R-404A/R-507	36" RYB hoses	-	3171	3176	3181	3186	3191
R-134a/R-404A/R-507	48" RYB hoses	-	3172	3177	3182	3187	-
R-134a/R-404A/R-507	60" RYB hoses	-	3173	3178	3183	3188	3192
R-134a/R-404A/R-507	72" RYB hoses	-	3174	3179	3184	3189	-
R-134a/R-404A/R-507	36" RYB hoses and case	-	3175	3180	3185	3190	-
-	Basic unit: manifold, gauges, hook and anchors	3193	-	-	-	-	-
R-410A	60" RYB hoses	-	-	3194	-	3195	3196
R-410A	60" RYB hoses special*	-	-	-	-	-	-
R-410A	HCA 60" hose	-	-	-	-	-	-
-	Basic unit: manifold, gauges, hook and anchors	3197	-	-	-	-	-
R-600	60" RYB hoses	-	-	3198	-	-	3200
R-600	60" RYB hoses special*	-	-	-	-	-	-
R-600	HCA 60" hose	-	-	-	-	-	-

2-Valve piston valve manifolds with l/4" sae fittinggs



CF-1003
2-valve manifold with 68mm gauges
Includes the Original Triple o-ring seal design Valve System!
PISTON VALVE SYSTEM

- Three Super Neoprene o-ring design
- Back-seating o-ring seals valve nut when fully open
- Valve stems retract fully to provide maximum flow
- Mirror-like port finish for smooth valve movement

GAUGE TYPE

1. Pressure& temperature unit: PSI/Kpa ,°F/°C;
Refrig scales& gauge diameter: R410A,R22, R-407C/68mm/2.5"
2. Pressure& temperature unit: PSI/Kpa , °F/°C;
Refrig scales& gauge diameter: R-134A,R22, R-404A,68mm/25"
3. Pressure& temperature unit: PSI/Kpa , °F/°C;
Refrig scales& gauge diameter: R-12, R22, R502,68mm/2.5"

4-Vaive manifolds with guages, piston valve at two ends and diaphragm valvein the middle



GAUGE TYPE

1. Pressure& temperature unit: PSI/Kpa , °F/°C;
Refrig scales& gauge diameter: R134A, R22,R404A, R407C. 80mm/35"
2. Pressure& temperature unit: PSI/Kpa , °F/°C;
Refrig scales& gauge diameter: R410A, R22, R404A, 80mm/3.5"
3. Pressure& temperature unit: PSI/Kpa , °F/°C;
Refrig scales& gauge diameter: R12, R22, R502, 80mm/35"

ITEM	Description
CF-1818A	4-valve manifold with 80mm gauges

Single test gauges



Quick pressure checks - use low or hi-side gauge with quick coupler to attach directly to system or tanks.

ITEM	Description
Gauge w/ QC & 12" hose - angle CPLG	
3201	Red pressure °F/°C
3202	Blue compound °F/°C
3203	12" red hose1/4" M. fl x 45°QC
Gauge with 3206 quick coupler for recovery tank pressure .checks	
3204	Red pressure
3205	Blue compound
3206	Quick coupler only
3207	12" blue hose 1/4" M. fl x 45°QC

5-Valve diaphragm manifolds with sightglass & 1/4 sae fitting



Five Valve Manifolds

- Anodized aluminum block body
- Oversized sightglass for easy viewing
- One full turn open/close valve
- Excellent vacuum characteristics
- No-flutter gauge design
- Easy-to-grip knobs
- Including vacuum gauge

ITEM	Description
CF-1009A	5-valve manifold with 68mm oil gauges
CF-1009B	5-valve manifold with 68mm without oil gauges

Manifold with digital gauges



Many times the first tool used to help diagnosis A/C problems is a manifold gauge set with hoses. With Robinair's new digital gauges you can enhance the effectiveness of this long trusted diagnostic tool. Calibrated to measure 56 different refrigerants these accurate gauges allow you to choose the temperature (°F or °C) and pressure units (PSI, bar, kPa and kg/cm2) your most comfortable using. The low side gauge has a pressure scale of 30 inHg VAC to 250 psig and the high side gauge has a pressure scale of 0 to 800 psig. Gauges come with a backlight to enhance the view and make the gauges easy to see in low light conditions.

- Includes profiles for 56 common refrigerants
- Detects vacuums in "Hg"
- Selectable temperature and pressure units of measure
- Easy to read LCD screen with large digits
- Automatic shutdown after 15 minutes of inactivity
- Low battery indicator

ITEM	Description
CF-1818B	2-valve manifold with digital gauges.No hoses
CF-1818C	4-valve manifold with digital gauges.No hoses
CF-1009C	5-valve manifold with digital gauges.No hoses. Add one vacuum gauge
RA118A	High side digital gauge
RA118B	Low side digital gauge

1-Valve aluminum block diaphragm manifold



CF-1006B CF-1006C

- High Pressure/low Pressure With Ball Valve
- TECHNICAL FEATURES:**
- Shut off ball valves
 - Scale bar/psi/°C
 - Bourdon gauges 80mm
 - Connections 3x1/4SAE
 - Gauges cl1.6 pulse-free
 - Anodized aluminum block body
 - One full turn open/close valve
 - Super strong 100%Teflon diaphragms
 - Excellent vacuum characteristics
 - No-flutter gauge design
 - Extra large knobs for easy grip

ITEM	Description
CF-1006B	Single valve manifold without sightglass
CF-1006C	Single valve manifold with sightglass

Aluminum manifold and hose



- This heavy-duty manifold features cast aluminum body and full size inetal handles.
- Other features:**
- Finger-tight one-piece valve stem for positive seal on nylon seat.
 - Easy, accurate valve adjustment.
 - Dual temperature/pressure gauge has bar with°C and psi with °F.

ITEM	Description
3208	Manifold body with valves
3209	Manifold above and gauges
3210	Above with three hoses
3211	Replacement valve assembly

Single valves



Individual manifolds for high and low sides of system.
Individual valves are available in two or three poil versions.
Nylon seals with double "O" rings.

ITEM	Description
3212	Hi-side manifold with gauge
3213	Lo-side manifold with gauge
3214	3 port valve - 1/8" NPT Female x two 1/4" Male flares

CT-466G



charging and testing unit with 2-3/4"compound gauge.0-03"vacuum,0-120 ibs pressuer

CT-466F



charging and testing unit with 2-3/4" shock-proof compound gauge.0-30"vacuum,0-120 ibspressure

CT-466



single gauge valve(without gauge)

CT-601-R134a



brass testing manifold for r134a 3pcs charging hose (3pcs 36" house for R134a; 3pcs 60" house for R134a; 3pcs 72" house for R134a.) and 2pcs 2-3/4"dia.guage

CT-501-R134a



brass testing manifold for R134a 3pcs charging hose (3pcs 36"house for R134a; 3pcs 60"house for R134a;3pcs 72"house for R134a.) and 2pcs 2-3/4"dia.guage

CT-601-R410a



brass testing manifold for R410a3pcs charging hose (3pcs 36"house for R410a; 3pcs 60"house for R410a; 3pcs 72" house for R410a.) and 2pcs 2-3/4"dia.guage

CT-501-R410a



brass testing manifold for R410a 3pcs charging hose(3pcs 36"house for R410a; 3pcs 60"house for R410a; 3pcs 72" house for R410a.) and 2pcs 2-3/4"dia.guage

CT-501



brass testing manifold for R12,R22,R502 3pcs charging hose (3pcs 36"house; 3pcs 60"house;3pcs 72"house.) and 2pcs 2-3/4" dia.guage

CT-A501



brass testing manifold for R404a,R407a,R134a and R22 3pcs charging hose (3pcs 36" house;3pcs 60"house;3pcs 72"house.) and 2pcs 2-3/4"dia.guage

CT-601



brass testing manifold for R12,R22,R502
3pcs charging hose (3pcs 36"house;3pcs 60"house;3pcs 72"house.) and 2pcs 2-3/4" dia.guage



Brass testing manifold for R404a,R407a,R134a and R22
3pcs charging hose (3pcs 36" house;3pcs 60"house;3pcs 72"house.) and 2pcs 2-3/4"dia.guage



Testing manifold set for R134a manifold with 3pcs house,2pcs qc-12 quick couplers and 2 pcs 2-3/4"dia.guage,1/4"sea connection. 3pcs 36"house for R134a. 3pcs 60"house for R134a. 3pcs 72"house for R134a



Testing manifold set for R410a manifold with 3pcs house,2pcs qc-12 quick couplers and 2 pcs 2-3/4"dia.guage,1/4"sea connection. 3pcs 36"house for R410a. 3pcs 60"house for R410a. 3pcs 72"house for R410a



Testing manifold set for R404a,R407a,R134a and R22 manifold with 3pcs house, 2pcs qc12 quick couplers and 2pcs 2-3/4"dia. guage,1/4"seaconnection. 3pcs 36"house.3pcs 60"house.3pcs 72"house.all house are desinged for working pressure 800psi bursting pressure 4000psi



QC-SML4 QC-SM44
QC-SM 1/4"SAE



QC-12L QC-12H
QC-12 1/4"SAE



QC-14H QC-14L
QC-14 1/4"SAE



QC-ML QC-MH
QC-M 14MM

Manifold sets



13-009



13-010

1/4" Charging hoses with double barrier protection



Moisture barrier provides improved resistance to moisture migration which contaminates expensive refrigerant.
Other features include 4000psi minimum burst and 800 psi maximum working pressure for a 5 to. 1 safety factor.
Color-coded 3-Pak
Standard 1/4" fitting or 45° with fitting at one end.

Hoses have proven performance benefits of the original line, plus double barrier protection for CFC, HCFC and HFC (R134A, R404A, R407C, R410A, R507, etc.).

Operating temperature -20°to 180°F

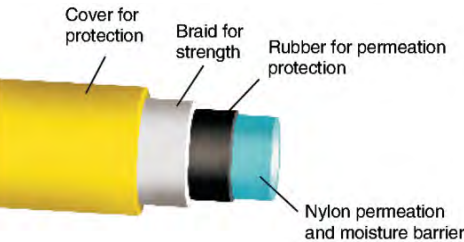
L.	Yellow	Blue	Red	3-Pak
12"	351-12Y	351-12B	351-12R	-
24"	351-24Y	351-24B	351-24R	-
36"	351-36Y	351-36B	351-36R	2338
48"	351-48Y	351-48B	351-48R	2339
60"	351-60Y	351-60B	351-60R	2340
72"	351-72Y	351-72B	351-72R	2341
96"	351-96Y	351-96B	351-96R	2342
10'	351-120Y	351-120B	351-120R	-
12'	351-144Y	351-144B	351-144R	-
25'	351-300Y	351-300B	351-300R	-
50'	351-600Y	351-600B	351-600R	-
75'	351-900Y	351-900B	351-900R	-
100'	351-1200Y	351-1200B	351-1200R	-

Hoses - there's one for every job with the name you know, the performance you want

1/4" Flexible Hoses		3/8" Flexible Hoses		1/2" and 5/8" Flexible Hoses	
Easily connects to 1/4" Male flare access fitting on system		Evacuates and charges 4 times faster than 1/4" hose		● Evacuates and charges 8 times faster than 1/4" hose ● Allows you to pull a deeper vacuum ● More efficient job of removing moisture and contaminants from the system	
Original Charging Hose 114" Charging Hose	1/4" Charging Hose(FlexFlow and Bag-Valve ends)	1/4" Charging Hose(FlexFlow and Bag-Valve ends)	1/4" Charging Hose(FlexFlow and Bag-Valve ends)	1/4" Charging Hose(FlexFlow and Bag-Valve ends)	1/4" Charging Hose(FlexFlow and Bag-Valve ends)
● All-weather flexible ● Dependable ● Adjust-a-Valve Opener- Patented valve core depressor allows you to easily open all troublesome, out of tolerance Schrader valves.	● Adjust-a-Valve Opener- Patented valve core depressor. Easily open all out of tolerance Schrader valves. (hoses offer different technology.) ● hoses offer double barrier protection: Moisture barrier provides improved resistance to moisture migration which contaminates expensive refrigerants. ● Rubber layer for permeation, braid for strength, and outer cover for protection	● hoses offer double barrier protection: Moisture barrier provides improved resistance to moisture migration which contaminates expensive refrigerants. Higher working pressure.		● Hoses: Moisture barrier provides improved resistance to moisture migration which contaminates expensive refrigerants. ● Large ID reduces vacuum time substantially over1/4" or 3/8" hose - allowing techs to pull a faster vacuum ● Faster refrigerant transfer and faster charging on large systems. ● Wide selection of fittings are available. ● Operating temperature -20°F to 200°F.	
Temp: -20°F to 180°F (-28.8°C to 82.2°C)		Temp: -20°F to 180°F (-28.8°C to 82.2°C)		Temp: -20°F to 180°F (-28.8°C to 82.2°C)	
Burst: 2500 psi (172 bar) minimum	Burst: 2500 psi (172 bar) minimum	Burst: 3000 psi (207 bar) minimum	Burst: 3000 psi (207 bar) minimum	Burst: 3000 psi (207 bar) minimum	Burst: 3000 psi (207 bar) minimum
Working: 500 psi (34 bar) maximum	Working: 800 psi (55 bar) maximum	Working: 600 psi (41 bar) maximum	Working: 600 psi (41 bar) maximum	Working: 600 psi (41 bar) maximum	Working: 600 psi (41 bar) maximum
Available Lengths: 6 inches to 100 feet		Safety factor: 5 to 1		Available Lengths: 12 inches to 100 feet	

Manifold

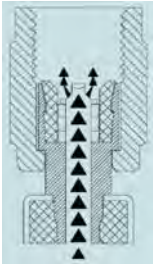
Chargng hoses for the environment



Hoses feature multi-laminate construction with double barrier protection to help contain the smaller molecules of newer refrigerants. feature multi-laminate construction with double barrier protection to help contain the smaller moleculesof newer refrigerants.

Moisture barrier provides maximum resistance to moisture migration which contaminates expensive refrigerants.

Adjust-A-valve-opener



High volume flow pattern
With this valve core depressor, you easily open all troublesome out-of-tolerance Schrader valves. Simply adjust height with needle nose pliers~ Use again and again~

Adjust-A-valve-opener



Reinforced rubber hose helps eliminate noise and vibration when installed in a heating system.
1250 psi (86 bar)nlin.burst. 250 psi (17 bar) max. working pressure.
Operating temperature -20°F to 180°F (-28.8°C to 82.2°C)

ITEM	Description	Blue
351	Oil burner connector	3/8" Male flare x 1/4" NPT Male

1/4" Standard charging hoses



Moisture barrier provides improved resistance to moisture migration whith contaminates expensive refrigerant.
Other features include 4000 psi (276 bar) min.burst and 800 psi (55 bar)max.working pressure for a 5-to-1 safety factor.
Color-coded 3-pak
Operating remperature -20 to 180°F (-28.8°C to 82.2°C)
House have proven performance benefits of the original line, plus double barrier protection for CFC, HCFC and HFC (R-404A, R-134a, R-507, R-407C, R-410A. etc.).

ITEM	Description
8443	Replacement gasket (10 pak)
8444	Adjust-a-Valve Opener (10 pak)

Hoses - standard 1/4" fittings

L.	Yellow	Blue	Red	3-Pak
12"	310-12	312-12	316-12	-
24"	310-24	312-24	316-24	-
36"	310-36	312-36	316-36	2183
48"	310-48	312-48	316-48	2184
60"	310-60	312-60	316-60	2185
72"	310-72	312-72	316-72	2186
96"	310-96	312-96	316-96	2187
10'	310-120	312-120	316-120	-
12'	310-144	312-144	316-144	-
25'	310-300	312-300	316-300	-
50'	310-600	312-600	316-600	-
75'	310-900	312-900	316-900	-
100'	310-1200	312-1200	316-1200	-

1/4"Hose with shut off ball valve



- Valve handle position shows when valve is opened or closed
- Improved smaller ergonomic valve with zero restriction for maximum flow. Plastic handle
- Flexible length of hose between valve and fitting makes access easier to tight areas
- 4000 psi (276 bar) min. burst and 800 psi (55 bar) max. working pressure
- Operating remperature -20°F to 180°F (-28.8°C to 82.2°C)

ITEM	Description
8443	Replacement gasket (10 pak)
8444	Adjust-a-Valve Opener (10 pak)

8" from angle end

L.	Yellow	Blue	Red	3-Pak
36"	311-36Y	311-36B	311-36R	2188
48"	311-48Y	311-48B	311-48R	2189
60"	311-60Y	311-60B	311-60R	2190
72"	311-72Y	311-72B	311-72R	2191
96"	311-96Y	311-96B	311-96R	2192
10'	311-120Y	311-120B	311-120R	-
12'	311-144Y	311-144B	311-144R	-
25'	311-300Y	311-300B	311-300R	-
50'	311-600Y	311-600B	311-600R	-
75'	311-900Y	311-900B	311-900R	-
100'	311-1200Y	311-1200B	311-1200R	-

Hose with compact ball valve end



- Improved compact design ball valve with Plastic handle at end of hose fits tight areas and traps all the gas.
- Full flow valve tor faster recovery
- Low loss fitting
- Hose and ball valve rated flr higher pressure. 4000 psi (276 bar) min. burst and 800 psi (55 bar)max. working pressure uses standard gasket and valve opener
- Operating remperature -20°F to 180°F (-28.8°C to 82.2°C)

ITEM	Description
8443	Replacement gasket (10 pak)
8444	Adjust-a-Valve Opener (10 pak)

8" from angle end

L.	Yellow	Blue	Red	3-Pak
36"	340-36Y	340-36B	340-36R	2193
48"	340-48Y	340-48B	340-48R	2194
60"	340-60Y	340-60B	340-60R	2195
72"	340-72Y	340-72B	340-72R	2196
96"	340-96Y	340-96B	340-96R	2197
10'	340-120Y	340-120B	340-120R	-
12'	340-144Y	340-144B	340-144R	-
25'	340-300Y	340-300B	340-300R	-
50'	340-600Y	340-600B	340-600R	-
75'	340-900Y	340-900B	340-900R	-
100'	340-1200Y	340-1200B	340-1200R	-

Manifold

1/4" Hose with low loss anti-blow back fitting



- Low loss anti-blowback fitting immediately traps refrigerant in the hose when disconnected. helping meet non-venting regulations and prevent finger burns
 - 45' end for easy installation in tight areas
 - Gaskets resist deterioration from existing CFCs. plus new HFC refrigerants and oils
 - Available with fittings on both ends
 - Operating temperature -20°F to 180°F (-28.8°C to 82.2°C)
 - 4000 psi (276 bar) min. burst. 800 psi (55 bar)max, working pressure
- Use hose with compact ball valve for R-410A.

ITEM	Description
8443	Replacement gasket (10 pak)
8444	Adjust-a-Valve Opener (10 pak)
8445	Seal Right "O"-ring (10 pak)

Flex Flow valve 8" from angle

L.	Yellow	Blue	Red	3-Pak
12"	341-12Y	341-12B	341-12R	-
24"	341-24Y	341-24B	341-24R	-
36"	341-36Y	341-36B	341-36R	2198
48"	341-48Y	341-48B	341-48R	2199
60"	341-60Y	341-60B	341-60R	2200
72"	341-72Y	341-72B	341-72R	2201
96"	341-96Y	341-96B	341-96R	2202
10'	341-120Y	341-120B	341-120R	-
12'	341-144Y	341-144B	341-144R	-
25'	341-300Y	341-300B	341-300R	-
50'	341-600Y	341-600B	341-600R	-
75'	341-900Y	341-900B	341-900R	-
100'	341-1200Y	341-1200B	341-1200R	-

1/4" Hose for 5/16" (1/2 - 20 thread) service ports for R-410A



- Available with standard fittings or compact ball valve
- 4000 psi (276 bar) rain. burst and 800 psi (55 bar) max. working pressure
- Moisture barrier provides maximum resistance to moisture migration which contaminates expensive refrigerants
- Operating temperature -20°F to 180°F (-28.8°C to 82.2°C)

Replacement parts

Size	Repl. Gasket	Adjust-a-Valve Opener
1/4" And 5/16"	8443	8444

Hose with 1/4" (7/16 - 20) Female flare on manifold connection and 5/16" (1/2 - 20) Female flare angled on service end
Standard fitting without ball valve

L.	Yellow	Blue	Red	3-Pak
36"	342-36Y	342-36B	342-36R	2203
60"	342-60Y	342-60B	342-60R	2204
72"	342-72Y	342-72B	342-72R	2205

Hose with 5/16" (1/2 - 20) Female flare on manifold connection and 5/16" (1/2 - 20) Female flare angled on service end
Standard fitting without ball valve

L.	Yellow	Blue	Red	3-Pak
36"	344-36Y	344-36B	344-36R	2209
60"	344-60Y	344-60B	344-60R	2210
72"	344-72Y	344-72B	344-72R	2211

Compact ball valve (R&B 1/4" x 5/16" BV) (Y 1/4" x 1/4" BV)

L.	Yellow	Blue	Red	3-Pak
36"	343-36Y	343-36B	343-36R	2206
60"	343-60Y	343-60B	343-60R	2207
72"	343-72Y	343-72B	343-72R	2208

Compact ball valve (R&B 5/16" x 5/16" BV) (Y 5/16"x 5/16" BV)

L.	Yellow	Blue	Red	3-Pak
36"	345-36Y	345-36B	345-36R	2212
60"	345-60Y	345-60B	345-60R	2213
72"	345-72Y	345-72B	345-72R	2214

3/8" Charging hose



- Special design puts features in a large volume hose for fast, high vacuum or charging. Hose uses hose technology which includes double barrier and higher working pressure.
- Burst pressure is 3000 psi(207 bar) min. burst with 600 psi(41 bar) max. working pressure
 - Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).
 - Larger selection of fittings to fit customer needs

ITEM	Description
8448	3/8" Replacement gasket (10 pak)
8449	3/8" "O"-ring (10 pak)

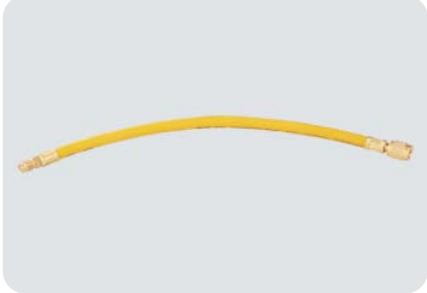
Most commonly selected

L.	Yellow	3/8" fl. str. x 3/8" fl. str Blue	Red	3/8" fl. x -Flow
36"	341-36Y	341-36B	341-36R	2215
48"	341-48Y	341-48B	341-48R	2216
60"	341-60Y	341-60B	341-60R	2217
72"	341-72Y	341-72B	341-72R	2218
96"	341-96Y	341-96B	341-96R	2219
10'	341-120Y	341-120B	341-120R	2220
12'	341-144Y	341-144B	341-144R	2221
25'	341-300Y	341-300B	341-300R	2222
50'	341-600Y	341-600B	341-600R	2223
75'	341-900Y	341-900B	341-900R	2224
100'	341-1200Y	341-1200B	341-1200R	2225

Other selections

L.	Yellow	3/8" fl. str. x 3/8" 45° Blue	Red	3/8" fl. x 3/8" x 90°	1/4" fl str.x 1/4" fl 45°
36"	342-36Y	342-36B	342-36R	2226	2237
48"	342-48Y	342-48B	342-48R	2227	2238
60"	342-60Y	342-60B	342-60R	2228	2239
72"	342-72Y	342-72B	342-72R	2229	2240
96"	342-96Y	342-96B	342-96R	2230	2241
10'	342-120Y	342-120B	342-120R	2231	2242
12'	342-144Y	342-144B	342-144R	2232	2243
25'	342-300Y	342-300B	342-300R	2233	2244
50'	342-600Y	342-600B	342-600R	2234	2245
75'	342-900Y	342-900B	342-900R	2235	2246
100'	342-1200Y	342-1200B	342-1200R	2236	2247

Cylinder valve hoses with finger tight drum fitting



Designed for finger tight operation on 125 lb. and 145 lb. refrigerant cylinders. Gaskets seal without wrenches.

- Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).
- 3/8" hose 3000 psi (207 bar) min. burst, 600 psi (41 bar)max. working pressure
- 1/4" heavy duty hose 3500 psi (241 bar) min. burst, 900 psi (62 bar) max. working pressure

ITEM	Description
8450	Replacement gasket (10 pak)

8" from angle end

L.	ITEM	Type	Fittings
12"	343	1/4" heavy duty	1/4" Male flare x 3/4" NPS
12"	344	3/8" heavy duty	3/8" Male flare x 3/4" NPS
72"	345	1/4" original	1/4" Female flare x 3/4" NPS
72"	346	3/8" standard	3/8" Female flare x 3/4" NPS

Automotive manifold hoses for R-134a systems



These 1/4" hoses combine hose with Acme fittings to meet SAE requirements. You get double

- barrier protection in a hose.

Manufactured specifically for automotive applications. Threads are 1/2" Acme Female, 14 mm Male and 1/2" Acme fittings.

- Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).
- 4000 psi (276 bar) min. burst, 800 psi (55 bar) max. working pressure.

ITEM	Description
8443	Replacement gasket for 1/4" and ½"hose Acme (10 pak)

Longer lengths available. Please specify.These fittings are not suitable for regular HVAC&R applications.

NOTE: These hoses meet SAE requirements J2196 components for refrigerants R12, R22, R500, R502 and R134A.

L.	SealRight Straight x45° Yellow	½" Fe. Acme x14mm Blue	Male Red	3-pak
36"	347-36Y	347-36B	347-36R	2248
48"	347-48Y	347-48B	347-48R	2249
60"	347-60Y	347-60B	347-60R	2250
72"	347-72Y	347-72B	347-72R	2251
96"	347-96Y	347-96B	347-96R	2252
10'	347-120Y	347-120B	347-120R	2253

1/4" Heavy duty charging hose



Heavy-duty construction for substantially increased service life. barrier reduces permeation Flexibility for all-v.eather easy handling.

- 3500 psi (241 bar) ram. urst.900 psi (62 bar) max.working pressure
- Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).
- Pulls 75 micron vacuum or better on 36" hose

ITEM	Description
8443	Replacement gasket (10 pak)

Most commonly selected

L.	HCA Hose Str.x Angle	Hose with FlexFlow	Hose with ball valve
12"	348 HCA-12"	-	-
24"	348 HCA-24"	-	-
36"	348 HCA-36"	2254	2265
48"	348 HCA-48"	2255	2266
60"	348 HCA-60"	2256	2267
72"	348 HCA-72"	2257	2268
96"	348 HCA-96"	2258	2269
10'	348 HCA-120"	2259	2270
12'	348 HCA-144"	2260	2271
25'	348 HCA-300"	2261	2272
50'	348 HCA-600"	2262	2273
75'	348 HCA-900"	2263	2274
100'	348 HCA-1200"	2264	2275

Other selections

L.	HCL Hose Str. x 90°	HCS Hose Str. x Str.
12"	348 HCL-12"	348 HCS-12"
24"	348 HCL-24"	348 HCS-24"
36"	348 HCL-36"	348 HCS-36"
48"	348 HCL-48"	348 HCS-48"
60"	348 HCL-60"	348 HCS-60"
72"	348 HCL-72"	348 HCS-72"
96"	348 HCL-96"	348 HCS-96"
10'	Black only. Longer lengths available. Please specify. The position of the new LAX valve lets you know for sure when it's fully opened securely closed or anywhere between.	
12'		
25'		
50'		
75'		
100'		

3/8"Heavy duty combination charging / hi - vacuum hose



Pull a vacuum much faster with this 3/8" heavy duty hose than with the 1/4" hose.

- Permeation resistant barrier.
- Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).
- 3000 psi (207 bar) rain. burst, 600psi (41 bar)max, working pressure.

ITEM	Description
8448	Replacement gasket
8449	"O"-ring

Most commonly selected

L.	3/8" ft. Str. x 3/8" ft. Str.	3/8" ft. Str. & FlexFlow
36"	349 BC-36"	2276
48"	349 BC-48"	2277
60"	349 BC-60"	2278
72"	349 BC-72"	2279
96"	349 BC-96"	2280
10'	349 BC-120"	2281
12'	349 BC-144"	2282
25'	349 BC-300"	2283
50'	349 BC-600"	2284
75'	349 BC-900"	2285
100'	349 BC-1200"	2286

Other selections

L.	3/8" fl. x 3/8" 45°	3/8" fl. x 3/8" 90°	3/8" fl. x 1/4" 45°	1/4" x 1/4" 45°
36"	2287	2298	349 BCA-36"	2309
48"	2288	2299	349 BCA-48"	2310
60"	2289	2300	349 BCA-60"	2311
72"	2290	2301	349 BCA-72"	2312
96"	2291	2302	349 BCA-96"	2313
10'	2292	2303	Longer lengths available on hose in this chart. Please specify. Longer than 8' not recommended for evacuation.	2314
12'	2293	2304		2315
25'	2294	2305		2316
50'	2295	2306		2317
75'	2296	2307		2318
100'	2297	2308		2319

1/2" and 5/8" heavy duty combination charging/hi-vacuum hose



Heavy-use construction with barrier technology for use with most refrigerants. Reduces permeation and vacuum loss.

- Large ID reduces vacuum time substantially over 1/4" or 3/8" hose
- Pull a more complete vacuum
- Faster refrigerant transfer
- Faster charging on large systems
- 3000 psi (207 bar)rain, burst, 600 psi (41 bar)max, working pressure 1/2" and 5/8" assemblies
- Various fittings available on request
- 1/4" access valve connection standard on one end of CA and DA hoses
- Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).

ITEM	Description
8452	1/2" and 5/8" Replacement gaskets
8443	1/4" Replacement gasket
8448	3/8" Replacement gasket

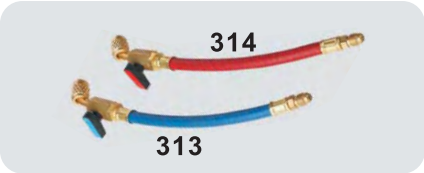
Most commonly selected

L.	"C" 1/2" ft. x 1/2" ft.	"D" 5/8" fl. x 5/8" fl.
36"	350 C-36"	350 D-36"
48"	350 C-48"	350 D-48"
60"	350 C-60"	350 D-60"
72"	350 C-72"	350 D-72"
96"	350 C-96"	350 D-96"
10'	350 C-120"	350 D-120"
12'	350 C-144"	350 D-144"
25'	350 C-300"	350 D-300"
50'	350 C-600"	350 D-600"

Other selections

L.	"CA" 1/4" angle end x 1/2" ft.	"DA" 1/4" angle end x 5/8" fl.	1/ 2" fl. x 3/8" fl.	3/8" fl x 3/8" fl.
36"	350 CA-36"	350 DA-36"	2320	2329
48"	350 CA-48"	350 DA-48"	2321	2330
60"	350 CA-60"	350 DA-60"	2322	2331
72"	350 CA-72"	350 DA-72"	2323	2332
96"	350 CA-96"	350 DA-96"	2324	2333
10'	36" hose will pull to 25 microns and lower. Hoses longer than 8' not recommended for evacuation		2325	2334
12'			2326	2335
25'			2327	2336
50'			2328	2337

9" And low loss adapter hoses



Easy retrofit of existing hoses with ball valve capabilities. Flexible hose between valve and fitting for handling in tight areas.

Operating remperature -20°F to 180°F (-28.8°C to 82.2°C)

Compact Ball Valve Assemblies

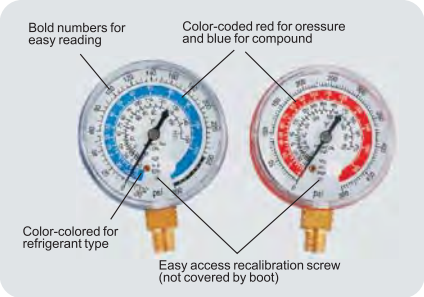
ITEM	Description
312	1/4" yellow ball valve adapter
313	1/4" blue ball valve adapter
314	1/4" red ball valve adapter
315	3 - pak: 312, 313, 314
316	1/4" compact ball valve - 3 Pak
317	1/4" compact ball valve - 45° - 1pc

Assemblies

ITEM	Description
322	1/4" yellow adapter
323	1/4" blue adapter
324	1/4" red adapter
325	3-pak: 322, 323, 324
326	1/4" heavy duty adapter
327	3/8" heavy duty adapter
328	Yellow std. "B" adapter
329	Acme 1/2" yellow adapter
330	Set of 2 handles and screws
331	1/4" replacement ball valve only
332	3/8" replacement ball valve only
333	Replacement yellow hose only
334	Replacement blue hose only
335	Replacement red hose only

Manifold

Large 3-1/8" dry manifold gauges (°F) red and blue with 1% accuracy (Class 1) calibration



For reliable performance and durability, these 3-1/8" gauges are housed in a red or blue steel case with front recalibrator screw. High visibility colored temperature scales are easy to read through the full view polycarbonate crystal. Several features combine for improved accuracy: Technology with brass surge protector to minimize needle pulsation; brass gauge movement, and copper alloy bourdon tube.

- 1/8" NPT Male connection.
- Calibrated to 1% accuracy at the plant.

* These gauges have °C and °F on dial
** Features retard protection to 350 psi
*** Features retard protection to 500 psi

ITEM	Size	Description	Press. Scale	Refrigerants
CF4001A	3-1/8"	Red pressure	0 - 500 psi	R-12, 22, 502
CF4001B	3-1/8"	Blue compound	30"-0-120** psi	R-12, 22, 502
CF4002A	3-1/8"	Red pressure	0 - 500 psi	R-12, 22, 134a
CF4002B	3-1/8"	Blue compound	30"-0-120** psi	R-12, 22, 134a
CF4003A	3-1/8"	Red pressure	0 - 500 psi	R-22, 134a, 404A
CF4003B	3-1/8"	Blue compound	30"-0-120** psi	R-22, 134a, 404A
CF4004A	3-1/8"	Red pressure	0 - 800 bar/psi	R-410A
CF4004B	3-1/8"	Blue compound	30"-0-300*** bar/psi	R-410A
CF4005A	3-1/8"	Red pressure	0 - 800 psi	R-22, 404A, 410A
CF4005B	3-1/8"	Blue compound	30"-0-350*** psi	R-22, 404A, 410A
CF4006A	3-1/8"	Red pressure	0 - 500 psi	R-134a, 404A, 407C
CF4006B	3-1/8"	Blue compound	30"-0-120** psi	R-134a, 404A, 407C

2-1/2" manifold gauges (°F) red and blue (class B)



Gauges feature bold high-visibility dials with colored

- Technology surge protector minimizes the needle pulsation for improved accuracy
- 1/8" NPT Male connection
- 3-2-3% accuracy

* These gauges have °C and °F on dial
** Features retard protection to 350 psi
*** Features retard protection to 500 psi

ITEM	Size	Description	Press. Scale	Refrigerants
CF4007A	2-1/2"	Red pressure	0 - 500 psi	R-12, 22, 502
CF4007B	2-1/2"	Blue compound	30"-0-120** psi	R-12, 22, 502
CF4007AB	Set red and blue gauges			R-12, 22, 502
CF4008A	2-1/2"	Red pressure	0 - 500 psi	R-12, 22, 134a
CF4008B	2-1/2"	Blue compound	30"-0-120** psi	R-12, 22, 134a
CF4009A	2-1/2"	Red pressure	0 - 500 psi	R-22, 134a, 404A
CF4009B	2-1/2"	Blue compound	30"-0-120** psi	R-22, 134a, 404A
CF4010A	2-1/2"	Red pressure	0 - 800 kg/cm/psi	R-410A
CF4010B	2-1/2"	Blue compound	30"-0-300*** kg/cm/psi	R-410A
CF4011A	2-1/2"	Red pressure	0 - 500 psi	R-134a, 404A, 507
CF4011B	2-1/2"	Blue compound	30"-0-120** psi	R-134a, 404A, 507

Protective gauge boots for 2-1/2" and 3-1/8" gauges



Rubber boots slip easily around gauges to cushion and protect them from impact.

- Fit 2-1/2" and 3-1/8" gauges without covering easy access recalibration screw
- Color-coded red or blue to match gauge

ITEM	Size	Description
CF4012	2-1/2"	Set of gauge boots
CF4012A	2-1/2"	Red protective gauge boot
CF4012B	2-1/2"	Blue protective gauge boot
CF4013	2-1/2"	Set of gauge boots
CF4013A	2-1/2"	Red protective gauge boot
CF4013B	2-1/2"	Blue protective gauge boot

Liquid - filled 2-1/2" manifold gauges (°F) red and blue (class B)



Liquid filled gauges are larger 2-1/2" diameter for easy reading with refrigerants color coded on dials. Liquid filled gauges dam pen pulsation. Gauges calibrated to 3-2-3 (Class B) accuracy. Back recalibrator screw.1/8" NPT Male connection.

* These gauges have °C and °F on dial
** Features retard protection to 240 psi
*** Features retard protection to 500 psi

ITEM	Size	Description	Press. Scale	Refrigerants
CF4014A	2-1/2"	Red pressure	0 - 500 psi	R-134a, 404A, 407C
CF4014B	2-1/2"	Blue compound	30"-0-120** psi	R-134a, 404A, 407C
CF4015A	2-1/2"	Red pressure	0 - 500 psi	R-22, 134a, 404A
CF4015B	2-1/2"	Blue compound	30"-0-120** psi	R-22, 134a, 404A
CF4016A	2-1/2"	Red pressure	0 - 500 psi	R-12, 22, 502
CF4016B	2-1/2"	Blue compound	30"-0-120** psi	R-12, 22, 502
CF4017A	2-1/2"	Red pressure	0 - 500 psi	R-12, 22, 134a
CF4017B	2-1/2"	Blue compound	30"-0-120** psi	R-12, 22, 134a
CF4018A	2-1/2"	Red pressure	0 - 800 bar/psi	R-410A
CF4018B	2-1/2"	Blue compound	30"-0-350*** bar/psi	R-410A
CF4019A	2-1/2"	Red pressure	0 - 800 psi	R-22, 404A, 410A
CF4019B	2-1/2"	Blue compound	30"-0-350*** psi	R-22, 404A, 410A
CF4012	2-1/2"	Set of gauge boots		

Mechanical vacuum gauges - 3-1/8"



Full range mechanical bourdon tube gauges for determining system vacuum. Much more accurate than a compound gauge. All gauges are 1/8" NPT Male bottom connection. 3-1/8" gauges are larger to show vacuum more accurately in inches of mercury and mbar.

ITEM	Size	Scale	Connection	Case
CF4029	3-1/8"	0-30" inHg & 1000-0 mbar	1/8" NPT Male lower	Blue

Manifold

Large 80 mm (3-1/8") dry(°C)red and blue with class 1 (1%accuracy)calibration



Housed in a red or blue steel case for durability.
Colored temperature scales are easy to read through polycarbonate crystal. Several features combine for improved accuracy:
Technology with brass surge protector'to minimize needle pulsation, brass gauge

ITEM	Size	Description	Press. Scale	Refrigerants
CF4020A	3-1/8"	Red pressure	bar and psi	R-134a, 404A, 407C
CF4020B	3-1/8"	Blue compound	bar and psi	R-134a, 404A, 407C
CF4021A	3-1/8"	Red pressure	bar and psi	R-410A
CF4021B	3-1/8"	Blue compound	bar and psi	R-410A
CF4022A	3-1/8"	Red pressure	bar and MPa	R-12, 22, 502
CF4022B	3-1/8"	Blue compound	bar and MPa	R-12, 22, 502
CF4023A	3-1/8"	Red pressure	bar and psi	R-12, 22, 502
CF4023B	3-1/8"	Blue compound	bar and psi	R-12, 22, 502
CF4024A	3-1/8"	Red pressure	bar and MPa	R-410A
CF4024B	3-1/8"	Blue compound	bar and MPa	R-410A
CF4025A	3-1/8"	Red pressure	bar and MPa	R-134a, 404A, 407C
CF4025B	3-1/8"	Blue compound	bar and MPa	R-134a, 404A, 407C
CF4026A	3-1/8"	Red pressure	bar and psi	R-12, 134a, 413A
CF4026B	3-1/8"	Blue compound	bar and psi	R-12, 134a, 413A
CF4027A	3-1/8"	Red pressure	bar and psi	R-22, 134a, 407C
CF4027B	3-1/8"	Blue compound	bar and psi	R-22, 134a, 407C
CF4028A	3-1/8"	Red pressure	bar and psi	R-22, 134a, 404A
CF4028B	3-1/8"	Blue compound	bar and psi	R-22, 134a, 404A

68 mm (2-1/2") manifold gauges (°C) red and blue (class B)



Gauges feature bold high-visibility dials with color coded temperature scales for easy reading. And Flutterless technology with surge protector minimizes the needle pulsation for improved accuracy.

Compound gauges feature over-pressure protection t0 350 pounds. 1/8" NPT Male lower mount fitting.

- Steel cases
- Class B (3-2-3% accuracy)

ITEM	Size	Description	Press. Scale	Refrigerants
CF4030A	2-1/2"	Red pressure	kPa and ps	R-12, 22, 502
CF4030B	2-1/2"	Blue compound	kPa and psi	R-12, 22, 502
CF4031A	2-1/2"	Red pressure	bar and psi	R-12, 22, 502
CF4031B	2-1/2"	Blue compound	bar and psi	R-12, 22, 502
CF4032A	2-1/2"	Red pressure	bar and MPa	R-12, 22, 502
CF4032B	2-1/2"	Blue compound	bar and MPa	R-12, 22, 502
CF4033A	2-1/2"	Red pressure	kg/cm2 and psi	R-12, 22, 502
CF4033B	2-1/2"	Blue compound	kg/cm2 and psi	R-12, 22, 502
CF4034A	2-1/2"	Red pressure	bar and psi	R-22, 134a, 407C
CF4034B	2-1/2"	Blue compound	bar and psi	R-22, 134a, 407C
CF4035A	2-1/2"	Red pressure	bar and psi	R-22, 134a, 404A
CF4035B	2-1/2"	Blue compound	bar and psi	R-22, 134a, 404A
CF4036A	2-1/2"	Red pressure	kg/cm2 and psi	R-410A
CF4036B	2-1/2"	Blue compound	kg/cm2 and psi	R-410A
CF4037A	2-1/2"	Red pressure	bar and MPa	R410A
CF4037B	2-1/2"	Blue compound	bar and MPa	R-410A
CF4038A	2-1/2"	Red pressure	bar and psi	R-134a, 404A, 507
CF4038B	2-1/2"	Blue compound	bar and psi	R-134a, 404A, 507
CF4039A	2-1/2"	Red pressure	kg/cm2 and psi	R-134a, 404A, 507
CF4039B	2-1/2"	Blue compound	kg/cm2 and psi	R-134a, 404A, 507
CF4040A	2-1/2"	Red pressure	MPa	R-134a, 404A, 407C, 507
CF4040B	2-1/2"	Blue compound	MPa	R-134a, 404A, 407C, 507
CF4041A	2-1/2"	Red pressure	bar and psi	R-134a, 404A, 407C
CF4041B	2-1/2"	Blue compound	bar and psi	R-134a, 404A, 407C

Liquid-filled 80 mm (3-1/8") manifold gauges(°C) red and blue (class B)



Large 80 mm diameter for easy reading with refrigerants color-coded on dials.
Liquid-filled gauges calibrated to Class B (3-2-3) accuracy and feature a recalibrator screw.
Rugged case features beefed-up rings for sealing reliability.
Unique design allows gauge attachment to most manifolds even where room is a consideration.
1/8" NPT Male lower connection.

ITEM	Size	Description	Press. Scale	Refrigerants
CF4042A	3-1/8"	Red liquid pressure	bar and MPa	R-12, 22, 502
CF4042B	3-1/8"	Blue liquid compound	bar and MPa	R-12, 22, 502
CF4043A	3-1/8"	Red liquid pressure	bar and MPa	R-134a, 404A, 407C
CF4043B	3-1/8"	Blue liquid compound	bar and MPa	R-134a, 404A, 407C
CF4044A	3-1/8"	Red liquid pressure	bar and MPa	R-410A
CF4044B	3-1/8"	Blue liquid compound	bar and MPa	R-410A
CF4045A	3-1/8"	Red liquid pressure	bar and psi	R-410A
CF4045B	3-1/8"	Blue liquid compound	bar and psi	R-410A
CF4013	3-1/8"	Set of gauge boots		

Digital electronic scales



CF-36575

Eliminate charging cylinders with a touch.
Save time with any refrigerant in any system.
Designed within CE guidelines.
Put this rugged scale to work with any refrigerant in any system and eliminate the time and cost of charging cylinders. The timesaving process also eliminates refrigerant transfer from tank to cylinder to system. You weigh the refrigerant container and charge directly into the system or recover from the system.
No concern about residual refrigerant in a charging cylinder.
Self-contain ed, the scale is ready to use in the carrying case or removed and set on a level surface. Select 50~100 kg. capacity (110~220lb).

- Calibration standards traceable to the National Institute of Standards and Technology .
- Large heavy duty metal platform and over sized strain gauge bridge for rigidity, repeatability, and accuracy of ±0.5% of reading, whichever greater.
- Has memory function.
- On-the-job convenience with removable control module on retractable 5 foot coiled cord.
- Water and environmental resistance with sealed LCD display and control module touchpad.
- Industrial grade circuitry for long life performance
- Mechanical overload protection and "OL" alert on LCD
- Minus (-) reading shows weight removed from the platform
- Large easy-to-read 0.5' numbers even in brightly lighted areas
- "Low" battery icon on LCD for 9V alkaline battery or pounds in decimal and kilograms
- Measures pounds/ounces, or pounds in decimal and kilograms
- Designed within CE guidelines

SPECIFICATION

SPECIFICATION	CF-36575A	CF-36575B	CF-36575C	CF-36575D
Capacity	50kg/110lbs	70kg/154lbs	90kg/200lbs	100kg/220lbs
Accuracy	+/-0.5% of reading	+/-0.5% of reading	+/-0.5% of reading	+/-0.5% of reading
Resolution	+/-0.1oz/0.005lbs/2g	+/-0.2oz/0.01lbs/5g	+/-0.2oz/0.01lbs/5g	+/-0.2oz/0.01lbs/5g
Platform size	23X23CM	23X23CM	23X23CM	23X23CM
Weight	3.3KG	3.3KG	3.3KG	3.3KG
Power	2pcs 9V battery include (60hours)	2pcs 9V battery include (60hours)	2pcs 9V battery include (60hours)	2pcs 9V battery include (60hours)
Readout	Imperial / Metric	Imperial / Metric	Imperial / Metric	Imperial / Metric
Operating Temp	0 32 F to 122 F (0~50 C) O	0 32 F to 122 F (0~50 C) O	0 32 F to 122 F (0~50 C) O	0 32 F to 122 F (0~50 C) O
Storage Temperature Range	-4 F to 158 F O O (-20~70 C)	-4 F to 158 F O O (-20~70 C)	-4 F to 158 F O O (-20~70 C)	-4 F to 158 F O O (-20~70 C)
Auto off	15 min	15 min	15 min	15 min

Digital programmable charging scale



CF-36443

Programmable charging scales have the same features as at left but with added capabilities for automated, and even faster, more economical charging. Simply enter the charging weight on the control touchpad. When weight has been dispensed, scale automatically signals to shut-off refrigerant flow.temperature scales for easy reading.

- Mesh filter in charging module protects solenoid valve from debris
- Low flow triggers automatic hold to extend solenoid life
- Schrader valve prevents backflow through solenoid
- Has memory function
- Charging accuracy is equal to scale accuracy ±0.25 oz.
- Designed within CE guidelines
- Larger carrying case contains charging module, control/ programming module, either a 50~100 kg.capacity platform (110~220 lb),and an AC power pack for solenoidpower during charging.
- Solenoid valve with 400 psi maximum operating pressure differential (MOPD) allows metering broad range of refrigerants.

Convert scale to programmable with upgrade

Kits with one of these kits, standard CF-36443 scales can be upgraded with programmable charging capability. Each kit includes a charging module, power pack, instruction manual, and larger carrying case to hold all parts.

SPECIFICATION				
ITEM	CF-36443A	CF-36443B	CF-36443C	CF-36443D
Capacity	50kg/110lbs	70kg/154lbs	90kg/200lbs	100kg/220lbs
Accuracy	+/-0.5% of reading	+/-0.5% of reading	+/-0.5% of reading	+/-0.5% of reading
Resolution	+/-0.1oz/0.005lbs/2g	+/-0.2oz/0.01lbs/5g	+/-0.2oz/0.01lbs/5g	+/-0.2oz/0.01lbs/5g
Platform size	23X23CM	23X23CM	23X23CM	23X23CM
Weight	3.6KG	3.6KG	3.6KG	3.6KG
Power	2pcs 5AA battery include (60hours)	2pcs 5AA battery include (60hours)	2pcs 5AA battery include (60hours)	2pcs 5AA battery include (60hours)
Readout	Imperial / Metric	Imperial / Metric	Imperial / Metric	Imperial / Metric
Operating Temp	O 32 F to 122 F (0~50 C) O	O 32 F to 122 F (0~50 C) O	O 32 F to 122 F (0~50 C) O	O 32 F to 122 F (0~50 C) O
Storage Temperature Range	-4 F to 158 F O O (-20~70 C)	-4 F to 158 F O O (-20~70 C)	-4 F to 158 F O O (-20~70 C)	-4 F to 158 F O O (-20~70 C)
Auto off	15 min	15 min	15 min	15 min

Has memory function

Charging stations



CF-36571

Charging station with 5-Valve manifold gauge

The compact unit with charging scale and interchangeable refrigerant scales

THE UNIT CONSISTS OF:

- 2CFM vacuum pump
- 5-valve manifold with Vacuum gauge 80mm diameter
- Compound gauge, 68mm
- Charging hoses , 36", 60", 72"



CF-36573

Charging station with 4-Valve manifold Gauge, electronic scale

Vacuum and charging system with case.It is a very compact, solid and easy-to-use recharging and vacuum unit It is equipped with and essential kit of components which make it a very versatile unit to be used with all types of cooling and air condition systems.

THE UNIT CONSISTS OF:

- 2CFM vacuum pump
- 2-valve manifold with Vacuum gauge 80mm diameter
- Compound gauge, 68mm
- Charging hoses , 36", 60", 72"
- Electronic scales(50kg or 100kg on page 7)



CF567

2-IN-1 Vacuum & Inflation PUMP

A substitute for vacuum pump. No need to move a hulking Nitrogen Tank to test leakage by high pressure. No need to disassemble all components of main cabinet during repairing. Leak detecting commercial air conditioning or automotive air conditioning system by air inflation. Built-in pressure gauge and vacuum gauge, assists user for proper readings and operation. Built-in special device to prevent compressor from spraying oil. Built in device for drying & filtering and oilwater separator.

Flush gun kit



An economical means of flushing contaminants and scale from A/C system componenes, the flush gun uses dry shop air to pesssurize the solvent. The process thoroughly cleans the part, removing oil and any refrigerant contaminants and residue. The attached nozzle directs the flow of solvent without sprayback. Includes: flush gun, hose, canister and canister adapter

AUTOMOBILE AIR CONDITIONING SERVICE PRODUCTS

2-Valve diaphragm manifolds with sightglas & 1/4" sae fittingsds



1. Unique swivel stem design reduces wear
 2. Excellent vacuum characteristics
 3. 100% virgin Teflon diaphragms
 4. Full porting for maximum refrigerant flow
- Two Valve Manifolds**
- Anodized aluminum block body
 - One full turn open/close valve
 - Oversized sight glass for easy viewing
 - Excellent vacuum characteristics
 - No-flutter gauge design, class 1.0, suitable for CO₂,68mm/2-1/2" gauges; psi & bar unit; °F/°C;
 - High quality stainless steel gauge
 - Easy-to-grip knobs

ITEM	Description
CF4441	2-valve aluminum manifold with gauges.No hoses.

2-Valve diaphragm manifolds with sightglas & 1/2" acme fittingsds



1. Unique swivel stem design reduces wear
 2. Excellent vacuum characteristics
 3. 100% virgin Teflon diaphragms
 4. Full porting for maximum refrigerant flow
- Two Valve Manifolds**
- Anodized aluminum block body
 - One full turn open/close valve
 - Oversized sight glass for easy viewing
 - Excellent vacuum characteristics
 - No-flutter gauge design, class 1.0, suitable for R-134a,68mm/2-1/2" or 80mm/ 3-1/2" gauges; psi & bar unit; °F/°C;
 - High quality stainless steel gauge
 - Easy-to-grip knobs

ITEM	Description
CF4434	2-valve aluminum manifold with 68mm gauges, No gauge boots, No hoses.
CF4435	2-valve aluminum manifold with 68mm gauges, with gauge boots, No hoses.
CF4436	2-valve aluminum manifold with 80mm gauges, No gauge boots, No hoses.
CF4437	2-valve aluminum manifold with 68mm gauges, No gauge boots, 60"RYB, 1/2ACME.
CF4438	2-valve aluminum manifold with 68mm gauges, No gauge boots, 72"RYB, 1/2ACME.
CF4439	2-valve aluminum manifold with 68mm gauges, No gauge boots, 60"RYB, 1/4"SAE.
CF4440	2-valve aluminum manifold with 68mm gauges, No gauge boots, 72"RYB, 1/4"SAE.

R-I34A side wheel manifolds for automotive service



brute manifold replacement parts



Solid Aluminum Bar
—Long-lasting and durable with proven face seal valves.

New Universal Gauges
—Easy to read dial faces show R-134a temperatures in degrees Fahrenheit, plus pressures in psi and kPa.

Gauge Boots
—Protects your manifold during use and storage.

Sight Glass
—Shows movement of refrigerant through the manifold.

Includes
—R134A low permeation hoses with field serve couplers on the high and low side hoses;yellow hose is 1/2"ACME x 1/2"ACMEwith Quick Seal Fitting.

ITEM	Description
CF4442	2-valve aluminum manifold with 68mm gauges with gauge boots, No hoses.
CF4443	R134a Manifold with 68mm gauges and three 60"colorcoded hoses and automotive field service couplers
CF4444	R134a Manifold with 68mm gauges and three 72"colorcoded hoses and automotive field service couplers
CF4445	2-valve aluminum manifold with 68mm gauges, No gauge boots, 60"RYB, 1/4"SAE.
CF4446	2-valve aluminum manifold with 68mm gauges, No gauge boots, 72"RYB, 1/4"SAE.

Two way manifold with sight glass



brute manifold replacement parts



Sight Glass
—Confirms movement and condition of refrigerant passing through the manifold.

Gauge Boots
—Provides protection against the bumps andknocks of every day use.

Pressure Temperature Chart
—Stores in a slot on the back of the manifold; gives you multiple refrigerant capability.

Face Seal Valves
—Give a tight seal, less wear and improved flow.

ITEM	Description
LX4447	Sight Glass Manifold with gauge boots no hoses
LX4448	Sight Glass Manifold with gauge boots, three 60"/72" standard hoses, 1/4" fittings
LX4449	Sight Glass Manifold with gauge boots, three 60"/72" standard hoses, 1/4" Quick Seal Fittings
LX4450	Sight Glass Manifold with gauge boots, three 60"/72" Hoses, 1/4" Quick Seal Fittings
LX4451	Sight Glass Manifold for automotive R-134a, three 60"/72" color-coded hoses with field service couplers

Side wheel manifold with 1/4" fittings



brute manifold replacement parts



Our popular side wheel manifold is easy to use and designed for accuracy.

Bar
—solid forged brass for long life; handwheels are durable,

Universal Gauges
—Clearly marked so they're easy to read and protected with lenses.

Field Proven Face Seal Valve
—Prevents leakage past the stem.

ITEM	Description
CF4452	Standard Side Wheel Manifold, color-coded gauges, °C/°F, brass bar, handwheels and hamging hook, no hoses
CF4453	Standard Side Wheel Manifold, color-coded gauges, Celsius scale brass bar, handwheels and hanging hook, no hoses
CF4454	Standard Side Wheel Manifold Set, includes three 36"standard hoses with 1/4" fittings
CF4455	Standard Side wheel Manifold, color-coded gauges, Fahrenheit sca le, brass bar, handwheels and hanging hook, no hoses, 80 mm lens gauges
CF4456	Standard Side Wheel Manifold Set, includes three 60"standard hoses with 1/4" fittings

Mini UV blue system



Compact flashlight with dichroic filter produces bright UV Blue light for maximum output in its class.

- KIT INCLUDES:**
- Lamp with bulb and UV glasses
 - A/C dye syringes plus delivery hose for HVAC&R and auto systems
 - Coolant, oil, and fluid dyes
 - Durable carrying case
 - Use with battery pack or AC transformer

ITEM	Description
1044	Mini lamp, glasses, clip adapter
1045	Mini lamp above with case
1046	Mini lamp above with A/C, oil and coolant dyes, delivery hoses and case
1047	UV Blue lens - 2"
1048	Bulb for mini

Fluorescent scanning



- Features include:
- One piece lens that focuses and projects up to 90% of light in a uniformly circular beam
 - Aircraft aluminum body with military grade, Type III anodized finish and sure-grip texture
 - Compression sealed for water resistance
 - UV12(UV17) emitters bulbs
 - 25,000 hour bulb life
 - Operate 22 hours w/3 AA batteries with normal using Works w/ most common fluorescent dyes Instant On . No heat.

ITEM	Description
UV12	Mini lamp,12 emitters bulbs
UV17	Mini lamp, 17 emitters bulbs

Universal A/C disposable injectors



Universal A/C dye injectors work in AC/R and aut o A/C systems 6pcs 2.5ml applications of dye A/C in each disposable tube make it economical fast and clean.

- Less costly and faster than many other methods
- One dye minimizes inventory
- No back-up refrigerant to move dye into system

ITEM	Description
CF-700	oz. (2.5 ml) injector - 6/cs. (12 residential applications/cs.)

Spotgun injector system



- Include:**
- Plastic injector
 - 10 cm rubber hose
 - 10 cm rubber hose

ITEM	Description
CFNJ15	Manual injector kit

Safety glasses for leak detection



Helps protect your eyes against metal particles, sparks, refrigerant gases,etc. when working on HVAC&R systems. Safety goggles are recommended any time you work on a system.

Dye catridges



Universal dye for A/C systems with minera or polyol ester lubricants

- Field proven and sold worldwide
- Passed thermal stability tests
- One dye for AC/R systems
- Raw material QC assures dye uniformity

ITEM	Description
CFDS14	1oz/30ml

Charging kit for R-134a system



CF1379

Reusable brass dispensing rail with hose and R-134a quick coupler charge A/C systems with R134a can tap with 1/2" ACME fitting.



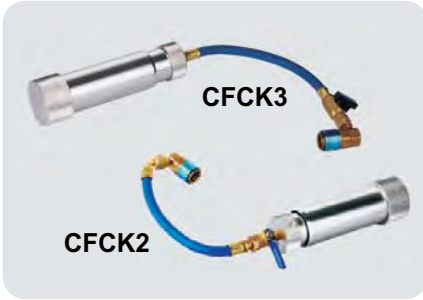
Calibrated A/C screw injection



This 2-ounce injector is easy to refill and easy to operate. Calibrations are clearly marked on the injector. Connect to A/C low side and rotate handle. AC/R and auto models.

ITEM	Description
5093	Auto R-134a calibrated A/C screw injector, 2 oz. oil injector
5094	Auto R-134a calibrated A/C screw injector, 1/4 oz. oil injector

Injection systems



CF1379

This 2-ounce injector is easy to refill and easy to operate. Calibrations are clearly marked on the injector. Connect to A/C low side and rotate handle. AC/R and auto models.

ITEM	Description
5093	Auto R-134a calibrated A/C screw injector, 2 oz. oil injector
5094	Auto R-134a calibrated A/C screw injector, 1/4 oz. oil injector

Dye and oil injectors



ITEM	Description
CFJ5	1/2ACME-M 1/2 ACME-F (R134a)
CFJ6	1/4"SAE F X 1/4"SAE M

Auto A/C swivel adapters kit include



ITEM	Description
CFCH136	Adapters kit

Spotgun injector system



ITEM	Description
CF6069	Injector kit
CF6069H	12cm hose
CF1306A	Lo side coupler w/ 1/4"flare
CF6069B	Adapter 1/4"SAE M X 12F
CF6069C	Anti-blow valve
1/2"SAE and 1/4"SAE hoses with anti-blowback valves	

Flush gun kit



Easy-to-use charging kit, including 12", 1/4"SAE hose, 2"R-134A gauge. New style with lock low side quick coupler brass can tap. (Manual exhaust available)

All gauges are 1/8" NPT.



ITEM	Description
1044	Mini lamp, glasses, clip adapter
1045	Mini lamp above with case
1046	Mini lamp above with A/C, oil and coolant dyes, delivery hoses and case
1047	UV Blue lens - 2"
1048	Bulb for mini

Automotive R-134a and R-12 can taps



With side tap, handles slip around and close to pierce the can. Small inserts for use with lubricant cans. Check valve on side taps help prevent back pressure into can. Not for use with other refrigerants.

ITEM	Description
LXCT006	R12/R134a can tap
172	R-134a side can tap
173	R-12 side can tap
174	Gaskets for side can tap (10 pak)

Brass can tap



ITEM	Description
CF1371	Automotive refrigerant can taps brass top can tap 1/4 " SAE
CF1372	Automotive refrigerant can taps brass top can tap 1/2 ACME
CF1373	R-12/R-134a can tap 1/4 " SAE

CF1381



Complete kit includes: R-134a can tap valve R-134a high pressure hose with quick connect fittings.

CF1382



Complete kit includes: R-134a can tap valve R-134a high pressure hose with quick connect fittings/pressure gauge in the middle of the hose.

Manifold

R-134a snap couplers 1/4" sae



ITEM	Description
1318A	Lo side coupler w/ 1/4"Flare
1318B	Hi side coupler w/ 1/4" Flare
1318C	Lo side coupler w/ 1/2"ACME
1318D	Hi side coupler w/ 1/2" ACME

Automotive R-134a A/C couplers - economy



A basic R-134a service coupler with no control valve. Snaps on for instant flow Professionals should use couplers above.

ITEM	Description
1306A	Lo side coupler w/ 1/4"flare
1306B	Hi side coupler w/ 1/4" flare
1306C	Replacement "O"-ring set (6 pk.)

R-134a snap couplers 14mm



The snap style is designed for mechanics just starting A/C repair

ITEM	Description
1307A	Lo side coupler w/ 14 MM
1307B	Hi side coupler w/ 14 MM

Automotive R-134a A/C couplers - premium with control valve



Couplers interface with R-134a service ports. 14 mm female thread or 1/4" male flare available.

- Quick, easy connect/disconnect.
- Control valve for access to systems even at working pressures.
- Integral safety sleeve holds coupler securely to service port.
- Highest flow characteristics.
- Low profile for tight applications.

ITEM	Description
1304A	14mmFe, 90° high side auto coupler
1304B	14mmFe, 90° low side auto coupler
1304C	High side x 3/8" Male flare auto coupler
1304D	Low side x 3/8" Male flare auto coupler
1305A	1/4 M. Fl., 90° high side auto coupler
1305B	1/4 M. Fl., 90° low side auto coupler
1304H	14mm Male x 1/4" Male fl.

Automotive R-134a 3-in-1 vacuum/charge recover core tool



1. Core removal for vacuum and charges. Lets you evacuate and charge through an unrestricted line for increased speed and higher vacuum.
2. Core replacement.
3. Recovery valve. Core removal allows recovery unit to work at



ITEM	Description
VC035A	High-side R-134a auto valve core tool
VC035B	Low-side R-134a auto valve core tool
VC038A	High-side R-134a auto valve core tool with charging function
VC038B	Low-side R-134a auto valve core tool with charging function
033C	"O"-ring kit for VC035A Hi/VC038A Hi.
034C	"O"-ring kit for VC035B Lo/VC038B Lo.

Superheat calculation kit



With the access valve, improved °F and °C digital thermometer and core extractor tool you can easily take an internal temperature reading for calculating system superheat.

- Read from -58 to 302°F (-50°C to 150°C), and pressure
- Extract Schrader core without opening system
- Remove broken Schrader cores
- Chase damaged threads
- Replace cores
- Use as vacuum valve to increase flow and reduce vacuum time.
- Also can decrease charging time
- Use to reduce recovery time

ITEM	Description
1035	Complete Superheat Kit and Accessories (as shown)
1036	Superheat Kit w/o accessory kit
1037	Improved Vacuum/Charge Valve
1038	Accessory Set - 2 piece
1039	Schrader Rethreading Accessory
1040	Broken Schrader Remover Accessory
1041	Digital Thermometer and Nut - 40°F to 230°F
1042	Pocket Thermometer
1043	Grappler rod and nut assembly

Pocket difital thermometer



Digital head rotates 180° for easy reading.

- On/off button
- Auto shut-off after 10 minutes to save battery
- Reading updates every second
- 5" (125 mm) stem
- Thermometer -58° to 302°F digital (-50° to 150°C)

Pocket thermometers



1" and 1-3/8" dial thermometers are adjustable with a 5" stainless steel stem. Colored sheath with pocket clip.

- Food processing
- Heating and ventilating
- Agriculture
- Laboratories
- Industrials
- Refrigeration
- Pharmaceutical
- Brewing

ITEM	Description
CF-36570	1"dial 0°F to 220°F
CF-36570A	1"dial 40°F to 160°F
CF-36570B	1" dial 50°F to 550°F
CF-36570C	1-3/8" dial -40°F to 160°F (-40°C to 70°C)
CF-36570D	1-3/8" dial 0°F to 220°F (-10°Cto 110°C)
CF-36570E	1" dial 0°Cto 70°C

45°Ratchet Eccentric Cone Type Flaring Tool



CF-R806A

- Accurate flaring exquisite workmanship
- Ball position simple and convinent operation
 - Precision flared no leakage connect
 - Double ring bars permanenl leveling malposition
 - Arc flame ergonomics design
 - Ratchet fast forward portable suitable to use in narrow space



CF-R806FT

ITEM	Description
CF-R806A	For inch: 1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing individual packed in color box.
CF-R806M	For inch: 6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing individual packed in color box.
CF-R808A	For inch: 3/16",1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing individual packed in color box.
CF-R808M	For inch: 5mm,6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing individual packed in color box.
CF-R806FT-L	WK-R806A+WK-532+CT-207 For inch: 1/4",5/16",3/8",1/2",5/8",3/4"&6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-R808FT-L	WK-R808A+WK-532+CT-207 For inch: 3/16",1/4",5/16",3/8",1/2",5/8",3/4"&5mm,6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carry-ing plastic case.

Flaring Tools



CF-N806A

- Accurate flaring exquisite workmanship
- Ball position simple and convinent operation
 - Precision flared no leakage connect
 - Double ring bars permanenl leveling malposition
 - High-strength aluminum alloy body, strong hand feeling, light weigh
 - Embedded diamond thread sleeve, long service life
 - Patented connecting baseplate design ensures that the body is not deformed

ITEM	Description
CF-N806A	For inch: 1/4",5/16",3/8",1/2",5/8"&3/4" O.D.Tubing individual packed in color box.
CF-N806M	For metric: 6mm,8mm,10mm,12mm,16mm&19mm O.D.Tubing individual packed in color box.
CF-N808A	For inch: 3/16",1/4",5/16",3/8",1/2",5/8"&3/4" O.D.Tubing individual packed in color box.
CF-N808M	For metric: 5mm,6mm,8mm,10mm,12mm,16mm&19mm O.D.Tubing individual packed in color box.
CF-N809AM	For inch and metric:6mm,1/4",9mm,3/8",10mm,12mm,1/2",5/8", (16mm) & 3/4"(19mm) O.D.Tubing individual packed in color box.
CF-N806FT-L	CF-N806+CF-532+CT-207 1/4",5/16",3/8",1/2",5/8" & 3/4" & 6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-N808FT-L	CF-N808+CF-532+CT-207 3/16",1/4",5/16",3/8",1/2",5/8",3/4" & 5mm,6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-N805FT-L	CF-N805+CF-532+CT-207 1/2",5/8",3/4",7/8",1" & 12mm,16mm,19mm,22mm,25mm O.D.Tubing Packed in hand carrying plastic case.

45°Eccentric cone type flaring tool



CF-519FT

- Super accuracy fast & convenient
- Liners(Customizable)
 - Stopper plate
 - Uniform flares in size
 - Easy clamp



CF-519FT-L

ITEM	Description
CF-519FT-L	CF-519FT+CF-532+CT-207 For inch & metric: 1/4",6mm,5/16"(8mm),3/8",10mm,1/2",12mm,5/8"(16mm),3/4"(19mm) O.D.Tubing Packed in hand carrying plastic case.

Flaring Tools



CF-806A

- Accurate flaring exquisite workmanship
- Ball position simple and convinent operation
 - Precision flared no leakage connect
 - Double ring bars permanenl leveling malposition
 - Arc flame ergonomics design



CF-806AM



CF-806FT

ITEM	Description
CF-806A	For inch: 1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing individual packed in color box.
CF-806M	For metric: 6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing individual packed in color box.
CF-808A	For inch: 3/16",1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing individual packed in color box.
CF-808M	For metric: 5mm,6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing individual packed in color box.
CF-809AM	For inch and metric:6mm,1/4",9mm,3/8",10mm,12mm,1/2",5/8"(16mm)&3/4"(19mm)O.D.Tubing individual packed in color box.
CF-806FT-L	CF-806+CF-532+CT-207 For inch: 1/4",5/16",3/8",1/2",5/8",3/4"&6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-808FT-L	CF-808+CF-532+CT-207 For inch: 3/16",1/4",5/16",3/8",1/2",5/8",3/4"&5mm,6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-805FT-L	CF-805+CF-532+CT-207 For inch: 3/16",1/4",5/16",3/8",1/2",5/8",3/4"&5mm,6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-806AM-L	WK-R808A+WK-532+CT-207 For inch: 1/4",5/16",3/8",1/2",5/8",3/4"&5mm,6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing Packed in hand carrying plastic case.
CF-808AM-L	WK-R808A+WK-532+CT-207 For inch: 3/16",1/4",5/16",3/8"&3/4"O.D.Tubing(5mm,6mm,8mm,10mm,12mm,16mm,19mm O.D.Tubing)Packed in hand carrying plastic case.

Eccnetric Cone Type Flaring Tools



CF-E806AM-L

Technical parameter

	Description
CF-E806AM+CF-532+CT-207+Spare battery+Charger(9.6v)+2 Steel bar	For inch: 1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing 6mm,8mm, 10mm,12mm,16mm&19mm O.D.Tubing packed in hand carrying plastic color .



CF-E800AM-L

Technical parameter

	Description
CF-E800AM+CF-532+CT-207+2 Clamp heads+Charger(9.6v) +7 Steel bar	For inch and metric: 6mm, 1/4",5/16"(8mm),3/8",10mm,12mm, 1/2",5/8"(16mm) & 3/4"(19mm) O.D.Tubing packed in hand carrying plastic color .

Tee-extractor sets



CF-T800

Technical parameter

Extractor heads size							
10mm	12mm	16mm	19mm	22mm	25mm	28mm	32mm
3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"

Service tools

45°Eccnetric Cone Type Flaring Tools



WK-813

Technical parameter

Item No.	Description
WK-813	WK-R806AM Flaring Tool; CT-274 Tube Cutter; CT-209 Reamer; CT-207 Deburrer; CT-96 Swaging Punch; CT-102 Spring Bender; CT-122 Ratchet Wrench

Item No.	Description
CT-806A	For inch:1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing For metric:6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing
CT-806M	For inch:1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing For metric:6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing
CT-808A	For inch:3/16",1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing For metric:5mm,6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing
CT-808M	For inch:3/16",1/4",5/16",3/8",1/2",5/8"&3/4"O.D.Tubing For metric:5mm,6mm,8mm,10mm,12mm,16mm&19mmO.D.Tubing
CT-806AM-L	CT-806+CT-274+CT-208 1/4",5/16",3/8",1/2",5/8",3/4"&6mm,8mm,10mm,12mm,16mm,19mmO.D.Tubing Packed in hand carrying plastic case.
CT-808AM-L	CT-808+CT-274+CT-208 3/16",1/4",5/16",3/8",1/2",5/8",3/4"&5mm,6mm,8mm,10mm,12mm,16mm,19mmO.D.Tubing Packed in hand carrying plastic case.



CT-806(M)&
CT-808A(M)



CT-806AM-L&
CT-808AM-L

45°Flaring & Swaging Tool Kit



CT-275&CT-2000

Item No.	Description
CT-275	Flares 1/8",3/16",1/4",5/16",3/8",7/16",1/2",5/8" & 3/4"O.D. Includes 5 swage adapters that swage 7 tube sizes 3/16",1/4",5/16",3/8",1/2",5/8",3/4"O.D. Packed In Hand Carrying Plastic Case.
CT-2000	For 3/16",1/4",5/16",3/8",7/16",1/2",5/8",O.D.Includes 6mm,8mm,10mm,12mm,16mm & 19mm O.D. Packed In Hand Carrying Plastic Case.



CT-278

Item No.	Description
CT-275	Flares 1/8",3/16",1/4",5/16",3/8",7/16",1/2",5/8" & 3/4"O.D. Includes 5 swage adapters that swage 7 tube sizes 3/16",1/4",5/16",3/8",1/2",5/8",3/4"O.D.
CT-274	Tube Cutter 1/8"~ 1-1/8"(3-28mm)
CT-122	Ratchet Wrench For 1/4",3/8",3/16",5/16" Packed In Hand Carrying Plastic Case.

45°Flaring & Cutter Tool Kit



CT-1226-AL

Item No.	Description
CT-195	Common Extrusion Flaring Tool.For 3/16",1/4",5/16",3/8",7/16",1/2" & 5/8",O.D.Tubing
CT-274	Tube Cutter 1/8"~ 1-1/8"(3-28mm) Packed In Hand Carrying Plastic Case.

45°Double & Flaring Tool Kits



CT-96FB

Item No.	Description
CT-96FB	Flares 3/16",1/4",5/16",3/8",7/16",1/2" & 5/8"and 6mm,8mm,10mm,12mm,16mm & 19mm O.D.Tubing. Includes 7 Double Faring Adapters Which Cover 3/16",1/4",5/16",3/8",7/16",1/2" & 5/8",O.D.Tubing. Packed In Hand Carrying Plastic Case.

90° Multi Bender Kit



WK-R999

Item No	Description
WK-R999	For inch: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" O.D.Tubing In blow-mold carrying case, Aluminum wheel
CT-R999+	For Metric: 6, 8, 10, 12, 16, 19, 22mm O.D.Tubing
CT-207	

90° Multi Bender Kit



WK-666

Designed to bend soft copper and coated soft copper of 6mm(1/4") to 12mm(1/2") as well as Mepla multilayer pipe up 12mm. Unique sliding mechanism places formers quickly in correct tube diameter position.

Item No	Description
WK-666	For 5mm、 6mm、 8mm、 10mm、 12mm、 1/4"、 5/16"、 3/8"&1/2"O.D.Tubing In blow-mold carrying case. Aluminium alloy wheel.

90° Multi Bender Kit



CT-999F

Features
Designed to bend soft copper and coated soft copper of 6mm to 22mm as well as Mepla multilayer pipe up to 22mm.Unique sliding mechanism places formers quickly in correct tube diameter positions.

Universal use
For sanitary,heating,air conditioning,refrigerating and hydraulic applications.Also for copper thin-walled heating tube according to DIN EN 1057 and for tubes of pressfitting systems.



CT-999R



CT-999RF

Item No	Description
CT-999F	CT-999F+CT-274+CT-207 For Inch:1/4",5/16",3/8",1/2",5/8",3/4",7/8"O.D.Tubing. In blow-mold carrying case.Aluminium alloy wheel For Metric:6,8,10,12,16,19,22mm O.D.Tubing.
CT-999R	CT-999+CT-274+CT-207 For Inch:3/8",1/2",5/8",3/4",7/8"O.D.Tubing. With special reverse direction benfing function. For Metric:10,12,16,19,22mm O.D.Tubing. In blow-mold carrying case.Fibre wheel
CT-999RF	CT-999F+CT-274+CT-207 For Inch:3/8",1/2",5/8",3/4",7/8"O.D.Tubing. With special reverse direction benfing function. For Metric:10,12,16,19,22mm O.D.Tubing. In blow-mold carrying case.Aluminium alloy wheel.

Service tools

Digital Programmable Vacuum Meter



WK-VG88

Resolution & Accuracy	
ATM~1000Pa:±10% of reading	ATM~7500Microns:±10% of reading
1000Pa~200Pa:±5 of reading	7500Microns~1500Microns:±5% of reading
200Pa~100Pa:±2.5% of reading	1500Microns~750Microns:±2.5% of reading
100Pa~20Pa:±1.5% of reading	750Microns~150Microns:±1.5% of reading
20Pa~0Pa:±1% of reading	150Microns~0Microns:±1% of reading

Item	Vacunm Range	Operating temperature range	Battery model	Battery life	Vacuum meter units	Vacuum meter indicate
WK-VG88	0~15000Microns (0~2000Pa)	-40℃-45℃	5x1.5V battery	300 hours of using	Pa,mBar,mmHg, Torr,mTorr,Microns	Real-time vacuum pressure test and percenfrage indicate

Refrigerant Gas Leak Detector

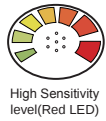


RLD-382P

FEATURES

Refrigerant Leak Detector is a perfect tool for maintaining the air-condition or a cooling system with compressor and Refrigerant.This unit uses a newly developed semi-conductor sensor which is extremely sensitive for variety of general used Refrigerant.

Refrigerant	H	M	L
R-22,134a	3g/year	15g/year	30g/year
R-404A,407,410A	4g/year	20g/year	40g/year



7 Lwd Multi Color Visual Displaty

Enables user to pinpoint exact location of leak

Alarm Method	Power Usage	Snake Tube length	Dimension/Weight	Battery Line	Auto Power OFF	Altitude
Buzzer,Tricolor LED bar Indicator.	4 AA size(6V DC) Alkaline Batteries	40cm(15.5")	137x66x56mm (approximately 400g)	Approxomately 7 hours normal use.	10 minutes	<2000M(6500')

Disable Auto Power OFF	Warm-up Time	Operating Temperature & Humidity	Storage Temperature & Humidity	Detectable Gases
Press"ON/OFF"button then power on the meter	Approximately 45 seconds	0~40℃<80% RH	-10~60℃,<70%RH	CFCs:R11,R12,R13; HFCs:R22,R502,R500; HFCs:R134a,R123,R125,R23,R404A,R407C,R410A and other halogen based compounds

CT-CPU05



CT-CPU06



DSA-200



Item No.	Dimensions	Batteries	Battery Life	Sensitivity	Sensor lifetime	Operating temperature	Warm up time	Response time Reset time	Probe length
CT-CPU05	22.9cm x 6.5cm x 6.5cm	2x 1.5 V'AA'Alkaline Batteries(3 VDC)	40 hours	<3g/year (0.1 oz/yr)	approx. 30 hours	32-122° F(0-50℃)	<10 sec.	instantaneous	14" (33.5 cm)
CT-CPU06	22.9cm x 6.5cm x 6.5cm	2x 1.5 V'AA'Alkaline Batteries(3 VDC)	40 hours	<3g/year (0.1 oz/yr)	approx. 30 hours	32-122° F(0-50℃)	<2 sec.	instantaneous	12" (30 cm)
DSA-200	17cm x 6cm x 3.8cm	2x 1.5 V'AA'Alkaline Batteries(3 VDC)	40 hours	<3g/year (0.1 oz/yr)	approx. 30 hours	32-122° F(0-50℃)	<2 sec.	instantaneous	12" (30 cm)

Charging Scale



WR-RF100

Extra-large flow quantity charging



NOTE:To prevent damage,never exceed the rated capacity of the WK-RF 100.

Item	Capacity	Accuracy	Resolution	Power	Battery life	Operation temperature	NET weight	Platform Size
WK-RF100	100KGS/220LB/ 220LB.00.OZ	0.05%Of Reading+/-1 Least	Low Accuracy ±5g; High Accuracy ±2g	6×1.5 V Alkaline batteries (7.5VDC+9VX)	60 hours continuous use	10℃-50℃ (50F-122F)	37 kg (81.6 LBS)	33.5×31.5×7.5cm

Large Flow Programmable Charging Scale

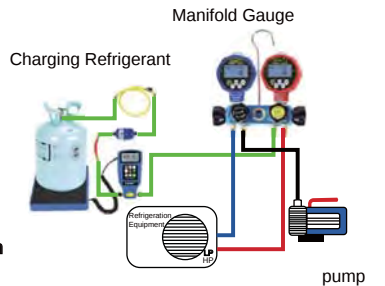


RCS-N9030

Extra-large flow quantity charging



Charging for auto A/C system Charging for A/C system



NOTE:To prevent damage,never exceed the rated capacity of the WK-RF 100.

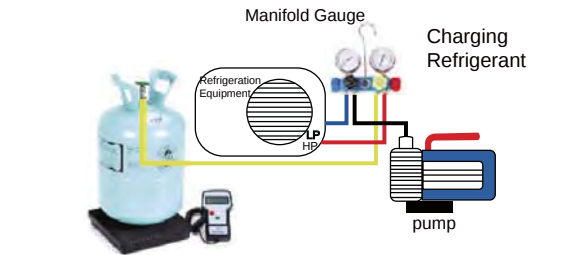
Item	Capacity	Units	Accuracy	Resolution	Platform Size	Power	Battery Life	Operation Temperature	Weight
RCS-N9030	100KGS/220LB /220LB.00.OZ	KGS/LBS/OZ	0.05% OF READING +/-1 LEAST	±0.25 OZ/5G	8-3/4"x8-3/4"223x223mm	5x1.5V ALKALINE BATTERY(7.5VDC)	60 HOURS CONTINUOUS USE	10℃-50℃ (50F-122F)	2.74KG (6.03 IBS)
RCS-N50A	50KGS/110LB/ 110LB.00.OZ	KGS/LBS/OZ	0.02% OF READING +/-1 LEAST	±0.07 OZ/2G	8-3/4"x8-3/4"223x223mm	5x1.5V ALKALINE BATTERY(7.5VDC)	60 HOURS CONTINUOUS USE	10℃-50℃ (50F-122F)	2.74KG (6.03 IBS)

Electric Refrigerant Charging Scale



RCS-7040

Extra-large flow quantity charging



NOTE:TO prevent damage,never exceed the rated capacity of the SCALE.

Item	Range of weight	Accuracy	Resolution	Unit	Power supply	Operting temp	Platform size	Battery life	Weight
RCS-7040	0-100kg or 0-220 lbs or 0 IB.00.00 oz-220 IB 00.00 oz	0.05% of reading	±5g/0.010 IB/ 0.25 OZ	Kg/Lb/OZ	9VDC	32F To 113F (0℃ To 45℃)	8-3/4"x 8-3/4" 223x223mm	30 Hours Continuous Use	2.485KG(5.47 OZ)
RCS-50	0-50kg or 0-110 lbs or 0 IB.00.00 oz-110 IB 00.00 oz	0.02% of reading	±2g/ 0.006 IB/ 0.08 OZ	Kg/Lb/OZ	9VDC	32F To 113F (0℃ To 45℃)	8-3/4"x 8-3/4" 223x223mm	30 Hours Continuous Use	2.485KG(5.47 OZ)

Digital Manifolds

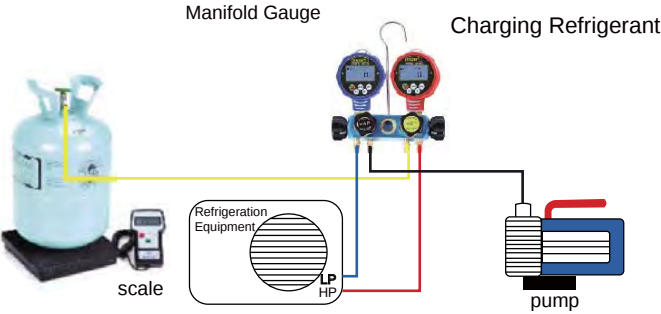
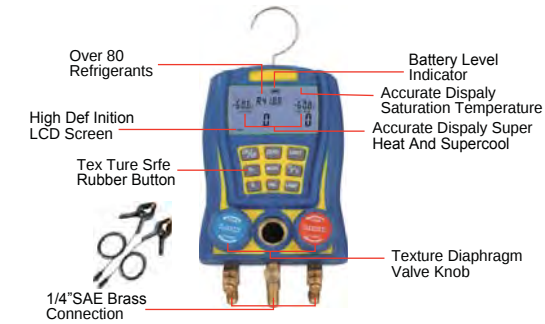


WK-6889

SPECIFICATION

Pressure units :KPA,INHg,KgF/cm2,PSI,Bar
Vacuum units:Torr,mmHg,Micron,%
Power:1.5V AA X 4=6V
Pressure measuring:actual pressure.
Temperature units: F , C
Measuring range: Vacuum:-101 Kpa~0Kpa
Proof prsdure:0 MPa~6 MPa
Refrigerant pressure:0 MPa~4 MPa
Sensor resolution: 1 KPa

Sensor accuracy:±0.5%
Overload limit: 100Bar,10Mpa
Operating temperature:-20 C~+60 C
Battery life: 30 hours
Sensor temperature range:-50C-150C(-58F-302F)
Temperature accuracy:<50C(+/-0.1C),>50-100C
(+/-0.2C),>100C(+/-1C)
Auto-off:15 min with disabling capability.



Item No.	Size of hose	Description
WK-6889-L	60\"(150cm)	2Valve Digital manifolds + 3Pcs of charge hose.Working pressure,800PSI, Burst 4000PSI + 5Pcs of 1.5VBattery + 2Pcs of temper ature sensor+ 1Pcs of suitcase.

Digital Manifolds



WK-6881H/L

Multifunction superhigh accuracy



WK-6881H

Item No.	Size of hose	Description
WK-6881H	36\"(90cm),60\"(150cm),72\"(180cm)	Single Digital manifolds+2Pcs of charge hose. Working pressure,800PSI.Burst 4000PSI+1Pcs of 9V Battery+1Pcs of Adapter AD-89+1Pcs of suitcase.
WK-6881L	36\"(90cm),60\"(150cm),72\"(180cm)	Single Digital manifolds+2Pcs of charge hose. Working pressure,800PSI.Burst 4000PSI+1Pcs of 9V Battery+1Pcs of Adapter AD-89+1Pcs of suitcase.

Spare Parts & Accessories



WKT48/45/87

Item	Description
WKT87	Adapter for WK-88VG.1/4\"SAE male to 1/2\"-20 male to 1/2\"-20 swivel female tee
WKT48	Adapter for WK-88VG.1/4\"SAE male to 1/2\"ACME male to 1/4\"SAE swivel female tee
WKT45	Adapter for WK-88VG.1/4\"SAE male to 1/4\"SAE male to 1/4\"SAE swivel female tee

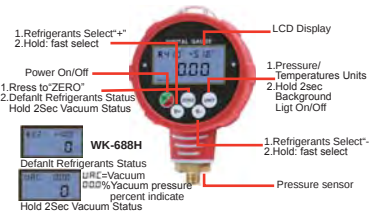
Digital Pressure & Vacuum Gauges



WK-688L/H

Features

Pressure and vacuum mode shift function
Real-time vacuum pressure test and percent indicate
Low power indicate. Batteries life:30H. 9V.
Pressure units:KPa,Bar,Psi,Torr,Kg F/cm2,InHg,MmHg
Temperature units: F , C
Test range UAC: 101Kpa-6Mpa
101Kpa~4Kpa
For WK-688L,WK688H



Resolution: 1Kpa
Accuracy: ±0.5%
Overload: 100Bar,10Mpa
Operating temp.: -20 C ~ 60 C

Unit	WK-688H Refrigerant	WK-688L Refrigerant	Unit	WK-688H Refrigerant	WK-688L Refrigerant	Unit	WK-688H Refrigerant	WK-688L Refrigerant
1	R11	R11	38	R408A-LIQ	R408A-VAP	75	R507A-LIQ	R507A-VAP
2	R113	R113	39	R409A-LIQ	R409A-VAP	76	R508A-LIQ	R508A-VAP
3	R114	R114	40	R409B-LIQ	R409B-VAP	77	R508B-LIQ	R508B-VAP
4	R115	R115	41	R41	R41	78	R509A-LIQ	R4509A-VAP
5	R116	R116	42	R410A-LIQ	R410A-VAP	79	R600	R600
6	R12	R12	43	R410B-LIQ	R410B-VAP	80	R600A	R600A
7	R123	R123	44	R411A-LIQ	R411A-VAP	81	R717	R717
8	R124	R124	45	R411B-LIQ	R411B-VAP	82	R744	R744
9	R125	R125	46	R412A-LIQ	R412A-VAP			
10	R13	R13	47	R413A-LIQ	R413A-VAP			
11	R134A	R134A	48	R414A-LIQ	R414A-VAP			
12	R14	R14	49	R414B-LIQ	R414B-VAP			
13	R141B	R141B	50	R415A-LIQ	R415A-VAP			
14	R142B	R142B	51	R415B-LIQ	R415B-VAP			
15	R143A	R143A	52	R416A-LIQ	R416A-VAP			
16	R152A	R170	53	R417A-LIQ	R417A-VAP			
17	R170	R152A	54	R418A-LIQ	R418A-VAP			
18	R21	R21	55	R419A-LIQ	R419A-VAP			
19	R218	R281	56	R420A-LIQ	R420A-VAP			
20	R22	R22	57	R421A-LIQ	R421A-VAP			
21	R23	R23	58	R421B-LIQ	R421B-VAP			
22	R290	R290	59	R422A-LIQ	R422A-VAP			
23	R32	R32	60	R422B-LIQ	R422B-VAP			
24	R401A-LIQ	R401A-VAP	61	R422C-LIQ	R422C-VAP			
25	R401B-LIQ	R401B-VAP	62	R422D-LIQ	R422D-VAP			
26	R401C-LIQ	R401C-VAP	63	R423A-LIQ	R423A-VAP			
27	R402A-LIQ	R402A-VAP	64	R424A-LIQ	R424A-VAP			
28	R402B-LIQ	R402B-VAP	65	R425A-LIQ	R425A-VAP			
29	R403A-LIQ	R403A-VAP	66	R426A-LIQ	R426A-VAP			
30	R403B-LIQ	R403B-VAP	67	R427A-LIQ	R427A-VAP			
31	R404A-LIQ	R404A-VAP	68	R428A-LIQ	R428A-VAP			
32	R405A-LIQ	R405A-VAP	69	R50	R50			
33	R406A-LIQ	R406A-VAP	70	R500-LIQ	R500-VAP			
34	R407A-LIQ	R407A-VAP	71	R501-LIQ	R501-VAP			
35	R407B-LIQ	R407B-VAP	72	R502-LIQ	R502-VAP			
36	R407C-LIQ	R407C-VAP	73	R503-LIQ	R503-VAP			
37	R407D-LIQ	R407D-VAP	74	R504-LIQ	R504-VAP			

Tube expadner



WK-622

Accuracy expanding super durable
Use for: 6mm,8mm,9mm,10mm,12mm,16mm,19mm,22mm,1/4\",5/16\",3/8\", 1/2\",5/8\",3/4\",7/8\"O.D. Tubing

Service tools

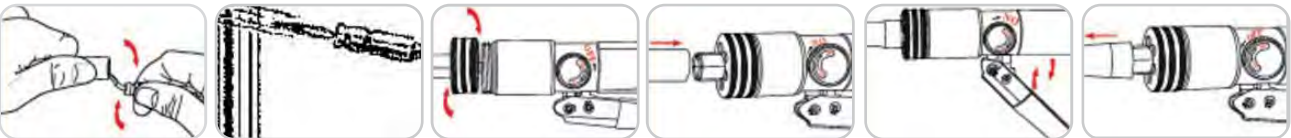
Hydraulic Tube Expander



CT-300

SIX EASY STEPS:

- 1. Debur inside of tube.
- 2. Anneal the tube if necessary (for hard or thickwall tube).
- 3. Screw the expander head on expander.
- 4. Put the end of tube on expander head.
- 5. Tighten the relief valve knob to 'On' position then pump handle until tube is expanded to the end.
- 6. Turn the relief valve knob to 'OFF' position to loosen expander head. Remove expanded tube.



Item No		Description	
CT-300A	Normal	CT-300A+CT-107+CT-209	For inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8" O.D. Tubing.
CT-300M	Normal	CT-300M+CT-107+CT-209	For metric: 10, 12, 16, 19, 22, 25, 28mm O.D. Tubing.
CT-300AL	NEW	CT-300A+WK-650+CT-209+CT-207+CT-300PL	For inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2", 1-5/8" O.D. Tubing.
CT-300ML	NEW	CT-300M+WK-650+CT-209+CT-207+CT-300PL	For metric: 10, 12, 16, 19, 22, 25, 28, 32, 35, 38, 42mm O.D. Tubing.

New Pander Heades



CFB

Item No	Inch	Item No	Inch	Item No	Material	Item No	Material
N100A-1/4"	For inch: 1/4"	N100A-10	For inch: 1-1/2"	N100M-6mm	For metric: 6mm	N100M-10	For metric: 38mm
N100A-3/16"	For inch: 3/16"	N100A-11	For inch: 1-5/8"	N100M-8mm	For metric: 8mm	N100M-11	For metric: 42mm
N100A-01	For inch: 3/8"	N100A-12	For inch: 1-3/4"	N100M-01	For metric: 10mm	N100M-45mm	For metric: 45mm
N100A-02	For inch: 1/2"	N100A-13	For inch: 2"	N100M-02	For metric: 12mm	N100M-50mm	For metric: 50mm
N100A-03	For inch: 5/8"	N100A-14	For inch: 2-1/8"	N100M-03	For metric: 16mm	N100M-54mm	For metric: 54mm
N100A-04	For inch: 3/4"			N100M-04	For metric: 19mm		
N100A-05	For inch: 7/8"			N100M-05	For metric: 22mm		
N100A-06	For inch: 1"			N100M-06	For metric: 25mm		
N100A-07	For inch: 1-1/8"			N100M-07	For metric: 28mm		
N100A-08	For inch: 1-1/4"			N100M-08	For metric: 32mm		
N100A-09	For inch: 1-3/8"			N100M-09	For metric: 35mm		

Hydraulic Expaner & Flaring Tools



WK-400

Item No		Description
WK-400A-L	WK-400+WK-532+CT-207+8PCS Includes swage adapters+4PCS Steel bar	For inch: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", O.D. Tubing. Packed In Hand Carrying Plastic Case.
WK-400M-L	WK-400+WK-532+CT-207+8PCS Includes swage adapters+4PCS Steel bar	For metric: 5mm, 6mm, 8mm, 10mm, 12mm, 16mm, 19mm, 22mm, O.D. Tubing. Packed In Hand Carrying Plastic Case.

Lever Tube Expanding Tool Kit



CT-100

SIX EASY STEPS:

- 1. Debur inside of tube.
- 2. To create perfectly expanded tubing for soldering or brazing you must use soft copper or fully anneal end of tube to be expanded.
- 3. Pull expander handle up to 90-degree position. Maintain this position as you screw the appropriate size head over the center-punch and tighten.
- 4. Insert the end of the tube over the expander head completely.
- 5. Pull the lever completely down.
- 6. Return the lever to the 90-degree position. Remove expanded tube.



Item No		Description	
CT-100A	Normal	CT-100A+CT-312+CT-207	For inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8" O.D. Tubing.
CT-100M	Normal	CT-100M+CT-312+CT-207	For Metric: 10, 12, 16, 19, 22, 25, 28mm O.D. Tubing.
CT-100AL	NEW	CT-100A+WK-650+CT-207	For inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2" & 1-5/8" O.D. Tubing.
CT-100ML	NEW	CT-100M+WK-650+CT-207	For Metric: 10mm, 12mm, 16mm, 19mm, 22mm, 25mm, 28mm, 32mm, 35mm, 38mm & 42mm O.D. Tubing.

Lever Type Tube Bender



WK-N364-14

Item No	Description
WK-N364A-06	Use for 3/8" O.D Tubing
WK-N364M-06	Use for 10mm O.D Tubing
WK-N364A-08	Use for 1/2" O.D Tubing
WK-N364M-08	Use for 12mm O.D Tubing
WK-N364-10	Use for 5/8" & 16mm O.D Tubing
WK-N364-12	Use for 3/4" & 19mm O.D Tubing
WK-N364-14	Use for 7/8" & 22mm O.D Tubing



CT-364-10/12/14

Item No	Size for	Bemd radius
CT-364-10	16mm&5/8"	54.4mm
CT-364-12	19mm&3/4"	75.3mm
CT-364-14	22mm&7/8"	82.1mm



CT-364-06/08

Item No	Size for	Bemd radius
CT-364A-10	3/8"	23mm
CT-364A-12	1/2"	35.8mm
CT-364M-14	12mm	35.8mm

180°2-in-1 Ladder Type Tube Bender



WK-1012-A Aluminum alloy body Bend radius 23mm For 3/8"(10mm)O.D.Tubing Bend radius 35.8mm For 1/2"(12mm)O.D.Tubing Open size-slips on tubing at any point,can bend 0.4mm thin tube without disortion. Calibrated markings for making accurate left-hand,right-hand,and offset bends 180°start requires less effort.Makes bending fast and easy.	
Item No	Description
WK-1012-A-180°	For 3/8"&1/2"size O.D.Tubing
WK-1012-M-180°	For 10mm& 12mm sizeO.D.Tubing

180°3-in-1 Tube Bender



WK-N368-180° Aluminum alloy body,Bend radius 15/16"(24mm). Open size-slips on tubing at any point,can bend 0.4mm thin tube without distortion. Calibrated marking for making accurate left-hand,right-hand,and offset bends 180°start requires less effort.Makes bending fast and esay.	
Item No	Description
WK-N368-A-180°	For1/4 "、 5/16"&3/8"size O.D.Tubing

180°2-in-1 Tube Bender



WK-N268-180° Aluminum alloy body. Open size-slips on tubing at any point,can bend 0.4mm thin tube without distortion. Calibrated marking for making accurate left-hand,right-hand,and offset bends 180°start requires less effort.Makes bending fast and esay.	
Item No	Description
WK-268-A-180°	For 1/4"&5/16"size O.D.Tubing Bend radius 11/16"(17.5mm).

180°4-in-1 Fibre Tube Bender



CT-369-FHA-180° Carbon steel+Fibre material body. 3/16"-1/4" Bend radius 11/16"(17.5mm). 5/16"-3/8" Bend radius 15/16"(24mm).	
Item No	Description
CT-369FHA-180°	For 3/16"、 1/4"、 5/16" & 3/8" size O.D.Tubing

90°Tube Bender 3-in-1



CT-369-90° Aluminum alloy body, Bend radius 15/16"(24mm).	
Item No	Description
CT-368A-90°	For 1/4",5/16" & 3/8"size O.D.Tubing
CT-368M-90°	For 6mm,8mm&10mm size O.D.Tubing

Hydraulic Hose Compressing Tools



WK-700-L	
Item No	Description
WK-700-L	WK-700+7PCS #6,#8,#10,#12,#6SRB,#8SRB,#10SRB,#12SRB O.D.Tubing Includes tablet compressing Packed in hand carrying plastic case.

Bender Spring



CT-102	
Model	Description
CT-102-L	For Inch:1/4",5/16",3/8",1/2"&5/8"size O.D.Tubing
CT-102-04	For Inch:1/4"O.D.Tubing
CT-102-06	For Inch:3/8"O.D.Tubing
CT-102-08	For Inch:1/2"O.D.Tubing
CT-102-10	For Inch:5/8"O.D.Tubing
CT-102-12	For Inch:3/4"O.D.Tubing

Vacuum Meter



WK-18VG Vacuum meter 1000 to 0 mbar Diameter: 3-1/8" Connection: 1/8" NPT Male connection With maxi-reading gauge pointer indicates maximum pressure reading attained during any given period. Readjust with thumb screw. Can be calibrated in the field with inexpensive reference weight.	
---	--

Air Conditioner Installation Spanner



WK-01 Strong magnet Use for 14mm & 17mm unts	
---	--

Automatic Ignition Gas Torch



WK-030	

Blocks Type Flaring Tool



WK-670

Ball bearings make the difference!
Great cuts with the greatest of ease!
High-quality radial ball bearings enable DSZH® tube cutters to cut with less effort than previous models.
Give them a try and see just how easy it is!
Alloy steel they can even cut thin wall stainless steel pipes.

WK-650



WK-532



WK-428



WK-319



Item No	Description		Material
WK-319	ROLLER TYPE TUBE CUTTER	For $\Phi 1/8"$ to $3/4"$ (3-19mm)	Zinc alloy body
WK-428	ROLLER TYPE TUBE CUTTER	For $\Phi 3/16"$ to $1-1/8"$ (4-28mm)	Zinc alloy body
WK-532	ROLLER TYPE TUBE CUTTER	For $\Phi 3/16"$ to $1-1/4"$ (5-32mm)	Aluminum alloy body
WK-650	ROLLER TYPE TUBE CUTTER	For $\Phi 1/4"$ to $2"$ (6-50mm)	Aluminum alloy body
WK-670	ROLLER TYPE TUBE CUTTER	For $\Phi 1/4"$ to $2-3/4"$ (6-70mm)	Aluminum alloy body
WK-319B	Cutting Blade	For WK-319	Alloy Steel Blade
WK-428B	Cutting Blade	For WK-428	Alloy Steel Blade
WK-532B/650B	Cutting Blade	For WK-532/WK-650	Alloy Steel Blade
WK-670B	Cutting Blade	For WK-670	Alloy Steel Blade



CT-206

Item No	Description		Material
CT-206	HEAVY-DUTY CUTTER	For $\Phi 3/8"$ to $2-5/8"$ (10-66mm)	Aluminum alloy body
CT-107B	Cutting Blade	For CT-107/206	65 Mn Steel



CT-274&CT-312

Item No	Description		Material
CT-274	Heavy-Duty Cutter	For $\Phi 1/8"$ to $1-1/8"$ (3-28mm)	Aluminum alloy body
CT-312	Heavy-Duty Cutter	For $\Phi 1/4"$ to $1-5/8"$ (7-42mm)	Aluminum alloy body
CT-274B	Cutting Blade	For CT-274/105/G/312/174/109	65 Mn Steel



CT-105&CT-107

Item No	Description		Material
CT-105	Heavy-Duty Cutter	For $\Phi 1/8"$ to $1-3/8"$ (3-35mm)	Aluminum alloy body
CT-107	Heavy-Duty Cutter	For $\Phi 1/4"$ to $2"$ (5-50mm)	Aluminum alloy body
CT-107B	Cutting Blade	For CT-107/206	65 Mn Steel

CF105



Art. Name: Heavy duty cutter
Capacity: 1/8" - 1-1/4"

CFG



Art. Name: Heavy duty cutter
Capacity: 1/8" - 1,1/8"

CF109



Art. Name: Heavy duty cutter
Capacity: 5/16" - 1,5/8"

CF365



Art. Name: 180 tube bender 2-in-1
Capacity: 1/4", 5/16"

WK-128



Item No Description
WK-128: For $\Phi 1/8"$ to $7/8"$ (3-22mm)
WK-127: For $\Phi 1/8"$ to $5/8"$ (3-16mm)

CF128



Art. Name: Heavy duty cutter
Capacity: 1/8" - 7/8"

CT-174



Item No Description
CT-174: For $\Phi 1/8"$ to $1-1/8"$ (3-28mm)
CT-274B: For CT-274/105/G/312/174/109

CT-127



Item No Description
CT-127: For $\Phi 1/8"$ to $5/8"$ (3-16mm)
CT-127B: For CT-127/CT-128

CT-526-F



Description
For 3/16" to 3/4" & 5mm to 19mm O.D.

CT-525-F



Description
For 3/16" to 5/8" & 5mm to 16mm O.D.

CF203



Description
For 5/8", 3/4", 7/8" & 1-1/8" O.D.

CF525



Art. Name: Grabber flaring tool
Capacity: 3/16"-5/8" & 5MM-16MM

CF500A



Art. Name: Blocks type flaring tool
Capacity: 3/16", 1/4", 5/16, 3/8", 1/2", 5/8"

CF103



Art. Name: 45 Flaring tool
Capacity: 3/4", 7/8", 1"

CF203



Art. Name: 45 Flaring tool
Capacity: 5/8", 3/4", 7/8", 1 1/8"

CF195



Art. Name: 45 Flaring tool
Capacity: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"

CT-500&CT-505



Description

CT-500 For 3/16",1/4",5/16",3/8",
1/2"&5/8"O.D.
CT-505 For 3/16",1/4",5/16",3/8",
1/2",5/8"&3/4"O.D.

CF808AM



Art. Name: Eccentric cone type
flaring tool

Capacity: 3/16",1/4",5/16",3/8",
1/2",5/8",3/4" &5,6,8,
10,12,16,19mm

CF1226AL



Art. Name: Flaring&swaging tool

Capacity: 3/16",1/4",5/16",3/8",
7/16",1/2",5/8",3/4"

CF93M



Art. Name: Flaring tool

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4"

Flaring tool & eccentric cone type flaring tool

CF100N



Art. Name: Lever tube
expanding toll kit

Capacity: 3/8",1/2",5/8",3/4",
7/8",1",1-1/8

CF300A



Art. Name: Hydraulic tube
expander kit

Capacity: 3/8",1/2",5/8",3/4",
7/8",1",1-1/8

CF100



Art. Name: Lever tube
expanding toll kit

Capacity: 3/8",1/2",5/8",3/4",
7/8",1",1-1/8

CF300AL



Art. Name: Hydraulic tube
expander kit

Capacity: 3/8",1/2",5/8",3/4",
7/8",1",1-1/8

CF275



Art. Name: Flaring tool

Capacity: 1/8",3/16",1/4",5/16",
3/8",7/16",1/2",5/8" &
3/4"

CF278L



Art. Name: Flaring tool

Capacity: 1/8",3/16",1/4",5/16",
3/8",7/16",1/2",5/8",
3/4"

CF96FB



Art. Name: Double Flaring tool

Capacity: 3/16",1/4",5/16",3/8",
7/16",1/2",5/8",3/4"

CF93



Art. Name: Flaring tool

Capacity: 1/4",5/16",3/8",1/2",5/8",
3/4",6mm,8mm,10mm,
12mm,16mm,19mm,
16mm,19mm

Lever type tube bender & 90 multilayer bender kit

CF999L



Art. Name: 90 Multi bender

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4",7/8"

CF368-180



Art. Name: 180 tube bender 3-in-1

Capacity: 1/4",5/16",3/8"

CF999



Art. Name: 90 Multi bender

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4",7/8"

CF364-08



Art. Name: lever type tube bender

CF364-08: 1/2"
CF364-06: 3/8"

CF806A



Art. Name: Eccentric cone
type flaring tool

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4" & 6,8,10,
12,16,19mm

RCT-806AM



Art. Name: Eccentric cone
type flaring tool

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4" & 6,8,10,
12,16,19mm

RCT-806



Art. Name: Ratchet eccentric
cone type flaring tool

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4"

RCT-806AM-L



Art. Name: Ratchet eccentric cone
type flaring tool

Capacity: 1/4",5/16",3/8",1/2",
5/8",3/4"

CF501



Art. Name: Ispect Mirror

O.D. : 50
Length : 127- 500
Diameter : 10

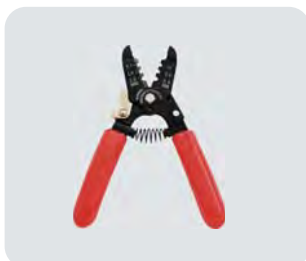
CF502



Art. Name: Ispect Mirror

O.D. : 50
Length : 200 - 410
Diameter : 10

PTC-02



Art. Name: Capillary Tube Cutter

Cuts all sizes of capillary tubes
without collapsing nor swaging the
tubes.

PTC-01



Art. Name: Fin Straightener

Fin Straightener stainless steel.
Cleaning & straightening evaporator
fin.

CT-204



Art. Name: Pinch-off Tool

In extra strong execution to pinch-off suction tubes on all hermetic refrigeration systems up to 3/8" diameter.

CT-201



Art. Name: 7" Pinch off plier

Pinch of copper tubing up to 5/16" (8mm) instantly.

CT-208



Art. Name: Inner-outer Reamer

Plastic body, 3/16" ~ 1-1/2" O.D. tubing. Reams Both Inside and Outside Edges of Tubing.

CT-209



Art. Name: Inner-outer Reamer

Zinc Body, 1/4" ~ 1-5/8" O.D. tubing. Reams Both Inside and Outside Edges of Tubing.

CT-351



Art. Name: Fin Straightener

For 8", 9", 10", 12", 14", 15" Spacings per inch.

CT-352



Art. Name: Fin Straightener

Fin Straightener stainless steel. Cleaning & straightening evaporator fin.

CT-123L



Art. Name: Fin Straightener

For 8", 9", 10", 12", 14", 15" Spacings per inch.

CT-122



Art. Name: Ratchet Wrench

4 size: 1/4", 3/8", 3/16", 5/16" square ratchet.

CF122



Art. Name: Ratchet wrench

Capacity: 1/4", 3/8", 3/16", 5/16"

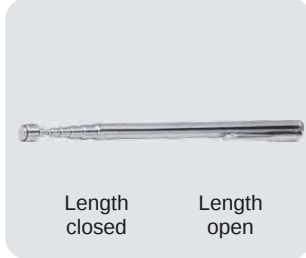
CT-207



Art. Name: Deburrer

Handy deburrer, Blade can be swivelled.

CF503



Length closed

Length open

Art. Name: Pick up tools

Length closed: 126mm
Length open: 637mm

Cf-195-SA



Art. Name: Swagging Punches

CF195SA: 1/8", 1/4", 5/16", 3/8", 1/2", 5/8"



Art. Name: Swagging Punches

CF94: 1/2", 5/8", 7/8"
CF95: 1/4, 5/16, 3/8", 1/2", 5/8"
CF96: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"



WK-96

Art. Name: Swaging Punch Tools

Use for 1/4", 5/16", 3/8", 1/2" & 5/8" O.D. Tubing

CF-208



CF-109



CF-518



CF-G001



KT-Touch1



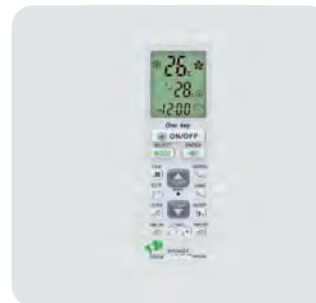
3 in 1 universal remote control
All-touch screen
Colorful screen
Available for different devices
Features
Light function
Pennanent memory
Lithium battery power
Plastic case with spray pain1ing

KT-Dot1



Universal A/C Remote Control
Brand letters
LCD backlight
Large room temoerature dlsplayed
Features
LCD backlight
Room temperature displayed
Clock
Sleep function
Permanent memory

SPEAKER



Universal A/C Remote Control
Voice prompt
One-key function
Large screen
Features
Large screen
Permanent memory
Voice prompt
One-key function
Room temperature displayed

KT-N858



LCD backlight
One-key function
Input codes by digital keys
Features
2000 in 1
Clock/C&F
Room temperature displayed
LCD backlight
Pennanent memory

KT-628



Universal A/C Remote Control
Large keys
Large screen
Features
2000 in 1
Permanent memory
i-cool & i-heat function

KT-B01



Universal A/C Remote Control
No setting patent
Domestic brands & universal
One second selected

KT-B02



Universal A/C Remote Control
No setting patent
One second selected
Intemational brands & universal

KT-B03



Universal A/C Remote Control
searched automatically
displayed directly
Clock

KT-e01



Universal A/C Remote Control
One-key function
Pamanent memory
Available for the blind
Features
2000 in 1
Large key with light
One-key function

KT-e02



Universal A/C Remote Control
Large keys
One-key function
Room temperature displayed
Features
Clock
4000 in 1

KT-e03



Universal A/C Remote Control
One-key function
Room temperature displayed
Features
Clock
4000 in 1
Innerkeys
Electrical heating
Room temperature displayed

KT-e05



Universal A/C Remote Control
One-key function
I-cool & i-heat function
Features
Clock
4000 in 1
C/F degree
Fast cool & Fast heat
Room temperature displayed

KT-e06



Universal A/C Remote Control
Painting case
One-key function
Features
Clock
4000 in 1
C/F degree
Fast cool & heat
Roomtemperature displayed

KT-e08



Universal A/C Remote Control
6000 in 1
One-key function
Room temperature displayed
Features
Clock
6000 in 1

KT-100A II



Universal A/C Remote Control
Classical appearance
Features
Comfortable keys
Full-automatic searching

KT-109 II



Universal A/C Remote Control
Fast cool
Classical appearance
Full-automaticsearching
Features
Comfortable keys

KT-208 II



Universal A/C Remote Control
Features
208in 1
Sliding cover
Timer
Too cool & Too warm

KT-508 II



Universal A/C Remote Control
Features
508 in 1
Sliding cover
Too cool & Too warm



KT-508

Universal A/C Remote Control
Flip-cover design
Permanent memory for codes
Features
508 in 1
Flapcover



KT-528

Universal A/C Remote Control
Clock
LCD backlight
Room temperature displayed
Features
Clock
1028 in 1
Timer function



KT-1000

Universal A/C Remote Control
Inner keys
Permanent memory
Features
1028 in 1
Timer Off



1000 IN 1

Universal A/C Remote Control
Clock function
Intelligent cooling/heating
Features
1000 in 1
Timer function
Heating function



KT-4000

Universal A/C Remote Control
Flip-open cover
Digit number input
One-key function
Features
4000 in 1
Clock function
Room temperature display



KT-9018E

Universal A/C Remote Control
Colorful cases
Digit number input
Features
4000 in 1
Clock function
Timer function
Intelligent cooling /heating function



KT-AX

Universal for AUX A/C
No setting
Anion fresh air function
Same shape as original model
Features
Timer function
Same function as the original



KT-CG

Universal for CHIGO A/C
No setting
Anion fresh air function
Larger screen than the original model
Features
More powerful
Electrical heating function
Same function as the original
Same shape as original model



KT-GR

Universal for GREE A/C
Same shape as original model
Features
Light function
Timer function
Dry and auxiliary heating
Function as the original



KT-KL

Universal for GREE A/C
Electrical heating function
Features
Same function as the original
Same shape as original model



KT-LG

Universal for LG NC
No setting
Features
No setting password
Same function as the original
Same shape as original model



KT-SP

Universal for SHARP A/C
Same shape as original model
Features
Timer function
Anion fresh air function
Same function as the original



KT-TL

Universal for TCL A/C
Same function as the original
Same shape as original model
Features
Timer function
Swing function



KT-L001E

Learning Remote Control
Reliable heating
Intelligent learning
Air conditioning IR learning
Features
Easy operation
Perfect memory
Clear cooling and heating



Wireless Programmable
Universal Air Conditioner Controller

Main feature
Programmable parameter
5+2 days: programmable
Wireless connection
Features

- Auto restart
- Sleep function
- Three sensors
- 86 type display panel
- Wireless connection
- Two ways for the swing :
stepper motor and AC motor
- High-power electrical heating
- Prevent cold air in the heating mode
- Double sockets design for stepper motor
- Password protection functions for the parameter
- 433MHZ/315MHZ communication options



Programmable control system
for air conditioner

Main feature
Display panel with long wire
Programmable system
LCD back-light
Features

- Sleep function
- Three sensors
- While back-light display function
- Programmable parameter
- Prevent cold wind in heating mode
- 86 type display panel
- IR remote control function
- High-power electrical heating function
- Large LCD screen display
- Five working modes: auto, cooling, dry, ventilation and heating



Control system for DC fan

Main feature
310V DC motor
Switch power
Memory function after power off
Features

- Switch power
- DC motor control
- 7 day timer function
- Malfunction self-diagnosis
- Precise temperature control
- Malfunction protection for fan
- Memory function after power off
- Components with high quality and epoxy PCB

QD73A



Fan Coil Controller

Main feature

One key for 26 °C
AC 100-240V 50/60HZ
Exquisite remote control

Features

- limer on/off
- Luxury receiver
- Sleep function
- Accurate auto wind
- Working modes: auto, cooling, heating and ventilation
- Malfunction self-diagnosis
- Self-protection in low temperature
- Three fan speed: high, middle and low
- Accurate and stable temperature control

QD53



Universal A/C control system

Main feature

IR receiver
Double sensors
Switch power AC 100-240V

Features

- Auto defrost
- Sleep function
- Double sensors
- Five work modes
- Accurate and stable auto fan
- Three fan speed: high, middle, low
- Malfunction self-diagnosis
- Prevent code air in heating mode
- Double stepper motor sockets, easy installation
- Strong power supply, wide working voltage: AC 100-240V 50 / 60HZ

QD53C



Universal A/C control system

Main feature

Auto restart
One key for 26 °C
Outdoor fan controlled independently

Features

- Double sensors
- Five working modes
- Auto defrost function
- Optional re-start function
- Colorful sensor sockets design and easier to distinguish and install
- Luxury receiver, elegant appearance, working state displayed directly
- Accurate auto wind function
- Prevent cold air in heating mode
- Double sockets for stepping motor
- Special socket design for start capacitor

QD-U028



Universal Air conditioner control system

Main feature

3 fan speed
Timer on/off
Accurate tamperagir control

Features

- 3fan speed
- Sleep function
- Periodical defrost
- 5 working modes
- Malfunction self-diagnosis
- Self-protection in low temperature
- Three fan speed: high, middle and low
- Accurate and stable temperature control

QD-U02B+



Universal Air conditioner control system

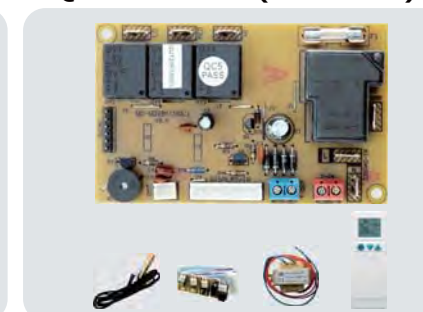
Main feature

3 fan speed
Luxury receiver
Transformer plug

Features

- Accurate & stable auto fan
- Sleep function
- 5 working modes
- Periodical defrost
- limer on/off
- 3 minutes protective delay for compressor to start
- Prevent cold air in the heating mode
- Accurate & stable temperature control
- Updated transformer, quick plug, easy for installation

QD-U02B(COOL)



Universal Air conditioner control system

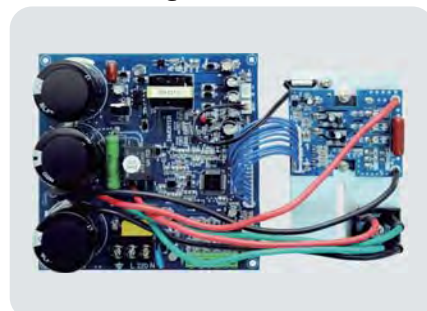
Main feature

Only cooling
3 fan speed
Accurate temperature control

Features

- 3 fan speed
- Sleep function
- limer on/off
- 4 working modes
- Accurate & stable auto fan
- Accurate & stable temperature control

QD80



Universal AC inverter air condition board

Main feature

Easy use
High quality
Special for AC inverter A/C

Features

- High-poper module, stable property
- High quality components, epoxy board, moisture proofing
- Special for AC inverter air conditioner manufactured before 2008.
- The board can work without signal wire. Indoor unit can adopt regular universal board such as QD02 (QD-U05PGX), QD-U03A etc.

QD-U20A



Wireless RF universal A/C control system

Main feature

Large LCD
RF remote control
Split and floor-standing A/C available

Features

- Negative ion control
- Auto restart function
- Break down protection
- Precise temperature control, accuracy of 0.1 degrees
- 5 working modes, three fan speed, timer on/off, sleep function
- Large LCD screen with back-light display
- Wireless remote control, up to 100 meters
- Built-in battery indicator in the power button

QD-U01A



Window Air Conditioner

Main feature

IR remote control
Special for window A/C
Nixie tube temperature display

Features

- limer on/off
- Sleep function
- Special for window A/C
- Accurate and stable auto fan
- Remote control with LCD screen, easy use
- 3 fan speed: high, middle, ICNJ
- 3 working modes: cooling, heating, dry
- Nixie tube temperature display, manual switch
- Delayed start for compressor protection

QD-U02B(SW)



Universal Air conditioner control system

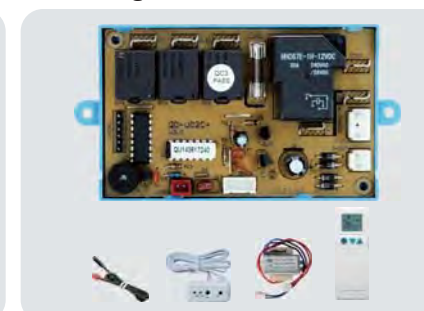
Main feature

3 fan speed
Precise temperature control
Switch power: AC 100V-240V

Features

- 3 Fan Speed
- Sleep function
- Periodical defrost
- limer on/off
- 5 Working Modes
- Accurate & Stable auto fan
- Accurate & Stable temperature control
- Switch power, suitable for AC 100V-240V

QD-U02C+



Universal Air conditioner control system

Main feature

2 fan speed
Luxury receiver
Transformer plug

Features

- 2 Fan Speed
- Sleep function
- Periodical defrost
- Timer on/off
- Nice receiver, good appearance, work status displayed directly
- 5 working modes
- Accurate & stable auto fan
- Accurate & stable temperature control
- Upgraded plug for transformer connection

QD-U03A+



Universal Air conditioner control system

Main feature

3 fan speed
Colorful plug
Special for tapped-winding motor

Features

- Auto defrost
- limer on/off
- Double sensors
- Sleep function
- 5 working modes
- Accurate & stable auto fan
- Prevent cold air in heating mode
- Accurate & stable temperature control
- Updated transformer, quick plug, easy for installation
- Updated receiver, good appearance, work state displayed directly

QD-U03C+



Universal Air conditioner control system

Main feature

Auto restart
Double Sensors
Outdoor fan controlled independently

Features

- Timer on/off
- 3 fan speed
- Sleep function
- Double sensors
- Defrost automatically
- Auto-restart function
- Prevent cold air in the heating mode
- Outdoor fan is controlled independently
- Accurate & stable temperature control
- Updated transformer, quick plug, easy for installation

QD-U05PG+



Universal Air conditioner control system

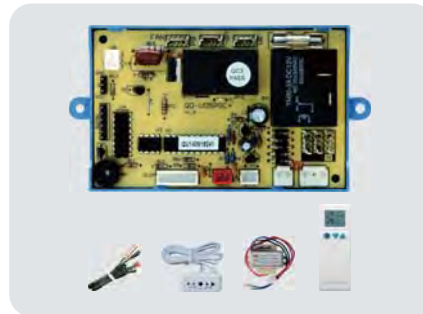
Main feature

Double sensors
High-power output
Stepless speed regulation fan

Features

- PG motor
- Sleep function
- 5 working modes
- Defrost automatically
- Accurate & stable auto fan• Upgraded receiver, good appearance, working state displayed directly
- limer on/off, double sensors
- Stepless speed regulation fan, low noise
- Prevent cold air in heating mode
- Pipe protection, malfunction self-diagnosis

QD-U05PGC+



Universal Air conditioner control system

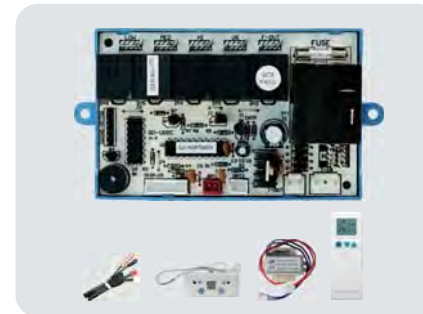
Main feature

Auto restart
Stepless speed regulation fan
Outdoor fan controlled independently

Features

- Sleep function
- 5 working modes
- Auto-restart function
- Accurate & stable auto fan
- limer on/off, double sensors
- Stepless speed regulation fan , low noise
- Prevent cold air in heating mode
- Accurate & stable temperature control
- Pipe protection, malfunction self-diagnosis
- Upgraded receiver, good appearance, working state displayed directly

QD-U08C



PG motor series

Universal Air conditioner control system

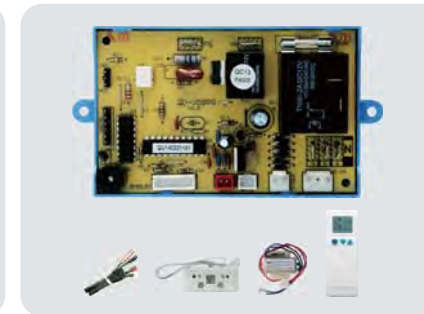
Main feature

Auto restart
Digital temperature display
Outdoor fan controlled independently

Features

- 3 fan speed
- Auto defrost
- Sleep function
- Auto-restart function
- Accurate & stable auto fan
- Stepless speed regulation fan, low noise
- Pipe protection for higher temperature
- Updated transformer, quick plug, easy installation
- Updated receiver, elegant appearance, displayed clearly

QD-U08PG



Universal Air conditioner control system

Main feature

PG motor
Auto production technique
Digital temperature display

Features

- Auto defrost
- Sleep function
- Double sensors
- 5 working modes
- Malfunction self-diagnosis
- Accurate & stable auto Fan
- Stepless speed regulation fan, low noise
- Pipe protection for higher temperature
- Updated transformer, quick plug, easy installation
- Updated receiver, elegant appearance, displayed clearly

QD-U05PGC+



Universal Air conditioner control system

Main feature

Auto restart
Stepless speed regulation fan
Outdoor fan controlled independently

Features

- Sleep function
- 5 working modes
- Auto-restart function
- Accurate & stable auto fan
- limer on/off, double sensors
- Stepless speed regulation fan , low noise
- Prevent cold air in heating mode
- Accurate & stable temperature control
- Pipe protection, malfunction self-diagnosis
- Upgraded receiver, good appearance, working state displayed directly

QD-U05PGX



Universal Air conditioner control system

Main feature

Stepless speed regulation fan
Strong starting capacitance
Quick plug for PG motor

Features

- PG motor
- Sleep function
- 5 working modes
- Defrost automatically
- Accurate & stable auto fan
- Timer on/off, double sensors
- Prevent cold air in heating mode
- Pipe protection, malfunction self-diagnosis
- Updated transformer, quick plug, easy for installation
- Upgraded receiver, good appearance, working state displayed directly

QD-U973



Universal Air conditioner control system

Main feature

3 fan speed
Accurate emperatura control
Original Panasonic remote control

Features

- Timer on/off
- 3 fan speed
- Sleep function
- 5 working modes
- Periodical defrost
- Acrurate & stable auto fan
- Prevent cold wind in heating mode
- Adopt codes of original PANASONIC
- Acrurate & stable temperature control
- 3 minutes protective delay for compressor to restart

QD-U08A



Universal Air conditioner control system

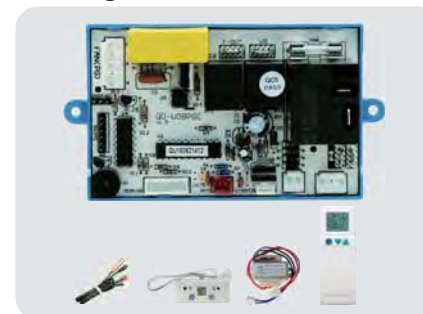
Main feature

5 modes
Effective defrost
Digital temperature display

Features

- 3 fan speed
- limer on/off
- Auto defrost
- Sleep function
- Updated receiver, elegant appearance, displayed clearly
- Double sensors
- 5 working modes
- Accurate & stable auto fan
- Colorful sensor socket, easy for connection

QD-U08PGC



PG motor series

Universal Air conditioner control system

Main feature

PG motor
Digital temperature display
Outdoor fan controlled independently

Features

- Auto defrost
- Sleep function
- Double sensors
- Pipe protection
- Auto-restart function
- Acrurate & stable auto fan
- Stepless speed regulation fan, low noise
- Accurate & stable temperature control
- Updated transformer, quick plug, easy for installation

QD-U10A



Universal Air conditioner control system

Main feature

Electenicsl heating
LED temperature display
Display panel manually operated

Features

- 3fan speed
- LED display
- limer on/off
- Sleep function
- Auxiliary heating
- 5 wor1<ing modes
- Auto defrost in heating mode
- Display panel manually operated
- Outdoor fan controlled independently
- 3 minutes protective delay for compressor to restart

QD-U11A



Universal Air conditioner control system

Main feature

Auto restart function
LED temprature display
Outdoor fan controlled independently

Features

- 3 fan speed
- limer on/off
- Sleep function
- Auxiliary heating
- 5 working modes
- LED temperature display
- Auto defrost in heating mode
- Display panel manually operated
- Outdoor fan controlled independently
- 3 minutes protective delay for compressor to restart

QD-U12A



Universal Air conditioner control system

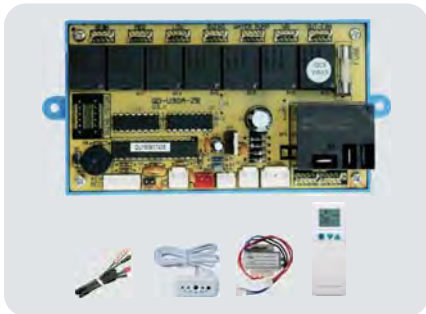
Main feature

- Auto restart
- Lsrge LCD didplay
- High production technique

Features

- Sleep function
- Auxiliary heating
- LCD back-light display panel
- 2 ways to control air direction: automatic and manual
- 3 sensors: coil pipe protection, precise temperature control and auto defrost
- Negative ion control function
- Memory and auto restart function
- Outdoor fan controlled independently
- Interior power indicator to shcrw working modes

QD-U30A



Ceiling and cassette
Universal Air conditioner control system

Main feature

- Double sensors
- Defrost effectively
- Outdoor fan controlled independently

Features

- 3 fan speed
- Auto defrost
- Sleep function
- 5 working modes
- Accurate & stable auto fan
- Malfunction self-diagnosis
- Prevent cold wind in heating mode
- Universal ceiling cassette NC control system
- 3 minutes protective delay for compressor to restart

QD51C/R



Universal Air conditioner control system

Main feature

- Stepless speed regulation fan
- Switch power: 100V-240V
- Outdoor fan controlled independently

Features

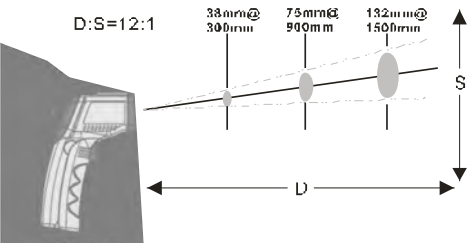
- Prevent cold air in heating mode
- Double sensors
- Auto defrost function
- Accurate temperature control
- Double stepper motor sockets, easy installation
- Luxury receiver, elegant appearance, working state displayed directly
- Sleep function
- Pipe protection, malfunction self-<liagnos1s
- Accurate auto wind function

Electron series



RI-300

- Wide temperature range
- 25.6 to 572°F(-32 to 300 C)
- °F/C switchable
- Unique flat surface,mini-gun housing
- Backlight
- Auto power off
- Data hold
- Low battery indication
- Over range indication



Cold storage temperature controller



14cf800lhc

A new product especially designed for refrigerated cabinet,refrigerated display cabinet with elegant appearance,panel separates from control box.ltc-800 can drive compressor 2hp directly.user's menu is isolated from the manager'menu, which is convenient for the use's simple operation.meanwhile,this can make the manager deal with varieties of states of the equipment flexibly.double sensors, one can control the defrosting temp.the limits to the adjustment of the upper and lower temperature limits prevent the user's improper operation. fan's operation modes optional,not only continually work;but also controlled by the difference between the storage temp.and the evaporator's.lighe control,defog,temp.calibration,power dormancy and so on.the keyboard can be locked.product size:170*40*33(mm)measuring and controlling temperature range:-40 C--+40 C Accuracy:1 C

All-purpose Temperature Controller



14CF8080

Temperature measure, display and control; defrosting control; Temperature upper and lower limit setting; defrosting cycle and time setting; compressor delay;temperature calibration; beyond temperature limit alarm. Universal model. Product size:75X34.5X85(mm) Temperature measuring and controlling range:-40--+50 C Accuracy:±1 C



14CF400DETC

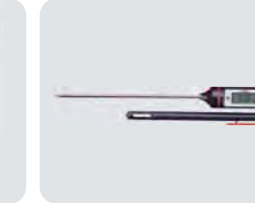
Temperature meansuring and controlling, Defrostng control: Electric heating or Thermal defrost,Enforced defrosting, Fan control: fanlags to start/stop or continued run for 30 seconds after compressor start, Compressor delay time adjustable, Strage temperature calibration, Defrosting wate-drop time: 2 minutes, Alarm delay time: 1minute, Dual control of temperature and time when defrosting ends, System auto - control the start/stop proportionably measuring and displaying range: -45 C--+50 C . Accuracy:±1 C



14CF300ETC

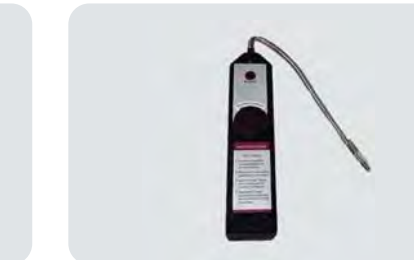
ETC-300 Temperature Controller Simplify functions based on ETC-400, cut down on production cost. Product size: 75x34.5X85mm Temperature measuring and controlling range: -45--+50 C Accuracy: ±0.5 C from-10 to + 10 C ; <±1 C at others

Temperature panel

14CF10TPM	14CF2DT	14CF3W	14CF2WT	14CF1WT
				
Measuring range: -50℃~+70℃ Accuracy: ±1℃(±2℉) Product size: 47.8X28.5X14.3mm	Temperature: -50℃~+70℃ Product size: 115X64X19mm	Temperature measuring range: -50℃(-58℉)~120℃(248℉) Accuracy: ±1℃(-20℃~80℃), ±2℃(other range) Product size: 59x107x19mm	Measuring range: -50℃~+300℃ (-58℉~+572℉) Accuracy: ±1℃(-20℃~+120℃) ±5℃(other range) Product size: 59x107x19mm	Measuring range: -50℃~+300℃ Accuracy: ±1℃(-20℃~+80℃) +5℃(other range) Product size: 20.5X206mm

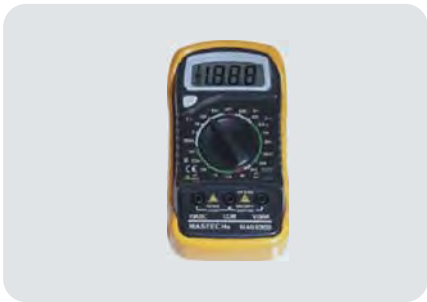
Halogen leak detector

14CFCCPU	14CF1GCPU	14CF1FCPU
		
As a practical Product of the CPU family serial,the comparability between quality and price of CPU-C is high. The product deals with the signals by using the microcomputer and because of its powerful digital ability to process, it can better control its	An advanced microprocessor is the heart of this unit. Its digital processing permits better management of circuitry and sensing tip signal than ever before possible. Additionally,the number of components used in the circuit is reduced nearly 40%, increas	The functions of CPU-1F are less than CPU 1G, but its capability and sensitivity change little with high comparability between quality and price.

14CF6000WJL	14CF100HLD	14CF2000WJL
		
Detects All halogenated refrigerants.Inner precise IC with ultra-low consumecircuit d-esing,more stable,longer battery time.	Detects all kinds of halogenated refrigerants	Detect all halogen refrigerants.Flexible long-probe sensing tips facilitate the detection of leak source in any place

Digital Clamp

	CF8221C Designed to international safety standard IEC 1010-1 CAT III 600V Secondary injection molding case Auto range Data hold Maximum value measurement Back light Auto power off ,Display: 1999 counts, digit is 16mm high DC voltage: 200m/2/200/600V±0.7% AC voltage: 200m/2/200/600V±0.8% DC current: 200μ/2000μ/20m/200mA±1.2%,2/10A±2.0% AC current: 200μ/2000μ/20m/200mA±1.5%,2/10A±3.0% DC current: (with clamp, optional): 200/2000A(0.1mV/0.1A)±1.2% DC current: (with clamp, optional): 200/2000A(0.1mV/0.1A)±1.2% Resistance: 200/2K/20K/200K2MΩ±1.2%, 20MΩ±2.0% Temperature: -20℃~1000℃±3.0%, 0℉~1800℉±3.0% Capacitance:20n/200n/2μ/20μ/200μ/1000μF±4.0% Continuity test Diode test,Transistor hFE test, Power:1.5V(AAA)x3
	CF8217 INNOVATIVE DIGITAL MULTMETER Diode test/Buzzer Temperature Test Frequency/Duty Cycle Relative Measurement Data Hold Auto Power Off Auto/Manual Ranging Holster(sec-ondary injection) Mechanical/Electronic Protection System in conformity with IEC 1010 CAT II 1000V Convenient Fuse/Battery Change design Battery Life up to 500 Hours Lifetime Warranty DC Voltage range: 0.1mV-1000V DC Voltage accuracy: ±(0.5%+3digits) DC Current range: 0.1μA-10A DC Current accuracy: ±(1.5%+3digits) AC Voltage range:0.1mV-1000V AC Voltage accuracy: ±(1.0%+3digits) AC Voltage Freq.response: 40Hz-500Hz AC Current range: 0.1μA-10A AC Current accuracy:±(1.5%+3digits) AC Current Freq. response: 40Hz-200Hz Resistance range: 0.1Ω-40MΩ Resistance accuracy: ±(0.5%+2digits) Capacitance range: 0.01nF-100μF Capacitance accuracy: ±(3.0%+5digits) FREQUENCY/DUTY CYCLE Range: 10Hz-100kHz FREQUENCY/DUTY CYCLE Accuracy: (0.1%+3digits) TEMPERATURE Range: -55℃-1000℃ TEMPERATURE Accuracy: ±(2.0%+1℃)
	CF344 Display: digital and analog display 3999 counts and 38 segments bar graph, digit is 15mm high DC voltage: 4/40/400V±0.5% 1000V±0.8% AC voltage: 4/40/400V±1.2% 750V±1.5% Dc current: 4/40/400 ma±1.2% 10a±2.0% AC current: 4/40/400ma±1.5% 10a±3.0% Resistance: 400/4k/40k/400k/4MΩ±1.2%, 40MΩ±3.0% Capquence: 4/400nf±4.0% Frequency: 40kh±3.0% DC Voltage range: 0.1mV-1000V DC Voltage accuracy: ±(0.5%+3digits) DC Current range: 0.1μA-10A DC Current accuracy: ±(1.5%+3digits) AC Voltage range:0.1mV-1000V AC Voltage accuracy: ±(1.0%+3digits) AC Voltage Freq. response: 40Hz-500Hz AC Current range: 0.1μA-10AAC Current accuracy:±(1.5%+3digits) AC Current Freq. response: 40Hz-200HzResistance range: 0.1Ω-40MΩ Resistance accuracy: ±(0.5%+2digits) Capacitance range: 0.01nF-100μF Capacitance accuracy: ±(3.0%+5digits)
	CF830L Display: 1999 counts, digit is 15mm high DC voltage: 200m/2/20/200V±0.5%, 600V±0.8% AC voltage: 200/2k/20k/200kΩ±0.8%,2M±1.0% hFE:1~1000 Diode test,Date hold,Back light,Continuity test Power: 6F22(9V)x1



CF830B
DC current: 200μ/2000μ/20m/200mA±1.2%, 2/10A±2.0%
AC current: 200μ/2000μ/20m/200mA±1.5%, 2/10A±3.0%
DC current(with clamp,optional): 200/2000A(0.1mV/0.1A)±1.2%
AC current(with clamp,optional): 200/2000A(0.1mV/0.1A)±1.5%
Auto range
Data hold
Auto power off
Back light

CF2002



Smt application
Dc voltage: 600v±1.0% AC current: 600v±1.5% AC current: 2a/20a/200a/±2.0%
Max. Diameter for conductor:ø28mm
Resistance: 2k Ω±1.0%

CF2001



Ac current
Dcv: 1000v±1.0%
Acv: 750v±1.0%
Aca: 20/200/1000a±2.0%
Resistor: 200/2000Ω±1.0%

CF2001C



Ac current
Dcv: 1000v ±1.0%
Acv:750v±1.0%
Aca:20/200/1000a±2.0%
Resistor:200/2000Ω±1.0%

CF266



Dc voltage: 1000v±0.8%
Ac voltage: 600v±1.2%
Ac current: 200-600a±2.0%, 600-1000a±3.0%
Resistance: 200Ω/20kΩ±1.0%
Continuily check: built in buzzer will sound.

CF2101



Ac current
Dcv: 0.4/4/40/400V±0.8%,1000v±1.0%
Acv: 4/40/400v±1.0%,700v±1.2%
Dca: 400/1000a±3.0%
Aca: 400/1000a±3.0%
Resistor:400/4k/40k/400k/4m Ω±1.0%,40mΩ 4±2.0%
Cap: 4n/40n/400n/4μ f±4.0%
Frequence: 40hz to 100khz±2.0%
Temperature: -40 C to 750 C ±1.0%

CF2000



Dc voltage: 2/20/200v±0.5%,1000v±1.0%
Ac voltage: 200/750v±1.0%
AC current: 200/1000a< 600a ±2.0%>±3.0%
Max.Diameter for conductor:ø50mm
Resistance: 200Ω±1.0%,20k/2mΩ±1.5%
Frequency: 2khz±2.0% 20khz±1.5%
Temperature: 0~750°±2.0%,32~1400° ±2.0%



CF2102
3 3/4 mini ac/dc autorange digital clamp meter
Dc current zero control for nulling out jaw / Sensor oppsetsmt application
Display: digital and analong display, 3999 counts and 42 segment bar graph, digit is 9mm high
Dc voltage: 400/600v±1.0% AC voltage: 400/600v±1.5%
Dc current: 40a/400a±2.5% AC current: 40a/400a±2.0%
Max.Diameter for conductor: φ28mm
Resistance: 400 Ω ±1.0%

Differential pressure control



Specifications

Model	Press.Side	Rang(bar)		Differential(bar)		Factory Setting(bar)		Max.Bellows Press.(bar)
		Min	Max	Min	Max	OFF	ON	
CFP830	Low Side	-0.7	6	0.6	4	3	2	16.5
	High Side	8	30	Fixed 3~5		2	15	35
CFP830HM	Low Side	-0.7	6	0.6	4	3	2	16.5
	High Side	8	30	Duplicate voltage disparity≤4		20	Maunal Reset	35
CFP830HLM	Low Side	8	6	Duplicate voltage disparity≤4		3	Maunal Reset	16.5
	High Side	8	30	Duplicate voltage disparity≤4		20	Maunal Reset	35



Electric ratings

Rated amps(a)/rated voltage(v)		Power Factor(cos)	125/250v Ac	
Non-inductive current		1	12	
	Full laod	0.75	12	
Inductive current	Locked roter	0.45	72	
Model	Connection size	Connection Max	Factory Setting	M.O.P.
CFD2C	0.2	3	0.5	12
CFLD4C	0.5	4	1	12
CFLD4CH	0.5	4	1	30
CFLD6CH	1	6	6	30



Electric ratings

Rated amps(a)/rated voltage(v)		Power Factor(cos)	125/250v Ac
Non-inductive current		1	12
		Full laod	12
Inductive current		Locked roter	72

Solenoid valve(flare) specification



Appearance dimension

Model	Connection size UNF	L	Appearance Dimension			
			H	h	B	K
CFF20-2	7/16"-20UNF	60	61.5	8		
CFF20-3	5/8"-18UNF	65	70.5	8		
CFF64-3	5/8"-18UNF	88	77.5	8	42	40
CFF64-4	3/4"-16UNF	88	77	8		
CFF70-4	3/4"-16UNF	100	86	12		
CFF70-5	7/8"-14UNF	105	85	12		

Solenoid valve(Flare)

Model	Connection size	Port size (mm)	M.O.P.D	Max.working Pressure(bars)	Kv factor (m3/hr)	Nominal capacity(kw)			
						R12	R22	R404a/r502	R134a
Cff20-2	1/4"-flare	2.5	21	30	0.175	2.5	3.15	2.08	2.95
Cff20-3	3/8"-flare	3	21	30	0.23	3.3	4.15	2.75	3.9
Cff64-3	3/8"-flare	7	21	30	0.8	11.45	14.5	9.5	13.5
Cff64-4	1/2"-flare	7	21	30	0.8	11.45	14.5	9.5	13.5
Cff70-4	1/2"-flare	12.5	21	30	2.2	31.5	39.6	26.2	37.1
Cff70-5	5/8"-flare	12.5	21	30	2.61	37.2	47	31	44



Appearance dimension

Model	Connection size UNF	Appearance Dimension					
		L	H	h	x	B	K
CFF20-2S	7.29/6.12	129	70.5	8	11		
CFF64-3S	11.93/9.84	111	79	8	8.5		
CFF64-4S	14.59/12.52	109	79	8	11.5	42	40
CFF70-5S	18.65/16.47	173	90	12	14		

Specifications

Model	Connection size	Port size (mm)	M.O.P.D	Max.working Pressure(bars)	Kv factor (m3/hr)	Nominal capacity(kw)			
						R12	R22	R404a/r502	R134a
Cff20-2S	1/4"-ODF Soler	2.5	21	30	0.15	2.51	2.7	1.8	2.55
Cff64-3S	3/8"-ODF Soler	7	21	30	0.8	11.45	14.5	9.5	13.5
Cff64-3S	1/2"-ODF Soler	7	21	30	0.8	11.45	14.5	9.5	13.5
Cff70-5S	5/8"-ODF Soler	12.5	21	30	2.16	37.2	47	31	44

TYPE: CBB60

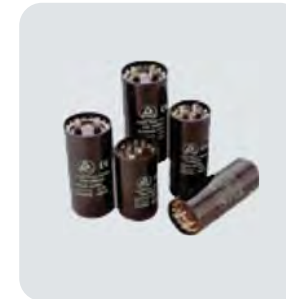


Capacitance(μF)	Rated voltage(V)	
5	250	450
6	250	450
8	250	450
10	250	450
12	250	450
14	250	450
15	250	450
16	250	450
18	250	450
20	250	450
25	250	450
30	250	450
35	250	450
40	250	450
45	250	450
50	250	450
55	250	450
60	250	450



Capacitance(μF)	Rated voltage(V)	
1	250	450
1.2	250	450
1.5	250	450
2	250	450
2.5	250	450
3.5	250	450
4	250	450
4.5	250	450
5	250	450
6	250	450
8	250	450
10	250	450
12	250	450
15	250	450
16	250	450
20	250	450
25	250	450
30	250	450
35	250	
40	250	

TTYE: CD60



Capacitance(μF)	Size(mm)		Rated voltage(V)	
21-25	36.5X69.8	110/125	220/250	330
25-30	36.5X69.8	110/125	220/250	330
30-36	36.5X69.8	110/125	220/250	330
88-108	36.5X69.8	110/125	220/250	330
108-130	36.5X69.8	110/125	220/250	330
124-149	36.5X69.8	110/125	220/250	330
130-156	36.5X69.8	110/125	220/250	330
145-175	36.5X69.8	110/125	220/250	330
161-193	36.5X69.8	110/125	220/250	330
189-227	36.5X69.8	110/125	220/250	330
216-259	36.5X85.7	110/125	220/250	
233-280	36.5X85.7	110/125	220/250	
243-292	36.5X85.7	110/125	220/250	
270-324	46X85.7	110/125	220/250	
324-389	46X85.7	110/125	220/250	
340-408	46X85.7	110/125	220/250	
378-454	46X85.7	110/125	220/250	
440-480	46X111	110/125	220/250	
430-516	46X111	110/125		
460-552	46X111	110/125		
540-648	46X111	110/125		
590-708	52X111	110/125		
645-774	52X111	110/125		
708-850	52X111	110/125		



TYPE: CBB65B

Capacitance(μF)	Rated voltage(V)	
5	370	440
6	370	440
7.5	370	440
8	370	440
10	370	440
12	370	440
14	370	440
15	370	440
16	370	440
18	370	440
20	370	440
20+5	370	440
25	370	440
25+5	370	440
30	370	440
30+5	370	440
35	370	440
35+5	370	440
40	370	440
40+5	370	440
45	370	440
45+5	370	440
50	370	440
55	370	440
60	370	
65	370	
70	370	
75	370	
80	370	

TYPE: CBB65A

Capacitance(μF)	Rated voltage(V)	
5	370	440
6	370	440
7.5	370	440
8	370	440
10	370	440
12.5	370	440
14	370	440
15	370	440
16	370	440
18	370	440
20	370	440
20+5	370	440
25	370	440
25+5	370	440
30	370	440
30+5	370	440
35	370	440
35+5	370	440
40	370	440
40+5	370	440
45	370	440
45+5	370	440
50	370	440
55	370	440
60	370	440



Q90 general purpose relays

Model	Contance Voltage	Fla	Amp Lre	Res.	Coil Voltage
Q90-340	125	12	60	15	
	250-277	6	35	15	24
	480	3	18	12.5	
Q90-341	125	12	60	15	
	250-277	6	35	15	110/120
	480	3	18	12.5	
Q90-342	125	12	60	15	
	250-277	6	35	15	208-240
	480	3	18	12.5	



PP1100 series relay protector

Model	Resistance	Voltage	Current
PP1100-1	5	110	4
PP1100-2	22	220	6



MZ series PTC starting relay with one,two and three headads

Model	Resistance at 25 C	Voltage	Recovery Time	Current	Power
MZ-12	12±10%	≥450	≤80	6	6
MZ-15	15±10%	≥600	≤80	7	7
MZ-22	22±10%	≥600	≤80	7	7
MZ-33	33±10%	≥600	≤80	6	6
MZ-47	47±10%	≥600	≤80	8	8
MZ-100	100±10%	≥600	≤80	3	3



QP Series Potential Relay

Model	Continuous coil Voltage	Pick-up Min. Max.	Drop-out Max.
QP-63	170	153	55
QP-64	395	275	120
QP-65	332	182	90
QP-66	395	225	120
QP-67	420	315	125
QP-68	502	345	135
QP-69	336	195	105



IC series solid state relay

Model	Voltage	PTC Resistance
IC-1	110	5±20%
IC-2	220	22±20%
IC-3	220	22±20%
IC-4	220	22±20%



Danfoss series relay

Model	Pick-up Current	Drop-out Current	Oveload Current
PW4.5A	3	2.5	6.5
PW5.5A	3.7	3	7.8



PO series relay

Model	Voltage	Horsepower
PO115	115	1/12 thru 1/12
PO230	230	1/12 thru 1/12



PW series relay

Model	Pick-up Current	Drop-out Current	Horsepower
PW-S1	4.25	3.35	1/5
PW-S2	4.75	3.75	1/4
PW-S3	5.3	4.25	1/3



ICG series relay

Model	Voltage	Horsepower
ICG-1	115	1/12thru1/12
ICG-220	230	1/12thru1/12



RP series push-on type relay

Model	Pick-up Current	Drop-out Current	Horsepower
RP18	3.15	2.5	1/8
RP16	3.75	3	1/6
RP15	4.75	3.75	1/5
RP14	5.35	4.25	1/4
RP13	6	5.2	1/3
RP12	8.4	7	1/2



Overload protector

Model	Break Current	Breatk Time(C)
JB-4	4	7~14S
JB-5	5	7~14S
JB-6	6	7~14S
JB-7	7	7~14S
JB-8	8	7~14S
JB-9	9	7~14S
JB-10	10	7~14S
JB-12	12	7~14S



SPP series relay

Model	Pick-up Current	Drop-out Current	Horsepower
SPP	115-230	210 Ounce	Inches



Relay and hard start capacitor

Model	Operating Voltage	Equipment Range	Recommended Range	Capacitor
SPP4E	90-130	1/12 to 1	1/8 to 1	99-106
SPP5E	90-277	1/12 to 10	1/3 to 2	43-52
SPP6E	90-277	1/12 to 10	1/2 to 3	88-106
SPP7E	90-277	1/12 to 10	1 to 4	130-156
SPP8E	90-277	1/12 to 10	1 to 5	189-227



HS series relay

Model	Robershaw	H.P.	Voltage
HS410	600-410	1/4,1/3	115V
HS810	600-810	1/12 thru 1/5	115V



Defrost compressor frequent size

Voltage	Capacitor	φxHmm
330V	64μF	38x100
330V	80μF	38x100
330V	88-108μF	38x100



PO series relay

Model	Robershaw	H.P.	Capacitor
HS600	115-277V	1/2-5	43-52μF
HS650	115-277V	1/2-10	130-156



Time delays

18-240 VAC/VDC
1.5Amp
1.5Amp.inrush
SPST,N.O.
Knob-Adjustable delays from
0.03 to 10 min.(1.8 to 600sec)



ICG series relay

Reference Gemline	Horsepower	Voltage
IC-15	1/12 thru 1/15	115
IC-13	1/4 and 1/3	115
	1/12,1/10 and 1/8	230
IC-25	1/6 and 1/5	230
IC-23	1/4 and 1/3	230



Relay and overload combination

Mold	Voltage	Horsepower
IC-13	110	1/3,1/4
IC-15	110	1/8,1/6,1/5
IC-23	220	1/3,1/4
IC-25	220	1/8,1/6,1/5



Overload protector

Mold	INCREASED TORQUE
SPP5	300%(270 oz.in.)
SPP6	500%(390 oz.in.)
SPP8	690%(520 oz.in.)



Thermostat F2000

Rating voltage	Available temperature	Differential
250V	-35 C~35 C	2 C~10 C
50Hz/60HZ		



Thermostat A2000
Available temperature: -35 C ~+320 C
Applicable Area:
This series is mainly applicable for refrigeration maching, water-heater,ovenect appliances



Danfoss series thermostat

Model	Cold ON	Operating Temperature(°C)			Capillary Length(mm)
		cold Off	warm ON	Warm OFF	
077B6208	3.5	-27	3.5	-11	1000
077B0033	-13.5	-24.5	2.5	-5	1000
077B6467	3.5	-27	3.5	-11	1000
077B6221	3.5	-23	3.5	-12.5	1000
077B0021	-5.5	-10	-1	-11	1000
077B0028	2.5	-4.5	11	5	1000
077B0025	-2.2	-32	-15	-23	1000
077B0027	8	0.5	15.5	9	1000



K series thermostat

Model	Cold ON	Operating Temperature(°C)			Capillary Length(mm)
		cold Off	warm ON	Warm OFF	
K50-P1125	-9.5	-18	8.5	--	1200
K50-P1126	-18	-24.5	-9.5	--	1200
K50-P1127	5	1.5	12.5	--	1200
K50-P1272	-17	-27	-12	-20	1200
K50-P1117	-22	-30	-7	-12	1200~2550
K50-P1174	-14	-17	-5	3	1200~2550
K50-P1118	1.8	-3.3	13	8	1200~2550
VW8= K55-L5010	18.5±1.5	16±1.5	35±2	33±2	1200~2550
VC1= K50-P1110	-14.5±1.5	-23±1.5	2±2	--	1200
K50-P1179	-10.5±1.5	-20±1.5	--	-10±2	800
K50-P1392	-22±2	-30±2	-14±1.5	-20±1.5	340
WL-0.5K	2.8+1-0.5	0.5+1+0.5			340
WL-0K	3.5+1-0.5	0+1-0.5			600
K54-P1102	-20±2	-26±2	-11.5±1.5	-16±1.5	1200
K60-P1013	-15±2	-24±2	-4±1.5	-11±1.5	1200
K59-L1102	3.5±1.5	-22±2	3.5±1.5	-12±1.5	1200
WDF-19K	3.5±1.5	-19±2	3.5±1.5	-9±2	1000
WDF-19KA	3.5±1.5	-19±2	3.5±1.5	-9±2	1000
WDF-22K	-16	-22	-5	-10	1000
WPF-1K	5	1.5	12.5	9	1000
K59-P4881	3.5	-24	3.5	-14	1200
K50-P6088	-135.	-26	-7	-17.5	1200
59-P6815	3.5±1.5	-22±2	3.5±1.5	12±1.5	1200

Thermostat



Lseries thermostats, single pole-aingle throw.

PART NO.	°DIFF.	OPEN ° F	CLOSE ° F	PART NO.	°DIFF.	OPEN ° F	OPEN ° F
L120	10	120	110	L180-40	40	180	140
L125	10	125	115	L190	40	190	150
L130	15	130	115	L200	40	200	160
L135	15	135	120	L205	40	205	165
L140	20	140	120	L225	40	225	185
L145	20	145	125	L240	40	240	200
L150	20	150	130	L250	40	250	210
L155	20	155	135	L260	40	260	220
L160	20	160	140	L270	40	270	230
L165	20	165	145	L290	40	290	250
L170	20	170	150	L300	40	300	260
L175	20	175	155	L320	40	320	280
L180-20	20	180	160	L340	40	340	300



One pole with shunt contactors

FullLoad Amp	CoilVoltage 50/60Hz	Line Voltage	LockedRotor Amp	ResistiveAmp Rating	Maximun HP Voltage Single phase	
20	24	240/277	20FLA-1POLE			
	120		120	30	120	1
	208/240		100	30	240	1
	277		80	30	-	-
25	24	240/277	25FLA-1POLE			
	120		150	35	120	1
	208/240		125	35	240	2
	277		100	35	-	-
30	24	240/277	30FLA-1POLE			
	120		150	40	120	1
	208/240		125	40	240	2
	277		100	40	-	-
40	24	240/277	40FLA-1POLE			
	120		200	50	120	2
	208/240		160	50	240	3
	277		120	50	-	-



Two pole contactors

FullLoad Amp	CoilVoltage 50/60Hz	Line Voltage	LockedRotor Amp	ResistiveAmp Rating	Maximun HP Voltage Single phase	
20	24	240/277	20FLA-2POLE			
	120		120	30	120	2
	208/240		100	30	240	3
	277		80	30	-	-
25	24	240/277	25FLA-2POLE			
	120		150	35	120	2
	208/240		125	35	240	3
	277		100	35	-	-
30	24	240/277	30FLA-2POLE			
	120		150	40	120	2
	208/240		125	40	240	3
	277		100	40	-	-
40	24	240/277	40FLA-2POLE			
	120		200	50	120	2
	208/240		160	50	240	3
	277		120	50	-	-

Two pole contactors



FullLoad Amp	CoilVoltage 50/60Hz	Line Voltage	LockedRotor Amp	ResistiveAmp Rating	Maximun HP Voltage Single phase
20	24		20FLA-3POLE		
	120	240/277	120	30	1.5
	208/240	480	100	30	3 7.5
	277	600	80	30	- 7.5
25	24		25FLA-3POLE		2 -
	120	240/277	150	35	5 10
	208/240	480	125	35	- 15
	277	600	100	35	- 20
30	24		30FLA-3POLE		2 -
	120	240/277	180	40	5 10
	208/240	480	150	40	- 15
	277	600	120	40	- 20
40	24		40FLA-3POLE		3 -
	120	240/277	240	50	7.5 10
	208/240	480	200	50	- 20
	277	600	160	50	- 25



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-003	110	50/60	0.2	10



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-001	110	50/60	0.15	7



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-004	220	50/60	0.21	27



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-002	220	50/60	0.1	7



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-007	110	50/60	0.08	9



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-009a	220	50/60	0.15	12
26CF-009b	110	50/60	0.21	12



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-008	220	50/60	0.08	7



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-011a	220	50/60	0.08	8
26CF-011b	110	50/60	0.16	10



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-011a	220	50/60	0.08	8
26CF-011b	110	50/60	0.16	8



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-015	220	50/60	0.05	5.5



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-012	220	50/60	0.08	8



Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-014	120	50/60	0.38	16



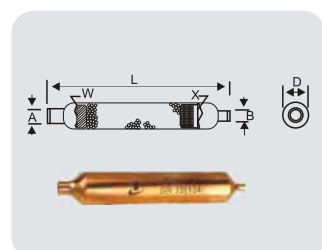
Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
26CF-016	100	50/60	0.13	8



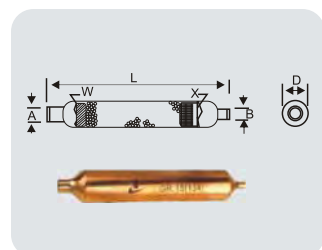
Type	Voltage (V)	Frequency (HZ)	Current (A)	Input (W)
CF-020	220	50/60	0.18	15



Type	Power(w) output	Input	Current(A)	Speed(r/min)	A	B	C	D	E	Fan Size
CF-019a	3	22	0.15	1300	9	16	41	81	45	200
CF-019b	5	33	0.2	1300	13	16	41	85	45	200
CF-019c	8	35	0.3	1300	17	20	45	91	49	200
CF-019d	10	40	0.35	1300	20	20	45	94	49	200



Type	TYPE	D	SOM A L	SOM B L	Gr.
SOM A5	SOM B5	16	78	83	5
SOM A7	SOM B7	16	92	97	7
SOM A7.5	SOM B7.5	16	96	101	7.5
SOM A8	SOM B8	16	101	106	8
SOM A10	SOM B10	16	112	117	10
SOM A-10	SOM B-10	19	95	98	10
SOM A12	SOM B12	19	103	108	12
SOM A13	SOM B13	19	108	113	13
SOM A15	SOM B15	19	120	125	15
SOM A18	SOM B18	19	128	133	18
SOM A20	SOM B20	24	141	146	20
SOM A-20	SOM B-20	24	111	116	20
SOM A25	SOM B25	24	130	135	25
SOM A30	SOM B30	24	140	145	30
SOM A35	SOM B35	24	155	160	35
SOM A40	SOM B40	24	170	175	40
SOM A50	SOM B50	24	200	205	50
SOM A-50	SOM B-50	30	160	168	50
SOM A60	SOM B60	30	178	185	60
SOM A70	SOM B70	30	195	200	70
SOM A80	SOM B80	30	210	215	80

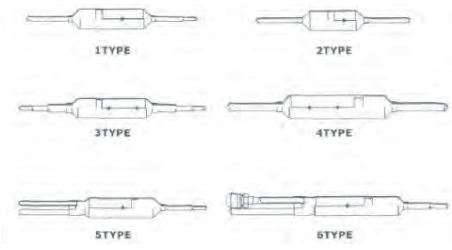
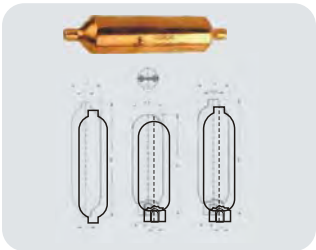


Type	Molec. Sievegr	FILTER MM	SIZES Imm.±3	Lmm. ±3	Amm.	Bmm.
SOM C10	10	19	105	225	2.5	6.35
SOM C15	15	19	125	250	2.5	6.35
SOM C20	20	24	120	245	2.5	6.35
SOM C25	25	24	140	265	3.1	6.35
SOM C30	30	24	150	275	3.1	6.35
SOM C50	30	30	168	315	3.1	6.34

Other spare parts



TYPE Tolerances	External Diameter (D)±0.10mm	Length (L)±3.00mm	Screen Depth (P)Mm3
SOM D19/180	19	180	40
SOM D19/200	19	200	45
SOM D25/90	25	90	30
SOM D25/120	25	120	40
SOM D25/200	25	200	80
SOM D30/150	30	150	80
SOM D30/200	30	200	110



Additional heating wire series for refrigerators and cooling

product name	Rated voltage	Frequency	power	surrounding temperature	using temperature	power consistency	instruction
PVC additional heating wire	≤250V	50/60Hz	1~40W	-25~60℃	-25~80℃	ms15W	Power rating is related to length in use working temperature is related to device status Outer diameter of heating wire shall be com monlyd2.3-3.5mm
Silastic heating wire	≤250V	50/60Hz	1~40W	-25~60℃	-25~80℃	ms15W	
Woven type silastic heating wire	≤250V	50/60Hz	1~40W	-25~60℃	-25~80℃	ms15W	

provide auxiliary heating for defrosting,dew-prevention and heat preservation Of refrigerator,cooling cabinet and AC etc household appliances

Additional heater series for refrigerators and cooling cabinets

product name	Rated voltage	Frequency	power	surrounding temperature	using temperature	power consistency	instruction
PVC aluminum foil heater	≤250V	50/60Hz	1~80W	-30~80℃	-30~90℃	15W/M	Power rating is related to length in use working temperature is related to device status Thickness of aluminum foil shall be generally 0.03mm.0.06mm, 0.05mm,0.13mm and 0.05mm is in commom use. Outer diameter of aluminum duct shall be D4.5~6mm
PVC aluminum tubular heater	≤250V	50/60Hz	1~80W	-30~80℃	-30~90℃	60W/M	
Silastic aluminum foil heater	≤250V	50/60Hz	1~100W	-60~160℃	-30~160℃	60W/M	
Silastic aluminum tubular heater	≤250V	50/60Hz	1~100W	-60~160℃	-30~160℃	60W/M	
PTC ceramic heater	≤250V	50/60Hz	1~100W	-30~80℃	-30~90℃	60W/M	

Application:widely used for additional heating of refrigeratores and cooling cabinets.Auxiliary heating ondefrosting,ice-out and other mechanica devices,such as drier,incubator,heat preservation room.such heat shall be machined into various shapes depending on the heating surface.

Thermal endurance silastic heating strip and silastic heating panel sesies

product name	Rated voltage	Frequency	power	using temperature	instruction
heating strip for cankcase of AC compressor	≤250V	50/60Hz	20~130W	≤180℃	-60~160℃
heating strip for drainpipe of cooling house and cabinet	≤250V	50/60Hz	20~130W	≤180℃	-60~160℃
Silastic heating plate	≤250V	50/60Hz	100~600W	≤180℃	-60~160℃

Quartz glass tubular defrosting heater series for refrigerators and cooling cabinets

product name	Rated voltage	Frequency	power	using temperature	instruction
quartz glass tubular defrosting heater	≤250V	50/60Hz	80~400W	≤180℃	Outer glass diameter:D9-20MM Length of glass tube: 170mm-570mm
high power silastic head heater	≤250V	50/60Hz	400~600W	≤300℃	
High power thermal endurance Material head heater	≤250V	50/60Hz	80~900W	≤500℃	
Explosion-proof heater	≤250V	50/60Hz	80~400W	≤180℃	
Deodorizing heater	≤250V	50/60Hz	80~400W	≤180℃	

Application:used to defrost refrigerators and cooling cabinets,which shall be a must for frost-free refrigerators.it is also applicable to sterilize dissinfection cabinet.

Thermal endurance silastic heating strip and silastic heating panel sesies

product name	Rated voltage	Frequency	power	instruction
parallel conncted equi-power heating wire	≤250V	50/60Hz	20~130W	-60~160℃

Application: to heat the floor of building,cooling house and ware house.to melt snow and frost on slope,trough and roof. to prevent frost and to preserve heat of petroleum pipline and other devices

Drying heater for industial washing machines,drying and roasting oven heater series

Application:washing machines,heater unit,drier and heating/roasing oven.

SADKS



Series liquid line and suction line filter-driers

- Replaceable core filter-drier for large commercial air conditioning and refrigeration systems
- joint Type: ODF
- Maximun working pressure
- Liquid line: 3.4 Mpa
- Suction Line: 2.7Mpa

SO



Series refrigerant oil separators

Join Type: ODF
Maxmun working pressure:3.1Mpa

SR



Series refrigerant receivers

Joint Type: Inlet/Outlet ODF
Maximun working pressure:4.5Mpa



SA
Series suction line accumulators

Joint Type: ODF
Maximun working pressure:3.1Mpa



SE
Series heat exchanger suction line accumulators

Joint Type: ODF
Maximun working pressure:3.1Mpa



TYPE	(in)Connecttoms		(KW)Liquid flow capacity					
	ODF	SAE	R134a	R12	R22	R404a	R502	
SAD-032		1/4	2.5	2.1	3.1	1.9	1.8	
SAD-032S	1/4		2.8	2.3	3.2	2.1	2.0	
SAD-033		3/8	3.0	2.5	3.3	2.2	2.1	
SAD-033S	3/8		3.0	2.5	3.3	2.3	2.1	
SAD-052		1/4	7.3	6.0	7.9	5.3	5.2	
SAD-052S	1/4		12.8	10.5	13.9	9.2	9.0	
SAD-053		3/8	16.2	13.3	17.3	11.7	11.4	
SAD-053S	3/8		23.5	19.3	25.5	16.9	16.6	
SAD-082		1/4		7.3	6.0	7.9	5.3	
SAD-082S	1/4		12.8	10.5	13.9	9.2	9.0	
SAD-083		3/8	19.2	15.8	20.9	13.9	13.6	
SAD-083S	3/8		26.1	21.5	28.4	18.9	18.5	
SAD-084		1/2	32.3	26.7	35.3	23.4	22.9	
SAD-084S	1/2		36.5	29.9	39.5	26.2	25.7	
SAD-162		1/4	10.3	7.6	13.6	6.3	6.2	
SAD-162S	1/4		15.3	18.3	16.8	11.5	11.3	
SAD-163		3/8	21.4	17.6	23.3	15.4	15.1	
SAD-163S	3/8		29.9	23.9	31.6	21.0	20.5	
SAD-164		1/2	42.8	35.2	46.5	30.9	30.2	
SAD-164S	1/2		51.3	42.2	55.8	37.0	36.2	
SAD-165		5/8	64.2	52.8	69.8	46.3	45.3	
SAD-165S	5/8		64.2	52.8	69.8	46.3	45.3	
SAD-167S	7/8		70.5	58.0	76.7	50.9	49.8	
SAD-303		3/8	28.4	24.8	30.1	22.0	21.7	
SAD-303SS	3/8		33.0	26.3	32.5	25.3	24.8	
SAD-304		1/2	49.6	40.8	54.0	35.8	35.0	
SAD-304S	1/2		54.3	44.7	59.1	39.2	38.4	
SAD-305		5/8	67.6	55.6	73.5	48.8	47.8	
SAD-305S	5/8		72.7	59.8	79.1	52.5	51.4	
SAD-306		3/4	73	59.8	79.1	52.5	51.8	
SAD-306S	3/4		82.4	67.3	88.3	58.4	57.4	
SAD-307S	7/8		98.4	81.0	107.1	71.1	69.6	
SAD-309S	1-1/8		111.6	91.8	121.4	80.5	78.8	
SAD-413		3/8	46.3	33.8	51.5	28.4	27.9	
SAD-414		1/2	63.3	50.2	70.4	43.7	43.1	
SAD-414S	1/2		63.3	50.2	70.4	43.7	43.1	
SAD-415		5/8	81.3	66.9	88.5	58.7	57.5	
SAD-415S	5/8		81.3	66.9	88.5	58.7	57.5	
SAD-417S	7/8		100.5	82.7	109.5	72.5	71.0	
SAD-419S	1-1/8		111.6	81.8	121.4	80.5	78.8	



SFX solid core liquid line filter drier

Type	Connection size	A (in)	B (in)	φC (in)
SFX-283T	3/8	4.40	5.59	
SFX-284T	1/2	4.43	5.69	
SFX-285T	5/8	4.92	6.38	
SFX-286T	3/4	6.18	7.75	3.5
SFX-287T	7/8	6.22	7.87	
SFX-289T	1-1/8	6.60	8.25	
SFX-2811T	1-3/8	8.84	10.81	
SFX-2813T	1-5/8	8.50	10.50	



TYPE	(in)Connecttoms		(KW)Liquid flow capacity				
	ODF	SAE	R134a	R12	R22	R404a	R502
SEK-032		1/4	2.0	1.6	2.0	1.4	1.4
SEK-032S	1/4		2.7	2.2	2.9	2.0	1.9
SEK-033		3/8	3.0	2.5	3.3	2.2	2.1
SEK-033S	3/8		3.0	2.5	3.3	2.2	2.1
SEK-052		1/4	9.0	7.4	9.8	6.5	6.3
SEK-052S	1/4		13.3	10.9	14.4	9.6	9.4
SEK-053		3/8	21.4	17.6	23.3	15.4	15.1
SEK-053S	3/8		26.5	21.8	28.9	19.1	18.7
SEK-082		1/4	8.6	7.0	9.3	6.2	6.0
SEK-082S	1/4		13.7	11.3	14.6	9.9	9.7
SEK083		3/8	21.8	18.0	23.7	15.7	15.4
SEK-083S	3/8		27.4	22.5	29.8	19.8	19.3
SEK-084		1/2	36.4	29.9	39.6	26.3	25.7
SEK-084S	1/2		38.9	32.0	42.4	28.1	27.5
SEK-162		1/4	2.0	1.6	2.2	1.4	1.4
SEK-162S	1/4		2.7	202.0	2.9	2.0	1.9
SEK-0163		3/8	22.2	18.3	24.2	16.1	15.7
SEK-163S	3/8		31.7	26.0	34.4	22.9	22.4
SEK-164		1/2	38.5	31.7	41.9	27.8	27.2
SEK-164S	1/2		49.6	40.8	54.0	35.8	35.2
SEK-165		5/8	50.5	41.5	549.0	36.4	35.7
SEK-165S	5/8		67.2	55.3	73.1	48.5	47.5
SEK-167S	7/8		70.6	58.1	76.8	51.0	49.5
SEK-303		3/8	28.4	24.8	30.1	22.0	21.7
SEK-303S	3/8		33.0	26.3	32.5	25.3	24.8
SEK-304		1/2	43.6	35.9	47.5	31.5	30.8
SEK-304S	1/2		54.1	44.7	59.1	39.2	38.4
SEK-305		5/8	55.6	45.8	60.5	40.1	39.3
SEK-305S	5/8		74.0	60.9	80.5	53.4	52.3
SEK-306S	3/4		82.4	63.3	88.3	58.4	57.4
SEK-307S	7/8		83.4	68.6	90.8	60.2	59.0
SEK-309S	1-1/8		109.1	89.8	118.7	78.7	77.1
SEK-413		3/8	46.3	33.8	51.5	28.4	27.9
SEK-414		1/2	63.3	50.2	70.4	43.7	43.1
SEK-414S	1/2		63.3	50.2	70.4	43.7	43.1
SEK-415		5/8	68.5	56.3	74.5	49.4	48.4
SEK-415S	5/8		78.3	64.4	85.2	56.5	55.3
SEK-417S	7/8		106.5	87.6	115.9	76.9	75.3
SEK-419S	1-1/8		113.8	93.6	123.8	82.1	80.4
SEK-757S	7/8		22.2	18.2	24.1	16.1	15.6
SEK-759S	1-1/8		32.7	26.8	35.4	23.7	23.0

Filter core



Type	D1(in)	D2(in)	L(in)
Ds48	1.85	3.78	5.51
HS48	1.85	3.78	5.51
Hs100	2.09	4.8	6.5



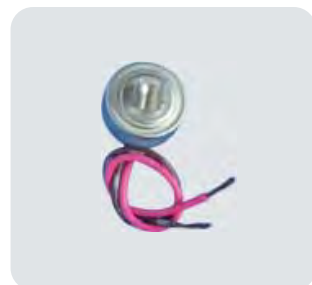
Type	A(in)	B(in)	C(in)
LX48	3.74	5.51	0.79
Lx100	4.69	6.54	1.1



S solid core liquid line filter drier

S" series SAE	Liquid Line ODF	Connection (in)	Volume of Desiccant(m2)	SAE	ODF	Solder Socket (mm)	Body Diameter (mm)φc
SAE	S-032S	1/4	49	106	97	10	44
S-032	S-033S	3/8		119	99	11	
S-033	S-052S	1/4	82	121	106	10	62
S-052	S-082S	1/4	147	143	130	10	67
S-082	S-083S	3/8		154	133	11	
S-083	S-084S	1/2		160	138	13	
S-084	S-162S	1/4	262	159	146	10	76
S-162	S-163S	3/8		171	149	10	
S-163	S-164S	1/2		176	152	13	
S-164	S-165S	5/8		184	160	16	
S-165	S-167S	7/8		-	176	19	
-	S-303S	3/8	492	246	226	11	76
S-303	S-304S	1/2		251	229	13	
S-304	S-305S	5/8		259	235	16	
S-305	S-306S	3/4		-	245	16	
-	S-307S	7/8		-	249	19	
-	S-309S	1-1/8		-	248	24	
-	-	3/8	672	243	-	-	
S-413	S-414S	1/2		252	230	13	89
S-414	S-415S	5/8		260	237	16	
S-415	S-417S	7/8			249	19	
	S-419S	1-1/8			248	24	
	S-607S	7/8	983		406	19	
	S-609S	1-1/8			406	24	76

KSD301B frost removal thermostat series



KSD301B-2



KSD301B-4



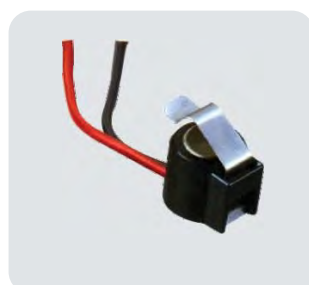
KSD301B-6



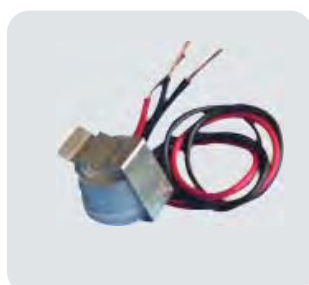
KSD301B-7



KSD301B-3



KSD301B-5



KSD301B-8



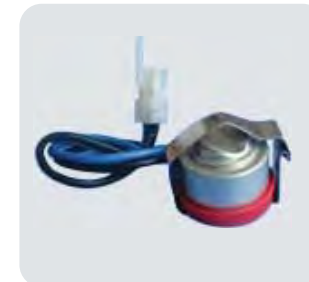
KSD301B-10



KSD301B-11



KSD301B-14



KSD301B-16



KSD301B-21

KSD301B2 frost removal thermostat with blister package series



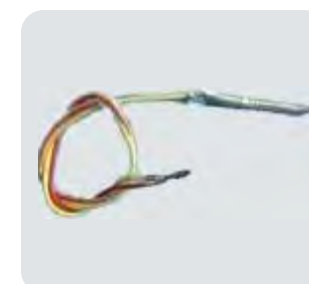
KSD301B2-1



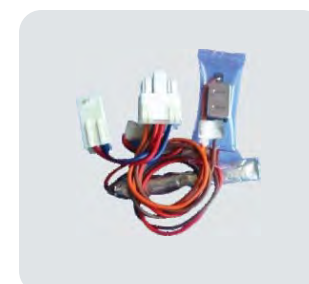
KSD301B2-5



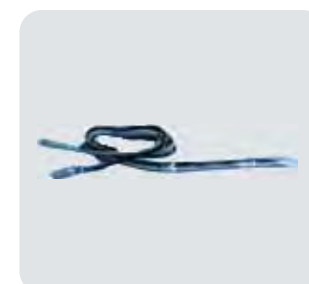
KSD301B2-6



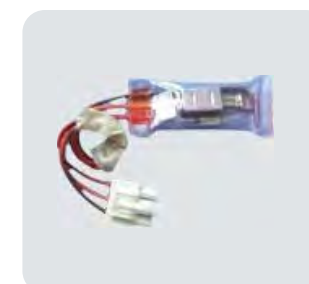
KSD301B2-10



KSD301B2-11



KSD301B2-13



KSD301B2-14

Features of the timer



Type	Daily Defrosting cycles	Defrosting time	Additional fuction	Dimention of time(mm)
SBL1.81	4cycles	5-90min adjustable	-	
SBL1.82	4cycles 1-12 cycles adjustable	5-90min adjustable	3.5min±25 Secretary	For fan starting
SBL3.81	1-12 cycles adjustable	2-60min adjustable	-	
SBL1.82	adjustable	2-60min adjustable	0-15min adjustable	For fan starting

Frost removal timer series



CF001
220V 50/60Hz 3W 110V 50/60Hz 3W
Operating Time: 6H/8H/10H
Defrosting Time: 20/21/25/30minuts of according to customers'requieirement
Working Life: more than 100000 times deforsting



CF002



CF003



CF004



CF005

Thermometer



Dial diameter 2"
Case material stainless steel



Dial diameter 2"
Case material stainless steel



Dial diameter 2"
Case material stainless steel



size88.4X61.8mm
Case material stainless steel



Size 82*75*0.4mm
Case material Aluminum



Size: 65X67X22.8mm



Temperature Range: 50~300℃
Date: stainless steel



size: 2"
-40~15℃/-40~60°



Temperature Range: -35~50℃
Color: white,(with hool)

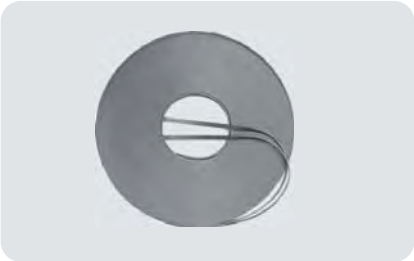


Temperature Range: -30~30℃
Data: sta5n3ess steel



Size: 2"
-50~198℃/58~392°F

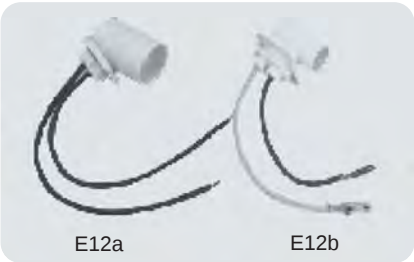
Plastic magnetic bar



specs	density
3*9	3.6
2.5*9	3.6
2*9	3.6

E12&E14 series lamp holder

E12



E12a

E12b

- Specification: E12 Screw thread caliber
- Electrical Rating: 1A 250VAC
- Insulation Resistance: ≥100mΩ
- Dielectric Strength: 1500VAC/1min
- Contact Resistance: ≤50mΩ
- Ambient Temperature: -15℃~+55℃

E14



E14a

E14b

- Specification: E14 Screw thread caliber
- Electrical Rating: 1A 250VAC
- Insulation Resistance: ≥100mΩ
- Dielectric Strength: 1500VAC/1min
- Contact Resistance: ≤50mΩ
- Ambient Temperature: -15℃~+55℃

Aluminium handle



25CF001

sizes
40
80
120
160
200
240
280



25CF002

sizes
40
80
120
160
200
240

Technical drawing of the rear view of the rear seat base. The drawing shows a rectangular base with a central cutout. Dimensions include a total width of 63.5, a central cutout width of 30, and a distance of 35 from the center to the outer edges. There are four M5 screw holes, with one labeled "8 M5Screw hole". The distance between the screw holes is 50, and the distance from the outer edge to the screw hole is 35. The total length of the base is 140, and the height of the base is 24.

[illegible]

Technical drawing of a mechanical part with dimensions and labels:

- Top view dimensions: 125, 5, 8 M5 Screw hole, 50, 70, 24.
- Side view dimensions: 50, 45, 24, 70, 145.
- Labels: "8Hole for pistons" and "8Hole for pistons".

[illegible]

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and features. The drawing includes a side view and a top view. Key dimensions include 10, 10, 70, 70, 20, 45, 25, 60, 250, 32, and 50. Features include "5-M8 Screw hole" and "5-M8 Screw hole".



Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and features:

- Top View:**
 - Overall width: 56
 - Overall height: 44.5
 - Distance from left edge to first hole center: 41
 - Distance between hole centers: 41
 - Distance from right edge to last hole center: 41
 - Overall length: 105
 - Distance from left edge to first hole center (bottom view): 56
 - Distance between hole centers (bottom view): 22
 - Distance from right edge to last hole center (bottom view): 24
 - Overall length (bottom view): 162
- Side View:**
 - Overall height: 32
 - Distance from top edge to hole center: 12
 - Distance from bottom edge to hole center: 10
 - Overall width: 27
 - Feature: 3-M6 Screw Hole
 - Feature: 7.0x12L
 - Feature: Upstand



joseph@globalsourcingdirect.us