

FP SERVICES

AUTOMATION

2019



Product overview



Produktübersicht



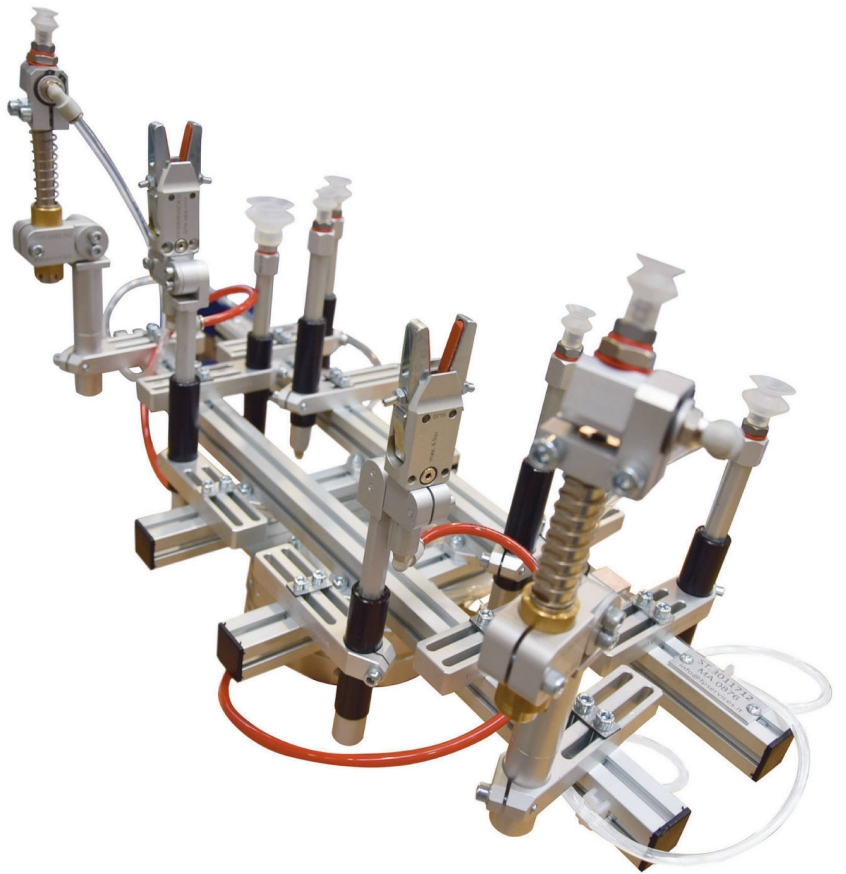
Panoramica Prodotti



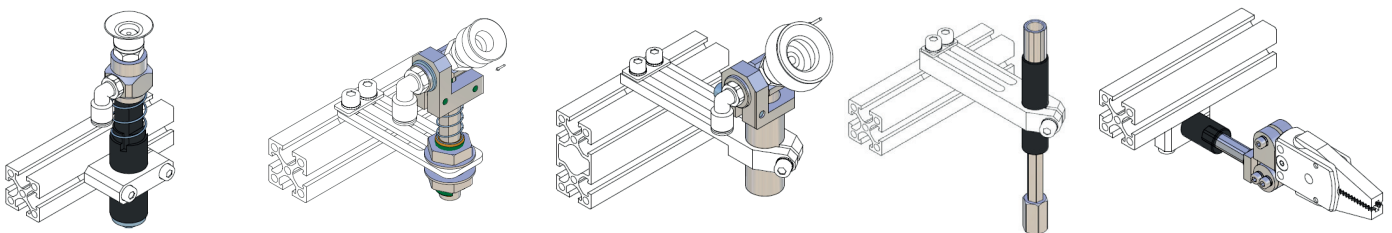
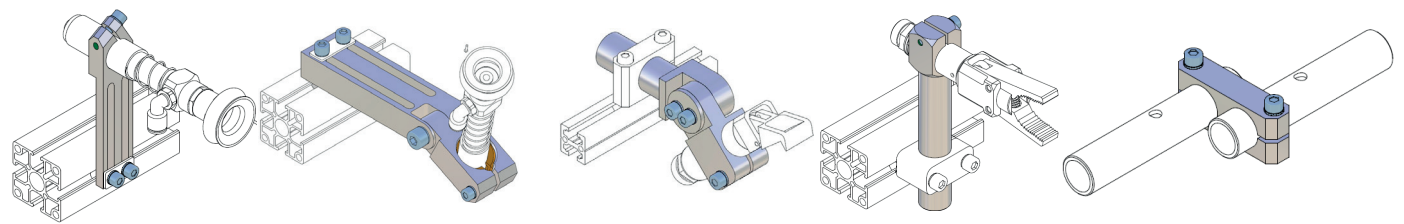
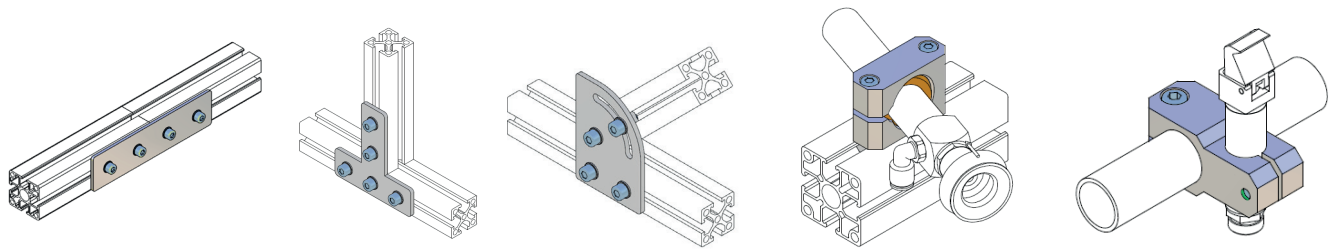
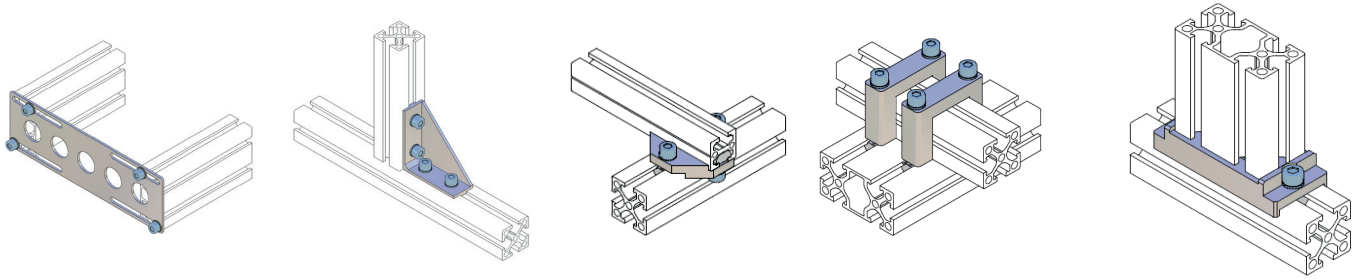
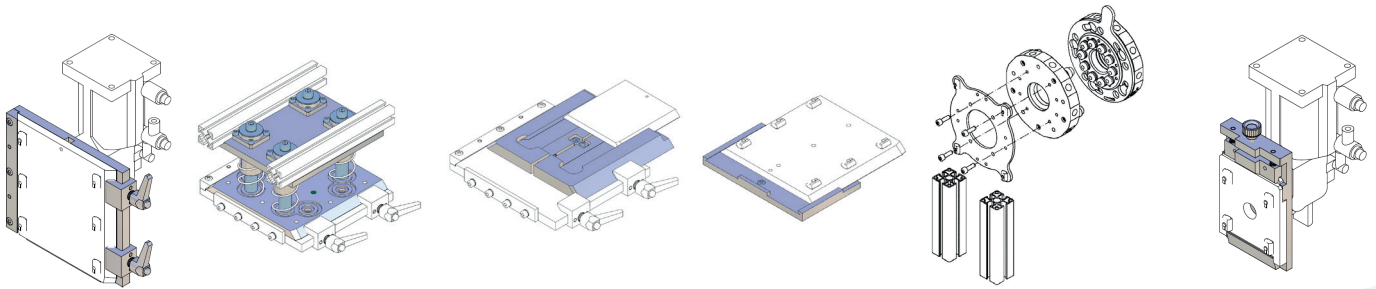
Gamme de produits

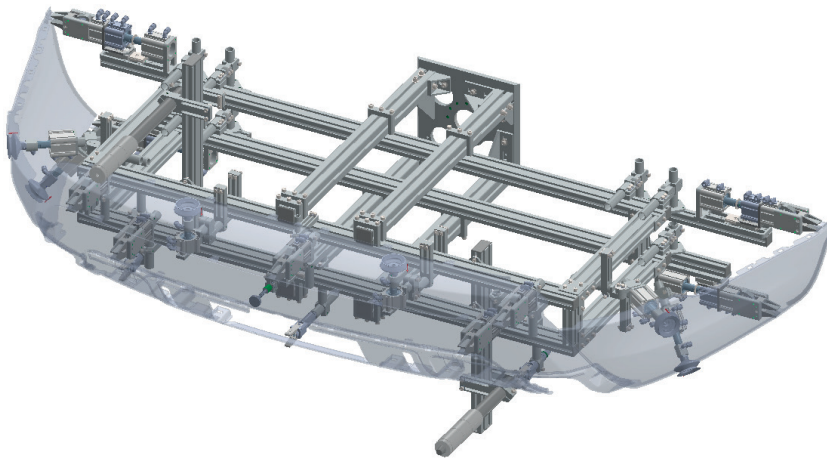


Gama de productos

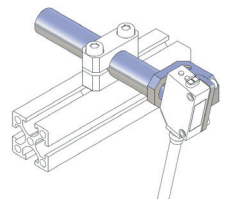
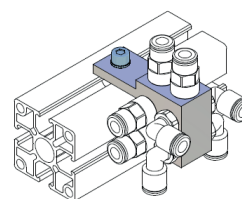
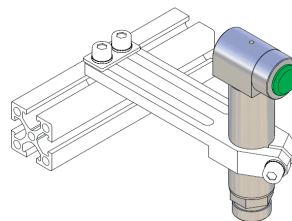
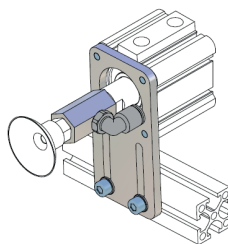
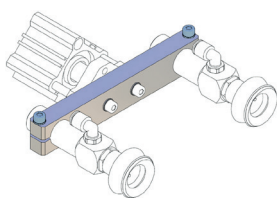
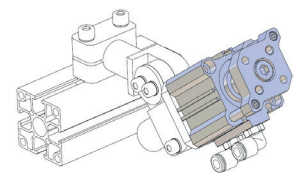
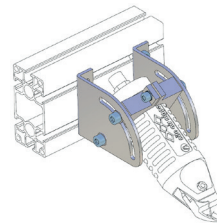
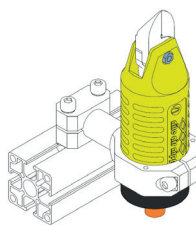
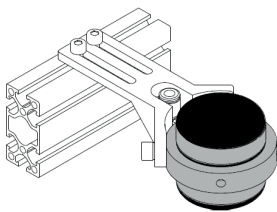
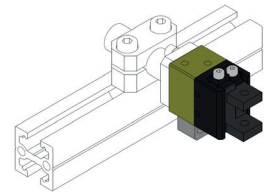
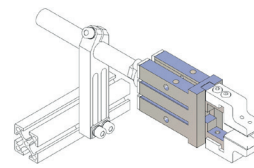
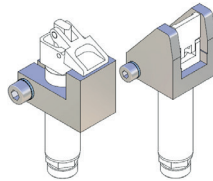
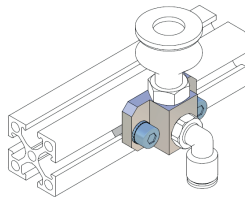
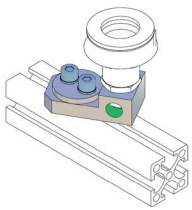


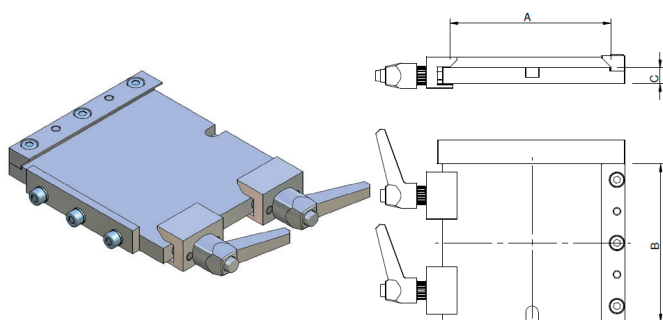
INNOVATION IN PROGRESS





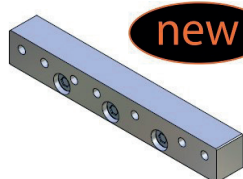
Application example
Anwendungsbeispiele
Esempio applicativo
Exemple d'application
Ejemplo de aplicación



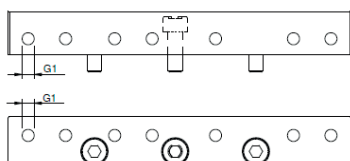


Quick changer (Robot side)
Schnellwerkzeugwechsler (Roboterseite)
Cambia utensile (Lato robot)
Changeur d'outils rapide (Côté robot)
Cambio rápido (Lado robot)

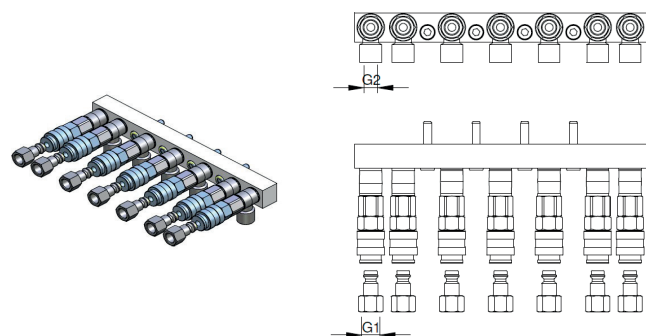
	A	B	C		
CA.SWM0	60	60	10	AL.	140 g
CA.SWM1	100	100			441 g
CA.SWM1S				STEEL	1138 g
CA.SWM2	160	160	12	AL.	1132 g
CA.SWM2S				STEEL	3099 g
CA.SWM3	250	250			2962 g
CA.SWM3S				STEEL	8173 g



new

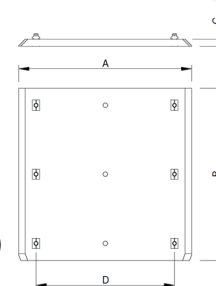
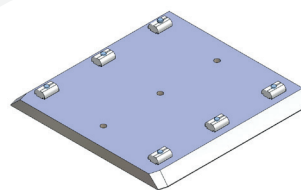


	G1	G2	L	M*	
SWM1.8	M5	M5	7	CA.SWM1	71 g
SWM2.8	G1/8	G1/8		CA.SWM2	136 g
SWM3.8	G1/4	G1/4	8	CA.SWM3	325 g



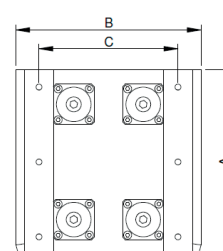
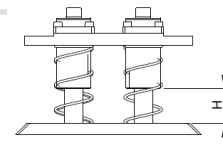
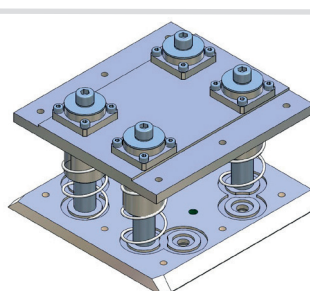
Pneumatic connection for quick changer
Luftanschlußleiste Greiferwechselsystem
Connessione aria
Raccord rapide
Distribuidor neumático

	G1	G2	L	M*	
CA.LAL.1.5	M5	M5	5	CA.SWM1	154 g
CA.LAL.1.7			7		225 g
CA.LAL.2.5	G 1/8	G 1/8	5	CA.SWM2	631 g
CA.LAL.2.7			7		742 g
CA.LAL.3.6	G 1/4	G 1/4	6	CA.SWM3	902 g
CA.LAL.3.8			8		1504 g



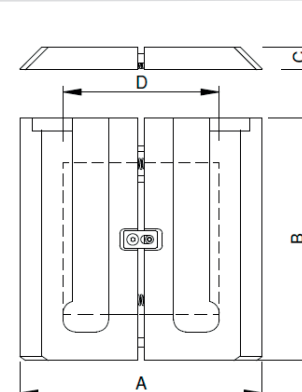
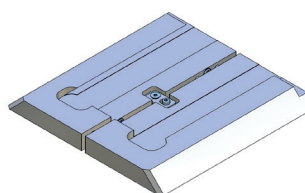
Quick changer (Gripper side)
Schnellwerkzeugwechsler (Greiferseite)
Cambia utensile (Lato mano)
Cambio rápido (Lado pinza)
Changeur d'outils rapide (Côté main de préhension)

	A	B	C	D	M*		
CA.GPM0	60	60	8	...	...	AL.	69 g
CA.GPM0.X				35	L		104 g
CA.GPM1	...	...		201 g			
CA.GPM1.X	100	100		70	L/X	242 g	
CA.GPM1S			...	...	STEEL	583 g	
CA.GPM2	160	160	10	...	...	AL.	653 g
CA.GPM2.X				120	L/X/JU		695 g
CA.GPM2S				...	...	STEEL	1892 g
CA.GPM3	250	250		...	...	AL.	1613 g
CA.GPM3.X				200	L/X/JU		1677 g
CA.GPM3S				...	...	STEEL	4673 g



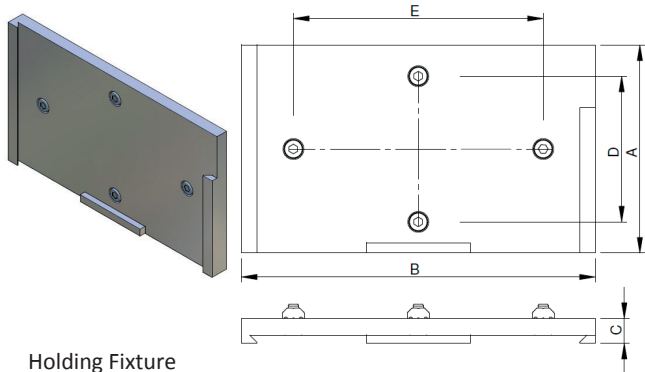
Ground Plate Spring Loaded
Greifergrundplatte gefedert
Piastra ammortizzata
Plaque de base sur ressort
Placa de Base (Resorte)

	A	B	C	H	F(N)	
CA.GPG.1	100	100	70	22	36	486 g
CA.GPG.2	160	160	120	30	50	1345 g
CA.GPG.3	250	250	200			3800 g



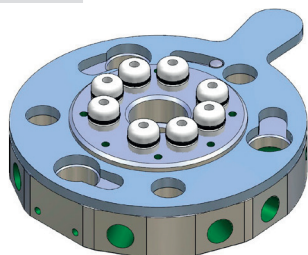
Ground Plate Reduction
Greifergrundplatte Reduzierung
Riduzione piastra
Plaque de base
Placa de base para elementos de pinza

	A	B	C	D	M*	
CA.GPR1.0	100	100	15	60	CA.GPM0/CA.SWM1	263 g
CA.GPR2.1	160	160		100	CA.GPM1/CA.SWM2	703 g
CA.GPR3.2	250	250	20	160	CA.GPM2/CA.SWM3	2441 g



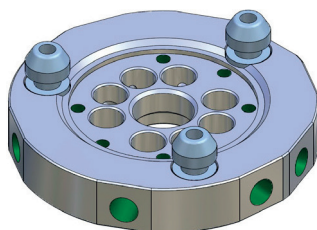
Holding Fixture
 Greiferwandhalterung
 Porta mano
 Équipement tenant
 Acessorio de Soporte

	A	B	C	D	E	M*	
CA.GHV.60	60	70	10	30	30	CA.GPM0	100 g
CA.GHV.100		110			70	CA.GPM1	168 g
CA.GHV.160	100	170	12	70	120	CA.GPM2	416 g
CA.GHV.250	120	270		90	220	CA.GPM3	757 g



Robot side

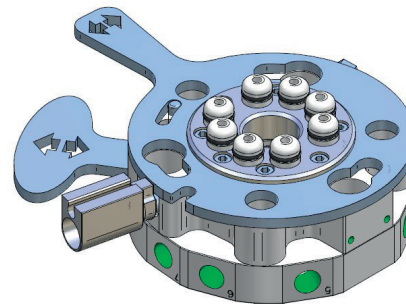
		Diameter	
CA.01.01.001	RS/90	90	318 g
CA.01.01.003	RS/150	150	1123 g
CA.01.01.013	RS/160		1200 g
CA.CUSL.200.R	RS/200	200	2496 g



Gripper side

		Diameter	
CA.01.01.002	GS/90	90	227 g
CA.01.01.004	GS/150	150	827 g
CA.01.01.014	GS/160		900 g
CA.CUSL.200.G	GS/200	200	1798 g

Quick changer
 Schnellwerkzeugwechsler
 Cambia utensile
 Changeur d'outils rapide
 Cambio rápido redondo

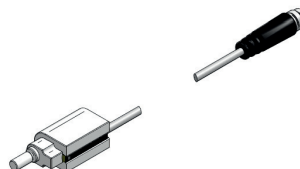


new

Robot side

		Diameter	
CA.CUDL.90	RS/90	90	520 g
CA.CUDL.150	RS/150	150	n.c.
CA.CUDL.160	RS/160	150	n.c.

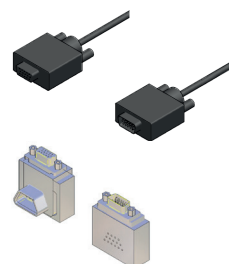
Quick changer
 Schnellwerkzeugwechsler
 Cambia utensile
 Changeur d'outils rapide
 Cambio rápido redondo



new

QC security lock with sensor
 QC Sicherheit lassen sich mit Sensor schließen
 Blocco di sicurezza QC con sensore
 Serrure de sécurité QC avec capteur
 QC la seguridad se cierran con el sensor

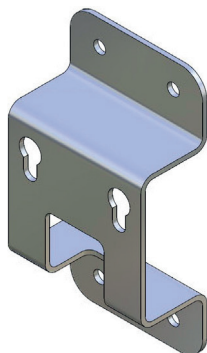
		M*	
CA.CUDL.01	PNP	CA.CUDL.90	18 g
CA.CUDL.02	NPN	CA.CUDL.150	
CA.CUDL.03	2 WIRES	CA.CUDL.160	



Cable
 Kabel
 Cavo elettrico
 Câble
 Cable

Electrical connection module
 Steckerhülse
 Modulo di connessione elettrica
 Module de connexion électrique
 Conector eléctrico

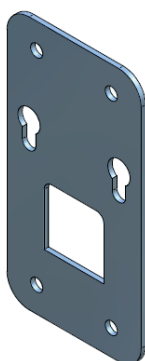
		M*
CA.01.01.008	Robot side	CA.01.01.001 CA.01.01.003 CA.01.01.013 CA.CUDL... CA.CUSL.200.R
CA.01.01.009	Gripper side	CA.01.01.002 CA.01.01.004 CA.01.01.014 CA.CUSL.200.G
CA.01.01.011	Female cable	Robot side
CA.01.01.012	Male cable	Gripper side



Holding Fixture
Greiferwandhalterung
Porta mano
Équipement tenant
Accesorio de Soporte

	A	M*	
CA.01.01.015	90	CA.01.01.002	438 g
CA.01.01.016	150	CA.01.01.004 CA.01.01.014	924 g
CA.01.01.017	200	CA.CUSL.200G	1178 g

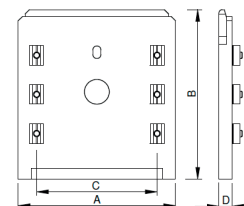
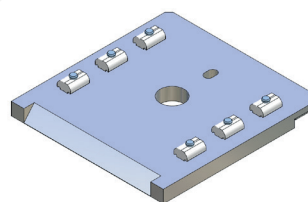
new



new

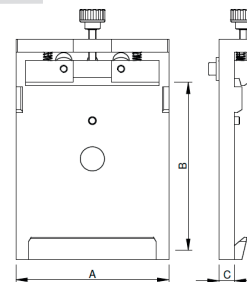
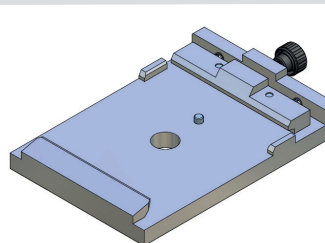
Holding Fixture
Greiferwandhalterung
Porta mano
Équipement tenant
Accesorio de Soporte

	A	M*	
CA.01.01.015.F	90	CA.01.01.002	307 g
CA.01.01.016.F	150	CA.01.01.004 CA.01.01.014	720 g
CA.01.01.017.F	200	CA.CUSL.200G	1398 g



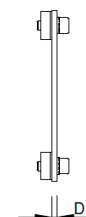
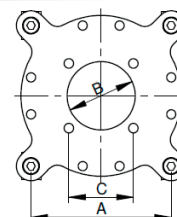
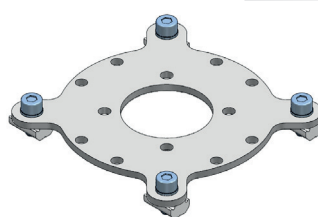
Quick changer (gripper side)
Schnellwerkzeugwechsler
Cambia Utensili (lato mano)
Changeur d'outil rapide (Côté main de préhension)
Sistema de Cambio Rápido (lado pinza)

	A	B	C	D	M*	M1	
CA.01.02.002	60	72	20		CA.01.02.001	...	96 g
CA.01.02.002.X						L/X	135 g
CA.01.02.004	120	130	92	10	CA.01.02.003	...	391 g
CA.01.02.004.X						L/X/JU	450 g
CA.01.02.004A					CA.01.02.003B	...	391 g
CA.01.02.004A.X						L/X/JU	450 g
CA.01.02.008	90	108	62		CA.01.02.007	...	231 g
CA.01.02.008.X						L/X	269 g



Quick changer (robot side)
Schnellwerkzeugwechsler (Roboterseite)
Cambia Utensili (lato robot)
Changeur d'outil rapide (Côté robot)
Sistema de Cambio Rápido (lado robot)

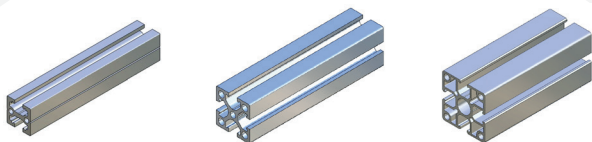
	A	B	C	H	M*	
CA.01.02.001	60	72	8	5 kg	CA.01.02.002	269 g
CA.01.02.003	120	130	12	20 kg	CA.01.02.004	727 g
CA.01.02.003B					CA.01.02.004A	
CA.01.02.007	90	108	8	10 kg	CA.01.02.008	395 g



Interface
Schnittstelle
Interfaccia
Interface
Interfaz

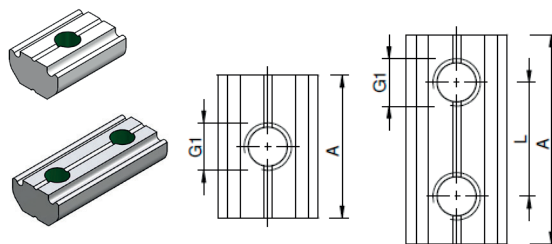
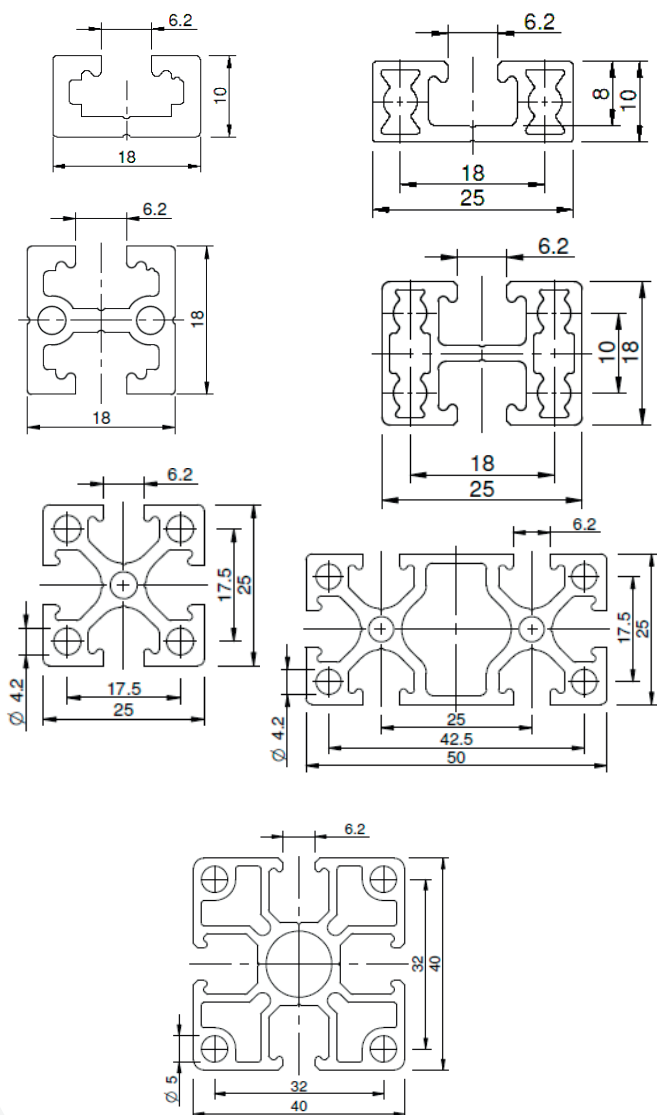
	A	B	C	D	M*	
CA.01.01.006	76	37	35	3	CA.01.01.002 CA.CUDL.90	174 g
CA.01.01.007	110	70	52	4	CA.01.01.004 CA.01.01.014	502 g
CA.CUSL.200.I	192	140	151.6	8	CA.CUSL.200.G	1850 g

new



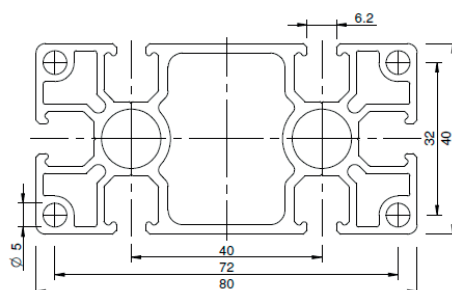
Profiles
Profile
Profil
Profiles
Perfiles

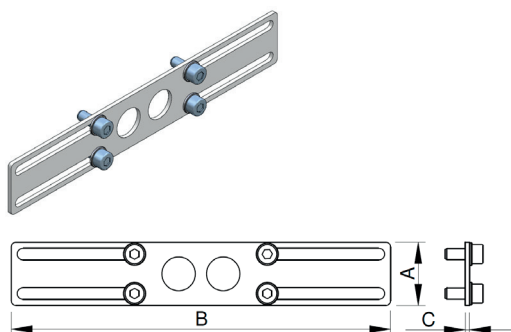
	L	M*	M1	
CA.L.1810.1000	1 m	CA.GWP	CA.ADK.L.1810	267 g
CA.L.1810.2000	2 m			534 g
CA.L.1818.1000	1 m		CA.ADK.L.1818	410 g
CA.L.1818.2000	2 m			820 g
CA.X.2510.1000	1 m		CA.ADK.X.2510	290 g
CA.X.2510.2000	2 m			580 g
CA.X.2518.1000	1 m		CA.ADK.X.2518	400 g
CA.X.2518.2000	2 m			800 g
CA.X.2525.1000	1 m		CA.ADK.X.2525	683 g
CA.X.2525.2000	2 m			1366 g
CA.X.5025.1000	1 m		CA.ADK.X.5025	1050 g
CA.X.5025.2000	2 m			2100 g
CA.JU.4040.1000	1 m		CA.ADK.JU.4040	1408 g
CA.JU.4040.2000	2 m			2816 g
CA.JU.8040.1000	1 m		CA.ADK.JU.8040	2303 g
CA.JU.8040.2000	2 m			4606 g



T-nut - Nutensteine für Profile - Tassello per profili
Ecrous à T- Tacos de Corredera

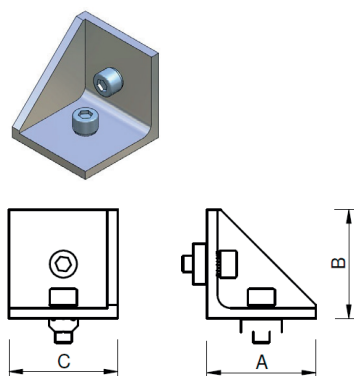
	G1	L	A	M*		
CA.GWP.3U	M3	...	15	L/X/JU		
CA.GWP.4U	M4	...	15		6 g	
CA.GWP.4.8		8	16			
CA.GWP.4.9		9	19		7 g	
CA.GWP.4.16		16	24		9 g	
CA.GWP.4.17		17	25		10 g	
CA.GWP.4.25		25	32		13 g	
CA.GWP.5U	M5	...	15			
CA.GWP.5.9		9	18		6 g	
CA.GWP.5.10		10	18			
CA.GWP.5.11		11	19		7 g	
CA.GWP.5.12		12	22		8 g	
CA.GWP.5.15		15	25		9 g	
CA.GWP.5.17		17	25			
CA.GWP.5.20		20	30		11 g	
CA.GWP.5.22		22	32		12 g	
CA.GWP.5.25		25	33		13 g	
CA.GWP.5.25.3		25 x 2	58		22 g	
CA.GWP.5.28		28	38		15 g	
CA.GWP.5.30		30	40		16 g	
CA.GWP.5.35		35	45		18 g	
CA.GWP.5.38		38	48			
CA.GWP.5.40		40	48		19 g	
CA.GWP.5.40.3		40 x 2	88		35 g	
CA.GWP.5.50		50	58		23 g	
CA.GWP.5.52		52	64		26 g	
CA.GWP.5.60		60	68		27 g	
CA.GWP.5.75		75	83		34 g	
CA.GWP.5LM		...	...		3 g	
CA.GWP.6U			...		15	6 g
CA.GWP.6.12		M6	12		24	8 g
CA.GWP.6.16			16		26	10 g
CA.GWP.6.20	20		30	11 g		
CA.GWP.6.22	22		32	12 g		
CA.GWP.6.25	25		35	13 g		
CA.GWP.6.25.3	25 x 2		58	22 g		
CA.GWP.6.28	28		40	15 g		
CA.GWP.6.35	35		45	17 g		
CA.GWP.6.40	40		50	19 g		
CA.GWP.6.50	50		60	23 g		
CA.GWP.6.52	52		64	25 g		
CA.GWP.6.90	90		100	40 g		
CA.GWP.500	...		500	...	210 g	
CA.GWP.1000	...	1000	...	420 g		





End plate for profile
Endplatte für Profile
Piastra testa profilo
Connecteur plat droit
Placa de conector extremo de placa

	A	B	C	M*	
CA.EPL.25.170	25	170	2	CA.X.2525...	48 g
CA.EPL.25.220		220			60 g
CA.EPL.25.270		270			69 g
CA.EPL.25.320		320			85 g
CA.EPL.50.25.170	50	170	2	CA.X.5025...	100 g
CA.EPL.50.25.220		220			130 g
CA.EPL.50.25.270		270			162 g
CA.EPL.50.25.320		320			192 g



Corner connector
Winkelverbinder
Connessione angolare
Bride à angle droits
Angular para Perfil

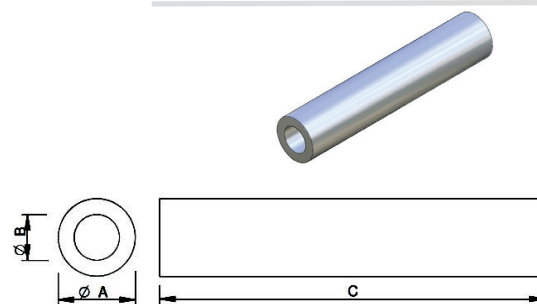
	A	B	C	M*	
CA.WIV.X.25.0	25	25	16	X	28 g
CA.WIV.X.50.25	51	51			72 g
CA.WIV.X.25.M	18	18			33 g
CA.WIV.X.25.E	38	38			47 g
CA.WIV.JU.40	40	40	40	JU	56 g
CA.WIV.JU.40.E	38	38	38		88 g
CA.WIV.JU.80.E	78	78	37		178 g

Butt connector
Stoßverbinder
Connessione profilo
Butées
Railes de fijación para Perfil

	D	M*	
CA.SV.X.5	M5	X	15 g
CA.SV.JU.6	M6	JU	

Butt connector
Stoßverbinder
Nottolino di fissaggio
Fixation de tête
Railes de fijación para Perfil

	M*
CA.UVV.X.25.S	X
CA.UVV.JU.40.S	JU

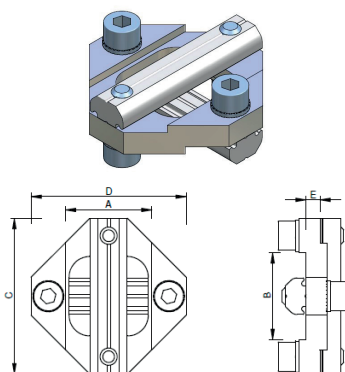


Round profile tube
Rund-Rohr Profile
Tubo Alluminio
Tubes Prolongateurs
Tubo Aluminio

	A	B	C	
CA.GAR.10.1000	10	5	1000	179 g
CA.GAR.14.1000	14	7		253 g
CA.GAR.20.1000	20	12		555 g
CA.GAR.30.1000	30	26		477 g

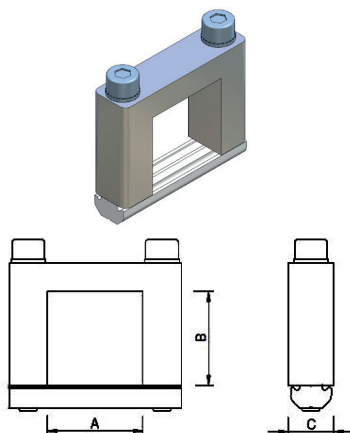
Profile end cap
Verschlusskappen
Tappi per profili
Bouchons pour profiles
Tapa final para perfiles

	A	B	M*	
CA.ADK.L.1810	18	10	CA.L.1810...	2 g x 10
CA.ADK.L.1818		18	CA.L.1818...	
CA.ADK.X.2510	25	10	CA.X.2510...	3 g x 10
CA.ADK.X.2518		18	CA.X.2518...	
CA.ADK.X.2525	50	25	CA.X.2525...	4 g x 10
CA.ADK.X.5025		25	CA.X.5025...	7 g x 10
CA.ADK.JU.4040	40	40	CA.JU.4040...	13 g x 10
CA.ADK.JU.8040	80	40	CA.JU.8040...	



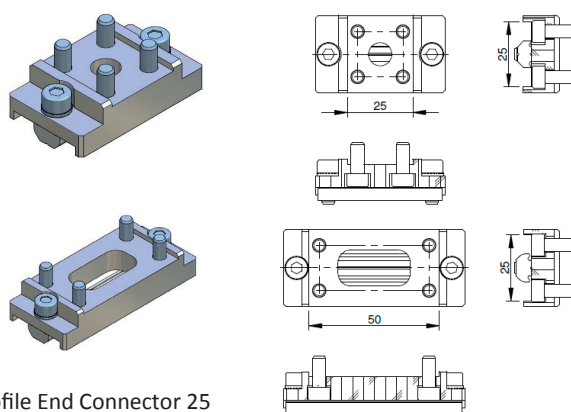
Cross Joint Connector
Profilverbinder
Connessione a Croce
Brides pour Fixation en Croix
Placa en Cruz para Perfiles

	A	B	C	D	E	M*	
CA.KPLL.1818	18	18	38	38	2	L	40 g
CA.KPLX.2518	25	18	45	45	4	L/X	74 g
CA.KPLX.2525	25	25	45	45		X	79 g
CA.KPLX.5025	50	50	70	70		X	108 g
CA.KPLX.5050	50	50	70	70		X	108 g
CA.KPLJU.4040	40	40	65	65	4	JU	103 g
CA.KPLJU.4025	40	25	45	45		JU/X	98 g
CA.KPLJU.8040	80	40	100	60		JU	190 g
CA.KPLJU.8080	80	80	100	100		JU	300 g



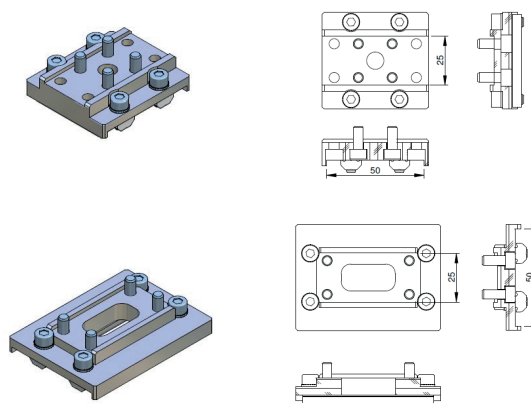
Square Joint Connector
Kreuzverbindung Vierkant
Staffa Quadra per Profilo
Brides Carrés pour Fixation en Croix
Elementos de Unión en Cruz Para Perfiles (alto)

	A	B	C	M*	
CA.KBVL.1810	18	10	10	L	26 g
CA.KBVL.1818	18	18	10	L	30 g
CA.KBVX.2510	25	10	12	X	42 g
CA.KBVX.2518	25	18	12		48 g
CA.KBVX.2525	25	25	12		58 g
CA.KBVX.2550	25	50	12		79 g
CA.KBVX.5025	50	25	15	JU	74 g
CA.KBVJU.4040	40	40	15		107 g
CA.KBVJU.4080	40	80	15		150 g
CA.KBVJU.8040	80	40	15		140 g



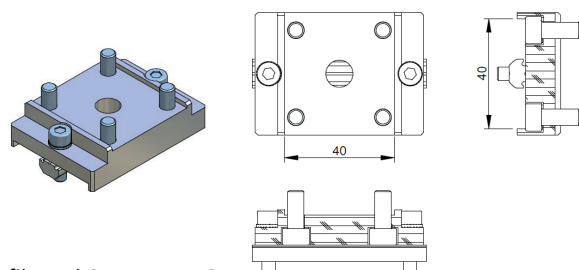
Profile End Connector 25
Stoßverbinder 25
Connessione Terminale per Profilo 25
Fixation Verticales pour Profilés 25
Conexión Terminal para Perfiles 25

	M*	
CA.SVB.X.25.25	X	69 g
CA.SVB.X.25.50	X	87 g



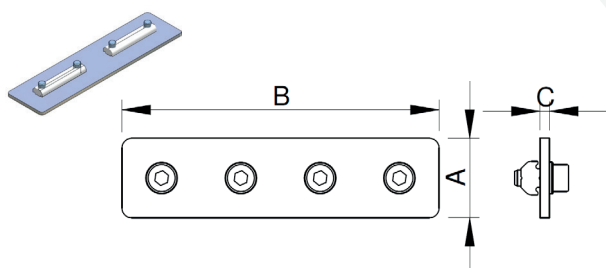
Profile End Connector 50
Stoßverbinder 50
Connessione Terminale per Profilo 50
Fixation Verticales pour Profilés 50
Conexión Terminal para Perfiles 50

	M*	
CA.SVB.X.50.25	X	118 g
CA.SVB.X.50.50	X	149 g



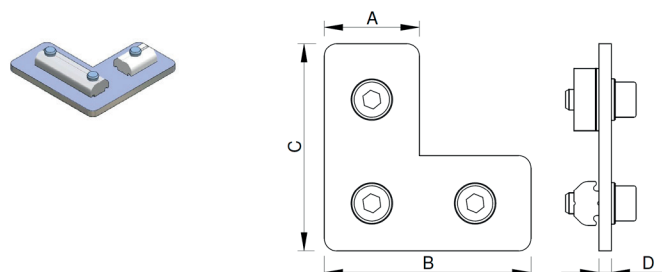
Profile End Connector 40
Stoßverbinder 40
Connessione Terminale per Profilo 40
Fixation Verticales pour Profilés 40
Conexión Terminal para Perfiles 40

	M*	
CA.SVB.JU.40.40	JU	128 g



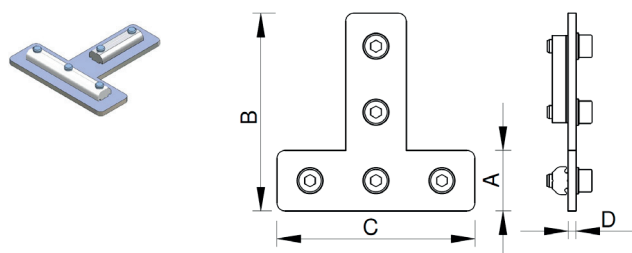
Straight Connector
Profilverbinder Gerade-Form
Connessione Lineare
Plaque de Fixage Droite
Conexión Linear

	A	B	C	M*	
CA.VBG.X.25.50	25	50	3	X	48 g
CA.VBG.X.50.50	50				98 g
CA.VBG.X.25.100	25	100		JU	97 g
CA.VBG.JU.40.80	40	80			99 g
CA.VBG.JU.40.160		160			215 g



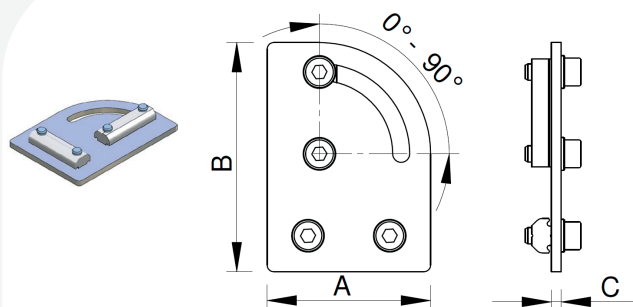
Connector L-Style
Profilverbinder Winkel
Connessione ad L
Plaque de Fixage en L
Conexión tipo L

	A	B	C	D	M*	
CA.VBL.50.50	25	50	50	3	X	72 g
CA.VBL.50.75			75			96 g
CA.VBL.80.80.JU	40	80	80		JU	151 g
CA.VBL.80.120.JU			120			206 g



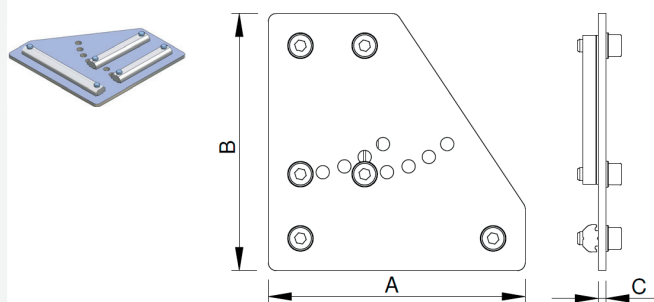
Connector T-Style
Profilverbinder T-Form
Connessione a T
Plaque de Fixage en T
Conexión tipo T

	A	B	C	D	M*	
CA.VBT.X.50.75	25	75	75	3	X	124 g
CA.VBT.X.75.100			100			150 g
CA.VBT.JU.120	40	120	80		JU	264 g



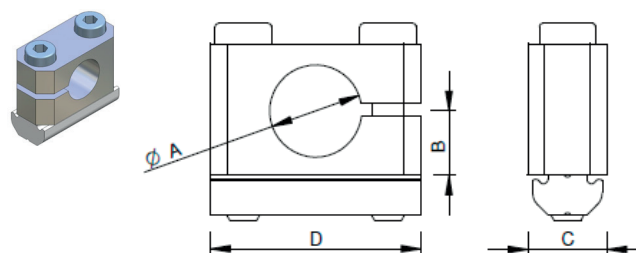
Adjustable Connector 0-90°
Profilverbinder Verstellbar 0-90°
Connessione Regolabile 0-90°
Plaque de Fixage à Angle Réglable
Elemento de Unión Pivotante

	A	B	C	M*	
CA.VBW.X.0.90	50	70	3	X	113 g
CA.VBW.JU.0.90	80	120		JU	256 g



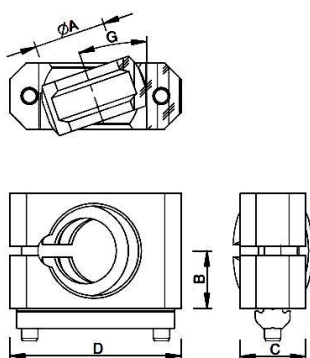
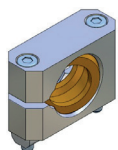
Corner Joint Plate
Eckverbinder
Connessione Angolare
Bride à Angle
Elemento de Unión en Ángulo

	A	B	C	M*	
CA.EVB.75.X	75	100	3	X	193 g
CA.EVB.100.X	100				292 g
CA.EVB.100.JU	80			JU	212 g



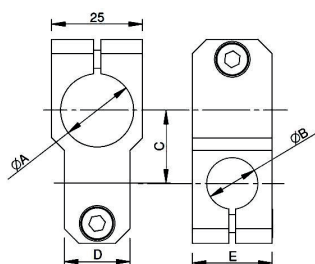
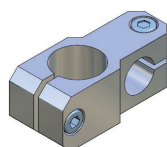
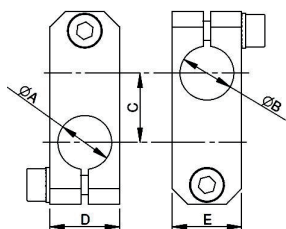
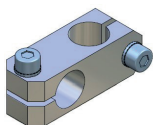
Cross Connector Round
Kreuzklemmstück Rund
Connessione Tubo
Bride Ronde pour Fixation en Croix
Pieza de Apriete en Cruz

	A	B	C	D	M*	
CA.KVB.L10	10	8	12	15	L	22 g
CA.KVB.X14	14	10		32	X	36 g
CA.KVB.X20	20	13		40		47 g
CA.KVB.JU20	30	18		20	52	JU
CA.KVB.JU30						



Cross Connector Round With Ball Joint
Kreuzklemmstück Rund mit Kugelgelenk
Connessione Tubo con Sfera
Bride Ronde pour Fixation en Croix avec Boule
Pieza de Apriete en Cruz con Esfera

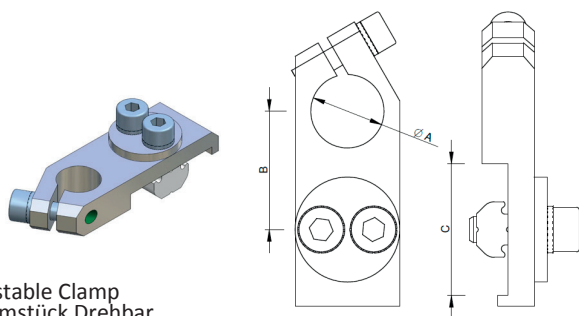
	A	B	C	D	G°	M*	
CA.KVB.KG.X10	10	10	12	32	0°-13°	X	42 g
CA.KVB.KG.X14	14	12,5	15	40	0°-17°		62 g
CA.KVB.KG.JU20	20	17,5	20	52	0°-19°	JU	124 g



Cross Connector Tube
Kreuzklemmstück Rohr
Connessione a Croce Tubo
Bloc de Conexion en Croix
Pieza de Apriete en Cruz

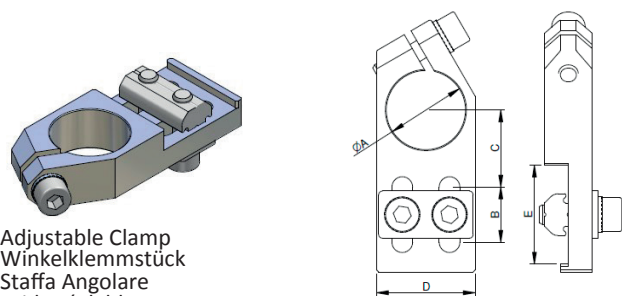
	A	B	C	D	E	
CA.KKS.10.10	10	10	16	14	14	17 g
CA.KKS.14.14	14	14	18	18	18	35 g
CA.KKS.20.20	20	20	26	25	25	71 g
CA.KKS.20.10		10	20	14	20	41 g
CA.KKS.20.14		14		18	22	48 g

Notes



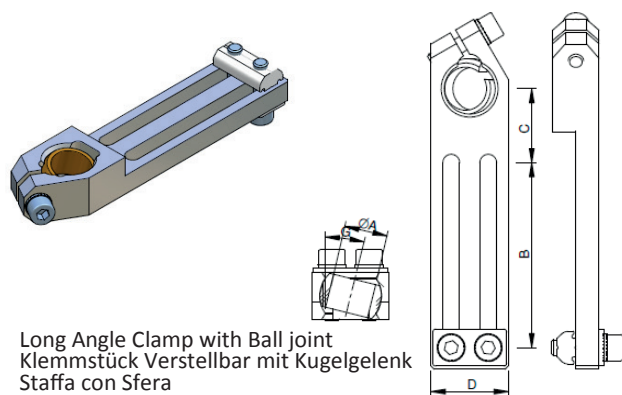
Adjustable Clamp
Klemmstück Drehbar
Staffa Angolare
Bride de Fixation
Pieza de Apriete Angular

	A	B	C	M*	
CA.WST.10.L	10	17	18	L	20 g
CA.WST.10.X		21	25	X	
CA.WST.14.L	14	19	18	L	31 g
CA.WST.14.X		23	25	X	
CA.WST.20.X	20	27			42 g
CA.WST.20.JU		34		JU	
CA.WST.30.X	30	30	40	X	95 g
CA.WST.30.JU		38		JU	105 g



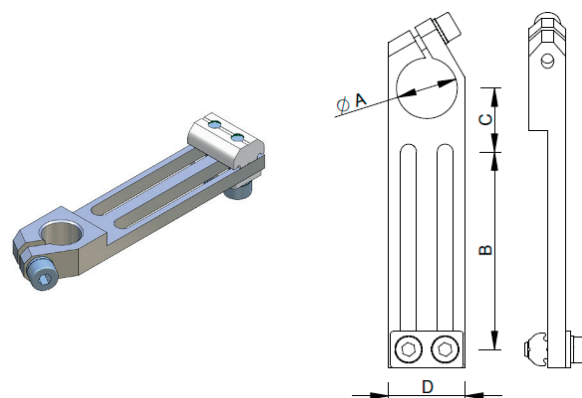
Adjustable Clamp
Winkelklemmstück
Staffa Angolare
Bride réglable
Pieza de apriete Angular

	A	B	C	D	E	M*	
CA.WST.1010.L	10	10	12	16	18	L	14 g
CA.WST.1014.X			13.55				15 g
CA.WST.1414.X	14	14	15.55	20	25	X	28 g
CA.WST.2014.X	20		19.55	25			38 g
CA.WST.2022.JU		22	23		40	JU	43 g



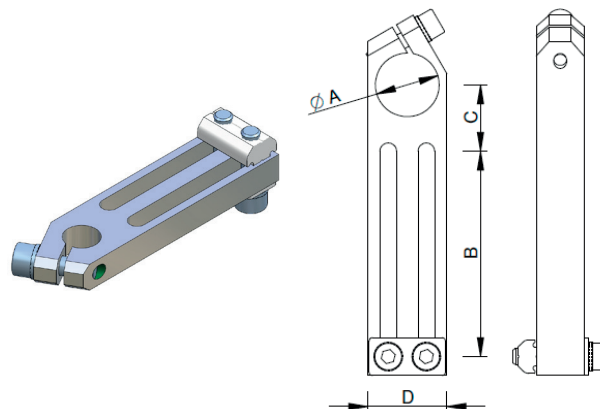
Long Angle Clamp with Ball joint
Klemmstück Verstellbar mit Kugelgelenk
Staffa con Sfera
Bride de Fixation Universel avec Boule
Pieza de Apriete en Escuadra con Esfera

	A	B	C	D	G°	M*	
CA.WSL.1050.G.X	10	50	20	20	0°-13°	X	51 g
CA.WSL.1460.G.X	14	60	24	25	0°-17°		78 g
CA.WSL.2060.G.X	20		29	35	0°-19°	X/JU	168 g



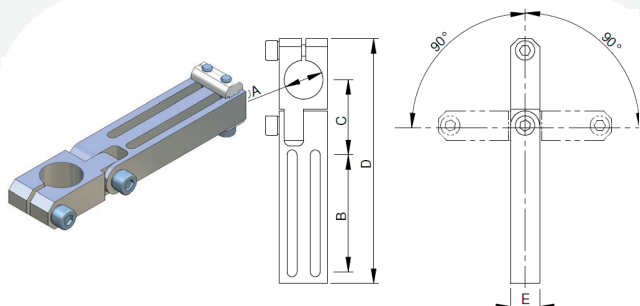
Universal Long Angle Clamp
Klemmstück Verstellbar
Staffa Angolare
Bride de Fixation Universel
Pieza de Apriete en Escuadra (Universal)

	A	B	C	D	M*	
CA.WSL.1040.U.L	10	40	17,5	16	L	23 g
CA.WSL.1040.U.X					X	
CA.WSL.1440.U.L	14		19	20	L	32 g
CA.WSL.1440.U.X					X	33 g
CA.WSL.1450.U.X		50	39 g			
CA.WSL.2060.U.X	20	65	21	25	X/JU	58 g
CA.WSL.2070.U.X		70	25,5		JU	76 g
CA.WSL.2070.U.JU						78 g
CA.WSL.3070.U.JU						30



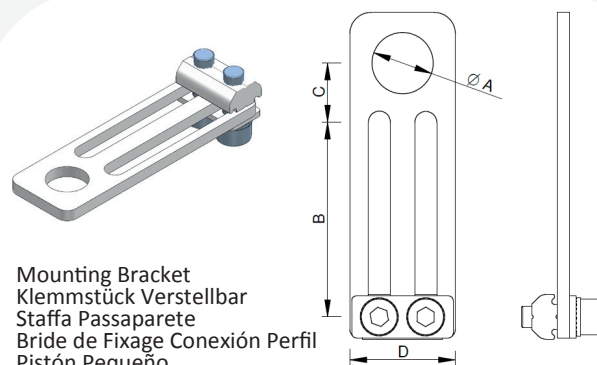
Long Angle Clamp Heavy Duty
Klemmstück Verstellbar und Verstärkt
Staffa Rinforzata
Bride Robuste
Conexión Perfil

	A	B	C	D	M*	
CA.WSL.1040.VU.X	10	40	15	20	L	41 g
CA.WSL.1060.VU.X		60	16		L/X	48 g
CA.WSL.1080.VU.X		80				53 g
CA.WSL.1440.VU.X	14	40	19	25	X	43 g
CA.WSL.1450.VU.X		50	22			59 g
CA.WSL.2060.VU.X	20	65	21	25	X/JU	94 g
CA.WSL.2070.VU.X		70	25,5		JU	106 g
CA.WSL.2080.VU.X		80				111 g
CA.WSL.2570.VU.X	25	70	21	30	JU	120 g
CA.WSL.3060.VU.J	30	60	30			188 g
CA.WSL.3070.VU.J		70				200 g



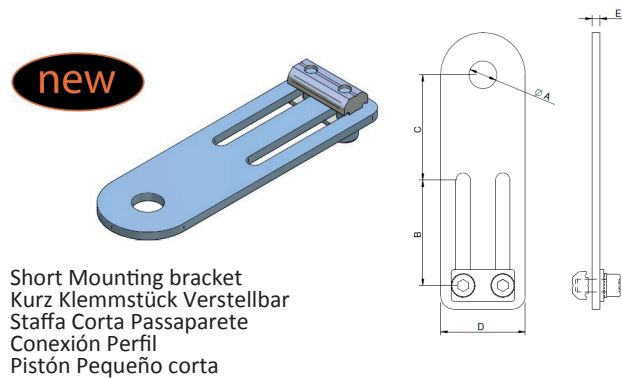
Long Angle Clamp (Swivel Head)
Winkelklemmstück Gelenkig
Staffa Snodata
Bride Perforeé Angulaire
Brida Angular Perforada

	A	B	C	D	E	M*	
CA.WSL.GA.10.X	10	40	26,6	85,3	10	L/X	57 g
CA.WSL.GA.14.X	14	40	27,8	88,3	10	X	
CA.WSL.GA.20.X	20	60	38,5	125,5	15	X/JU	122 g
CA.WSL.GA.30.X	30	82	53	168,5	20	JU	266 g



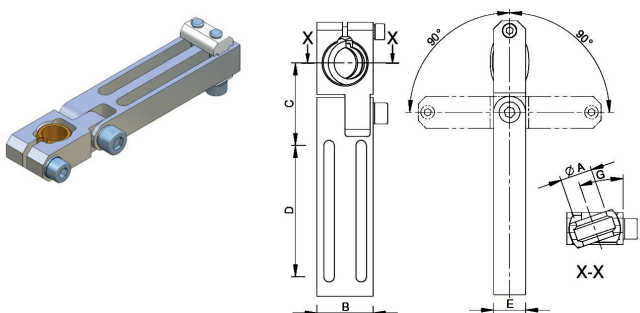
Mounting Bracket
Klemmstück Verstellbar
Staffa Passaparete
Bride de Fixage Conexión Perfil
Pistón Pequeño

	A	B	C	D	M*	
CA.04.20.10.X	10	40	11	20	X	35 g
CA.04.20.12.X	12					
CA.04.20.14.X	14	46	14	25	X/JU	45 g
CA.04.20.20.X	20	51,5	19	30		65 g



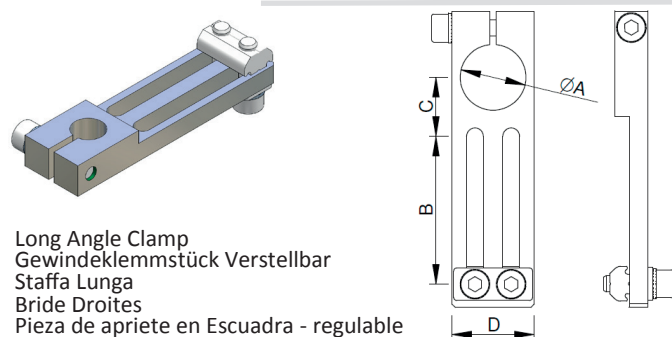
Short Mounting bracket
Kurz Klemmstück Verstellbar
Staffa Corta Passaparete
Conexión Perfil
Pistón Pequeño corta

	A	B	C	D	E	M*	
CA.SCM.10.X	10,5	40	40	32	3	X	74 g
CA.SCM.12.X	12,5						73 g
CA.SCM.14.X	14,5					X/JU	72 g
CA.SCM.20.X	20,5						69 g



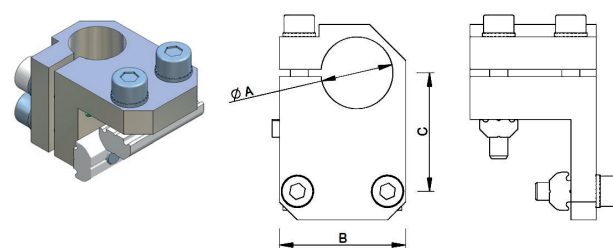
Long Angle Clamp Swivel Head and Ball Joint
Winkelklemmstück Gelenkig mit Kugelgelenk
Staffa Snodata con Sfera
Bride Perforeé Angulaire Sphériques
Pieza de apriete en escuadra con Articulación y Esfera

	A	B	C	D	E	G°	M*	
CA.WSL.KG.X.10	10	20	32,5	50	12	0°-13°	X	59 g
CA.WSL.KG.X.14	14	25	39,5	60	15	0°-17°		109 g
CA.WSL.KG.JU.20	20	35	51,5	82	20	0°-19°	X/JU	266 g



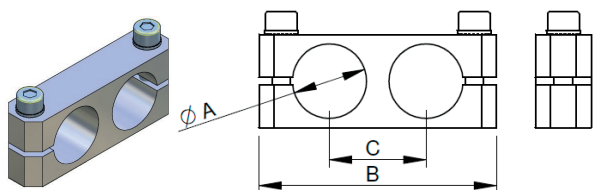
Long Angle Clamp
Gewindeklemmstück Verstellbar
Staffa Lunga
Bride Droites
Pieza de apriete en Escuadra - regulable

	A	B	C	D	M*	
CA.04.02.10.X	10	40	15,5	20	X	41 g
CA.04.02.14.X	14	45	16,5	25		53 g
CA.04.02.20.X	20	45	18	25	X/JU	51 g
CA.04.02.30.X	30	70	34	35	JU	128 g



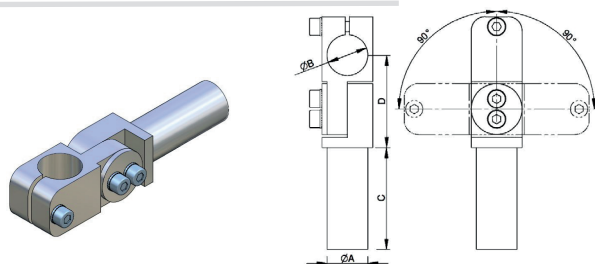
Clamp angle
Winkelklemmstück
Staffa Angolare
Bride de Fixage
Pieza de apriete Angular

	A	B	C	M*	
CA.KSW.10.L	10	20	16	L	27 g
CA.KSW.10.X	10	25	19,5	X	57 g
CA.KSW.14.X	14		21,5		60 g
CA.KSW.20.X	20	32	24,5	JU	80 g
CA.KSW.20.JU	20	35	33		105 g
CA.KSW.30.JU	30	45	39		178 g



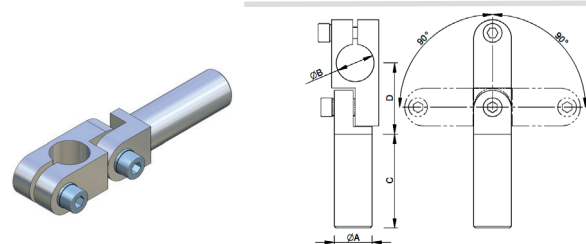
Parallel Clamp - Parallelklemmstück - Staffa Parallela
Bride Parallèle - Soporte Paralelo

	A	B	C	D
CA.PKS.1010.15	10	38	15	12 g
CA.PKS.1414.20	14	52	20	27 g
CA.PKS.2020.26	20	64	26	47 g
CA.PKS.3030.38	30	88	38	104 g



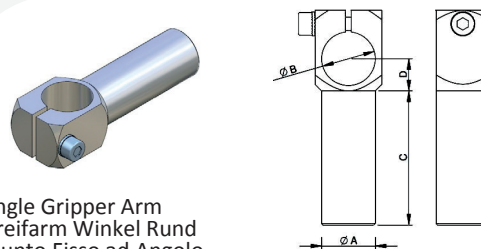
Elbow Gripper Arm - Gelenkgreifarm Verstellbar Rund
Giunto Supporto Orientabile - Coude Robuste avec Cravate
Brazo en Escuadra (Pivotante)

	A	B	C	D
CA.GVR.1010.30	10	10	30	27 g
CA.GVR.1010.60			60	31 g
CA.GVR.1010.90			90	37 g
CA.GVR.1414.40	14	14	40	56 g
CA.GVR.1414.80			80	66 g
CA.GVR.1414.120			120	83 g
CA.GVR.2020.50	20	20	50	111 g
CA.GVR.2020.100			100	127 g
CA.GVR.2020.150			150	169 g
CA.GVR.3030.80	30	30	80	302 g
CA.GVR.3030.140			140	394 g
CA.GVR.3030.200			200	509 g



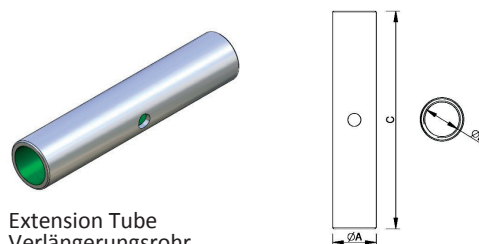
Elbow Gripper Arm - Gelenkgreifarm - Giunto Supporto Orientabile
Bras de Préhension Ajustable - Brazo en Escuadra (Pivotante)

	A	B	C	D
CA.GLA.1010.30	10	10	30	17 g
CA.GLA.1010.60			60	21 g
CA.GLA.1010.90			90	28 g
CA.GLA.1414.40	14	14	40	43 g
CA.GLA.1414.80			80	51 g
CA.GLA.1414.120			120	70 g
CA.GLA.2020.50	20	20	50	99 g
CA.GLA.2020.100			100	106 g
CA.GLA.2020.150			150	165 g
CA.GLA.2030	30	30	47	315 g
CA.GLA.3030			52,5	



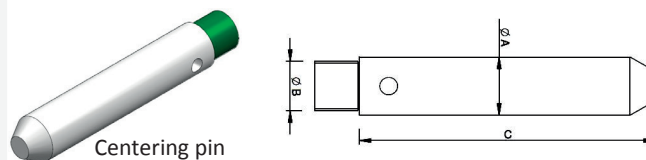
Angle Gripper Arm
Greifarm Winkel Rund
Giunto Fisso ad Angolo
Bras avec élément de Serrage
Brazo en Escuadra (Rígido)

	A	B	C	D
CA.WKA.10.10.30	10	10	30	13 g
CA.WKA.10.10.60			60	17 g
CA.WKA.10.10.90			90	22 g
CA.WKA.14.14.40	14	14	40	35 g
CA.WKA.14.14.80			80	48 g
CA.WKA.14.14.120			120	56 g
CA.WKA.20.20.50	20	20	50	78 g
CA.WKA.20.20.100			100	96 g
CA.WKA.20.20.150			150	136 g
CA.WKA.30.30.80	30	30	80	178 g
CA.WKA.30.30.140			140	278 g
CA.WKA.30.30.200			200	



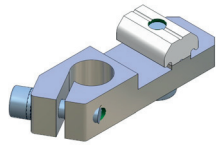
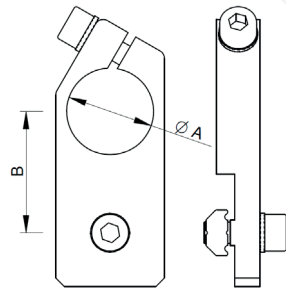
Extension Tube
Verlängerungsrohr
Prolunga
Rallonge
Tubo de Prolongación

	A	B	C
CA.VLR.10.30	10	M8X1	30
CA.VLR.10.60			60
CA.VLR.10.90			90
CA.VLR.14.40	14	M12X1	40
CA.VLR.14.80			80
CA.VLR.14.120			120
CA.VLR.20.50	20	M17X1	50
CA.VLR.20.100			100
CA.VLR.20.150			150
CA.VLR.30.80	30	M27X1	80
CA.VLR.30.140			140
CA.VLR.30.200			200



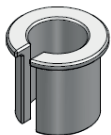
Centering pin
Zentrierbolzen
Centratori
Douille de Centrage
Perno de Centrado

	A	B	C	M*
CA.ZTB.1040	10	M8X1	40	CA.VLR.10
CA.ZTB.1060			60	CA.VLR.14
CA.ZTB.1460	14	M12X1	80	CA.VLR.20
CA.ZTB.20100			100	CA.VLR.30
CA.ZTB.30100	30	M27X1	100	

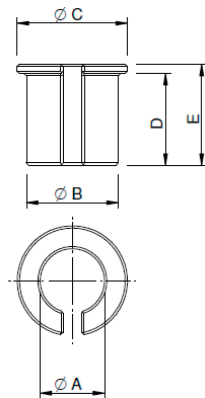
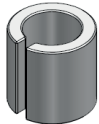
CA.04

CA.04 WST (Easy)


Adjustable Clamp
Klemmstück Drehbar
Staffa Angolare
Bride de Fixation
Pieza de Apriete Angular

	A	B	M*	
CA.WST.10	10	21	X	23 g
CA.WST.14	14	24		25 g
CA.WST.20	20	28		36 g

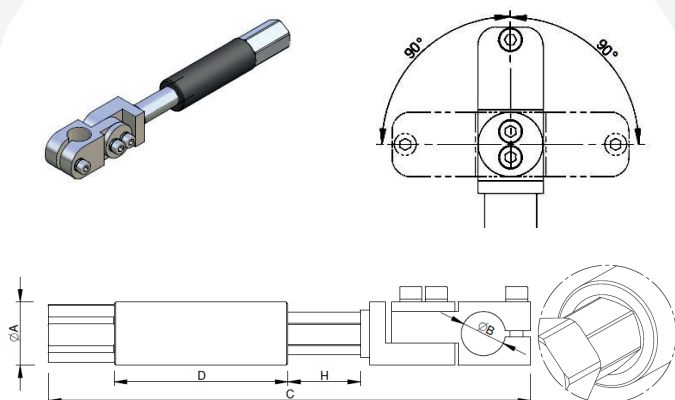


new



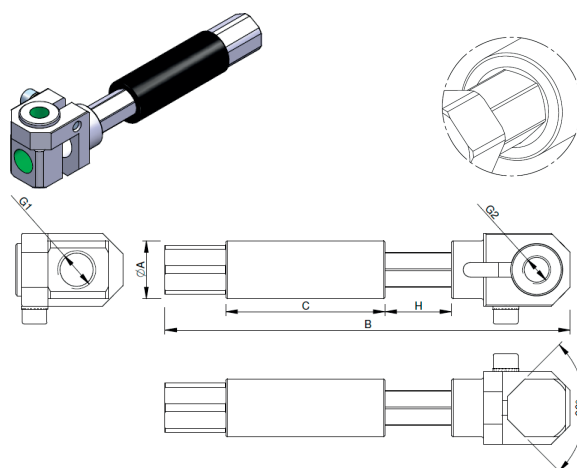
	A	B	C	D	E	
CA.RID.1410	10	14	18	14	16	4 g
CA.RID.2014	14	20	24	20	22	9 g
CA.RID.3020	20	30	30	30	30	30 g

Notes



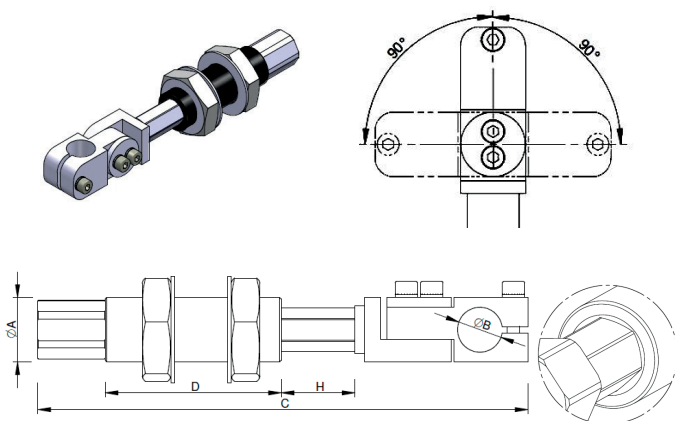
Smooth-Body Non-Rotative Suspension
Greifarm Gefedert Verstellbar Rund, Verdrehgesichert
Sospensione Anti-Rotazionale
Suspension Anti-Rotation, avec Corps Lisse
Compesador de Nivel Anti-Rotación, con Cuerpo Liso

	A	B	C	D	H	F(N)	
CA.SMN.142010	14	10	129	42	20	8.9	43 g
CA.SMN.143510			157.5	60	35	9.5	50 g
CA.SMN.202514		14	150	55	25	11	95 g
CA.SMN.202520		20	163.5				103 g
CA.SMN.205014		14	208	82.5	50	11.4	100 g
CA.SMN.205020		20	221.5				109 g



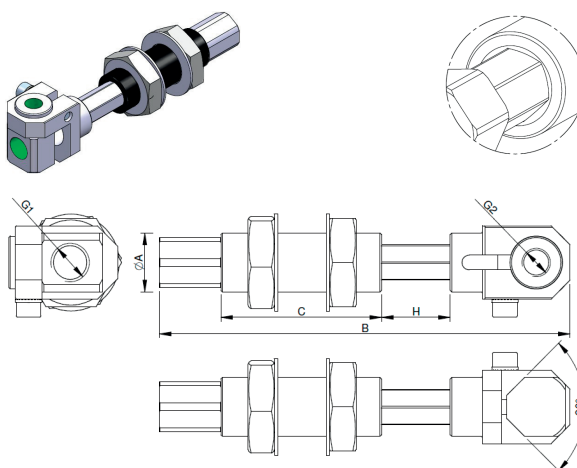
Smooth-body Non-Rotative Telescopic Suspension
Verdrehgesicherte Aufhängung mit Glattem Körper
Sospensione Anti-Rotazionale
Suspension Anti-Rotation avec Corps Lisse
Soporte Liso Antitorsión

	A	B	C	G1	G2	H	F(N)	
CA.SSN.10100505	10	56	21	M5	M5	10	3.6	19 g
CA.SSN.10250505		90.5	40.5			25	3.7	22 g
CA.SSN.14201818	14	98.5	38.5	G 1/8		20	8.9	45 g
CA.SSN.14351818		148	60			35	9.5	51 g
CA.SSN.20251418	20	110	49	G 1/4	G 1/8	25	11	105 g
CA.SSN.20501418		167.5	81.5			50	11.4	110 g



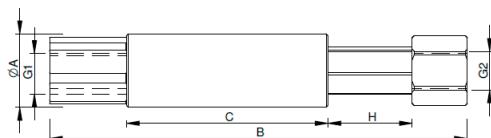
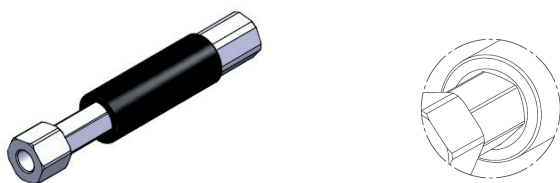
Threaded-body Non-Rotative Suspension
Verdrehgesicherte Aufhängung mit Gewindekörper
Sospensione Ammortizzata Anti-Rotazionale Filettata
Suspension Anti-Rotation avec Corps Fileté
Soporte Roscado Antitorsión

	A	B	C	D	H	F(N)	
CA.SMNG.142010	M14X1.5	10	129	42	20	8.9	55 g
CA.SMNG.143510			157.5	60	35	9.5	61 g
CA.SMNG.202514	M20X1.5	14	150	55	25	11	129 g
CA.SMNG.205014			208	82.5	50	11.4	134 g



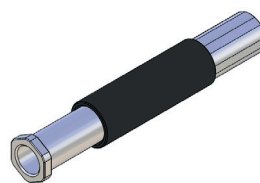
Threaded-Body Non-Rotative Suspension
Verdrehgesicherte Aufhängung mit Gewindekörper
Sospensione Anti-Rotazionale Filettata
Suspension Anti-Rotation avec Corps Fileté
Soporte Roscado Antitorsión

	A	B	C	G1	G2	H	F(N)	
CA.SSNG.10100505	M10X1	56	21	M5	M5	10	3.6	25 g
CA.SSNG.10250505		90.5	40.5			25	3.7	28 g
CA.SSNG.14201818	M14X1.5	98.5	38.5	G 1/8		20	8.9	57 g
CA.SSNG.14351818		148	60			35	9.5	63 g
CA.SSNG.20251418	M20X1.5	110	49	G 1/4	G 1/8	25	11	139 g
CA.SSNG.20501418		167.5	81.5			50	11.4	144 g

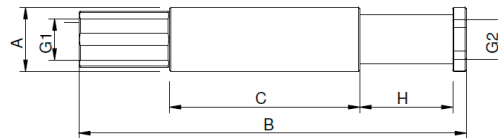


Smooth-Body Non-Rotative Telescopic Suspension
Greifarm Gefedert, Verdrehgesichert
Sospensione Anti-Rotazionale Liscia
Suspension Anti-Rotation avec Corps Lisse
Soporte Liso Antitorsi3n

	A	B	C	G1	G2	H	F(N)	
CA.SDN.1010	10	60.5	26.5	M5	M5	10	3.6	8 g
CA.SDN.1025		89.5	41.5			25	3.7	11 g
CA.SDN.1420	14	102.5	42	G 1/8	G 1/8	20	8.9	25 g
CA.SDN.1435		135	60			35	9.5	31 g
CA.SDN.2025	20	114.5	55			25	11	65 g
CA.SDN.2050		169	82.5			50	11.4	71 g

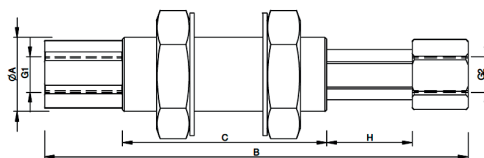
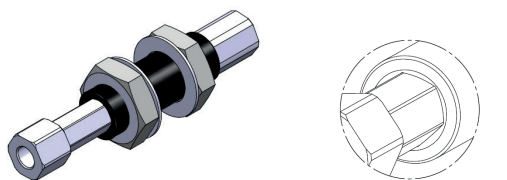


new



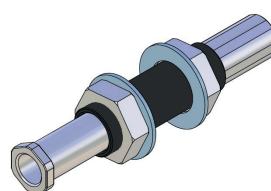
Smooth-body rotative telescopic suspension
Drehbare Aufhngungen mit glattem K3rper
Sospensione rotazionale liscia
Suspension sans anti-rotation avec corps lisse
Soporte Liso rotacional

	A	B	C	G1	G2	H	F(N)	
CA.SDR.1010	10	51	20.5	M5	M5	10	3.6	7 g
CA.SDR.1025		86	40.5			25	3.7	11 g
CA.SDR.1420	14	85.5	42	G 1/8	G 1/8	20	8.9	19 g
CA.SDR.1435		120.5	62			35	9.5	25 g
CA.SDR.2025	20	97	47.5			25	11	55 g
CA.SDR.2050		147	72.5		M10	50	11.4	73 g

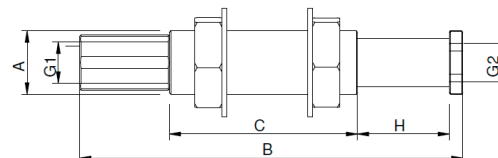


Smooth-Body Non-Rotative Telescopic Suspension
Verdrehgesicherte Aufhngung mit Gewindek3rper
Sospensione Anti-Rotazionale Filettata
Suspension Anti-Rotation avec Corps Filet3
Soporte Roscado Antitorsi3n

	A	B	C	G1	G2	H	F(N)	
CA.SDNG.1010	M10X1	60.5	26.5	M5	M5	10	3.6	13 g
CA.SDNG.1025		89.5	41.5			25	3.7	16 g
CA.SDNG.1420	M14X1.5	102.5	42	G 1/8	G 1/8	20	8.9	37 g
CA.SDNG.1435		135	60			35	9.5	43 g
CA.SDNG.2025	M20X1.5	114.5	55			25	11	99 g
CA.SDNG.2050		169	82.5			50	11.4	105 g

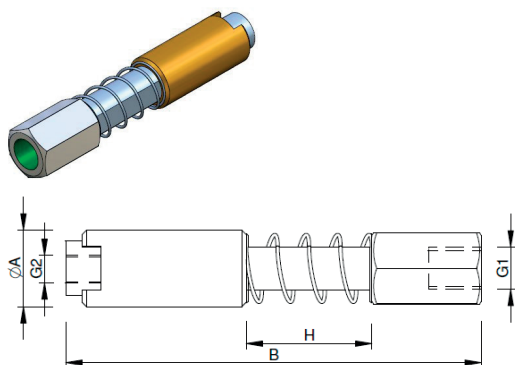


new



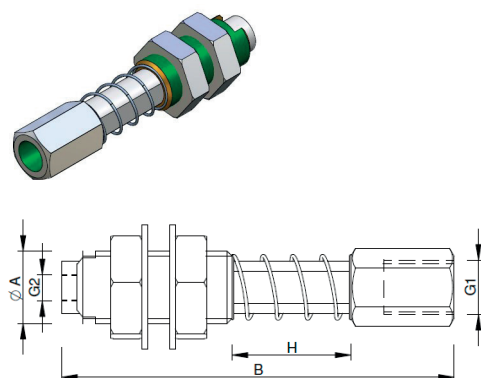
Threaded-body rotative telescopic suspension
Drehbare Aufhngungen mit glattem K3rper
Sospensione rotazionale filettata
Suspension sans anti-rotation avec corps Filet3
Soporte Roscado rotacional

	A	B	C	G1	G2	H	F(N)	
CA.SDRG.1010	M10X1	51	20.5	M5	M5	10	3.6	12 g
CA.SDRG.1025		86	40.5			25	3.7	16 g
CA.SDRG.1420	M14X1.5	85.5	42	G 1/8	G 1/8	20	8.9	27 g
CA.SDRG.1435		120.5	62			35	9.5	33 g
CA.SDRG.2025	M20X1.5	97	47.5			25	11	81 g
CA.SDRG.2050		147	72.5		M10	50	11.4	94 g



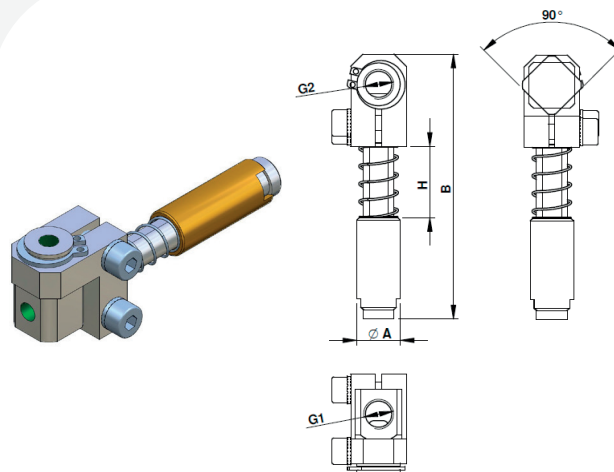
Spring Loaded Non-Rotative Vacuum Cup Arm
Greifarm Gefedert Verdrehgesichert
Sospensione Anti-Rotazionale
Suspension Anti-Rotation, avec Corps Lisse
Soporte Liso de Muelle Antitorsi3n

	A	B	G1	G2	H	F(N)	
CA.05.02.002	20	125	G 1/4	G 1/8	48	16.6	155 g
CA.05.02.004		100			25	18.4	135 g
CA.05.02.009	10	69	M5	M5	20	3.4	26 g
CA.05.02.009.6N						6	
CA.05.02.010		59			10	4.8	23 g
CA.05.02.010.6N						6	
CA.05.02.011	14	100	G 1/8		38	23.3	63 g
CA.05.02.012		76			17	20.7	52 g



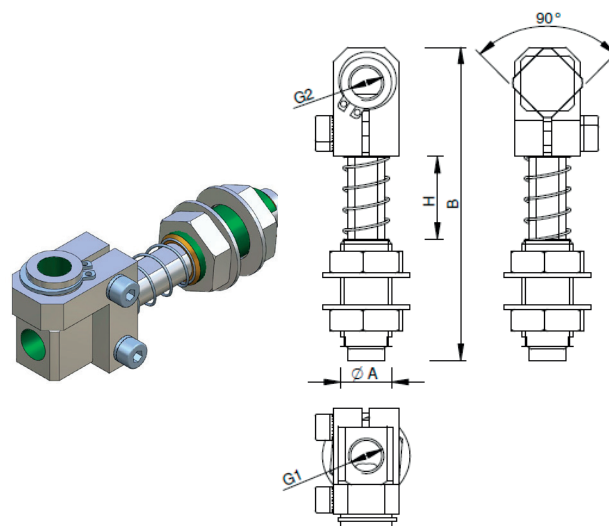
Spring Loaded Non-Rotative Vacuum Cup Arm
Greifarm Gefedert Verdrehgesichert
Sospensione Anti-Rotazionale Filettata
Suspension Anti-Rotation, avec Corps Taraud3
Soporte Roscado de Muelle Antitorsi3n

	A	B	G1	G2	H	F(N)	
CA.05.01.001	M14x1.5	100	G 1/8	M5	38	23.2	71 g
CA.05.01.002	M20x1.5	125	G 1/4	G 1/8	48	16.7	189 g
CA.05.01.003	M14x1.5	76	G 1/8	M5	17	20.7	58 g
CA.05.01.004	M20x1.5	100	G 1/4	G 1/8	25	18.4	163 g
CA.05.01.005	M10x1	70	M5		20	3.4	36 g
CA.05.01.005.6N						6	
CA.05.01.006		59			10	4.8	33 g
CA.05.01.006.6N						6	
CA.05.01.010	M16x1.5	76	G 1/8	M5	17	20.7	56 g
CA.05.01.011		97			38	23.2	95 g
CA.05.01.50		123			50	17	81 g
CA.05.01.75	M14x1.5	153			75	19	91 g
CA.05.01.100		193			100	18	95 g



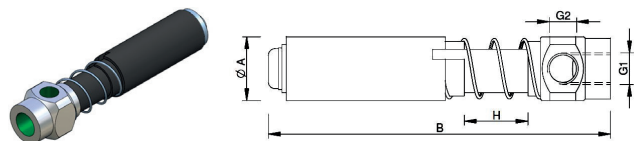
Spring Loaded Non-Rotative Vacuum Cup Arm
Greifarm Gefedert Verdrehgesichert
Supporto Ammortizzato Anti-Rotazionale
Suspension Anti-Rotation, avec Corps Lisse
Soporte Liso de Muelle Antitorsi3n

	A	B	G1	G2	H	F(N)	
CA.GGS100515	10	69	M5	M5	10	3.6	37 g
CA.GGS100520		79			20	6	40 g
CA.GGS100530		98			30	8.6	45 g
CA.GGS141815	14	86	G 1/8	G 1/8	17	20.7	82 g
CA.GGS141840		110			38	23.3	89 g
CA.GGS201425	20	116	G 1/4		23	18.4	196 g
CA.GGS201445		141			45	16.7	206 g



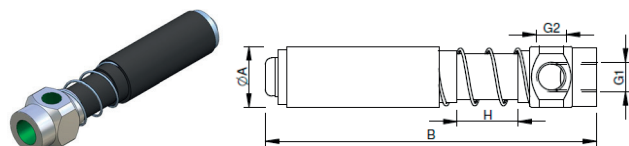
Spring Loaded Non-Rotative Vacuum Cup Arm
Greifarm Gefedert Verdrehgesichert
Supporto Ammortizzato Anti-Rotazionale
Suspension Anti-Rotation, avec Corps Lisse
Soporte Liso de Muelle Antitorsi3n

	A	B	G1	G2	H	F(N)	
CA.GGSM100515	M10X1	69	M5	M5	10	6	42 g
CA.GGSM100520		79			20		45 g
CA.GGSM100530		98			30	8.6	50 g
CA.GGSM141815	M14X1.5	86	G 1/8	G 1/8	17	20.7	85 g
CA.GGSM141840		110			38	23.3	101 g
CA.GGSM201425	M20X1.5	116	G 1/4		23	18.4	216 g
CA.GGSM201445		141			45	16.7	242 g



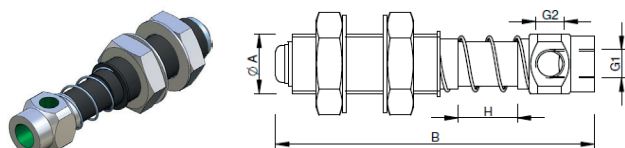
Spring Loaded Non-Rotative Vacuum Cup Arm Easy
Greifarm Gefedert Verdrehgesichert Einfach
Supporto Ammortizzato Antirotazionale Easy
Suspension Anti-Rotation, avec Corps lisse Easy
Soporte Liso de Muelle Antitorsi3n Easy

	A	B	G1	G2	H	F(N)	
CA.GGVE.10050510	10	59	M5	M5	10	8	11 g
CA.GGVE.10050530		85			30	11	15 g
CA.GGVE.14181815	14	86	G 1/8	G 1/8	15	9	33 g
CA.GGVE.14181840		111			40	14.6	37 g
CA.GGVE.20141820	20	109	G 1/4		20	11.7	75 g
CA.GGVE.20141850		147			50	16.8	95 g



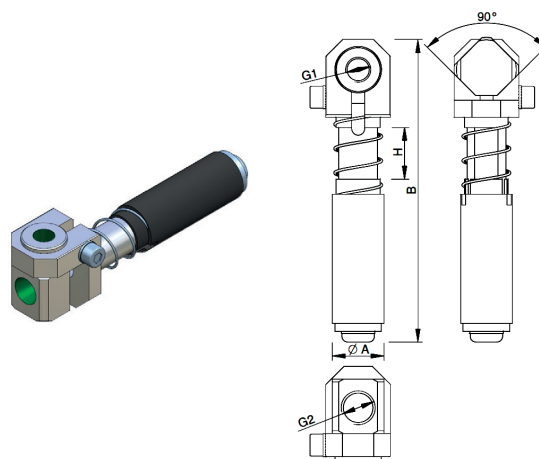
Spring Loaded Rotative Vacuum Cup Arm
Greifarm Gefedert Drehbar
Supporto Ammortizzato
Suspension de Rotation, avec Corps Lisse
Brazo Portaventosa (Elastico)

	A	B	G1	G2	H	F(N)	
CA.GGD.10050510	10	59	M5	M5	10	8	11 g
CA.GGD.10050530		85			30	11	15 g
CA.GGD.14181815	14	86	G 1/8	G 1/8	15	9	33 g
CA.GGD.14181840		111			40	14.6	38 g
CA.GGD.20141820	20	109	G 1/4		20	11.7	76 g
CA.GGD.20141850		147			50	16.8	92 g



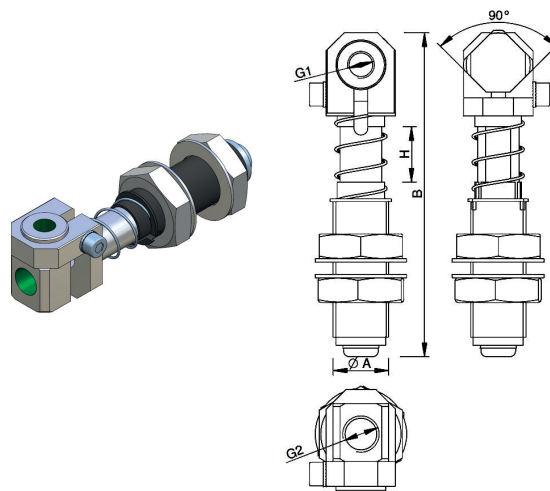
Spring Loaded Vacuum Cup Arm
Greifarm Gefedert Drehbar
Supporto Ammortizzato con Filetto
Suspension de Rotation, avec Corps Taraudé
Soporte Roscado de Muelle para Ventosas

	A	B	G1	G2	H	F(N)	
CA.GGDG.10050510	M10x1	59	M5	M5	10	8	17 g
CA.GGDG.10050530		85			30	11	20 g
CA.GGDG.14181815	M14x1.5	86	G 1/8	G 1/8	15	9	43 g
CA.GGDG.14181840		111			40	14.6	48 g
CA.GGDG.20141820	M20x1.5	109	G 1/4		20	11.7	110 g
CA.GGDG.20141850		147			50	16.8	126 g



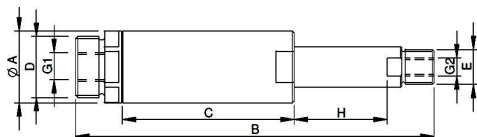
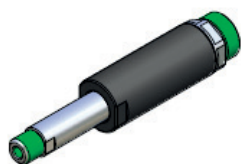
Spring Loaded Non-Rotative Vacuum Cup Arm
Greifarm Gefedert Verdrehgesichert
Supporto Ammortizzato Anti-Rotazionale
Suspension Anti-Rotation, avec Corps Lisse
Soporte Liso de Muelle Antitorsi3n

	A	B	G1	G2	H	F(N)	
CA.GGV.10050510	10	64	M5	M5	10	8	19 g
CA.GGV.10050530		90			30	11	22 g
CA.GGV.14181815	14	91	G 1/8	G 1/8	15	9	45 g
CA.GGV.14181840		116			40	14.6	49 g
CA.GGV.20141820	20	117	G 1/4	G 1/4	20	11.7	104 g
CA.GGV.20141850		155			50	16.8	124 g



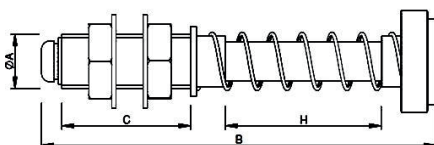
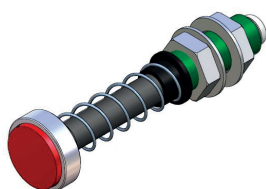
Spring Loaded Non-Rotative Vacuum Cup Arm
Greifarm Gefedert Verdrehgesichert
Supporto Filettato Ammortizzato Anti-Rotazionale
Suspension Anti-Rotation, avec Corps Taraudé
Soporte Roscado de Muelle Antitorsi3n

	A	B	G1	G2	H	F(N)	
CA.GGVG.10050510	M10x1	64	M5	M5	10	8	24 g
CA.GGVG.10050530		90			30	11	26 g
CA.GGVG.14181815	M14x1.5	91	G 1/8	G 1/8	15	9	49 g
CA.GGVG.14181840		116			40	14.6	57 g
CA.GGVG.20141820	M20x1.5	117	G 1/4	G 1/4	20	11.7	138 g
CA.GGVG.20141850		155			50	16.8	157 g



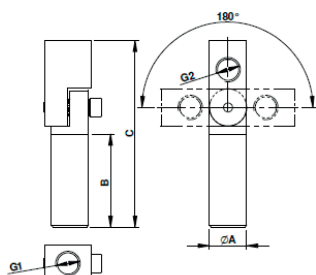
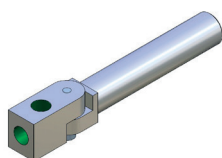
Telescopic self-retracting suspension
Selbst-einziehende Teleskop-Aufhängung
Sospensione Auto Retrattile
Suspension télescopique auto rétractable
Soporte Auto-Retractable

	A	B	C	D	E	G1	G2	H	F(N)	
CA.SAR.2025	20	100	48	M17x1	G 1/8	G 1/8	M5	25	3.6	42 g
CA.SAR.2050		150	73					50	4.2	68 g



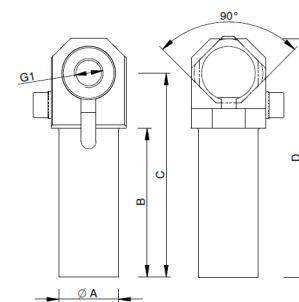
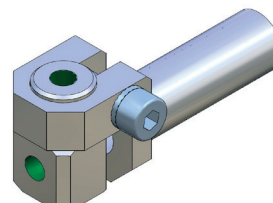
Spring rod
Druckstück gefedert
Pressore a Molla
Pressor a Ressort
Barra de Muelle

	A	B	C	H	F(N)
CA.VSX.1440	M14X1.5	101	42	40	47 g



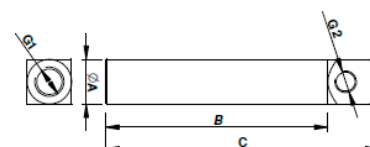
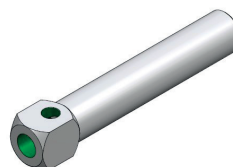
Swivel Gripper Arm
Greifarm beweglich
Giunto Supporto Ventosa
Bras porte ventouse angulaire
Brazo portaventosa (pivotante)

	A	B	C	G1	G2	
CA.GGE.10.M5.M5	10	60	90	M5	M5	22 g
CA.GGE.14.18.18	14	80	120	G 1/8	G 1/8	42 g
CA.GGE.20.14.18		100	150	G 1/4	G 1/4	85 g
CA.GGE.20.14.14				G 1/4	G 1/4	84 g
CA.GGE.201414150		150	200	G 1/8	G 1/8	122 g
CA.GGE.201818150				G 1/8	G 1/8	124 g



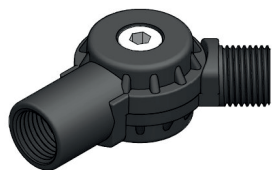
Swivel Gripper Arm
Greifarm Beweglich
Giunto Supporto Ventosa
Coude a Support pour Ventouse
Brazo portaventosa (pivotante)

	A	B	C	D	G1	G2	
CA.GGB.10050530		30	41	48			14 g
CA.GGB.10050560		60	71	78			17 g
CA.GGB.10050590		90	101	108			20 g
CA.GGB.14181840		40	56	65			29 g
CA.GGB.14181880		80	96	105			38 g
CA.GGB.141818120		120	136	145			45 g
CA.GGB.20141850		50	68	80			56 g
CA.GGB.201418100		100	118	130			70 g
CA.GGB.201418150		150	168	180			87 g
CA.GGB.20141450		50	68	80			55 g
CA.GGB.201414100		100	118	130			69 g
CA.GGB.201414150		150	168	180			86 g



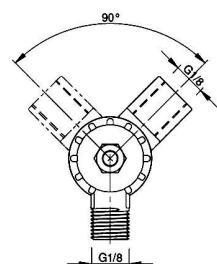
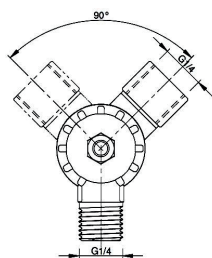
Gripper Arm
Greifarm für Vakuumsauger
Gambo per Ventosa
Bras porte Ventouse
Brazo Portaventosa (rígido)

	A	B	C	G1	G2	
CA.GSE.1018M530		30	52			15 g
CA.GSE.1018M560		60	82			18 g
CA.GSE.1018M590		90	112			25 g
CA.GSE.10M5M530		30	46			9 g
CA.GSE.10M5M560		60	76			15 g
CA.GSE.10M5M590		90	106			24 g
CA.GSE.14181840		40	62			18 g
CA.GSE.14181880		80	102			30 g
CA.GSE.141818120		120	142			43 g
CA.GSE.20141850		50	73			44 g
CA.GSE.201418100		100	123			63 g
CA.GSE.201418150		150	173			78 g
CA.GSE.30141480		80	108			155 g
CA.GSE.301414140		140	168			219 g
CA.GSE.301414200		200	228			283 g

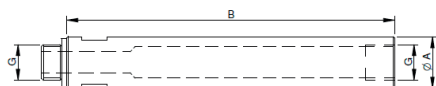


Elbow arm
Einstellbarer Winkelhalter
Snodo Direzioneabile
Joint Angulaire
Articulación para Ventosa

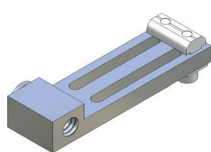
	G1	G2	
CA.07.01.001	G 1/8	G 1/8	7 g
CA.07.01.002	G 1/4	G 1/4	15 g



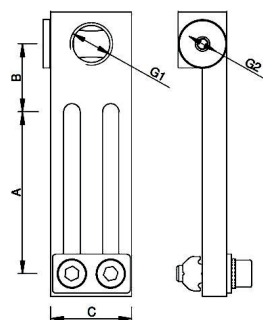
Extension tube with air lead
Verlängerungsrohr mit Luftkanal
Prolunga per Ventosa
Prolongateur avec canal d'air
Prolongación para Ventosa



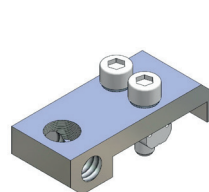
	A	B	G	
new CA.GSEG.100515	10	15	M5	3 g
new CA.GSEG.100530		30		6 g
CA.GSEG.100545		45		9 g
CA.GSEG.100590		90		16 g
new CA.GSEG.120545	12	45	M5	12 g
new CA.GSEG.120590		90		24 g
new CA.GSEG.141815	14	15	G1/8	5 g
CA.GSEG.141830		30		10 g
CA.GSEG.141845		45		14 g
CA.GSEG.141890		90		26 g
CA.GSEG.201445	20	45	G1/4	30 g
CA.GSEG.201490		90		58 g



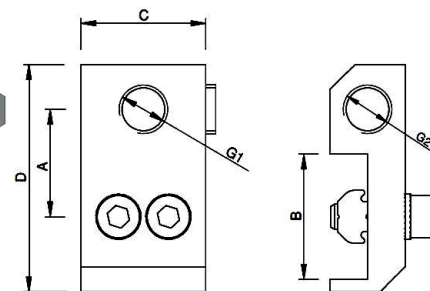
Thread Clamp Adjustable
Winkelstück Gewinde Verstellbar
Staffa Lunga per Ventosa
Bride Longue pour Ventouse
Brida (regulable)



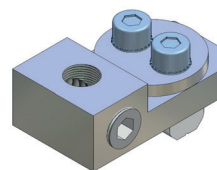
	A	B	C	G1	G2	M*	
CA.WLS.M5.M5.X	40	14	16	M5	M5	L/X	24 g
CA.WLS.18.18.X	50	21	25	G 1/8	G 1/8	X/JU	65 g
CA.WLS.14.18.X				G 1/4	G 1/4	JU	73 g
CA.WLS.14.14.JU				G 1/4	G 1/4	JU	73 g



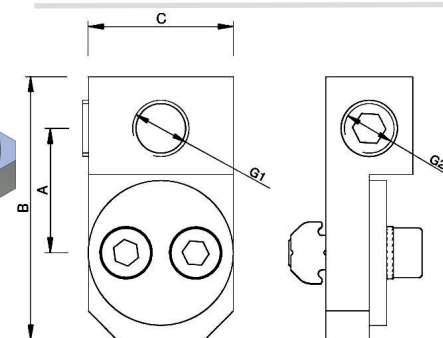
Threadclamp fixed
Winkelstück Gewinde Fest
Staffa per Ventosa
Bride pour Ventouse
Pieza de apriete en escuadra



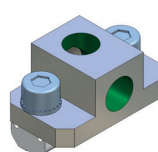
	A	B	C	D	G1	G2	M*	
CA.WSS.L.M5.M5	17	18	16	32	M5	M5	L	18 g
CA.WSS.X.18.18	22	25	25	46	G 1/8	G 1/8	X	46 g
CA.WSS.X.14.18				60	G 1/4		JU	49 g
CA.WSS.JU.14.18	29	40						



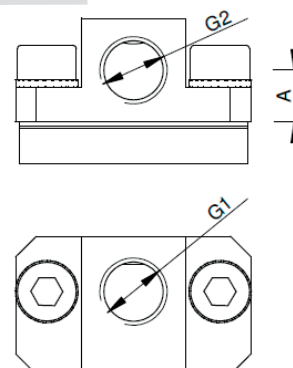
Adjustable connector for Vacuum Cups
Winkelstück 360°, drehbar
Staffa per Attacco Ventosa Orientabile
Bride angulaire pour Ventouse
Atornilladura en Ángulo (pivotante)



	A	B	C	G1	G2	M*	
CA.WSD.L.M5.M5	14	28	16	M5	M5	L	19 g
CA.WSD.X.18.18	21	46	25	G 1/8	G 1/8	X	44 g
CA.WSD.X.14.18				G 1/4			

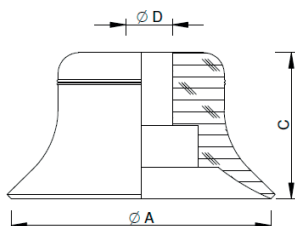
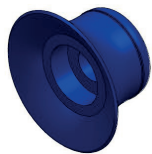


Clamp for Vacuum Cups
Sauggreifer Befestigungsstück
Staffa attacco diretto Ventosa
Bride de fixation directe pour Ventouse
Atornilladura en Ángulo (para el montaje lateral)



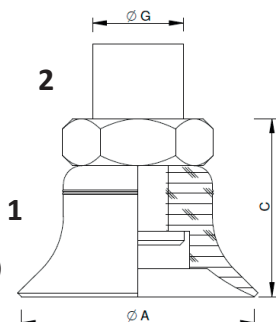
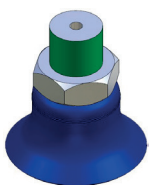
	A	G1	G2	M*	
CA.SGB.5.5.X	4	M5	M5	L	27 g
CA.SGB.18.18.X	7.5	G 1/8	G 1/8	X/JU	35 g
CA.SGB.14.14.X	10	G 1/4	G 1/4		39 g

HT1 SERIES



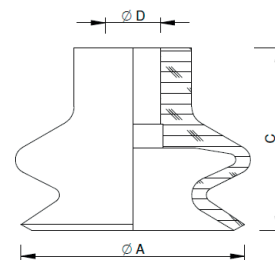
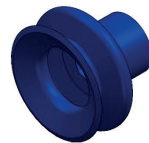
Vacuum Cup with 1 bellows only
Saugnapf mit 1 kante
Ventosa con 1 soffietto
Ventouse avec 1 soufflet
Ventosa de 1 fuelle

	A	C	D	F(N)	
CA.08.29.001	Ø5	6.5	Ø4	0.75	1 g
CA.08.29.002	Ø6			1.2	
CA.08.29.003	Ø8	7		2.3	
CA.08.29.004	Ø10	7.5		4	
CA.08.29.005	Ø15	8	Ø4.5	9	2 g
CA.08.29.006	Ø20	10		15.5	
CA.08.29.007	Ø25	14	Ø6	26.5	3 g
CA.08.29.008	Ø30	12		34	
CA.08.29.009	Ø35			44	
CA.08.29.010	Ø40	14		57.7	
CA.08.29.011	Ø50	15	Ø8	91	15 g
CA.08.29.012	Ø60	18	M10x1.25	125	19 g
CA.08.29.013	Ø80	20		260	38 g



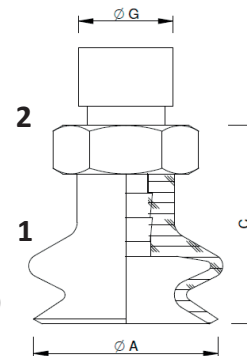
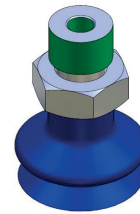
Vacuum Cup with 1 bellows (complete)
Saugnapf mit 1 kante (komplett)
Ventosa con 1 soffietto (completa)
Ventouse avec 1 soufflet (complet)
Ventosa de 1 fuelle (completa)

	1	2	A	C	G	
KIT.08.29.D05	CA.08.29.001	CA.08.09.014	Ø5	9.5	M5	5 g
KIT.08.29.D06	CA.08.29.002		Ø6	12		
KIT.08.29.D08	CA.08.29.003		Ø8	12.5		
KIT.08.29.D10	CA.08.29.004		Ø10	13.3		
KIT.08.29.D15	CA.08.29.005	CA.08.09.015	Ø15	15	G 1/8	6 g
KIT.08.29.D20	CA.08.29.006	CA.08.09.016	Ø20	17		
KIT.08.29.D25	CA.08.29.007	CA.08.09.017	Ø25	19		
KIT.08.29.D30	CA.08.29.008		Ø30	17		
KIT.08.29.D35	CA.08.29.009		Ø35	19		
KIT.08.29.D40	CA.08.29.010		Ø40	20	G 1/4	24 g
KIT.08.29.D50	CA.08.29.011	CA.08.09.018	Ø50	23		
KIT.08.29.D60	CA.08.29.012	CA.08.09.019	Ø60	25		
KIT.08.29.D80	CA.08.29.013		Ø80	25		



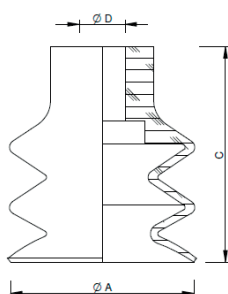
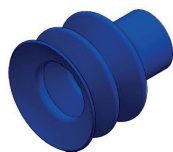
Vacuum Cup with 2 bellows only
Saugnapf mit 2 kanten
Ventosa con 2 soffietti
Ventouse avec 2 soufflets
Ventosa de 2 fuelles

	A	C	D	F(N)	
CA.08.31.012	Ø6	9	Ø3.7	1.5	1 g
CA.08.31.001	Ø11	16	Ø5	2.4	
CA.08.31.002	Ø14			3.5	
CA.08.31.003	Ø16	19	Ø4.7	3.7	3 g
CA.08.31.004	Ø20	16		7.7	4 g
CA.08.31.005	Ø22	20	Ø8	9	5 g
CA.08.31.006	Ø25	23		11	7 g
CA.08.31.007	Ø33	27.5		19.2	12 g
CA.08.31.008	Ø43	28		28	18 g
CA.08.31.009	Ø53	34	Ø12	59	23 g
CA.08.31.010	Ø63			82	32 g
CA.08.31.011	Ø78	46.8		152	



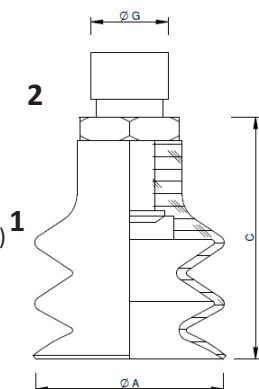
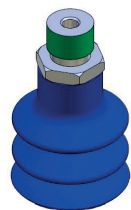
Vacuum Cup with 2 bellows (complete)
Saugnapf mit 2 kanten (komplett)
Ventosa con 2 soffietti (completa)
Ventouse avec 2 soufflets (complet)
Ventosa de 2 fuelles (completa)

	1	2	A	C	G	
KIT.08.31.D06.14	CA.08.31.012	CA.08.09.014	Ø6	14	M5	2 g
KIT.08.31.D11.4	CA.08.31.001	CA.08.09.004	Ø11	20.5	M5	2 g
KIT.08.31.D11.9		CA.08.09.009		21	G1/8	4 g
KIT.08.31.D14.4	CA.08.31.002	CA.08.09.004	Ø14	20.5	M5	2 g
KIT.08.31.D14.9		CA.08.09.009		21	G1/8	4 g
KIT.08.31.D16.4	CA.08.31.003	CA.08.09.004	Ø16	23.5	M5	4 g
KIT.08.31.D16.9		CA.08.09.009		24	G1/8	6 g
KIT.08.31.D20.4	CA.08.31.004	CA.08.09.004	Ø20	20.5	M5	5 g
KIT.08.31.D20.9		CA.08.09.009		21	G1/8	7 g
KIT.08.31.D22.4	CA.08.31.005	CA.08.09.004	Ø22	20.5	M5	6 g
KIT.08.31.D22.9		CA.08.09.009		21	G1/8	8 g
KIT.08.31.D25.4	CA.08.31.006	CA.08.09.004	Ø25	27.5	M5	6 g
KIT.08.31.D25.9		CA.08.09.009		28	G1/8	8 g
KIT.08.31.D33.11	CA.08.31.007	CA.08.09.011	Ø33	33.5	G1/8	11 g
KIT.08.31.D33.21		CA.08.09.021		31.5	G1/4	15 g
KIT.08.31.D43.11	CA.08.31.008	CA.08.09.011	Ø43	34	G1/8	16 g
KIT.08.31.D43.21		CA.08.09.021		32	G1/4	20 g
KIT.08.31.D53.11	CA.08.31.009	CA.08.09.011	Ø53	40.5	G1/8	22 g
KIT.08.31.D53.21		CA.08.09.021		38	G1/4	26 g
KIT.08.31.D63.21	CA.08.31.010	CA.08.09.021	Ø63	38	G1/4	31 g
KIT.08.31.D78.24	CA.08.31.011	CA.08.09.024	Ø78	52.8		47 g



Vacuum Cup with 3 bellows only
Saugnapf mit 3 kanten
Ventosa con 3 soffiatti
Ventouse avec 3 soufflets
Ventosa de 3 fuelles

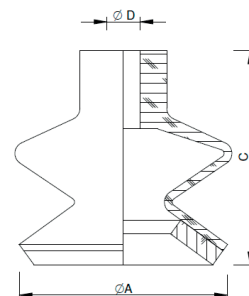
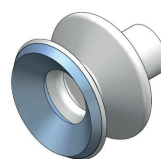
	A	C	D	F(N)	
CA.08.32.D09	Ø9	15	Ø4	0.7	2 g
CA.08.32.D12	Ø12	21		0.9	3 g
CA.08.32.D14	Ø14	23		1.2	4 g
CA.08.32.D20	Ø20	22		3.8	6 g
CA.08.32.D25	Ø25	34	Ø8	4.5	7 g
CA.08.32.D32	Ø32	37		12	8 g
CA.08.32.D42	Ø42	46		13.6	10 g
CA.08.32.D52	Ø52	49		28.5	25 g
CA.08.32.D62	Ø62	54		41	39 g



Vacuum Cup with 3 bellows (complete)
Saugnapf mit 3 kanten (komplett)
Ventosa con 3 soffiatti (completa)
Ventouse avec 3 soufflets (complet)
Ventosa de 3 fuelles (completa)

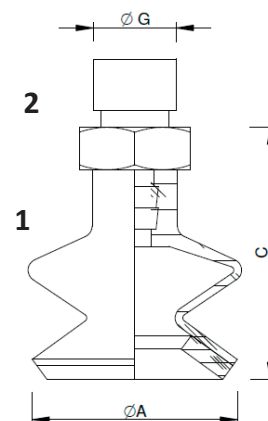
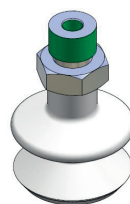
	1	2	A	C	G	
KIT.08.32.D09.26	CA.08.32.D09	CA.08.09.026	Ø9	20	M5	3 g
KIT.08.32.D12.4	CA.08.32.D12	CA.08.09.004	Ø12	25.5	M5	4 g
KIT.08.32.D12.9		CA.08.09.009		26	G1/8	6 g
KIT.08.32.D14.4	CA.08.32.D14	CA.08.09.004	Ø14	27.5	M5	5 g
KIT.08.32.D14.9		CA.08.09.009		28	G1/8	7 g
KIT.08.32.D20.4	CA.08.32.D20	CA.08.09.004	Ø20	26.5	M5	10 g
KIT.08.32.D20.9		CA.08.09.009		27	G1/8	12 g
KIT.08.32.D25.4	CA.08.32.D25	CA.08.09.004	Ø25	38.5	M5	11 g
KIT.08.32.D25.9		CA.08.09.009		39	G1/8	13 g
KIT.08.32.D32.11	CA.08.32.D32	CA.08.09.011	Ø32	43.3	G1/8	12 g
KIT.08.32.D32.21		CA.08.09.021		41	G1/4	14 g
KIT.08.32.D42.11	CA.08.32.D42	CA.08.09.011	Ø42	52.3	G1/8	14 g
KIT.08.32.D42.21		CA.08.09.021		50	G1/4	18 g
KIT.08.32.D52.21	CA.08.32.D52	CA.08.09.021	Ø52	64	G1/4	33 g
KIT.08.32.D62.21	CA.08.32.D62		Ø62	59		50 g

SILICONE SERIES



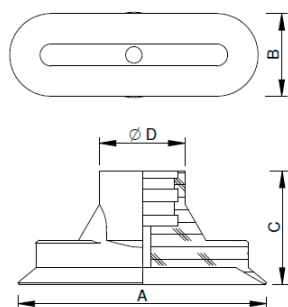
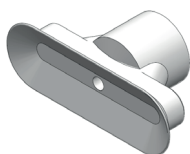
Vacuum Cup with 2 bellows and foam strip
Saugnapf mit 2 kanten und schaumstoffband
Ventosa con 2 soffiatti con anello in spugna
Ventouse avec 2 soufflets et bandes mousses annulaires
Ventosa de 2 fuelles con espuma

	A	C	D	F(N)	
CA.08.26.D16.AS	Ø16	21	Ø3.8	7	2 g
CA.08.26.D20.AS	Ø20	18		9	
CA.08.26.D25.AS	Ø25	25		11	3 g
CA.08.26.D33.AS	Ø33	29	Ø8	19.2	7 g
CA.08.26.D43.AS	Ø43	32		28	13 g
CA.08.26.D53.AS	Ø53	38		59	22 g
CA.08.26.D63.AS	Ø63	37		82	26 g
CA.08.26.D78.AS	Ø78	51		152	51 g



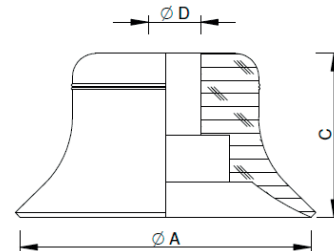
Vacuum Cup with 2 bellows and foam strip (complete)
Saugnapf mit 2 kanten und schaumstoffband (komplett)
Ventosa con 2 soffiatti con anello in spugna (completa)
Ventouse avec 2 soufflets et bandes mousses annulaires (complet)
Ventosa de 2 fuelles con espuma (completa)

	1	2	A	C	G	
KIT.08.26.D16.4	CA.08.26.D16.AS	CA.08.09.004	Ø16	25.5	M5	3 g
KIT.08.26.D16.9		CA.08.09.009		26	G1/8	6 g
KIT.08.26.D20.4	CA.08.26.D20.AS	CA.08.09.004	Ø20	22.5	M5	3 g
KIT.08.26.D20.9		CA.08.09.009		23	G1/8	6 g
KIT.08.26.D25.4	CA.08.26.D25.AS	CA.08.09.004	Ø25	29.5	M5	4 g
KIT.08.26.D25.9		CA.08.09.009		30	G1/8	6 g
KIT.08.26.D33.11	CA.08.26.D33.AS	CA.08.09.011	Ø33	35.3	1/8"	11 g
KIT.08.26.D33.21		CA.08.09.021		33	1/4"	15 g
KIT.08.26.D43.11	CA.08.26.D43.AS	CA.08.09.011	Ø43	38.3	1/8"	17 g
KIT.08.26.D43.21		CA.08.09.021		36	1/4"	21 g
KIT.08.26.D53.11	CA.08.26.D53.AS	CA.08.09.011	Ø53	44.3	1/8"	26 g
KIT.08.26.D53.21		CA.08.09.021		42	1/4"	30 g
KIT.08.26.D63.11	CA.08.26.D63.AS	CA.08.09.011	Ø63	43.3	1/8"	30 g
KIT.08.26.D63.21		CA.08.09.021		41	1/8"	34 g
KIT.08.26.D78.24	CA.08.26.D78.AS	CA.08.09.024	Ø78	57	1/4"	57 g



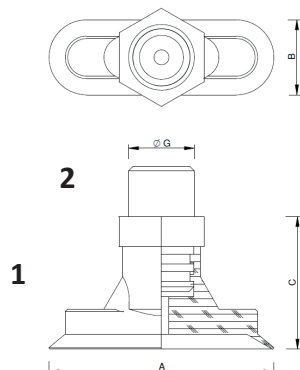
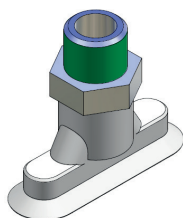
Vacuum Cup oval only
Saugnapf oval
Ventosa ovale
Ventouse ovale
Ventosa oval

	A	B	C	D	F(N)	
CA.08.27.001	24	8	12	Ø12	8	1 g
CA.08.27.002	30	10			12.2	
CA.08.27.003	36	12	21	Ø17	20	7 g
CA.08.27.004	45	15			28	4 g
CA.08.27.005	60	20			50	7 g
CA.08.27.006	75	25			78	14 g



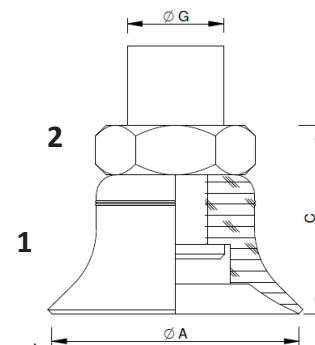
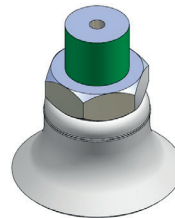
Vacuum Cup with 1 bellows only
Saugnapf mit 1 kante
Ventosa con 1 soffietto
Ventouse avec 1 soufflet
Ventosa de 1 fuelle

	A	C	D	F(N)	
CA.08.28.001	Ø5	6.5	Ø4	0.75	1 g
CA.08.28.002	Ø6			1.2	
CA.08.28.003	Ø8			7	
CA.08.28.004	Ø10	7.5	Ø4.5	4	
CA.08.28.005	Ø15	8		9	
CA.08.28.006	Ø20	10		15.5	
CA.08.28.007	Ø25	14	Ø6	26.5	2 g
CA.08.28.008	Ø30	12		34	3 g
CA.08.28.009	Ø35	14		44	5 g
CA.08.28.010	Ø40		57.7	7 g	
CA.08.28.011	Ø50	15	Ø8	91	15 g
CA.08.28.012	Ø60	18	M10x1.25	125	19 g
CA.08.28.013	Ø80	20		260	38 g



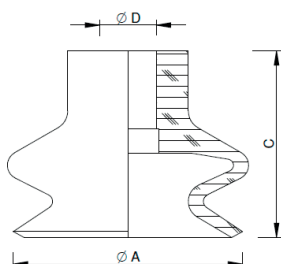
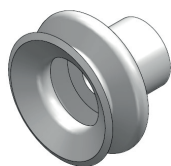
Vacuum Cup oval (complete)
Vakuumsauger oval (komplett)
Ventosa ovale (completa)
Ventouse ovale (complet)
Ventosa oval (completa)

	1	2	A	B	C	G	
KIT.08.27.L24.1A	CA.08.27.001	CA.08.09.001.AL	24	8	15.7	G 1/8	4 g
KIT.08.27.L30.1A	CA.08.27.002		30	10			10 g
KIT.08.27.L36.1A	CA.08.27.003		36	12			23 g
KIT.08.27.L45.13	CA.08.27.004	CA.08.09.013	45	15	27	G 1/4	26 g
KIT.08.27.L60.13	CA.08.27.005		60	20			33 g
KIT.08.27.L75.13	CA.08.27.006		75	25			



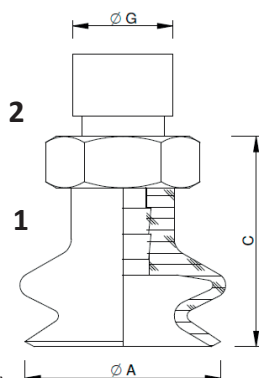
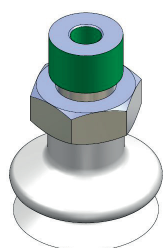
Vacuum Cup with 1 bellows (complete)
Vakuumsauger mit 1 kante (komplett)
Ventosa con 1 soffietto (completa)
Ventouse avec 1 soufflet (complet)
Ventosa de 1 fuelle (completa)

	1	2	A	C	G	
KIT.08.28.D05	CA.08.28.001	CA.08.09.014	Ø5	9.5	M5	6 g
KIT.08.28.D06	CA.08.28.002		Ø6			
KIT.08.28.D08	CA.08.28.003		Ø8	12		
KIT.08.28.D10	CA.08.28.004		Ø10	12.5		
KIT.08.28.D15	CA.08.28.005	CA.08.09.015	Ø15	13.3		
KIT.08.28.D20	CA.08.28.006	CA.08.09.016	Ø20	15		
KIT.08.28.D25	CA.08.28.007		Ø25	19	G 1/8	7 g
KIT.08.28.D30	CA.08.28.008		Ø30	17		8 g
KIT.08.28.D35	CA.08.28.009		Ø35	19		10 g
KIT.08.28.D40	CA.08.28.010	Ø40	12 g			
KIT.08.28.D50	CA.08.28.011		Ø50	20		20 g
KIT.08.28.D60	CA.08.28.012	CA.08.09.019	Ø60	23	G 1/4	24 g
KIT.08.28.D80	CA.08.28.013		Ø80	25		43 g



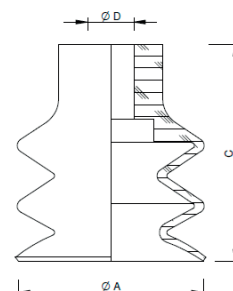
Vacuum Cup with 2 bellows only
Saugnapf mit 2 kanten
Ventosa con 2 soffietti
Ventouse avec 2 soufflets
Ventosa de 2 fuelles

	A	C	D	F(N)	
CA.08.30.012	Ø6	9	Ø3.7	1.5	1 g
CA.08.30.001	Ø11	16	Ø5	2.4	
CA.08.30.002	Ø14			3.5	
CA.08.30.003	Ø16	19	Ø4.7	3.7	3 g
CA.08.30.004	Ø20	16		7.7	4 g
CA.08.30.005	Ø25	23		11	5 g
CA.08.30.006	Ø33	27.5	Ø8	19.2	7 g
CA.08.30.007	Ø43	28		28	12 g
CA.08.30.008	Ø53	34		59	18 g
CA.08.30.009	Ø63			82	23 g
CA.08.30.010	Ø78	46.8		Ø12	152



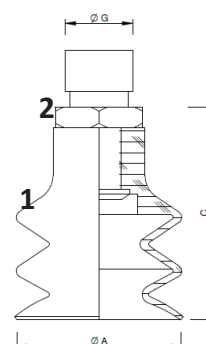
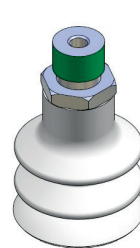
Vacuum Cup with 2 bellows (complete)
Vakuumsauger mit 2 kanten (komplett)
Ventosa con 2 soffietti (completa)
Ventouse avec 2 soufflets (complet)
Ventosa de 2 fuelles (completa)

	1	2	A	C	G	
KIT.08.30.D06.14	CA.08.30.012	CA.08.09.014	Ø6	14	M5	2 g
KIT.08.30.D11.4	CA.08.30.001	CA.08.09.004	Ø11	20.5	M5	2 g
KIT.08.30.D11.9		CA.08.09.009		21	G1/8	4 g
KIT.08.30.D14.4	CA.08.30.002	CA.08.09.004	Ø14	20.5	M5	2 g
KIT.08.30.D14.9		CA.08.09.009		21	G1/8	4 g
KIT.08.30.D16.4	CA.08.30.003	CA.08.09.004	Ø16	23.5	M5	4 g
KIT.08.30.D16.9		CA.08.09.009		24	G1/8	6 g
KIT.08.30.D20.4	CA.08.30.004	CA.08.09.004	Ø20	20.5	M5	5 g
KIT.08.30.D20.9		CA.08.09.009		21	G1/8	7 g
KIT.08.30.D25.4	CA.08.30.005	CA.08.09.004	Ø25	27.5	M5	6 g
KIT.08.30.D25.9		CA.08.09.009		28	G1/8	8 g
KIT.08.30.D33.11	CA.08.30.006	CA.08.09.011	Ø33	33.5	G1/8	11 g
KIT.08.30.D33.21		CA.08.09.021		31.5	G1/4	15 g
KIT.08.30.D43.11	CA.08.30.007	CA.08.09.011	Ø43	34	G1/8	16 g
KIT.08.30.D43.21		CA.08.09.021		32	G1/4	20 g
KIT.08.30.D53.11	CA.08.30.008	CA.08.09.011	Ø53	40.5	G1/8	22 g
KIT.08.30.D53.21		CA.08.09.021		38	G1/4	26 g
KIT.08.30.D63.11	CA.08.30.009	CA.08.09.011	Ø63	40.5	G1/8	27 g
KIT.08.30.D63.21		CA.08.09.021		38	G1/4	31 g
KIT.08.30.D78.24	CA.08.30.010	CA.08.09.024	Ø78	52.8	G1/4	47 g



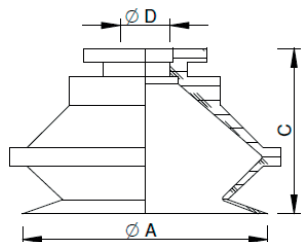
Vacuum Cup with 3 bellows only
Saugnapf mit 3 kanten
Ventosa con 3 soffietti
Ventouse avec 3 soufflets
Ventosa de 3 fuelles

	A	C	D	F(N)	
CA.08.33.D5	Ø5	14	Ø3.5	0.15	1 g
CA.08.33.D7	Ø7		Ø4	0.1	
CA.08.33.D9	Ø9	15		0.68	2 g
CA.08.33.D12	Ø12	21		0.9	3 g
CA.08.33.D14	Ø14	23		1.2	4 g
CA.08.33.D20	Ø20	22	Ø8	3.8	6 g
CA.08.33.D25	Ø25	34		4.5	7 g
CA.08.33.D32	Ø32	37		12.0	8 g
CA.08.33.D42	Ø42	46		13.6	10 g
CA.08.33.D52	Ø52	49		27	20 g
CA.08.33.D60	Ø60	55		32	60 g



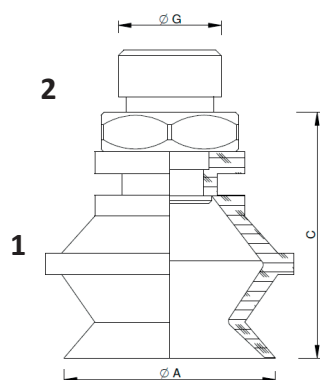
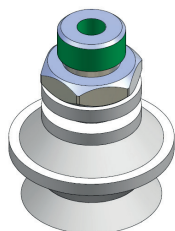
Vacuum Cup with 3 bellows (complete)
Vakuumsauger mit 3 Kanten (komplett)
Ventosa con 3 soffietti (completa)
Ventouse avec 3 soufflets (complet)
Ventosa de 3 fuelles (completa)

	1	2	A	C	G	
KIT.08.33.D5.25	CA.08.33.D5	CA.08.09.025	Ø5	18.5	M5	2 g
KIT.08.33.D7.26	CA.08.33.D7	CA.08.09.026	Ø7	19		
KIT.08.33.D9.26	CA.08.33.D9	CA.08.09.026	Ø9	20		
KIT.08.33.D12.4	CA.08.33.D12	CA.08.09.004	Ø12	25.5	M5	4 g
KIT.08.33.D12.9		CA.08.09.009		26	G1/8	6 g
KIT.08.33.D14.4	CA.08.33.D14	CA.08.09.004	Ø14	27.5	M5	5 g
KIT.08.33.D14.9		CA.08.09.009		28	G1/8	7 g
KIT.08.33.D20.4	CA.08.33.D20	CA.08.09.004	Ø20	26.5	M5	10 g
KIT.08.33.D20.9		CA.08.09.009		27	G1/8	12 g
KIT.08.33.D25.4	CA.08.33.D25	CA.08.09.004	Ø25	38.5	M5	11 g
KIT.08.33.D25.9		CA.08.09.009		39	G1/8	13 g
KIT.08.33.D32.11	CA.08.33.D32	CA.08.09.011	Ø32	43.3	G1/8	12 g
KIT.08.33.D32.21		CA.08.09.021		41	G1/4	16 g
KIT.08.33.D42.11	CA.08.33.D42	CA.08.09.011	Ø42	52.3	G1/8	14 g
KIT.08.33.D42.21		CA.08.09.021		50	G1/4	18 g
KIT.08.33.D52.11	CA.08.33.D52	CA.08.09.011	Ø52	55.3	G1/8	24 g
KIT.08.33.D52.21		CA.08.09.021		53	G1/4	28 g
KIT.08.33.D60.21	CA.08.33.D60	CA.08.09.021	Ø60	59	G1/4	68 g



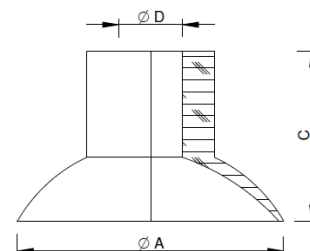
Vacuum Cup with 2 bellows only
Saugnapf mit 2 kanten
Ventosa con 2 soffietti
Ventouse avec 2 soufflets
Ventosa de 2 fuelles

	A	C	D	F(N)	
CA.08.01.001	Ø11	16	Ø4	4.6	1 g
CA.08.01.002	Ø16	19		7.5	2 g
CA.08.01.003	Ø20	19.5	Ø4.8	14.7	3 g
CA.08.01.004	Ø33	27	Ø6	25.5	6 g
CA.08.01.005	Ø42	28	Ø8	48.1	7 g
CA.08.01.006	Ø52	35	Ø10.5	83.3	15 g



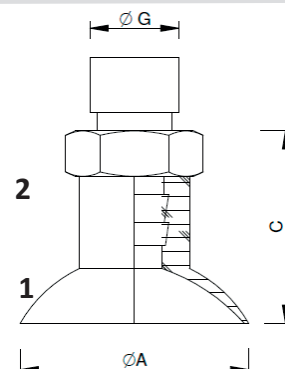
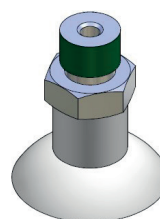
Vacuum Cup with 2 bellows (complete)
Vakuumsauger mit 2 kanten (komplett)
Ventosa con 2 soffietti (completa)
Ventouse avec 2 soufflets (complet)
Ventosa de 2 fuelles (completa)

	1	2	A	C	G	
KIT.08.01.D11.4	CA.08.01.001	CA.08.09.004	Ø11	20.5	M5	2 g
KIT.08.01.D11.9		CA.08.09.009		21	G1/8	4 g
KIT.08.01.D16.4	CA.08.01.002	CA.08.09.004	Ø16	23.5	M5	3 g
KIT.08.01.D16.9		CA.08.09.009		24	G1/8	4 g
KIT.08.01.D20.1	CA.08.01.003	CA.08.09.001.AL	Ø20	23	G1/8	5.5 g
KIT.08.01.D30.2	CA.08.01.004	CA.08.09.002.AL	Ø33	32		18 g
KIT.08.01.D40.2	CA.08.01.005	CA.08.09.037	Ø42	33		19 g
KIT.08.01.D50.3	CA.08.01.006	CA.08.09.003	Ø52	39	G1/4	18 g



Vacuum Cup with 1 bellow only
Saugnapf mit 1 kante
Ventosa con 1 soffietto
Ventouse avec 1 soufflet
Ventosa de 1 fuelle

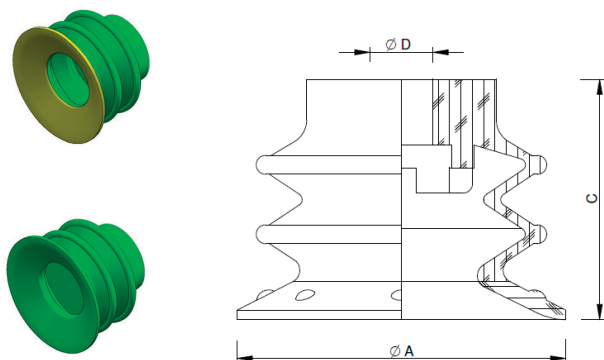
	A	C	D	F(N)	
CA.08.03.001	Ø6	8	Ø1.5	0.7	1 g
CA.08.03.002	Ø8		Ø3	1.0	
CA.08.03.003	Ø10	11	Ø4	1.7	2 g
CA.08.03.004	Ø12			2.4	
CA.08.03.005	Ø15	12	Ø6	3.9	3 g
CA.08.03.006	Ø20	13		7.25	
CA.08.03.007	Ø25	16	Ø10	12.2	5 g
CA.08.03.008	Ø30			16.7	
CA.08.03.009	Ø35	17	Ø10	23.0	8 g
CA.08.03.010	Ø45	20		39.0	
CA.08.03.011	Ø60	22		67.1	



Vacuum Cup with 1 bellow (complete)
Vakuumsauger mit 1 kante (komplett)
Ventosa con 1 soffietto (completa)
Ventouse avec 1 soufflet (complet)
Ventosa de 1 fuelle (completa)

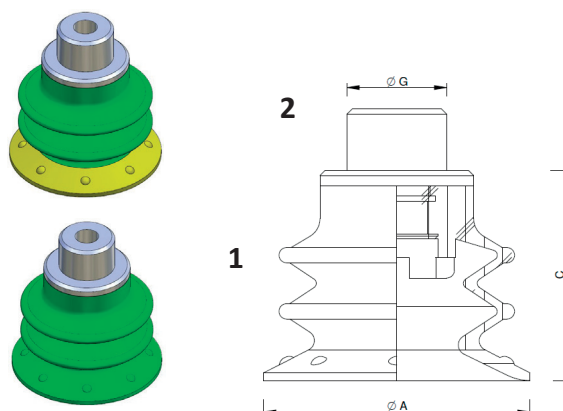
	1	2	A	C	G		
KIT.08.03.D06.5	CA.08.03.001	CA.08.09.005	Ø6	11.5	M5	3 g	
KIT.08.03.D08.6	CA.08.03.002	CA.08.09.006	Ø8	10			
KIT.08.03.D10.4	CA.08.03.003	CA.08.09.004	Ø10	14.51	M5		
KIT.08.03.D10.9		CA.08.09.009		5	G1/8		
KIT.08.03.D12.4	CA.08.03.004	CA.08.09.004	Ø12	15.51	M5		
KIT.08.03.D12.9		CA.08.09.009		6	G1/8		
KIT.08.03.D15.4	CA.08.03.005	CA.08.09.004	Ø15	16.51	M5		
KIT.08.03.D15.9		CA.08.09.009		7	G1/8		
KIT.08.03.D20.4	CA.08.03.006	CA.08.09.004	Ø20	17.51	M5	2 g	
KIT.08.03.D20.9		CA.08.09.009		8	G1/8	4 g	
KIT.08.03.D25.10	CA.08.03.007	CA.08.09.010	Ø25	21	G1/8	6 g	
KIT.08.03.D30.10	CA.08.03.008		Ø30			23	7 g
KIT.08.03.D35.11	CA.08.03.009		Ø35				
KIT.08.03.D45.11	CA.08.03.010	CA.08.09.011	Ø45	26	G1/8	9 g	
KIT.08.03.D60.11	CA.08.03.011		Ø60	28		12 g	

POLYURETHANE SERIES



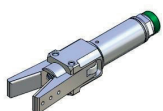
Vacuum Cup with 3 bellows only
Saugnapf mit 3 kanten
Ventosa con 3 soffiatti
Ventouse avec 3 souffletts
Ventosa de 3 fuelles

	Sh	A	C	D	Cod. PIAB	F(N)	
CA.08.36.D10	30/60	Ø10	16.5	Ø3.8	0118329	3.7	1 g
CA.08.36.D10.60	60				0122966		
CA.08.36.D15	30/60	Ø15	18.5		0118505	4.5	
CA.08.36.D15.60	60			Ø5	0124237	6	3 g
CA.08.36.D20	30/60	Ø21	16.2		0118507	9.5	
CA.08.36.D20.60	60				0124249		
CA.08.36.D25	30/60	Ø26	19	Ø6.5	0109006	18	8 g
CA.08.36.D25.60	60				0108240		
CA.08.36.D35	30/60	Ø37	26.8		0106292	28	24 g
CA.08.36.D35.60	60			Ø12	0107477	30	
CA.08.36.D52	30/60	Ø53	39		0104529	75	
CA.08.36.D52.60	60			/	0107381	80	71 g
CA.08.36.D75	30/60	Ø77	51.7		0107145	141	
CA.08.36.D75.60	60				0107150	166	



Vacuum Cup with 3 bellows (complete)
Vakuumsauger mit 3 kanten (komplett)
Ventosa con 3 soffiatti (completa)
Ventouse avec 3 souffletts (complet)
Ventosa de 3 fuelles (completa)

	1	2	Cod. PIAB	A	C	G		
KIT.08.36.D10	CA.08.36.D10	CA.08.09.030 3107030	0122869	11	21	M5	2 g	
KIT.08.36.D10.60	CA.08.36.D10.60	CA.08.09.030 3107030	0122967					
KIT.08.36.D15	CA.08.36.D15	CA.08.09.030 3107030	0124344	16	23		G 1/8 M M5 F	3 g
KIT.08.36.D15.60	CA.08.36.D15.60	CA.08.09.030 3107030	0124345					
KIT.08.36.D20	CA.08.36.D20	CA.08.09.031 0101152	0125105	21	20.2	G 1/8 M M5 F		5 g
KIT.08.36.D20.60	CA.08.36.D20.60	CA.08.09.031 0101152	0125110					
KIT.08.36.D25	CA.08.36.D25	CA.08.09.032 3250004	0109402	26	25		G 1/4 M	65 g
KIT.08.36.D25.60	CA.08.36.D25.60	CA.08.09.032 3250004	0109398					
KIT.08.36.D35.1	CA.08.36.D35	CA.08.09.033 0200714	9912151	37	32.8	G 1/8 M G 1/4 M		10 g 13 g
KIT.08.36.D35.2		CA.08.09.034 3250091	0114449					
KIT.08.36.D35.60	CA.08.36.D35.60	CA.08.09.034 3250091	9912152				53	45
KIT.08.36.D52	CA.08.36.D52	CA.08.09.035 3250092	0106045					
KIT.08.36.D52.60	CA.08.36.D52.60	CA.08.09.035 3250092	0107385	77	60.4	90 g		
KIT.08.36.D75	CA.08.36.D75	CA.08.09.036 0201077	0201073					
KIT.08.36.D75.60	CA.08.36.D75.60	CA.08.09.036 0201077	0101074					

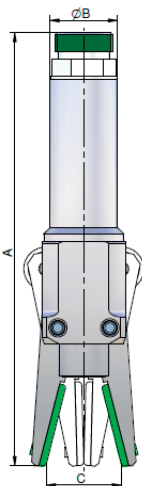


PAC Magnetic

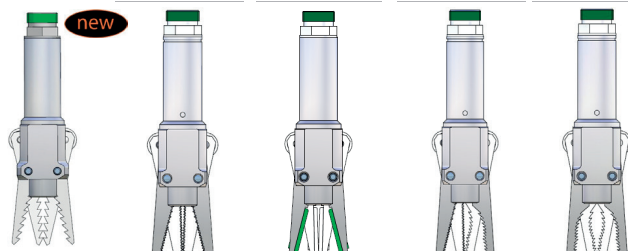
Selfcentering Sprue Grippers
Selbstzentrierende Anguss-Greifzangen
Pinza Materozza Autocentrante
Pincas Pneumatique Angulaire Auto Centreuse
Pinza de Presión Autocentrante

	Sensor		
CA.PAC20.169			153 g
CA.PAC20.16A			95 g
CA.PAC20.16E			104 g
CA.PAC20.16K			135 g
CA.PAC20.16P			102 g
CA.PAC20.16R			165 g
CA.PAC20.16S	KT58PM8	PNP	157 g
CA.PAC20.16S9			187 g
CA.PAC20.16SN	KT58NM8	NPN	192 g
CA.PAC20.16S9N			187 g
CA.PAC20.16SP	KT58PM8	PNP	111 g
CA.PAC20.16SPN	KT58NM8	NPN	162 g
CA.PAC20.16W	KT58PM8	PNP	162 g
CA.PAC20.16WN	KT58NM8	NPN	126 g

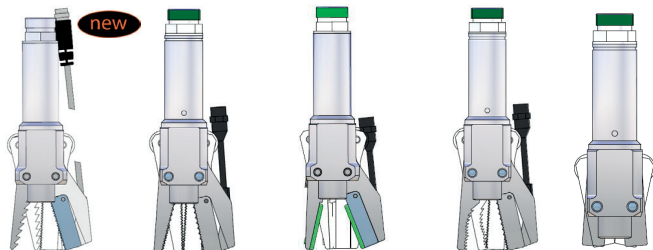
	A	B	C
CA.PAC20.16A	107	Ø 20	/
CA.PAC20.16E	130		21
CA.PAC20.16K			22
CA.PAC20.16P			22.8
CA.PAC20.16R			23
CA.PAC20.16S/SN			22.3
CA.PAC20.16SP/SPN			25
CA.PAC20.16W/WN			21.5



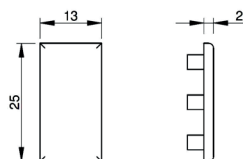
CA.PAC20.169 CA.PAC20.16R CA.PAC20.16P CA.PAC20.16K CA.PAC20.16E



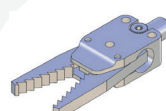
CA.PAC20.16S9 CA.PAC20.16S CA.PAC20.16SP CA.PAC20.16W CA.PAC20.16WN CA.PAC20.16A



Insert
Einlage
Gommino per Pinza
Insert
Inserto para Pinza



PAC.20.16P.03	TPU	4 g
PAC.20.16P.03.V	VITON	

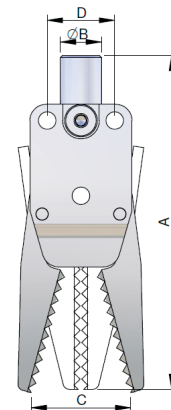


GZA.10

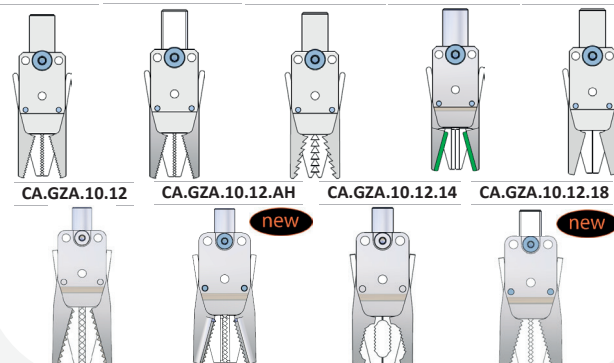
Sprue Grippers
Greifzange
Pinza Materozza
Pince de Préhension
Pinza de Presión

	Sensor		Closing force (6bar)	
CA.GZA.10.08			19 N	16 g
CA.GZA.10.08.18				15 g
CA.GZA.10.08.19				16 g
CA.GZA.10.08.G				36 g
CA.GZA.10.08.LL				34 g
CA.GZA.10.12			30 N	50 g
CA.GZA.10.12.14				37 g
CA.GZA.10.12.18				40 g
CA.GZA.10.12.19				34 g
CA.GZA.10.12.AH				36 g
CA.GZA.10.12.AHV				34 g
CA.GZA.10.12.C				35 g
CA.GZA.10.12.G				43 g
CA.GZA.10.12.L				44 g
CA.GZA.10.12.LL				50 g
CA.GZA.10.12.M				59 g
CA.GZA.10.12.M50				65 g
CA.GZA.10.12.MC				62 g
CA.GZA.10.12.MS	MMD.IL5AP3AVF80	PNP		
CA.GZA.10.12.MSN	MMD.IL5AN3AVF80	NPN		
CA.GZA.10.12.S	MMD.IL5AP3AVF80	PNP		
CA.GZA.10.12.SN	MMD.IL5AN3AVF80	NPN		
CA.GZA.10.12.S4	MMD.IL5AP3AVF80	PNP		
CA.GZA.10.12.S4N	MMD.IL5AN3AVF80	NPN		
CA.GZA.10.12.S9	MMD.IL5AP3AVF80	PNP		
CA.GZA.10.12.S9N	MMD.IL5AN3AVF80	NPN		
CA.GZA.10.12.SG	MMD.IL5AP3AVF80	PNP		
CA.GZA.10.12.SGN	MMD.IL5AN3AVF80	NPN		

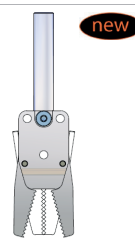
	A	B	C	D
CA.GZA.10.08	64	Ø 10	14	13
CA.GZA.10.08.18		G1/8	13,3	
CA.GZA.10.08.19		Ø 10	14	
CA.GZA.10.08.G			22,5	
CA.GZA.10.08.LL		G1/8	17,5	
CA.GZA.10.12	83		19,5	16,5
CA.GZA.10.12.14	76,5	Ø 10	22	
CA.GZA.10.12.18	82		20	
CA.GZA.10.12.19	75		13	
CA.GZA.10.12.AH	59,5		22,5	
CA.GZA.10.12.AHV	83		21	
CA.GZA.10.12.C	76,5		15	
CA.GZA.10.12.G	76,4		20	
CA.GZA.10.12.L	76,5		19,5	
CA.GZA.10.12.LL	76,4		21,5	
CA.GZA.10.12.M	76,5		22	
CA.GZA.10.12.MC	114,5		19	
CA.GZA.10.12.M50	76,4		24,5	
CA.GZA.10.12.MS/MSN	83		23	
CA.GZA.10.12.S/SN	76,2			
CA.GZA.10.12.S4/S4N	83			
CA.GZA.10.12.S9/S9N	82,7			
CA.GZA.10.12.SG/SGN				



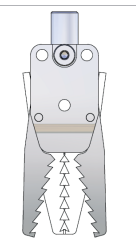
CA.GZA.10.08 CA.GZA.10.08.18 CA.GZA.10.08.19 CA.GZA.10.08.G CA.GZA.10.08.LL



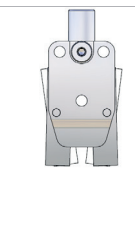
CA.GZA.10.12.M50



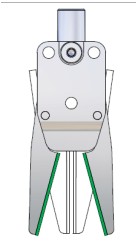
CA.GZA.10.12.19



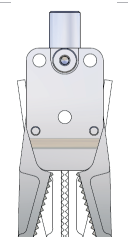
CA.GZA.10.12.C



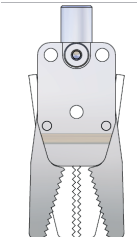
CA.GZA.10.12.G



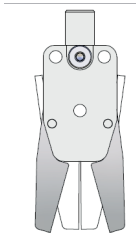
CA.GZA.10.12.L



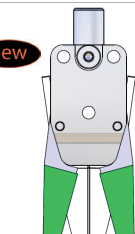
CA.GZA.10.12.M



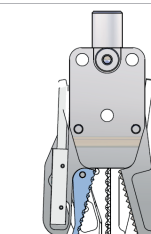
CA.GZA.10.12.LL



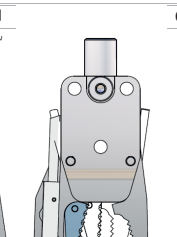
CA.GZA.10.12.MC



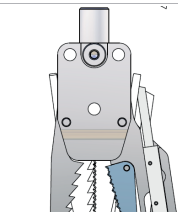
CA.GZA.10.12.MS/MSN



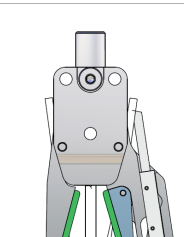
CA.GZA.10.12.S4/S4N



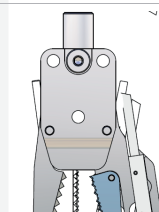
CA.GZA.10.12.S9/S9N



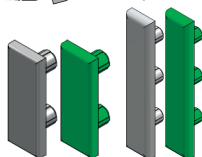
CA.GZA.10.12.SG/SGN



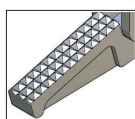
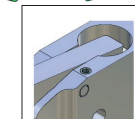
CA.GZA.10.12.S/SN



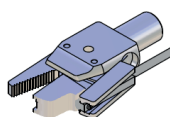
Insert
Einlage
Gommino per Pinza
Insert
Inserto para Pinza



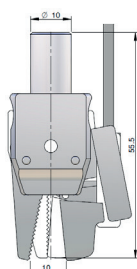
GZA.10.08.6	TPU	2 g
GZA.10.08.6.V	VITON	
GZA.10.12.6	TPU	4 g
GZA.10.12.6.V	VITON	



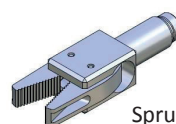
GRZ.10



Sprue Grippers
Greifzange
Pinza Materozza
Pinçe de Préhension
Pinza de Presión



	SENSOR	Closing force (6bar)	
CA.GRZ.10.08.S	KT58PM8 (PNP)	19 N	25 g
CA.GRZ.10.08.S2F	KT58REQD (2WIRES)		
CA.GRZ.10.08.SN	KT58NM8 (NPN)		

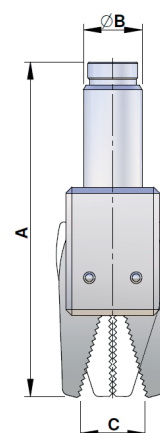


GRZ.20

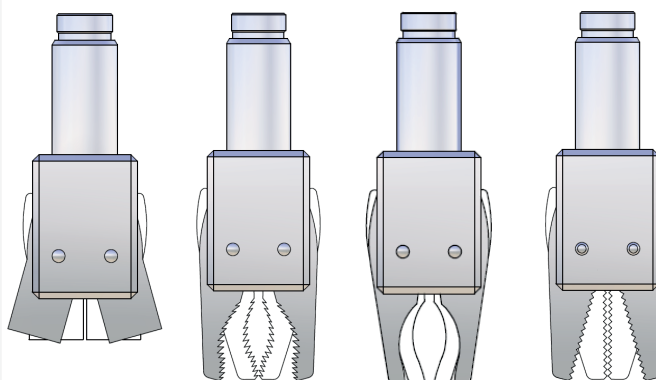
Sprue Grippers
Greifzange
Pinza Materozza
Pinçe de Préhension
Pinza de Presión

	Sensor	Closing force (6bar)	
CA.GRZ.20.A		90 N	114 g
CA.GRZ.20.E			85 g
CA.GRZ.20.LL			85 g
CA.GRZ.20.R			121 g
CA.GRZ.20.S	GRZ.20.SC.PNP		127 g
CA.GRZ.20.SN	GRZ.20.SC.NPN		107 g
CA.GRZ.20.W	GRZ.20.SC.PNP		110 g
CA.GRZ.20.WN	GRZ.20.SC.NPN		114 g
CA.GRZ.20.WL	GRZ.20.SC.PNP		110 g
CA.GRZ.20.WLN	GRZ.20.SC.NPN		110 g

	A	B	C
CA.GRZ.20.A	100	Ø 20	15
CA.GRZ.20.E	115		22
CA.GRZ.20.LL			
CA.GRZ.20.R			
CA.GRZ.20.S/SN			
CA.GRZ.20.W/WN			
CA.GRZ.20.WL/WLN			



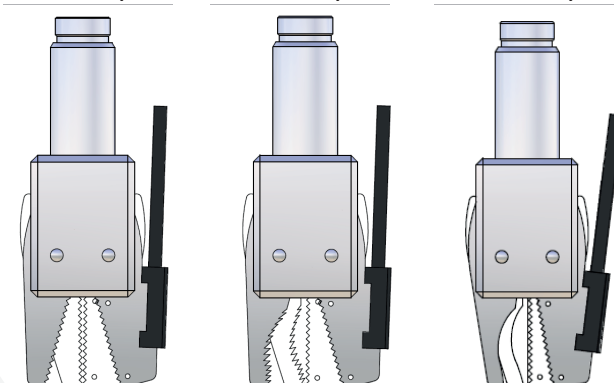
CA.GRZ.20.A CA.GRZ.20.E CA.GRZ.20.LL CA.GRZ.20.R

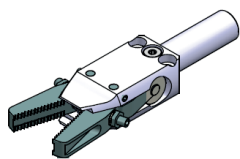


CA.GRZ.20.S/SN

CA.GRZ.20.W/WN

CA.GRZ.20.WL/WLN





GTS.14 / GTS.20

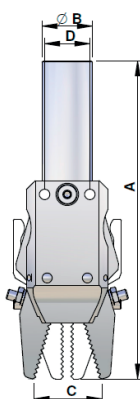
Sprue Grippers
Greifzange
Pinza Materozza
Pince de Préhension
Pinza de Presión

	Sensor	Closing force (6bar)	
CA.GTS.1003.1212		45 N	115 g
CA.GTS.1003.1214			110 g
CA.GTS.1003.1717			115 g
CA.GTS.1003.1919			112 g
CA.GTS.1003.2929			110 g
CA.GTS.1003.1215	GRZ.20.SC.PNP		120 g
CA.GTS.1003.125N	GRZ.20.SC.NPN		
CA.GTS.1003.1415	GRZ.20.SC.PNP		116 g
CA.GTS.1003.145N	GRZ.20.SC.NPN		
CA.GTS.1003.1915	GRZ.20.SC.PNP		96 g
CA.GTS.1003.195N	GRZ.20.SC.NPN		

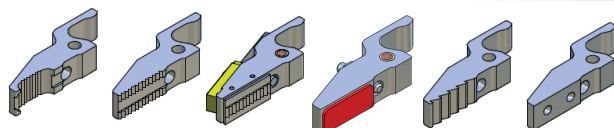
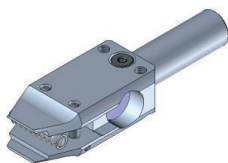
	Sensor	Closing force (6bar)	
CA.GTS.1004.1212		90 N	151 g
CA.GTS.1004.1214			144 g
CA.GTS.1004.1717			151 g
CA.GTS.1004.1919			146 g
CA.GTS.1004.2929			144 g
CA.GTS.1004.1215	GRZ.20.SC.PNP		160 g
CA.GTS.1004.125N	GRZ.20.SC.NPN		
CA.GTS.1004.1415	GRZ.20.SC.PNP		120 g
CA.GTS.1004.145N	GRZ.20.SC.NPN		

	A	B	C	D
CA.GTS.1003.1212	116,5	Ø 14	18	18
CA.GTS.1003.1214			19,2	
CA.GTS.1003.1717			18,1	
CA.GTS.1003.1919			18,8	
CA.GTS.1003.1215/125N			18	
CA.GTS.1003.1415/145N			19,4	
CA.GTS.1003.1915/195N				
CA.GTS.1003.2929	113		18	

	A	B	C	D
CA.GTS.1004.1212	127,5	Ø 20	25	18
CA.GTS.1004.1214			23	
CA.GTS.1004.1717			24,8	
CA.GTS.1004.1919			25,5	
CA.GTS.1004.2929			23	
CA.GTS.1004.1215/125N			24	
CA.GTS.1004.1415/145N				

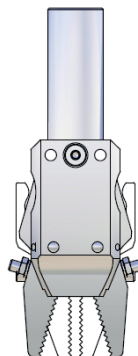


GTS.03.G18	52 g
GTS.04.G18	95 g

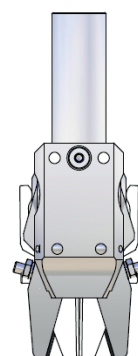


GTS.03.14	GTS.03.12	GTS.03.15/15.N	GTS.03.17	GTS.03.19	GTS.03.29
22 g	27 g	35 g	27 g	26 g	25 g
GTS.04.14	GTS.04.12	GTS.04.15/15.N	GTS.04.17	GTS.04.19	GTS.04.29
26 g	31 g	39 g	31 g	30 g	29 g

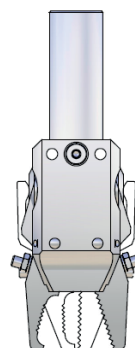
CA.GTS.1003.1212
CA.GTS.1004.1212



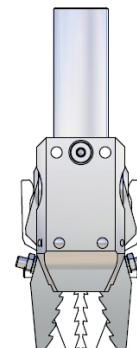
CA.GTS.1003.1717
CA.GTS.1004.1717



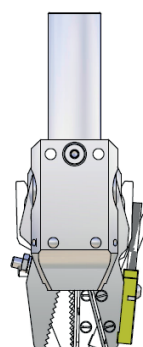
CA.GTS.1003.1214
CA.GTS.1004.1214



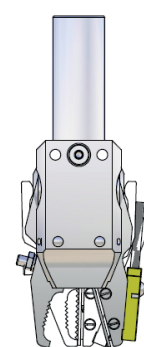
CA.GTS.1003.1919
CA.GTS.1004.1919



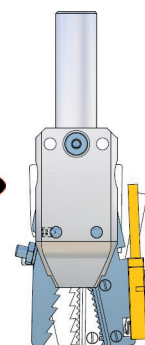
CA.GTS.1003.1215/125N
CA.GTS.1004.1215/125N



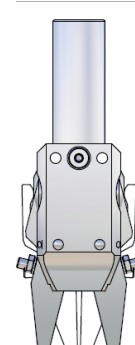
CA.GTS.1003.1415/145N
CA.GTS.1004.1415/145N



CA.GTS.1003.1915/195N



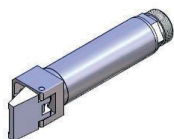
CA.GTS.1003.2929
CA.GTS.1004.2929



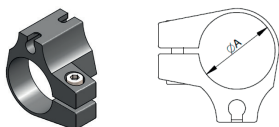
GRF Magnetic

Gripper Finger
 Greiffinger
 Dito di Presa
 Doigt de Préhension à Blocage Angulaire
 Dedo Pinza

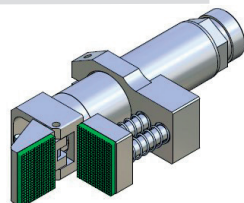
CA.GRF.1435	35°	26 N	25 g
CA.GRF.2035		100 N	65 g
CA.GRF.3035		430 N	206 g
CA.GRF.1495	95°	19 N	25 g
CA.GRF.2095		70 N	60 g
CA.GRF.3095		300 N	193 g
CA.GRF.1490	90°	19 N	25 g
CA.GRF.2090		70 N	65 g
CA.GRF.3090		300 N	185 g
CA.GRF.1495.G	95°	19 N	28 g
CA.GRF.2095.G		70 N	75 g
CA.GRF.3095.G		300 N	235 g
CA.GRF.1495.GW		19 N	25 g
CA.GRF.2095.GW		70 N	60 g
CA.GRF.3095.GW		300 N	193 g
CA.GRF.2035.WE	35°	100 N	76 g
CA.GRF.3035.WE		430 N	259 g



Holder for Cylinder sensor
 Halter für Zylindersensor
 Supporto per sensore cilindrico
 Support pour capteur de cylindre
 Soporte para sensor de cilindro



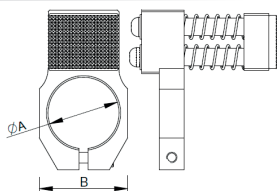
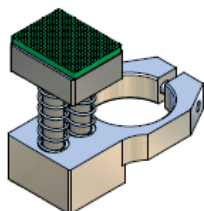
	A	M*	Sensor
CA.TIK.14007	14	CA.GRF.14..	KT38...
CA.TIK.20007	20	CA.GRF.20..	
CA.TIK.30007	30	CA.GRF.30..	



GRF.VSX

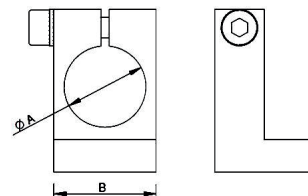
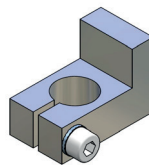
Gripper Finger
 Greiffinger
 Dito di Presa
 Doigt de Préhension à Blocage Angulaire
 Dedo Pinza

CA.GRF.1495.VSX	95°	19 N	35 g
CA.GRF.2095.VSX		70 N	85 g
CA.GRF.3095.VSX		300 N	280 g



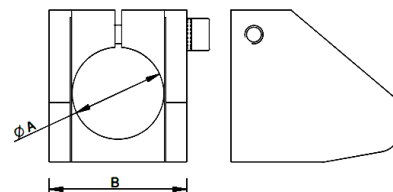
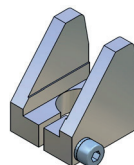
Stopper for grippers
 Anschlagstück
 Riscontro Pinza
 Butée Pince
 Elemento Stop

	A	M*	
GRF14.VSX	14	CA.GRF.14...	15 g
GRF20.VSX	20	CA.GRF.20...	20 g
GRF30.VSX	30	CA.GRF.30...	50 g



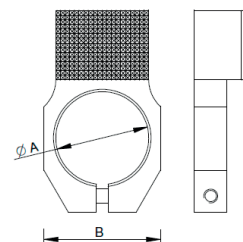
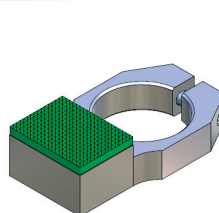
Stopper for Gripper
 Anschlagstück
 Riscontro Pinza
 Butée Pince
 Elemento Stop

	A	B	M*	
CA.ANS.14	Ø 14	20	CA.GRF.14..	17 g
CA.ANS.20	Ø 20	25	CA.GRF.20..	21 g
CA.ANS.30	Ø 30	35	CA.GRF.30..	30 g



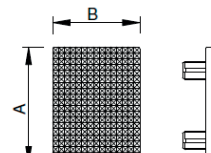
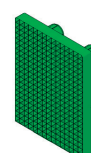
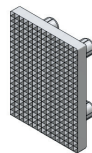
Gripper Guide
 Zentrierstück
 Guida Pinza
 Guide Doigt de Préhension
 Elemento de Centrado

	A	B	M*	
CA.ZTS.14	Ø 14	24	CA.GRF.14..	15 g
CA.ZTS.20	Ø 20	30	CA.GRF.20..	20 g
CA.ZTS.30	Ø 30	45	CA.GRF.30..	60 g



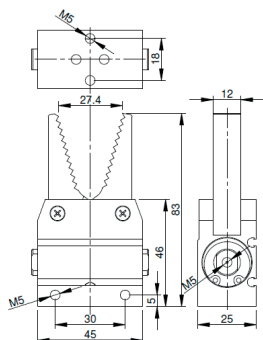
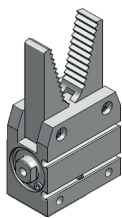
Stopper for Grippers VITON
 Anschlagstück VITON
 Gommino Collare per Pinza VITON
 Butée Pince VITON
 Elemento Stop Para Pinza VITON

	A	B	M*	
GRF14.95.0708	Ø 14	20	CA.GRF.14..	5 g
GRF20.95.0708	Ø 20	25	CA.GRF.20..	14 g
GRF30.95.0708	Ø 30	37	CA.GRF.30..	33 g



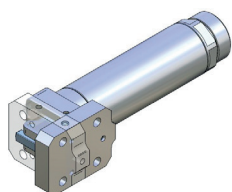
Insert TPU / VITON
 TPU / VITON Einlage
 Gommino per Pinza TPU / VITON
 Insert TPU / VITON
 Inserto para Pinza TPU / VITON

		A	B	M*	
GRF14.95.08	TPU	14	10	CA.GRF.14..	1 g
GRF20.95.08		20	15	CA.GRF.20..	2 g
GRF30.95.08		30	20	CA.GRF.30..	3 g
GRF14.95.08.V	VITON	14	10	CA.GRF.14..	1 g
GRF20.95.08.V		20	15	CA.GRF.20..	2 g
GRF30.95.08.V		30	20	CA.GRF.30..	3 g



Selfcentering sprue gripper
Selbstzentrierende Anguss Greifzange
Pinza Materozza
Pince de Préhension
Pinza Prensosa

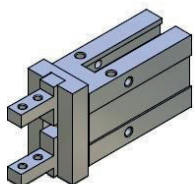
	CA.GZA.AA24	Double effect	115 g
	CA.GZA.AA24.NO	Normally Open	151 g
	CA.GZA.AA24.NOS2		
	CA.GZA.AA24.NOSN		
	CA.GZA.AA24.NOSP		



Pneumatic tilt
Pneumatische Kippenheit
Ribaltatore pneumatico
Unité de basculement pneumatique
Volteador neumático

new

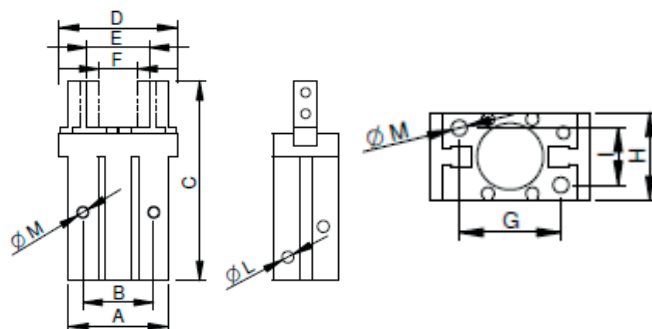
	Stroke	External Diameter	Grip force (at 6 bar)	Cycle air consumption	
CA.RBL.30	90°	Ø 30 mm	300 N	12,9 cm³	270 g



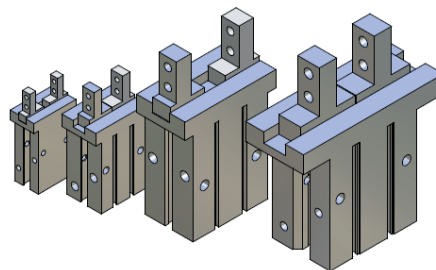
EASY GS

Parallel Gripper Easy
Parallelgreifer Easy
Pinza Parallela due Griffe Autocentranti Easy
Pince Pneumatique Parallèle double Effet Auto-Centreuse
Pinza Paralela (estándar) Easy

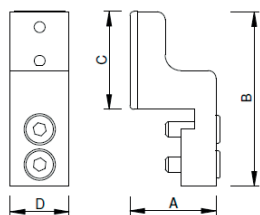
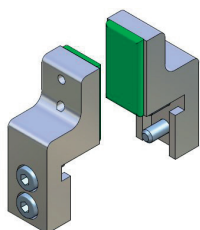
	Bore size	Stroke	Opening gripping force	Closing gripping force	
CA.09.05.009 CA.09.05.009.NC CA.09.05.009.NO	10	4	22 N	34 N	55 g
CA.09.05.009.L		8			60 g
CA.09.05.010 CA.09.05.010.NC CA.09.05.010.NO	16	6	68 N	90 N	135 g
CA.09.05.010.L		12			
CA.09.05.011 CA.09.05.011.NC CA.09.05.011.NO	20	10	84 N	132 N	235 g
CA.09.05.011.L		18			270 g
CA.09.05.012 CA.09.05.012.NC CA.09.05.012.NO	25	14	130 N	208 N	430 g
CA.09.05.012.L		22			470 g
CA.09.05.013	32	22	316 N	386 N	715 g
CA.09.05.014	40	30	508 N	636 N	1275 g



	A	B	C	D	E	F	G	H	I	L	M
CA.09.05.009	23	16	57	29	16.5	11	18	16,4	12	M3	M3
CA.09.05.009.NC											
CA.09.05.009.NO											
CA.09.05.009.L				35	20.3						
CA.09.05.010	30,5	24	67.3	38	22	14.5	22	23,6	15		M4
CA.09.05.010.NC											
CA.09.05.010.NO											
CA.09.05.010.L			70	47	28	14.7					
CA.09.05.011	42	30	84.8	50	27.5	16	32	27,6	18		M5
CA.09.05.011.NC											
CA.09.05.011.NO											
CA.09.05.011.L			90	62	35.5	16.1					
CA.09.05.012	52	36	102.7	63	34.5	19	40	33,6	22		M6
CA.09.05.012.NC											
CA.09.05.012.NO											
CA.09.05.012.L			106	75	41.3	19.3					
CA.09.05.013	60	46	113	97	48	26	46	40	26		
CA.09.05.014	72	56	139	119	60	30	56	48	32		M8

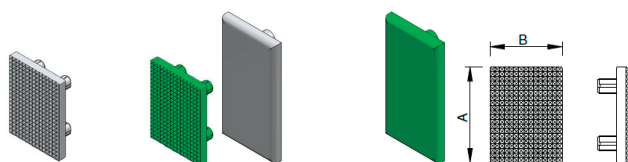


	PNP	NPN
CA.09.05.009 CA.09.05.009.NC CA.09.05.009.NO	DS1HPC08	DS1HNC8
CA.09.05.009.L	SMC.D.Y7PSAPC	SMC.D-Y59ASAPC
CA.09.05.010 CA.09.05.010.NC CA.09.05.010.NO	KT38PM8 KT38P3M KT58PM8 KT58P3M	KT38NM8 KT38N3M KT58NM8 KT58N3M
CA.09.05.010.L		
CA.09.05.011 CA.09.05.010.NC CA.09.05.010.NO		
CA.09.05.011.L		
CA.09.05.012 CA.09.05.012.NC CA.09.05.012.NO		
CA.09.05.012.L		
CA.09.05.013		
CA.09.05.014		



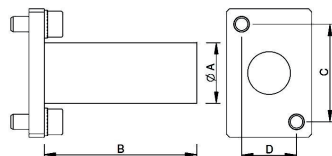
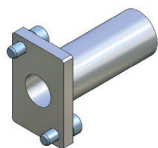
Jaws for Parallel Gripper GS (complete)
Grundbacken für Parallelgreifer GS (komplett)
Dita per Pinza Parallela GS (complete)
Mâchoires pour Pince Parallèle
Garras para el Ajuste Modular GS (completas)

	Insert	A	B	C	D	M*	
CA.KB.10	GRF14.95.08.V	15.5	27	14	10	CA.09.05.009/L	14 g
CA.KB.16	GRF20.95.08.V	18.5	35	20	15	CA.09.05.010/L	28 g
CA.KB.20	PAC.20.16P.03.V	22	44.5	25		CA.09.05.011/L	41 g
CA.KB.25		29	55	20	20	CA.09.05.012/L	73 g
CA.KB.32	...	...	...	...	...	CA.09.05.013	...



Insert TPU / VITON
TPU / VITON Einlage
Gommino per Pinza TPU / VITON
Insert TPU / VITON
Inserto para Pinza TPU / VITON

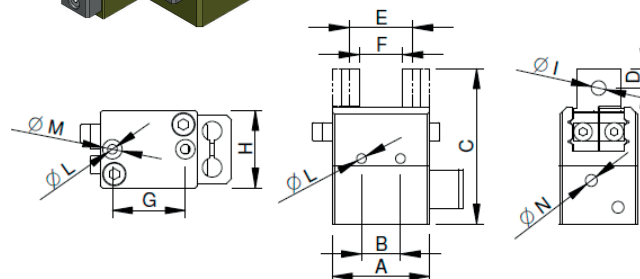
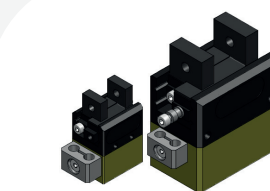
		A	B	M*	
GRF14.95.08	TPU	14	10	CA.KB.10	1 g
GRF20.95.08		20	15	CA.KB.16	2 g
PAC.20.16P.03		25	13	CA.KB.20 CA.KB.25	4 g
GRF14.95.08.V	VITON	14	10	CA.KB.10	1 g
GRF20.95.08.V		20	15	CA.KB.16	2 g
PAC.20.16P.03.V		25	13	CA.KB.20 CA.KB.25	4 g



Adapter for Parallel Gripper Easy
Adapter für Parallelgreifer Easy
Staffa per Pinze Parallela Easy
Support pour Fixation Pince Easy
Estrubo para Pinza Paralela Easy

	A	B	C	D	M*	
CA.APGE.10.10.30	10	30	18	12	CA.09.05.009/L	11 g
CA.APGE.16.14.40	14	40	22	15	CA.09.05.010/L	21 g
CA.APGE.20.20.50	20	50	32	18	CA.09.05.011/L	38 g
CA.APGE.25.20.50			40	22	CA.09.05.012/L	55 g
CA.APGE.32.20.50			46	26	CA.09.05.013	102 g
CA.APGE.40.20.50			56	32	CA.09.05.014	140 g

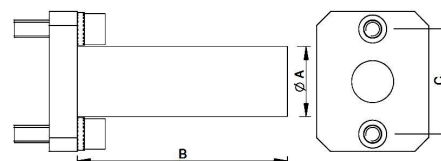
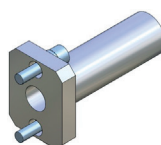
MPG



Parallel Gripper
Parallelgreifer
Pinza Paralela
Pince Pneumatique Parallèle Auto-Centreuse
Pinza Paralela Compacta

	A	B	C	D	E	F	G	H	I	L	M	N
CA.MPG.20	20	8	32	4	13	9	15	16	3	M2,5	4	M3
CA.MPG.25	26		34		17	11	20	18		M3	5	
CA.MPG.32	32	10	43	5	22	14	25	22	4	M4	6	M5
CA.MPG.40	40		51	6	28	16	32	26				
CA.MPG.50	50	40	60	7	35	18	40	30	5	M5	8	
CA.MPG.64	64	52	70	8	44	24	52	35	6			

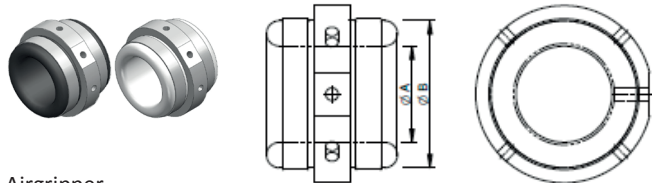
	Stroke	Opening total gripping force	Closing total gripping force	
CA.MPG.20	4	24 N	28 N	40 g
CA.MPG.25	6	28 N	31 N	60 g
CA.MPG.32	8	55 N	65 N	120 g
CA.MPG.40	12	90 N	110 N	200 g
CA.MPG.50	16	155 N	175 N	350 g
CA.MPG.64	20	190 N	200 N	600 g



Adapter for Parallel Gripper MPG
Adapter für Parallelgreifer MPG
Staffa per Pinza Paralela MPG
Support pour Fixation Pince MPG
Estrubo para Pinza Paralela MPG

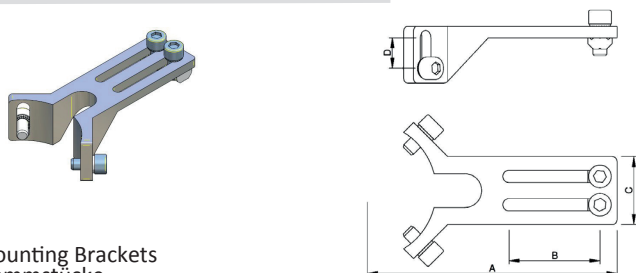
	A	B	C	M*	
CA.APG.20.10.30	10	30	15	CA.MPG.20	8 g
CA.APG.25.14.40		40	20	CA.MPG.25	16 g
CA.APG.32.14.40	14		25	CA.MPG.32	23 g
CA.APG.40.14.50		30	32	CA.MPG.40	22 g
CA.APG.40.20.50	20	50			30 g
CA.APG.50.20.50			40	CA.MPG.50	48 g
CA.APG.65.20.50			52	CA.MPG.64	63 g

Firestone



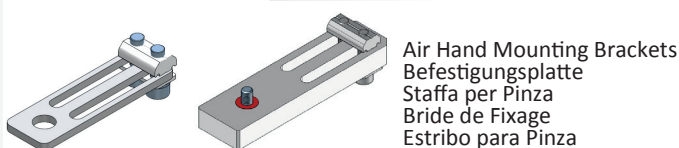
Airgripper
Pneumatische Außengreifer
Pinza ad Espansione per Esterni
Préhenseurs Extérieurs
Pinza de Expansión

	FIRESTONE	Working range	A	B	
CA.09.13.05.15 CA.09.13.05.15.S	WP1-M58-5001 WP1-M58-5005	5-15 mm	19	33	60 g
CA.09.13.10.25 CA.09.13.10.25.S	WP1-M58-5002 WP1-M58-5006	10-25 mm	27	48	145 g
CA.09.13.15.35 CA.09.13.15.35.S	WP1-M58-5003 WP1-M58-5007	15-35 mm	37	58	210 g
CA.09.13.20.45 CA.09.13.20.45.S	WP1-M58-5004 WP1-M58-5008	20-45 mm	48	69	285 g



Mounting Brackets
Klemmstücke
Staffa per Pinza
Bride pour le Montage de la Pinza sur Profile
Estrubo para Pinza

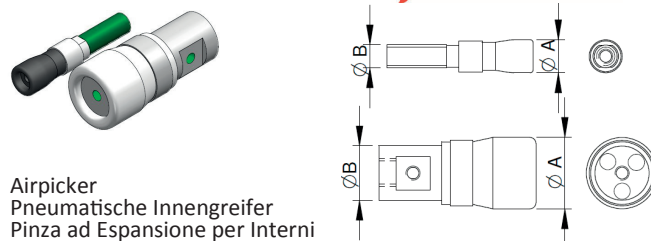
	M* M1	A	B	C	D	
CA.09.17.0515.X	CA.09.13.05.15 CA.X../JU	100	40	25	15	31 g
CA.09.17.1025.X	CA.09.13.10.25 CA.X../JU	110		30		46 g
CA.09.17.1535.X	CA.09.13.15.35 CA.X../JU	115		40		57 g
CA.09.17.2045.X	CA.09.13.20.45 CA.X../JU	120				69 g



Air Hand Mounting Brackets
Befestigungsplatte
Staffa per Pinza
Bride de Fixage
Estrubo para Pinza

	M*	M1	
CA.04.20.06.X	CA.09.14.06 CA.09.14.07	CA.L../CA.X..	34 g
CA.04.20.08.X	CA.09.14.09		35 g
CA.09.18.1014.X	CA.09.14.10 CA.09.14.14	CA.X../CA.JU..	41 g
CA.09.18.1719.X	CA.09.14.14 CA.09.14.17		50 g
CA.09.18.2225.X	CA.09.14.22 CA.09.14.25		52 g
CA.09.18.35.JU	CA.09.14.35		78 g
CA.09.18.4555.JU	CA.09.14.45 CA.09.14.55		102 g

Firestone

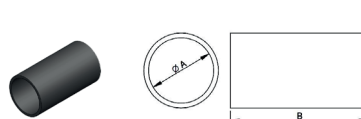


Airpicker
Pneumatische Innengreifer
Pinza ad Espansione per Interni
Préhenseurs Intérieurs
Pinza de Expansión

	FIRESTONE		Working range	A	B	
CA.09.14.06	WP1-M58-0001	N	8.5-10 mm	8	M6	8 g
CA.09.14.07	WP1-M58-0002		10-12 mm	9.5		12 g
CA.09.14.09	WP1-M58-0003		12-17 mm	11	M8X1.25	17 g
CA.09.14.10	WP1-M58-0004		16-21 mm	14	Ø10	28 g
CA.09.14.14	WP1-M58-0005	N	21-27 mm	19	Ø14	60 g
CA.09.14.14.S	WP1-M58-0024	S				
CA.09.14.17	WP1-M58-0006	N	24-32 mm	22	Ø17	85 g
CA.09.14.17.S	WP1-M58-0025	S				
CA.09.14.19	WP1-M58-0007	N	28-36 mm	25	Ø19	105 g
CA.09.14.19.S	WP1-M58-0018	S				
CA.09.14.22	WP1-M58-0008	N	30-44 mm	27	Ø22	160 g
CA.09.14.22.S	WP1-M58-0026	S				
CA.09.14.25	WP1-M58-0009	N	32-52 mm	29	Ø25	245 g
CA.09.14.25.S	WP1-M58-0019	S				
CA.09.14.35	WP1-M58-0011	N	45-65 mm	41	Ø34	180 g
CA.09.14.35.S	WP1-M58-0028	S				
CA.09.14.45	WP1-M58-0012	N	58-85 mm	51	Ø44	370 g
CA.09.14.55	WP1-M58-0013	N	70-105 mm	63	Ø54	610 g

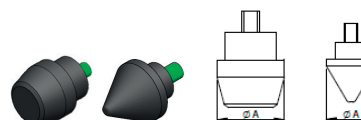
S = silicone

N = neoprene



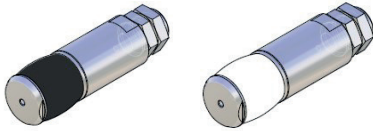
Protective Sleeve
Greiferschutz
Guaina Protettiva per Pinza
Manche de Protection
Funda Protettiva para Pinza

	FIRESTONE	A	B	M*	
CA.09.15.001	WP1-358-1500	18	38	CA.09.14.14	1 g
CA.09.15.002	WP1-358-1501	20		CA.09.14.17	
CA.09.15.003	WP1-358-1502	23	44	CA.09.14.19	
CA.09.15.004	WP1-358-1503	25		CA.09.14.22	
CA.09.15.005	WP1-358-1504	27	54	CA.09.14.25	2 g
CA.09.15.006	WP1-358-1505		64	CA.09.14.35	
CA.09.15.007	WP1-358-1506	37	73	CA.09.14.45	
CA.09.15.008	WP1-358-1507	47	79	CA.09.14.55	



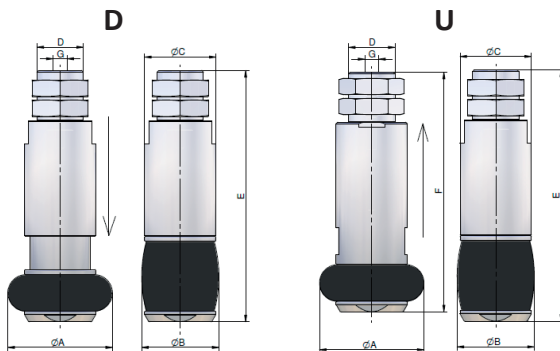
Nose Cones
Führungskonus
Punta Conica per Pinza
Douille de Centrage
Perno de Centrado

	FIRESTONE	A	M*	
CA.09.16.001	WP1-358-1006	14.7	CA.09.14.10	3 g
CA.09.16.002	WP1-358-1016	19.8	CA.09.14.14	5 g
CA.09.16.003	WP1-358-1017	22.9	CA.09.14.17	6 g
CA.09.16.004	WP1-358-1018	27.9	CA.09.14.19	
CA.09.16.005	WP1-358-1019	28.7	CA.09.14.22	7 g
CA.09.16.006	WP1-358-1020	29.7	CA.09.14.25	8 g
CA.09.16.007	WP1-358-1021	42.7	CA.09.14.35	10 g
CA.09.16.008	WP1-358-1022	51.6	CA.09.14.45	12 g
CA.09.16.009	WP1-358-1023	63.8	CA.09.14.55	14 g



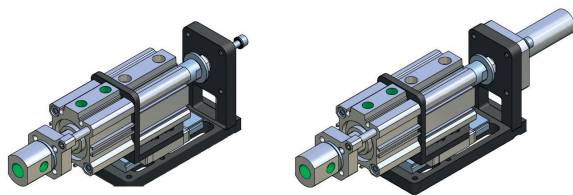
Expansion gripper
Innergreifer
Pinza ad espansione
Préhenseurs Intérieurs
Pinza de Expansión

	Material	
FS.DHEB8EDEL/DSL	EPDM/SILICONE	15 g
FS.DHEB8EUEL/USL		16 g
FS.DHEB10EDEL/DSL		17 g
FS.DHEB10EUEL/USL		
FS.DHEB12EDEL/DSL		18 g
FS.DHEB12EUEL/USL		17 g
FS.DHEB14EDEL/DSL		20 g
FS.DHEB14EUEL/USL		28 g
FS.DHEB18EDEL/USL		35 g
FS.DHEB18EUEL/USL		43 g
FS.DHEB22EDEL/DSL		50 g
FS.DHEB22EUEL/USL		79 g
FS.DHEB27EDEL/DSL		100 g
FS.DHEB27EUEL/USL		118 g
FS.DHEB33EDEL/DSL		130 g
FS.DHEB33EUEL/USL		280 g
FS.DHEB41EDEL/DSL		300 g
FS.DHEB41EUEL/USL		490 g
FS.DHEB51EDEL/DSL		500 g
FS.DHEB51EUEL/USL		800 g
FS.DHEB63EDEL/DSL		785 g
FS.DHEB63EUEL/USL		



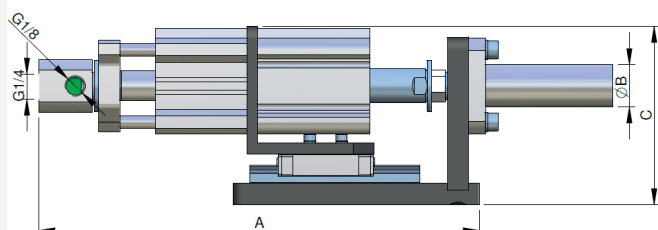
	A	B	C	D	E	F	G
FS.DHEB8EDEL/DSL	11	8	14	M10X1	52,7	/	M5
FS.DHEB8EUEL/USL					57,5	53,5	
FS.DHEB10EDEL/DSL	14	10.5			54,2	/	
FS.DHEB10EUEL/USL					58,8	54	
FS.DHEB12EDEL/DSL	17	13		M12X1	55,5	/	
FS.DHEB12EUEL/USL				M10X1	60,5	55	
FS.DHEB14EDEL/DSL	19,5	15		M12X1	55,8	/	
FS.DHEB14EUEL/USL				M10X1	64	57	
FS.DHEB18EDEL/USL				25	19.5	M12X1	
FS.DHEB18EUEL/USL	72,5	65					
FS.DHEB22EDEL/DSL	31,5	24	21,5	M14X1	75,5	/	
FS.DHEB22EUEL/USL					82	72	
FS.DHEB27EDEL/DSL	37	28	25	M16X1	88	/	
FS.DHEB27EUEL/USL					98	86	
FS.DHEB33EDEL/DSL	45	34	30	M22X1,5	109	/	G1/8
FS.DHEB33EUEL/USL					116	101,5	
FS.DHEB41EDEL/DSL	54	42	40		126,5	/	
FS.DHEB41EUEL/USL					131	115,5	
FS.DHEB51EDEL/DSL	68	54	50	M26X1,5	159	/	
FS.DHEB51EUEL/USL					160	142	
FS.DHEB63EDEL/DSL	85	66	60		189	/	
FS.DHEB63EUEL/USL					185	160	

Notes

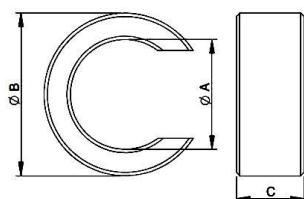


Movable Vacuum Unit BVAE32 with Double Stroke Guided
Bewegliche Vakuumeinheit BVAE32 mit Doppelhub Geführt
Slitta Doppia Corsa per Ventosa
Glissières à Double Course
Unidad de Doble Carrera para Ventosa

CA.BVAE.322010	988 g
CA.BVAE.32201020	1043 g
CA.BVAE.32201025	1073 g

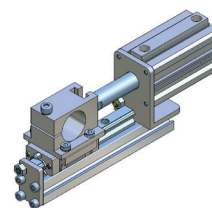


	A	B	C
CA.BVAE.322010	207,5	/	84
CA.BVAE.32201020		Ø20	
CA.BVAE.32201025		Ø25	



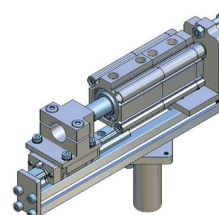
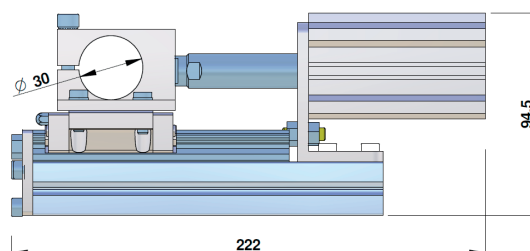
Stroke Reducer
Distanz-Buchse
Réducteur de Course
Anello di Riduzione Corsa
Casquillo Distanciador

	A	B	C	M*	
CA.DB.05.25	12	20	5	Ø25	1 g
CA.DB.10.25			10		2 g
CA.DB.15.25			15		4 g
CA.DB.05.32	16	24	5	Ø32	1 g
CA.DB.10.32			10		2 g
CA.DB.15.32			15		3 g



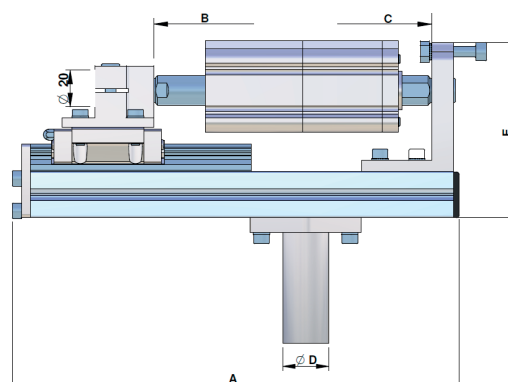
Linear Stroke Unit
Hubeinheit Linearführung
Slitta per pinza
Unité course linéaire
Unidad linear de carrera

CA.HEH.30.50	1052 g
--------------	--------

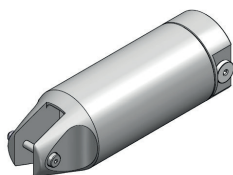


Double Stroke Unit
Doppelhubeinheit
Slitta universale con doppia corsa
Glissières à double course
Unidad de doble carrera

CA.UDHE.32102020	1375 g
CA.UDHE.32203020	1455 g



	A	B	C	D	E
CA.UDHE.32102020	243	20	10	Ø25	96
CA.UDHE.32203020	283	30	20		


new
Made in FP

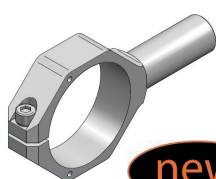
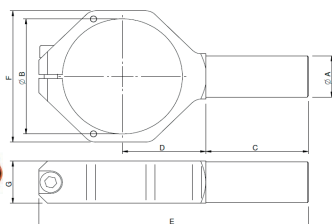
Air Nipper Actuators
Pneumatische Antriebe für Schneidzangen
Attuatore Pneumatico
Pincas Pneumatiques Rondes
Alicate de Corte Neumático

	D	Closing Force	
CA.ATE.05	Ø 30	11 Nm	97 g
CA.ATE.10	Ø 36	38 Nm	147 g
CA.ATE.20	Ø 45	67 Nm	255 g
CA.ATE.30	Ø 56	150 Nm	452 g
CA.ATE.50	Ø 75	116 Nm	911 g


MR

Air Nipper Actuators
Pneumatische Antriebe für Schneidzangen
Attuatore Pneumatico
Pincas Pneumatiques Rondes
Alicate de Corte Neumático

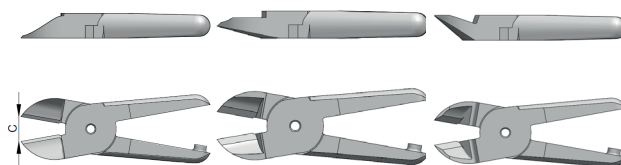
	D	Closing Force	
CA.MR.05M	Ø 30	11 Nm	100 g
CA.MR.10M	Ø 36	38 Nm	160 g
CA.MR.20M	Ø 45	67 Nm	270 g
CA.MR.30AM	Ø 56	150 Nm	470 g
CA.MR.50AM	Ø 75	116 Nm	1040 g


new


Mounting Bracket MR
Klemstück MR
Staffa per attuatore MR
Brides en aluminium MR
Soporte para alicates de corte MR (para elementos de apriete)

	A	B	C	D	E	F	G	M*	
CA.STF.30	20	30	48	25	101.5	38	20	MR.05 / ATE.05	91 g
CA.STF.36		36		28	107.5	43		MR.10 / ATE.10	95 g
CA.STF.45		45		33	116	52		MR.20 / ATE.20	102 g
CA.STF.56		56		38	127.5	54		MR.30 / ATE.30	117 g
CA.STF.75	30	75	50	47	146	83	30	MR.50 / ATE.50	275 g

CA.04.10... will be replaced by CA.STF...



Inline

Standard - Plastic cutting

Deep angle

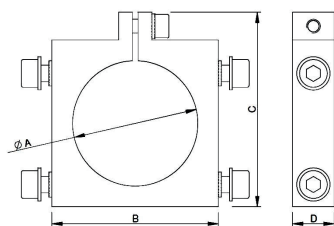
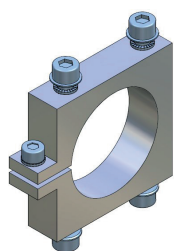
Blades
Schneideinsätze
Lama
Outils
Cuchilla

	M*	Style	C	
VES.N5AP	CA.ATE.05	Standard	4	40 g
VES.N10LAP	CA.ATE.10	Deep angle	5	120 g
VES.N10LPF		Standard		
VES.N20AP	CA.ATE.20	Inline	11	125 g
VES.N20AJ		Deep angle	16	230 g
VES.N20AJL		Standard	11	130 g
VES.N20PF		Standard	16	380 g
VES.N30AP	CA.ATE.30	Inline	11	370 g
VES.N30AJ	CA.ATE.50	Deep angle	19	470 g
VES.N30AJL		Standard	15	390 g
VES.N30PF		Standard		

Complete line of Vessel's blade is
online in www.fpservices.it

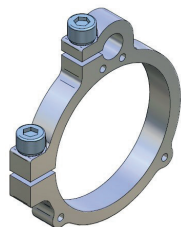
Blades
Schneideinsätze
Lama
Outils
Cuchilla

	M*	Style	C	
CA.F1S	CA.MR.05M	Inline	2.5	33 g
CA.F1		Platic cutting	3	34 g
CA.S2		Standard		
CA.FD1		Deep angle	2.5	35 g
CA.F3LS	CA.MR.10M	Long Inline	8	117 g
CA.F3		Platic cutting	5	115 g
CA.S4		Standard		
CA.FD3		deep angle		112 g
CA.F5S	CA.MR.20M	Inline	9	121 g
CA.F5		Platic cutting	10	124 g
CA.S5		Standard		
CA.FD5		Deep angle	15	220 g
CA.F5LS		Long inline	16	365 g
CA.F9PS	CA.MR.30AM	Inline	16	380 g
CA.F9P		Platic cutting	8	388 g
CA.S7P		Standard	15	388 g
CA.FD9P		Deep angle		
CA.S120	CA.MR.50AM	Standard	10	380 g

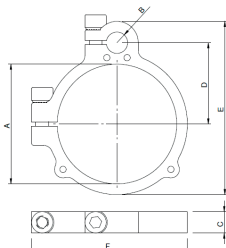


Swivel Bracket MR
 Schwenkbock MR
 Morsetto per attuatore MR
 Brides pour support MR
 Soporte para alicates MR

	A	B	C	D	M*	
CA.04.10.30.1	30	45	55	15	MR.05 / ATE.05	87 g
CA.04.10.36.1	36	50	62		MR.10 / ATE.10	97 g
CA.04.10.45.1	45	60	70		MR.20 / ATE.20	115 g
CA.04.10.56.1	56	70	85		MR.30 / ATE.30	136 g
CA.04.10.75.1	75	90	105		MR.50 / ATE.50	188 g



new

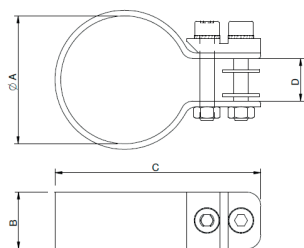


Swivel Bracket MR
 Schwenkbock MR
 Morsetto per attuatore MR
 Support pivotant MR
 Soporte para alicates MR

	A	B	C	D	E	F	M*	
CA.SAT.3610	36	10	10	28	62.8	53	MR.10 / ATE.10	27 g
CA.SAT.4510	45			32.5	70	62	MR.20 / ATE.20	30 g
CA.SAT.5610				38	81			43 g
CA.SAT.5614	56	14		40	85	73	MR.30 / ATE.30	37 g
CA.SAT.5620		20		43	91			57 g
CA.SAT.7510		10	75	47.5	100	92.5	MR.50 / ATE.50	43 g
CA.SAT.7514		14		49.5	104			45 g
CA.SAT.7520		20		52.5	110			49 g

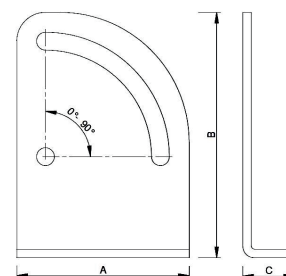
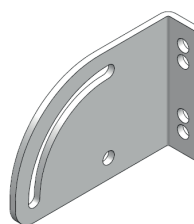


new



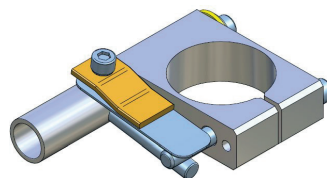
Mounting Brackets MR
 Klemmstück MR
 Staffa per attuatore MR
 Support de montage MR
 Soporte para alicates de corte MR

	A	B	C	D	M*	
CA.04.10.004	56	20	83.5	15	MR.30 / ATE.30	98 g
CA.04.10.005	45		72.5		MR.20 / ATE.20	87 g
CA.04.10.006	36		62		MR.10 / ATE.10	78 g
CA.04.10.007	30		55.5		MR.05 / ATE.05	72 g

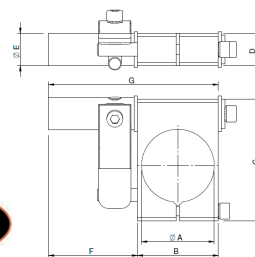


Support for swivel bracket MR
 Lagerung für Schwenkbock MR
 Soporte para alicates MR
 Supporto per morsetto MR
 Support pour clamp

	A	B	C	M*	
CA.04.10.30.2	50	75	18	MR.05 / ATE.05	84 g
CA.04.10.36.2	55	80		MR.10 / ATE.10	100 g
CA.04.10.45.2	60	85		MR.20 / ATE.20	116 g
CA.04.10.56.2	65	90		MR.30 / ATE.30	134 g
CA.04.10.75.2	85	122	28	MR.50 / ATE.50	246 g

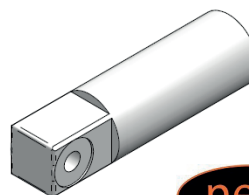


new

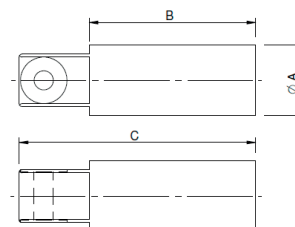


Spring loaded clamp
 Gefederte Halterung
 Staffa ammortizzata
 Bride amortie
 Brida amortizada

	A	B	C	D	E	F	G	M*	
CA.STA.45	45	50	75	20	20	53	105	MR.20 / ATE.20	275 g
CA.STA.56	56	60	86			63	125	MR.30 / ATE.30	322 g
CA.STA.75	75	85	106			59	146	MR.50 / ATE.50	443 g

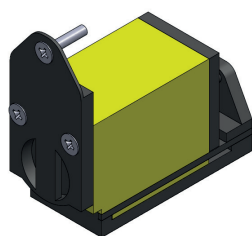


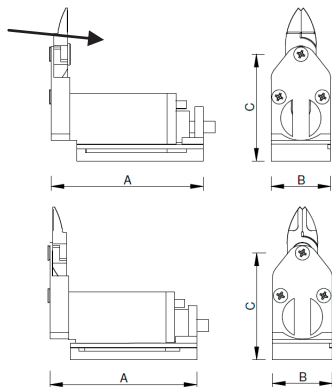
new



Hinge with stud
 Gelenkhalter
 Support orientable
 Soporte para cortador con articulació
 Giunto snodato per attuatori

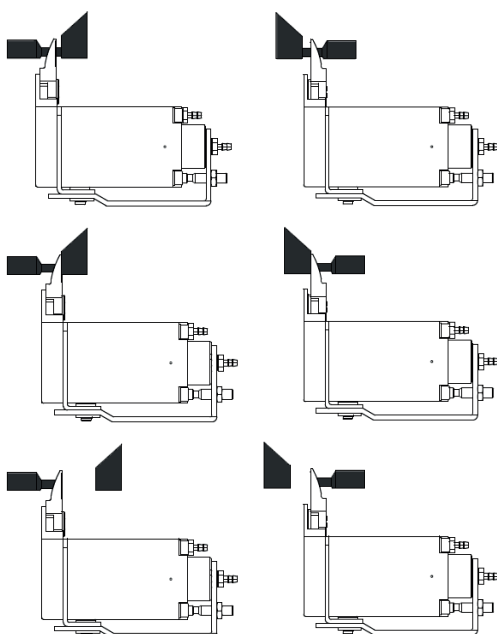
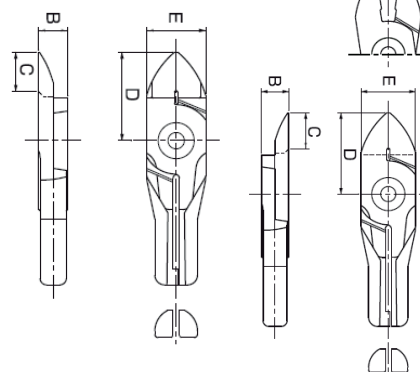
	A	B	C	
CA.04.12.001	20	47.5	67.5	56 g
CA.04.12.002	30			82 g

SN

PUSH = SNP

PULL = SN


		A	B	C	Cutting capacity	
CA.SN3	PULL	59	28	79.6	2 ø mm	170 g
CA.SNP3	PUSH			74.6		
CA.SN5	PULL	63	28	83.6	3 ø mm	220 g
CA.SNP5	PUSH			78.6		
CA.SN10	PULL	70	33	91.6	4 ø mm	300 g
CA.SNP10	PUSH			86.6		
CA.SN20	PULL	82	42	110	5 ø mm	595 g
CA.SNP20	PUSH			105		

Slide Air Nippers Horizontal
Pneumatische Antriebe für Schneideinsätze
Base mobile orizzontale scorrimento arretrato
Pince coupe-carotte pneumatique
Alicates de corte estacionario con recorrido de cierre

PULL TYPE
PUSH TYPE

**FNP
Push**
**FN
Pull**


Blades FN
Schneideinsätze FN
Lame FN
Outils FN
Cuchillas FN

	M*	A	B	C	D	E	
CA.FN10	CA.SN3	3.5	7	11	24	14	25 g
CA.FN1	CA.SN5	5.5	7		27	16	30 g
CA.FN3	CA.SN10	7	9	16	35	22	60 g
CA.FN5	CA.SN20	8.5	12		45	22	100 g

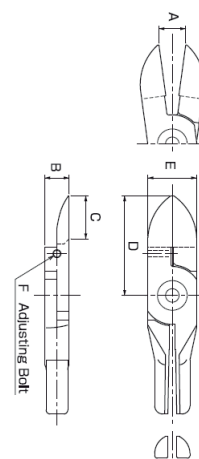
	M*	A	B	C	D	E	
CA.FNP10	CA.SNP3	3.5	7	11	24	14	30 g
CA.FNP1	CA.SNP5	5.5	7		27	16	35 g
CA.FNP3	CA.SNP10	7	9	16	35	22	60 g
CA.FNP5	CA.SNP20	8.5	12		45	22	110 g

**FN - K
Pull**

	M*	A	B	C	D	E	
CA.FN10K	CA.SN3	3.5	7	11	24	14	30 g
CA.FN1K	CA.SN5	5.5	7		27	16	60 g
CA.FN3K	CA.SN10	7.5	9	16	35	22	110 g
CA.FN5K	CA.SN20	8.5	12		45	22	110 g

**FN - L
Pull**

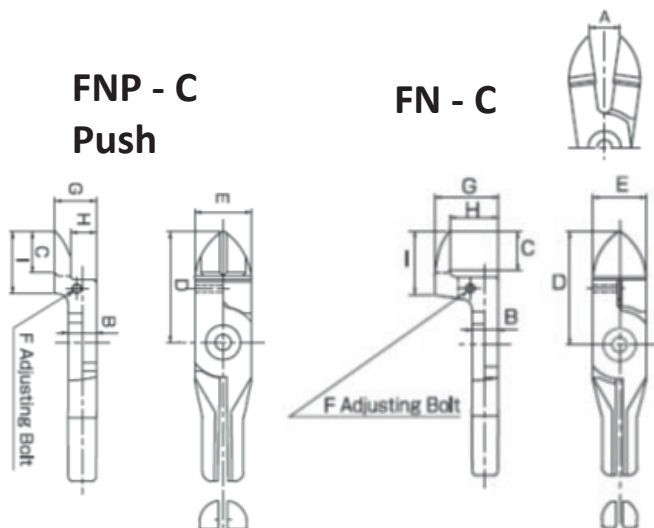
	M*	A	B	C	D	E	F	
CA.FN10L	CA.SN3	5.5	7	16	33	14	M3	35 g
CA.FN1L	CA.SN5	8	7		37	16		40 g
CA.FN3L	CA.SN10	9.5	9	21	45	18	M3	65 g
CA.FN5L	CA.SN20	10	12		45	22		115 g



Blades FN
Schneideinsätze FN
Lame FN
Outils FN
Cuchillas FN

FNP - C Push

FN - C

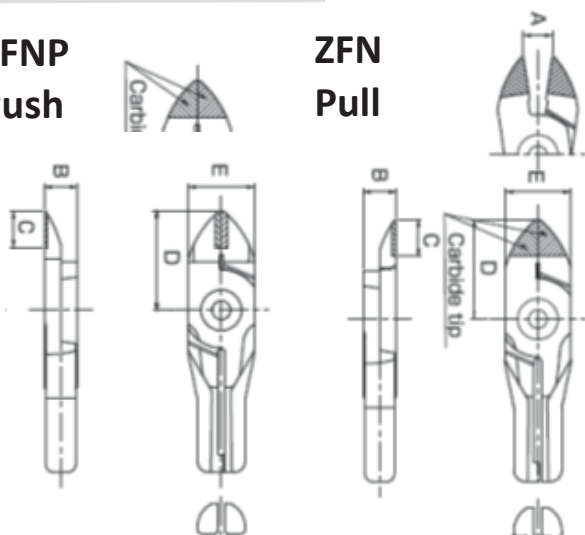


	M*	A	B	C	D	E	F	G	H	I	
CA.FN10C	CA.SN3	5.2	7	11	35	14	M3	18	14	19	50 g
CA.FN1C	CA.SN5	9		13	38	16		20	15	21	60 g
CA.FN3C	CA.SN10	10	9			18		21.5	16.5		70 g
CA.FN5C	CA.SN20		12	19	46	22		24	19	30	155 g

	M*	A	B	C	D	E	F	G	H	I	
CA.FNP10C	CA.SNP3	5.2	7	11	35	14	M3	12	8	20	50 g
CA.FNP1C	CA.SNP5	8.6		14	37	16		12.2	7.2	22	60 g
CA.FNP3C	CA.SNP10	9.8	9	13	35	18		13.2	8.2	20	70 g
CA.FNP5C	CA.SNP20	10	12	18	42	22		16	11	27	155 g

ZFNP Push

ZFN Pull

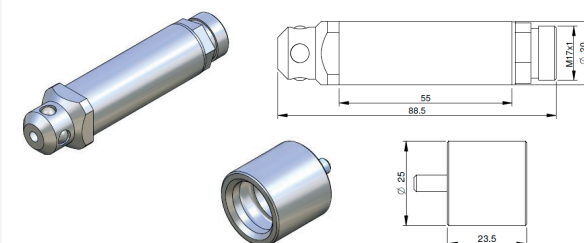


	M*	A	B	C	D	E	
CA.ZFN10	CA.SN3	3.5	7	11	24	14	30 g
CA.ZFN1	CA.SN5	5.5				16	35 g
CA.ZFN3	CA.SN10	7	9	10	27	19	60 g
CA.ZFN5	CA.SN20	8.5	12	16	35	22	110 g

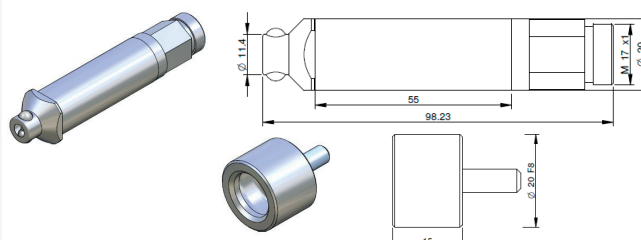
	M*	A	B	C	D	E	
CA.ZFNP10	CA.SNP3	3.5	7	11	24	14	30 g
CA.ZFNP1	CA.SNP5	5.5				16	35 g
CA.ZFNP3	CA.SNP10	7	9	10	27	19	60 g
CA.ZFNP5	CA.SNP20	8.5	12	16	35	22	110 g

Centering locking unit
Kopplungsgreifer
Pinza per aggancio e centrage
Doigt de centrage et de serrage
Pinza de bloqueo y centrado

AGP



CA.AGP.20.G	Gripper side	93 g
CA.AGP.20.M	Mould side	60 g

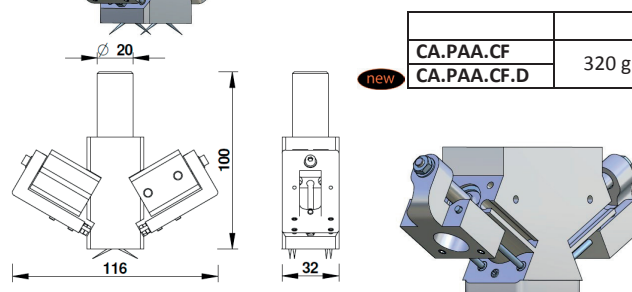
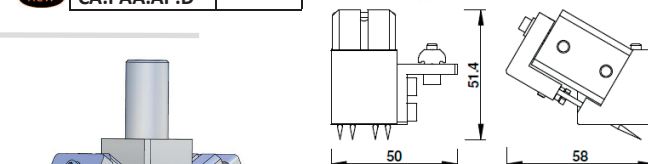


CA.AGP.20.G.20	Gripper side	66 g
CA.AGP.20.M.20	Mould side	30 g

Needle gripper
Nadelgreifer
Pinza ad aghi
Pince à aiguilles
Pinza de agujas

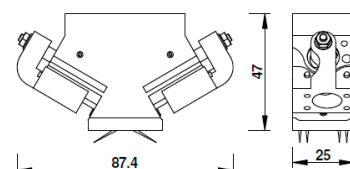
PA

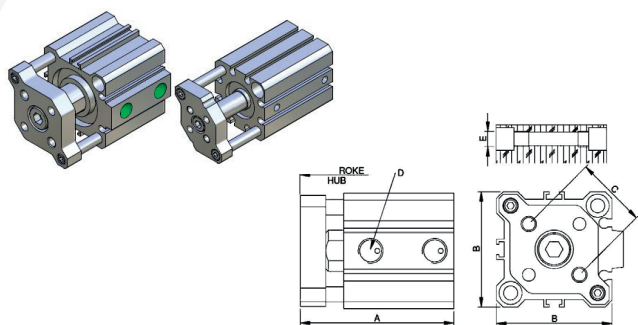
CA.PAA.AP		135 g
CA.PAA.AP.D		



CA.PAA.CF		320 g
CA.PAA.CF.D		

CA.PAA.SP		132 g

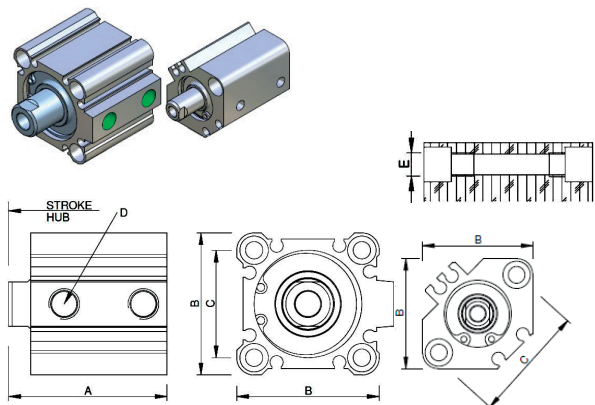




Compact Cylinder/Guide Rod Type
Kompaktzylinder mit Führungsstangen
Cilindro Antirotazionale
Vérin Pneumatique
Cilindro Compacto Antitorsión

	Ø	Stroke	A	B	C	D	E		
CA.11.17.001	12	10	41.5	25	10	M5	M4	59 g	
CA.11.17.002		20	51.5					77 g	
CA.11.17.003	16	10	41.5	29	14			97 g	
CA.11.17.004		20	51.5					138 g	
CA.11.17.005	20	10	50	36	17		168 g		
CA.11.17.006		20	60				186 g		
CA.11.17.007	25	10	53.5	40	22		M6	223 g	
CA.11.17.008		20	63.5					264 g	
CA.11.17.009	32	10	60	45	28			G 1/8	309 g
CA.11.17.010		20	70						

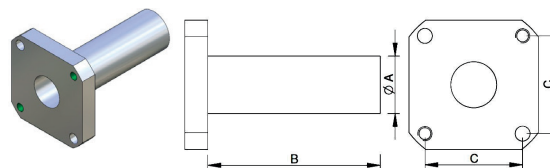
Sensor: PNP = KT58PM8 or KT58P3M



Compact Cylinder
Kompaktzylinder
Cilindro compatto
Vérin Pneumatique
Cilindro Compacto

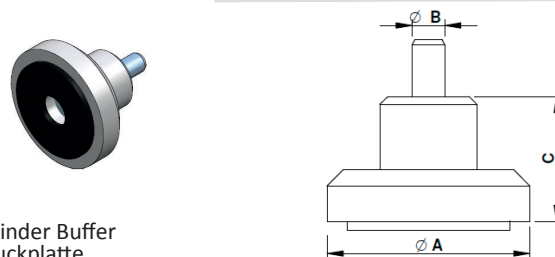
	Ø	Stroke	A	B	C	D	E	
CA.11.18.001	12	10	42	25	15.5	M5	M4	44 g
CA.11.18.002		20	51.5					69 g
CA.11.18.003	16	10	44	29	20			68 g
CA.11.18.004		20	54					89 g
CA.11.18.005	20	10	46	36	25.5		106 g	
CA.11.18.006		20	56				138 g	
CA.11.18.007	25	10	47.5	40	28	M6	148 g	
CA.11.18.008		20	57.5				186 g	
CA.11.18.009	32	10	50	45	34		G 1/8	231 g
CA.11.18.010		20	60					285 g

Sensor: PNP = KT58PM8 or KT58P3M



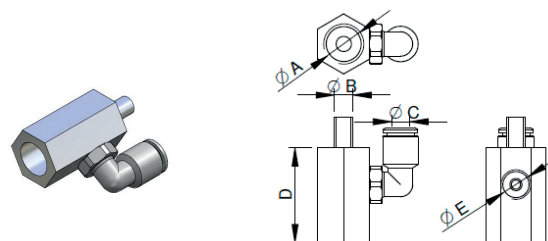
Adapter for Cylinder
Adapter für Kompaktzylinder
Staffa parallela per Cilindro
Bride pour Vérin Pneumatique
Montaje para el Cilindro compacto

	A	B	C	M*	
CA.ADZ.12.14	14	30	15.5	Ø12	19 g
CA.ADZ.16.14			19.9	Ø16	25 g
CA.ADZ.20.14		40	25.5	Ø20	32 g
CA.ADZ.25.20	20	60	28	Ø25	55 g
CA.ADZ.32.20		90	34	Ø32	74 g
CA.ADZ.32.20.90	25	60			85 g



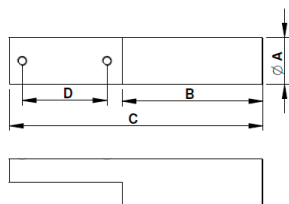
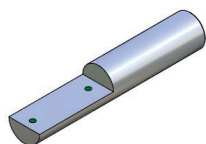
Cylinder Buffer
Druckplatte
Tampone per cilindro
Tampón para vérin
Tampón para pistón pequeño

	A	B	C	M*	
CA.11.04.001	20	M3	14	Ø12	5 g
CA.11.04.002	25	M4	15	Ø16	10 g
CA.11.04.003	30	M5	18	Ø20	17 g
CA.11.04.004	35	M6	19	Ø25	28 g
CA.11.04.005	40	M8	20	Ø32	46 g
CA.11.04.006	20	M5	14	KHZ/JDR	7 g
CA.11.04.007	40	G1/8	20		40 g



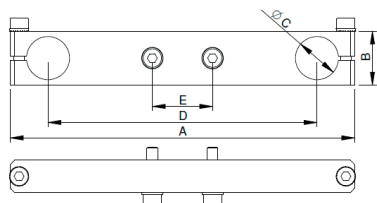
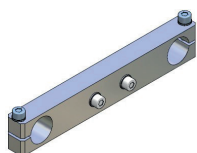
Adapter for vacuum cup
Adapter für Vakuumsauger
Collegamento cilindro per ventosa
Adaptateur pour ventouse
Adaptador para ventosa

	A	B	C	D	E	M*	
CA.11.15.001	G1/8	M4	4	24.5	M5	Ø16	13 g
CA.11.15.002						Ø25	15 g
CA.11.15.003	G1/4	M6	6	31	G 1/8	Ø20	24 g
CA.11.15.004	G1/8	M5	4	34.5	M5	Ø20	21 g
CA.11.15.005	G1/4	M8	6	31	G 1/8	Ø32	22 g



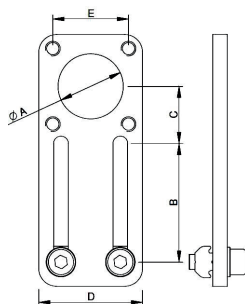
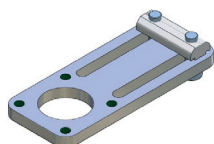
Adapter for Cylinder
Adapter für Kompaktzylinder
Staffa posteriore a L per cilindro
Adaptateur pour vérin
Adaptador para cilindro compacto

	A	B	C	D	M*	
CA.GAZ.12.10.60	10	60	98	21.9	Ø12	17 g
CA.GAZ.16.14.60	14		104	28.3	Ø16	27 g
CA.GAZ.20.20.60	20		125	36.1	Ø20	56 g
CA.GAZ.25.20.60			130	39.6	Ø25	59 g
CA.GAZ.32.20.60			140	48.1	Ø32	62 g



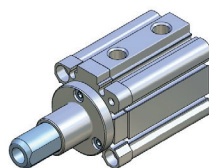
Bracket for Cylinder
Adapter für Kompaktzylinder
Staffa per cilindro
Bride pour vérin
Estribo para cilindro compacto

	A	B	C	D	E	M*	
CA.KBH.12.10.60	85	15	10	60	10	Ø12	33 g
CA.KBH.16.14.90	121	20	14	90	14	Ø16	56 g
CA.KBH.16.16.125	156	25	16	125			88 g
CA.KBH.20.14.90	121	20	14	90	17	Ø20	58 g
CA.KBH.20.16.125	156	25	16	125			90 g
CA.KBH.25.16.125					22	Ø25	94 g
CA.KBH.32.20.125	160		20		28	Ø32	156 g

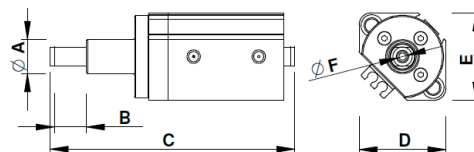


Bracket for Cylinder
Adapter für Kompaktzylinder
Staffa per cilindro
Bride pour vérin
Estribo para cilindro compacto

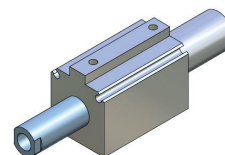
	A	B	C	D	E	M*	
CA.11.08.001.X	14	30	19.5	25	15.5	Ø12	35 g
CA.11.08.002.X	18				20	Ø16	
CA.11.08.003.X	22	40	19.3	35	25.5	Ø20	49 g
CA.11.08.004.X	28				28	Ø25	
CA.11.08.005.X	32		27.5	45	34	Ø32	60 g


KHZ

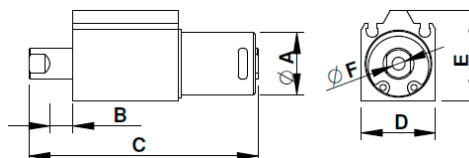
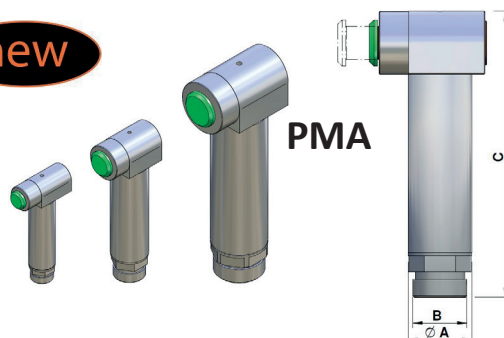
	A	B	C	D	E	F	
CA.KHZ.20141005	Ø14	10	101,5	36	36	M5	135 g
CA.KHZ.20143005		30	141,5				250 g
CA.KHZ.32201518	Ø20	15	119,5	45	49.5	G1/8	399 g
CA.KHZ.32203018		30	149,5				483 g
CA.KHZ.32205018		50	189,5				602 g



Compact cylinder for vacuum cup
Kurzhubzylinder für Saugnapf
Cilindro per ventosa
Vérin compact pour ventouse
Cilindro compacto para ventosa

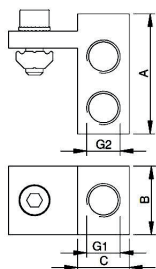
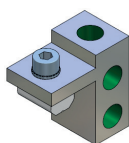

JDR

	A	B	C	D	E	F	
CA.JDR.141005	Ø14	10	74,2	24	29	M5	54 g
CA.JDR.142505		25	119,2				76 g
CA.JDR.201005	Ø20	10	74,2	34	39	G1/8	63 g
CA.JDR.301518		15	87,2				112 g
CA.JDR.303018		30	130,2				150 g
CA.JDR.305018		50	190,2				200 g


new

PMA

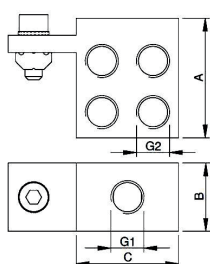
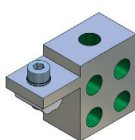
One finger, perpendicular acting, pneumatic grippers for clamping
Pneumatische Einfingergreifer, mit senkrechter Bewegung
Pinza perpendicolare per staffaggio
Doigt de préhension pneumatiques perpendiculaires
Pinza perpendicular para grapar

	Stroke	A	B	C	Gripping force (at 6 bar)	
CA.PMA.1406	6	14	M12X1	65	63 N	47 g
CA.PMA.2010	10	20	M17X1	89.9	115 N	115 g
CA.PMA.3015	15	30	M27X1	130.9	230 N	380 g



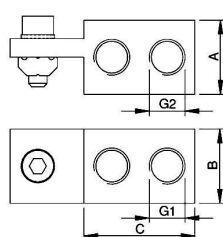
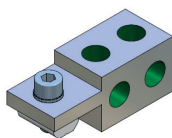
Air vacuum manifold 1-4
Verteilerblock 1-4
Distributore aria 1-4
Bloc distributeur lateral 1-4
Distribuidor de aire 1-4

	A	B	C	G1	G2	M*	
CA.VTB.X.141818	35	20	15	G 1/8	G 1/8	X	35 g
CA.VTB.JU.141818						JU	37 g



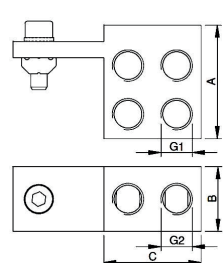
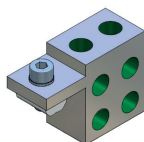
Air vacuum manifold 1-8
Verteilerblock 1-8
Distributore aria 1-8
Bloc distributeur lateral 1-8
Distribuidor de aire 1-8

	A	B	C	G1	G2	M*	
CA.VTB.X.181818	35	20	30	G 1/8	G 1/8	X	55 g
CA.VTB.JU.181818						JU	58 g



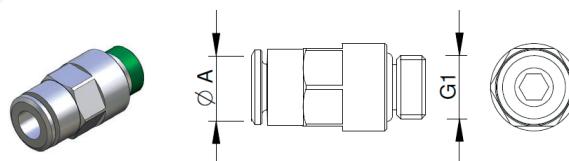
Air vacuum manifold 2-4
Verteilerblock 2-4
Distributore aria 2-4
Bloc distributeur lateral 2-4
Distribuidor de aire 2-4

	A	B	C	G1	G2	M*	
CA.VTB.X.241818	20	20	30	G 1/8	G 1/8	X	39 g
CA.VTB.JU.241818	40					JU	41 g



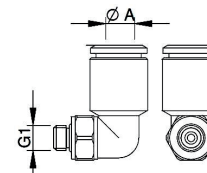
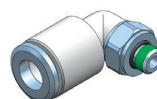
Air vacuum manifold 2-8
Verteilerblock 2-8
Distributore aria 2-8
Bloc distributeur lateral 2-8
Distribuidor de aire 2-8

	A	B	C	G1	G2	M*	
CA.VTB.X.281818	35	20	30	G 1/8	G 1/8	X	54 g
CA.VTB.JU.281818						JU	57 g



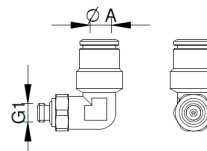
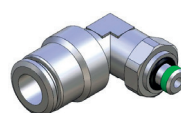
Straight male adapter (parallel)
Steckverschraubung
Raccordo diritto
Raccord droit mâle
Empalme vertical

	A	G1	
CA.12.05.015	Ø 4	M5	4 g
CA.12.05.016	Ø 6	M5	8 g
CA.12.05.017		G 1/8	10 g
CA.12.05.023	Ø 3	M3	1 g
CA.12.05.024		M5	
CA.12.05.044	Ø 4	G 1/8	10 g
CA.12.05.047	Ø 6	G 1/4	13 g
CA.12.05.048	Ø 8	G 1/4	17 g
CA.12.05.049		G 3/8	27 g



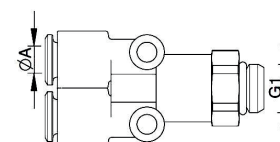
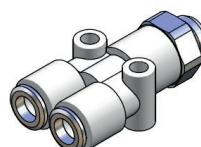
Orienting elbow male adapter (parallel)
Steckverschraubung L-Form
Raccordo gomito
Équerre orientable mâle
Empalme en codo

	A	G1	
CA.12.05.001	Ø 4	M5	4 g
CA.12.05.002		M5	5 g
CA.12.05.003	Ø 6	G 1/8	8 g
CA.12.05.038		G 1/4	11 g
CA.12.05.039	Ø 8	G 1/4	13 g
CA.12.05.040	Ø 4	G 1/8	7 g



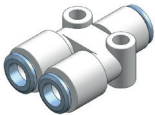
Orienting elbow male adapter (parallel)
Steckverschraubung L-Form
Raccordo gomito
Équerre orientable mâle
Empalme en codo

	A	G1	
CA.12.05.018	Ø 4	M5	12 g
CA.12.05.019		G 1/8	19 g
CA.12.05.020	Ø 6	M5	14 g
CA.12.05.021	Ø 3	M3	5 g
CA.12.05.022		M5	6 g

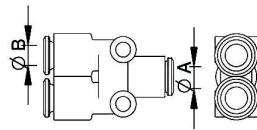


Y connector
Steckverschraubung Y
Raccordo a Y intermedio
Raccord en y simple
Racor en Y

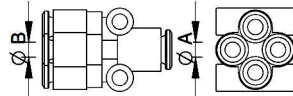
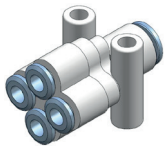
	A	G1	
CA.12.05.050	Ø 4	G 1/8	13 g
CA.12.05.051	Ø 6	G 1/8	15 g

CA.12


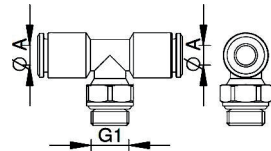
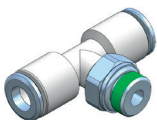
Y connector
Y-Anschluss
Raccordo Y
Raccord en Y
Empalme en Y



	A	B	
CA.12.05.004	Ø 4	2 x Ø 4	6 g
CA.12.05.005	Ø 6	2 x Ø 6	9 g
CA.12.05.006	Ø 6	2 x Ø 4	7 g
CA.12.05.007	Ø 8	2 x Ø 6	11 g
CA.12.05.034	Ø 3	2 x Ø 3	5 g

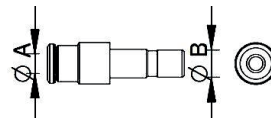
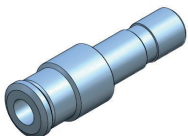


	A	B	
CA.12.05.008	Ø 6	4 x Ø 4	12 g
CA.12.05.009	Ø 8	4 x Ø 6	17 g



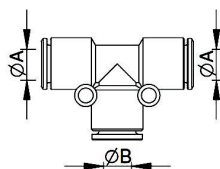
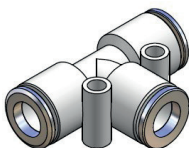
Orienting T male adapter (parallel) centre leg
Steckverschraubung T
Raccordo T centrale girevole
T Orientable à piquage mâle central
Empalme en T giratorio

	A	B	
CA.12.05.028	Ø 4	M5	7 g
CA.12.05.029	Ø 4	G 1/8	9 g
CA.12.05.030	Ø 6	M5	11 g
CA.12.05.031	Ø 6	M5	9 g



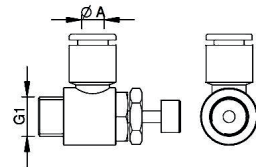
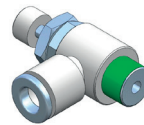
Reducer Junction
Reduzierung
Riduzione
Réduction
Reducción

	A	B	
CA.12.05.035	Ø 3	Ø 4	2 g
CA.12.05.042	Ø 4	Ø 6	9 g



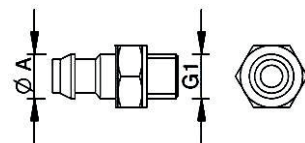
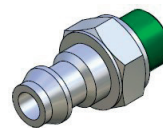
T connector
Steckkupplung T
Raccordo a T intermedio
Raccord T
Racor en T

	A	B	
CA.12.05.012	Ø 4	Ø 4	6g
CA.12.05.013	Ø 6	Ø 6	9g
CA.12.05.014	Ø 8	Ø 8	14g



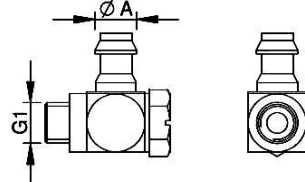
Speed Controller (centre leg)
Drosselrückschlagventile
Regolatore Flusso
Régulateur de Débit
Válvula de Retención con paso Calibrado

	A	G1	
CA.12.05.RF1806	Ø 6	G 1/8	17 g
CA.12.05.RF1804	Ø 4		
CA.12.05.RFM504	Ø 4	M5	7 g
CA.12.05.RFM506	Ø 6		



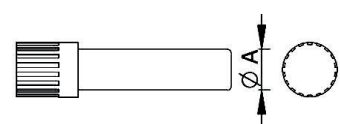
Straight fitting
Gerade Verschraubung zum Aufstecken
Raccordo a resca diritto metallico
Raccord droit à emboîtement
Empalme roscado vertical

	A	G1	
CA.12.05.M5AU3	Ø 3	M5	1 g
CA.12.05.M5AU4	Ø 4		
CA.12.05.M5AU6	Ø 6		2 g



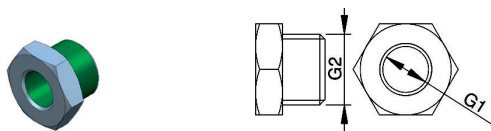
Adjustable-position elbow fitting
Schwenkbare L-förmige Verschraubung zum Aufstecken
Raccordo a resca metallico
Raccord orientable en L à emboîtement
Empalme roscado giratorio en L

	A	G1	
CA.12.05.M5ALHU3	Ø 3	M5	3 g
CA.12.05.M5ALHU4	Ø 4		
CA.12.05.M5ALHU6	Ø 6		4 g



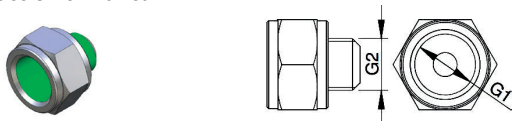
Plug polyamide
Verschlusszapfen Polyamid
Tappo Maschio
Bouchon en polyamide
Tapón Macho

	A	
CA.12.05.036	Ø 4	
CA.12.05.037	Ø 6	1 g

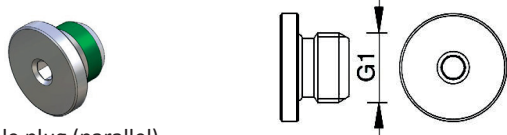


	G1	G2	
CA.08.14.001	M5	G 1/8	8 g
CA.08.14.002	M6	G 1/8	11 g
CA.08.14.003	G 1/8	G 1/4	13 g
CA.08.14.004	M6	G 1/4	12 g
CA.08.14.022	G 1/4	G 3/8	

Reducer (parallel)
Reduzierstück zylindrisch
Riduzione cilindrica
Réduction cylindrique
Reducción cilíndrica

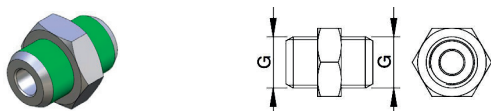


	G1	G2	
CA.08.14.018	G 1/8	M5	7 g
CA.08.14.019	G 1/4	G 1/8	14 g



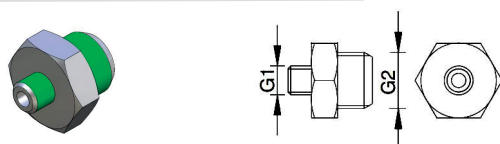
Male plug (parallel)
Gewindestopfen zylindrisch
Tappo testa cilindrica
Bouchon mâle cylindrique
Tapón roscado cilíndrico

	G1	
CA.08.14.013	M5	2 g
CA.08.14.014	G 1/8	9 g
CA.08.14.015	G 1/4	15 g



Nipple (parallel)
Doppelnippel zylindrisch
Nipplo cilindrico
Nipple double, cylindrique
Adaptador cilíndrico

	G	
CA.08.14.021	M5	2 g
CA.08.14.005	G 1/8	9 g
CA.08.14.006	G 1/4	15 g

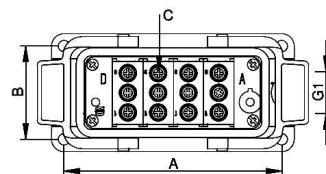
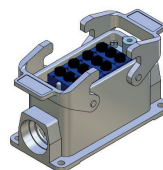


Nipple (parallel)
Doppelnippel reduziert zylindrisch
Nipplo cilindrico
Nipple double inégal, cylindrique
Adaptador de reducción cilíndrica

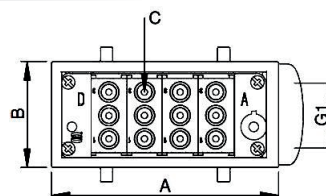
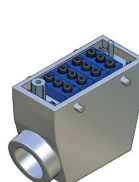
	G1	G2	
CA.08.14.011	M5	G 1/8	8 g
CA.08.14.012	G 1/8	G 1/4	15 g



	M*
CA.08.09.05	M5
CA.08.09.18	G 1/8
CA.08.09.14	G 1/4

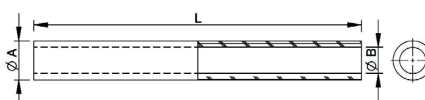


	A	B	G1	C	
CA.SCAR.12P00E	105	45	PG21	12x Ø 6	405 g



Mounting case
Anbaugehäuse
Connessione pneumatica
Harting Cas de l'œillet Hartig
Conexión neumática Harting

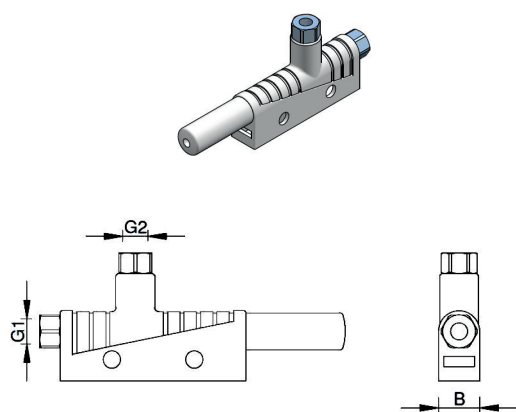
	A	B	G1	C	
CA.SCAG.12P00E	93	43	PG21	12x Ø 6	361 g



Hoses
Schläuche
Tubo Poliuretano
Tubes flexibles
Tubo flexible en poliuretano

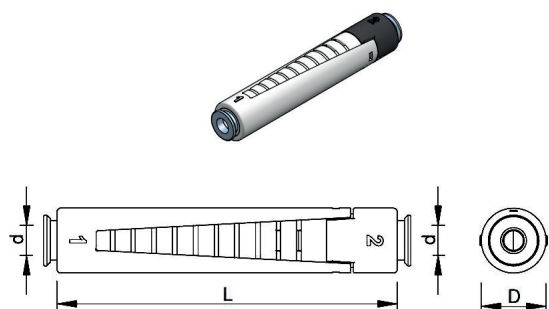
	Color	A	B	L
CA.15.01.011	Neutral	3	1.5	25 mt
CA.15.01.010		4	2.5	
CA.15.01.001	Blue			
CA.15.01.004	Yellow			
CA.15.01.007	Red			
CA.15.01.019	Black			
CA.15.01.020	Green			
CA.15.01.009	Neutral	6	4	
CA.15.01.002	Blue			
CA.15.01.003	Yellow			
CA.15.01.006	Red			
CA.15.01.015	Black			
CA.15.01.014	Green			
CA.15.01.016	Gray	8	5.5	
CA.15.01.012	Neutral			
CA.15.01.005	Yellow			
CA.15.01.008	Red			

new
new



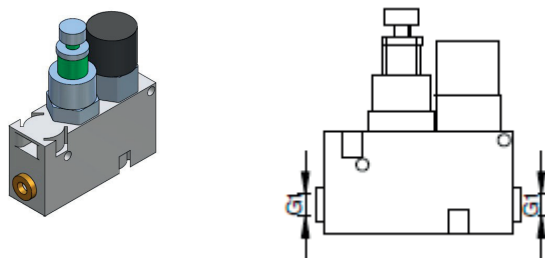
Basic ejector
 Grundejektor
 Eiettore base
 Ejecteur de base
 Ejector básico

	G1	G2	B	Ø	
CA.SBP.10.G02	G 1/8	G 1/8	10	1	22 g
CA.SBP.15.G02			15	1.5	
CA.SBP.20.G03	G 1/4	G 3/8	20	2.0	50 g



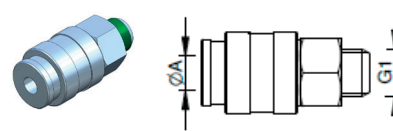
Inline ejector
 Inlineejektor
 Eiettore inline
 Système Venturi en ligne
 Ejector en línea

	d	D	L	Ø	
CA.SLP.05.SI	4	10	57	0.5	5 g
CA.SLP.07.SI				0.7	



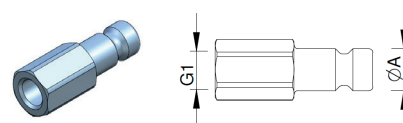
Pressure Regulator
 Druckregler
 Micro regolatore di pressione
 Régulateur de pression
 Regulador de presión

	G1	
CA.11.06.001	4	30 g



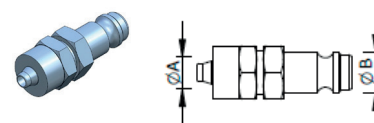
Quick coupling socket
 Schnellschlusskupplung
 Innesto a scatto femmina
 Raccord rapide
 Racord rápido hembra

	A	G1	
CA.12.06.003	2.5	M5	8 g
CA.12.06.001	5.0	G 1/8	27 g
CA.12.06.007	7	G 1/4	70 g

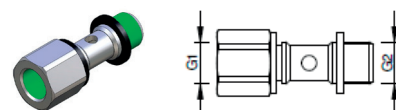


Plug-In Nipple
 Stecknippel für Schnellschlusskupplung
 Innesto a scatto maschio
 Mamelon Plug-In
 Racord rápido macho

	A	G1	
CA.12.06.008	2.5	M5	3 g
CA.12.06.005	5.0	G 1/8	14 g
CA.12.06.006	7	G 1/4	23 g

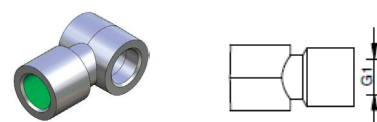


	A	B	
CA.12.06.004	4	2.5	5 g
CA.12.06.002	6	5.0	18 g



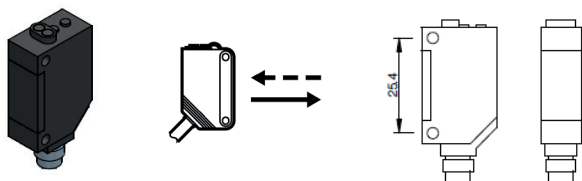
Pneumatic Hollow bolt
 Pneumatik Hohlschraube
 Asta per anello pneumatico
 Boulon creux pneumatique
 Inserto para anillo neumático

	G1	G2	
CA.01.08.005	M5	M5	3 g
CA.01.08.003	G 1/8	G 1/8	17 g
CA.01.08.006	G 1/4	G 1/4	28 g



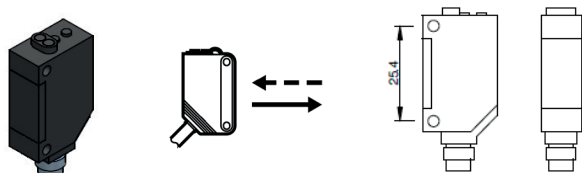
Pneumatic ring connection
 Pneumatik Ringanschluss Einfach
 Anello pneumatico
 Raccordement annulaire pneumatique
 Anillo neumático

	G1	M*	
CA.01.08.008	M5	CA.01.08.005	6 g
CA.01.08.004	G 1/8	CA.01.08.003	15 g
CA.01.08.007	G 1/4	CA.01.08.006	20 g



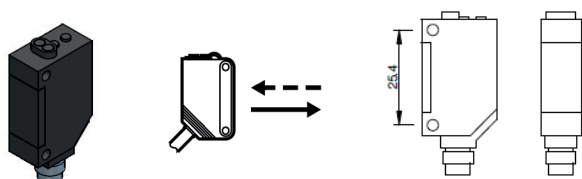
Diffuse reflective
Energetische reflexionslichttaster
Fotosens. tast. diretto fascio largo
Réflexion diffuse
Sensor fotoeléctrico tipo difuso reflectivo

	Output	Power supply voltage	Sensor Type	Sensing distance	Connector method
OM.E3Z-D86.OMS	PNP	12 to 24 VDC $\pm 10\%$	Diffuse - reflective	5 to 100 mm (wide view)	Connector type M8 4pin
OM.E3Z-D66.OMS	NPN				



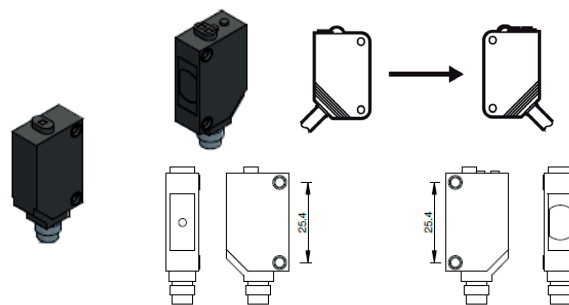
Laser Thin beam type (1 mm) reflective model
Laser Reflexionslichttaster mit engem Strahlkegel (1 mm)
Fotosens. tast. diretto fascio (1 mm)
Détection et positionnement précis
Sensor fotoeléctrico tipo thin beam (1 mm) modelo reflectivo

	Output	Power supply voltage	Sensor Type	Sensing distance	Connector method
OM.E3Z-LL86.OMS	PNP	12 to 24 VDC $\pm 10\%$	Laser Thin beam type reflective model	90 ± 30 mm	Connector type M8 4pin
OM.E3Z-LL66.OMS	NPN				



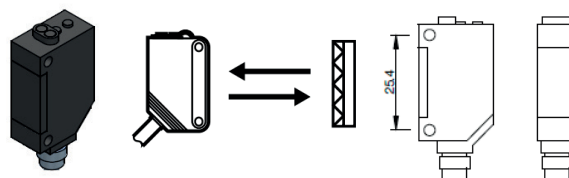
Distance-settable (Laser)
Hinter/Vordergrundausschaltung (Laser)
Fotosens. sopp. di sfondo regolabile
Distance réglable
Sensor fotoeléctrico tipo distance - settable

	Output	Power supply voltage	Sensor Type	Sensing distance	Connector method
OM.E3Z-LS86.OMS	PNP	12 to 24 VDC $\pm 10\%$	Distance-settable	30 to 200 mm	Connector type M8 4pin
OM.E3Z-LS66.OMS	NPN				



Through-beam laser 1 mm
Einweglichtschranke Laser 1 mm
Fotosens. spot 1 mm emett./ricev
Capteurs laser 1mm
Sensor fotoeléctrico tipo through-beam

	Output	Power supply voltage	Sensor Type	Sensing distance	Connector method
OM.E3Z-LT86	PNP	12 to 24 VDC $\pm 10\%$	Through-beam	15 m	Connector type M8 4pin
OM.E3Z-LT66.OMS	NPN				

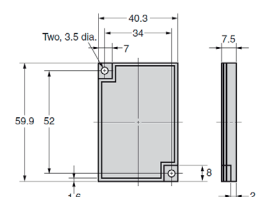


Retroreflective model
Reflexionslichtschranken
Fotosens. per catarinfrangente regol. fascio largo
Rétro réfléchissant
Sensor regulable para reflectores

	Output	Power supply voltage	Sensor Type	Sensing distance	Connector method
OM.E3Z-R86.OMS	PNP	12 to 24 VDC $\pm 10\%$	Retroreflective model	4 m	Connector type M8 4pin
OM.E3Z-R66.OMS	NPN				

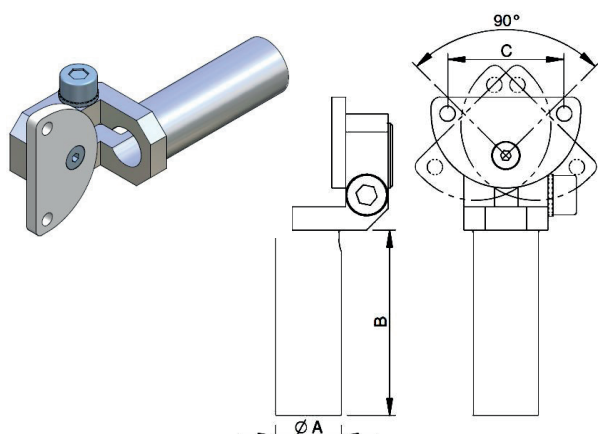


Material:
Reflective surface: acrylic
Rear surface: ABS



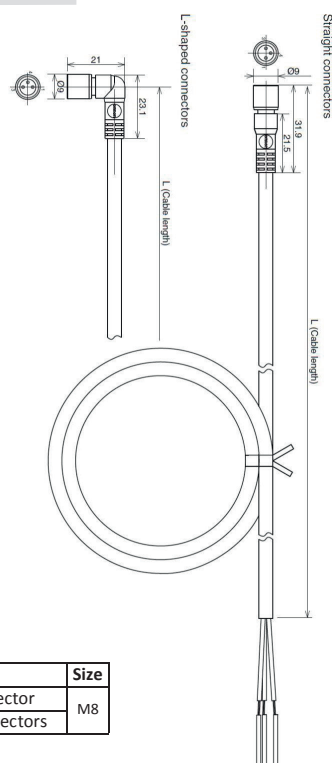
Reflector (order separately)
Rückstrahler
Catarinfrangente per sensori
Réflecteur
Reflector para sensor

OM.E39-R1S



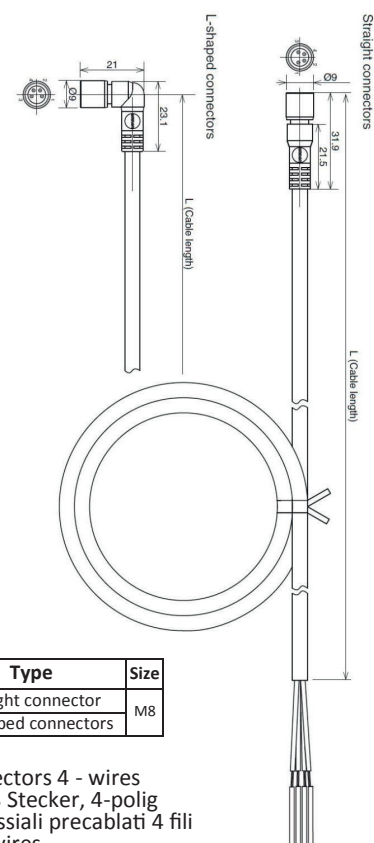
Adapter for Part Control
Adapter für Teilekontrolle
Staffa Snodata per Sensore
Bras de Prise
Estribo para Sensor

	A	B	C	
CA.ATK.10.10.30		30		23 g
CA.ATK.10.10.60	10	60		26 g
CA.ATK.10.10.90		90		29 g
CA.ATK.10.14.40		40	25	36 g
CA.ATK.10.14.80	14	80		44 g
CA.ATK.10.14.120		120		52 g



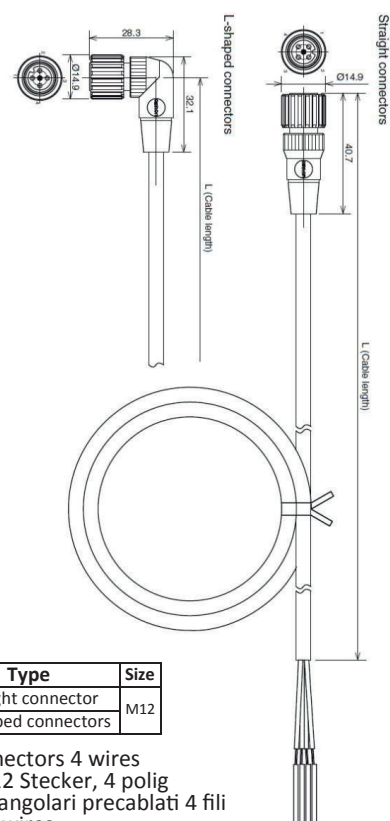
	Type	Size
OM.XS3F.M83S5M	Straight connector	M8
OM.XS3F.M83A5M	L - shaped connectors	

M8 Screw-on cable connectors 3 - wires
Kabeldose gerade mit M8 Stecker, 3-polig
Connettori femmina M8 assiali precablati 3 fili
Capteurs inductifs M8 3 wires
Juego de cables para conectores hembra M8 tipo PRO 3 pines



	Type	Size
OM.XS3F.M84S5M	Straight connector	M8
OM.XS3F.M84A5M	L - shaped connectors	

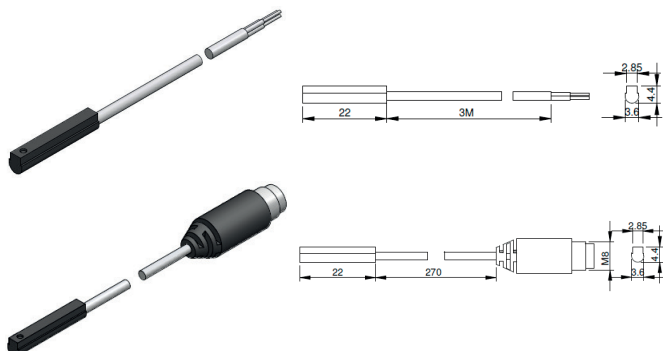
M8 Screw-on cable connectors 4 - wires
Kabeldose gerade mit M8 Stecker, 4-polig
Connettori femmina M8 assiali precablati 4 fili
Capteurs inductifs M8 4 wires
Juego de cables para conectores hembra M8 tipo PRO 4 pines



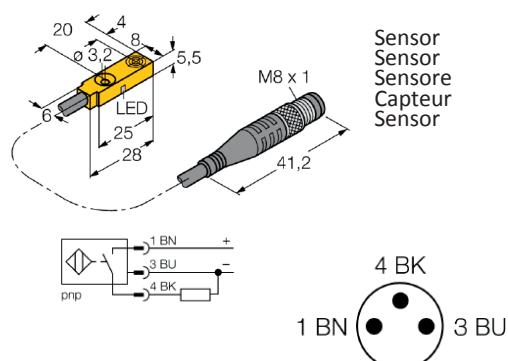
	Type	Size
OM.XS2F.M124S5M	Straight connector	M12
OM.XS2F.M124A5M	L - shaped connectors	

M12 Screw-on cable connectors 4 wires
Kabeldose gerade mit M12 Stecker, 4 polig
Connettori femmina M12 angolari precablati 4 fili
Capteurs inductifs M12 4 wires
Juego de cables para conectores hembra M12 tipo PRO 4 pines

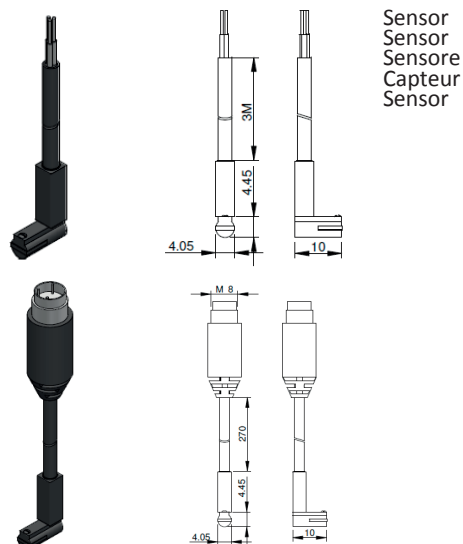
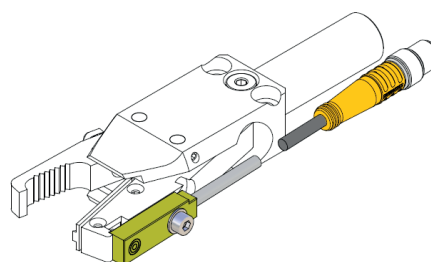
Sensor
Sensor
Sensore
Capteur
Sensor



	Sensor with cable	
KT58PM8	3 wires electronic PNP normally Open M8 plug connector	4 g
KT58P3M	3 wires electronic PNP normally Open mt 3 cable	
KT58NM8	3 wires electronic NPN normally Open M8 plug connector	
KT58N3M	3 wires electronic NPN normally Open mt 3 cable	

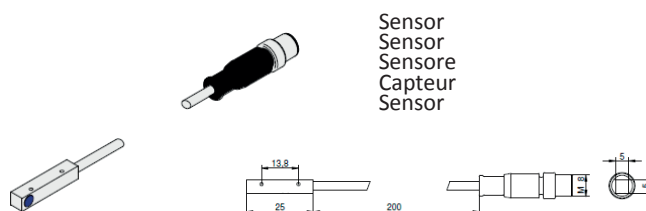


	Sensor with cable	
GRZ.20.SC.PNP	INDUCTIVE SENSOR PNP normally Open M8 plug connector	4 g
GRZ.20.SC.NPN	INDUCTIVE SENSOR NPN normally Open M8 plug connector	



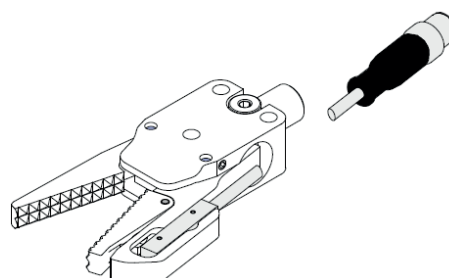
Sensor
Sensor
Sensore
Capteur
Sensor

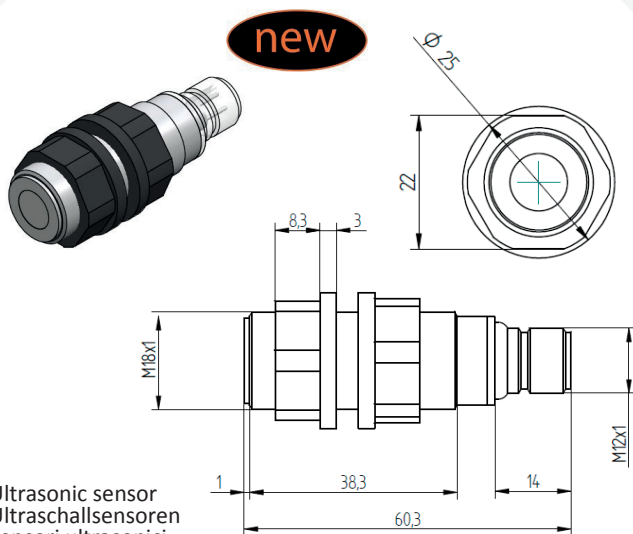
	Sensor with cable	
KT38PM8	3 wires electronic PNP normally Open M8 plug connector	4 g
KT38P3M	3 wires electronic PNP normally Open mt 3 cable	
KT38NM8	3 wires electronic NPN normally Open M8 plug connector	
KT38N3M	3 wires electronic NPN normally Open mt 3 cable	



Sensor
Sensor
Sensore
Capteur
Sensor

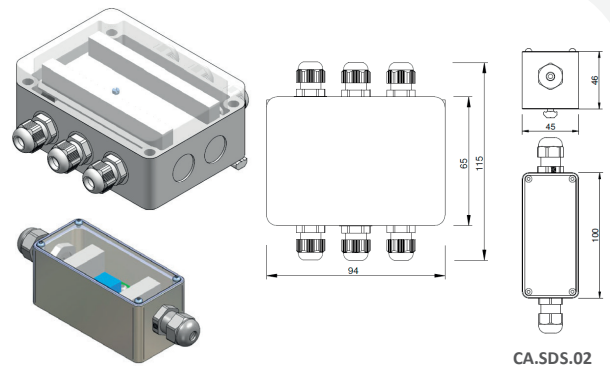
	Sensor with cable	
MMD.IL5AP3AVF80	INDUCTIVE SENSOR NPN normally Open M8 plug connector	4 g
MMD.IL5AN3AVF80		





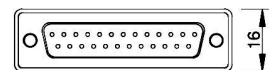
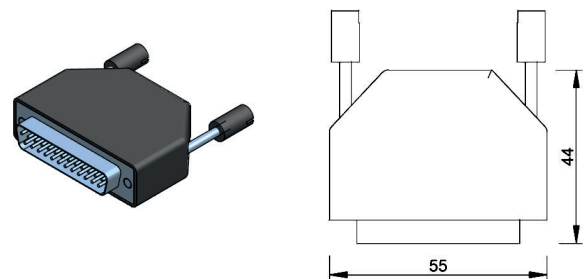
Ultrasonic sensor
 Ultraschallsensoren
 Sensori ultrasonici
 Capteurs ultrasonores
 Sensor ultrasónicos

	Output	Sensor Type	Sensing distance	Connector method	
MMD.UK6AHN0EUL	NPN	Ultrasonic sensor	40 mm	Connector type M12 4pin	65 g
MMD.UK6AHP0EUL	PNP				

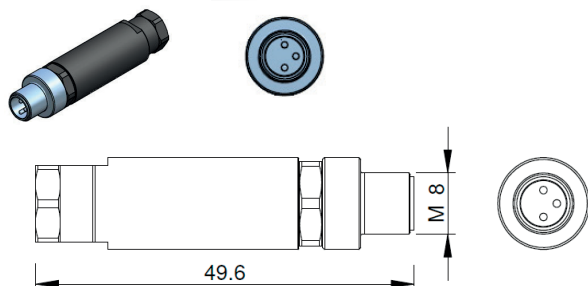


Sensor Box
 Klemmkasten für Sensoren
 Scatola Derivazione Sensori
 Boîte de Dérivation pour Capteurs
 Caja de Conexiones Sensores

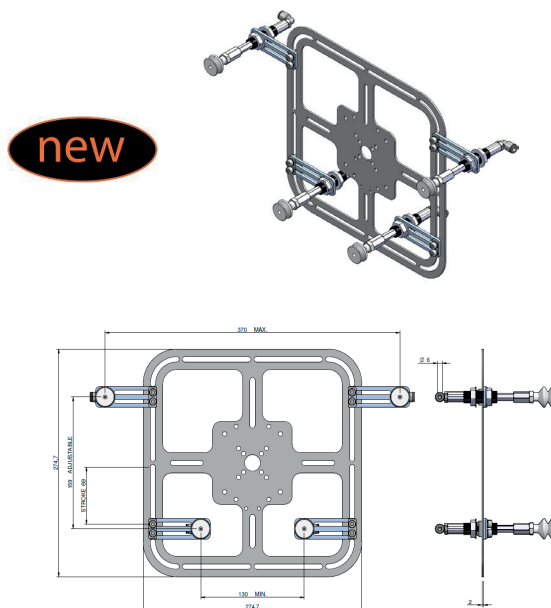
	Power supply	INputs	OUTputs
CA.SDS.02	24 V dc (+/- 10%)	Maximum 2 PNP, NPN or dry contact (NO or NC) sensor switched by jumper	1 up to 2 PNP, NPN or dry contact (NO or NC) outputs switched by jumpers
CA.SDS.04		Maximum 4 PNP, NPN or dry contact (NO or NC) sensor switched by jumper	1 up to 4 PNP, NPN or dry contact (NO or NC) outputs switched by jumpers
CA.SDS.06		Maximum 6 PNP, NPN or dry contact (NO or NC) sensor switched by jumper	1 up to 6 PNP, NPN or dry contact (NO or NC) outputs switched by jumpers
CA.SDS.08		Maximum 8 PNP, NPN or dry contact (NO or NC) sensor switched by jumper	1 up to 8 PNP, NPN or dry contact (NO or NC) outputs switched by jumpers



CA.19.03.001	25 pin M	10 g
--------------	----------	------



PAX.1501252	M8 3P M	15 g
-------------	---------	------



Kit End of Arm Tooling
Kit Greiferbaukasten
Kit mano di presa
Kit la main de Préhension
Kit Mano de Robot

KIT.MA01

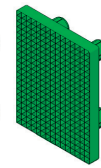
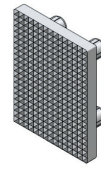
COMPONENTS	DESCRIPTION	QUANTITY	
CA.04.20.14.X	Mounting Bracket 14	4	45 g
CA.08.09.009	Adapters for vacuum cups G 1/8		3 g
CA.08.30.005	Vacuum Cup with 2 bellows only (silicone) D. 25 mm		5 g
CA.12.05.003	Orienting elbow male adapter (parallel) G 1/8 6 mm		8 g
CA.SDNG.1420	Threaded-body non-rotative Suspension D. 14 Stroke 20 mm		33 g
PIA.275X275X2	Basic EOAT Plate 275x275x2 inox	1	516 g

Notes

Insert TPU / VITON
 TPU / VITON Einlage
 Gommino per Pinza TPU / VITON
 Insert TPU / VITON
 Inserto para Pinza TPU / VITON

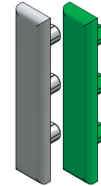
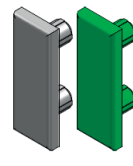
		M*
GZA.10.08.6	TPU grey VITON green The code with V in VITON The code without V in TPU	CA.GZA.10.08.G
GZA.10.08.6.V		
GZA.10.12.6		CA.GZA.10.12.G
GZA.10.12.6.V		CA.GZA.10.12.SG/SGN
GRF14.95.08		CA.GRF.1495.G
GRF14.95.08.V		CA.GRF.1495.GW CA.GRF.1495.VSX GRF14.VSX GRF14.95.0708 CA.KB.10
GRF20.95.08		CA.GRF.2095.G
GRF20.95.08.V		CA.GRF.2095.GW CA.GRF.2095.VSX GRF20.VSX GRF20.95.0708 CA.KB.16
GRF30.95.08		CA.GRF.3095.G
GRF30.95.08.V		CA.GRF.3095.GW CA.GRF.3095.VSX GRF30.VSX GRF30.95.0708
PAC.20.16P.03		CA.KB.20
PAC.20.16P.03.V		CA.KB.25 CA.PAC20.16SP/SPN CA.PAC20.16P
PPS.1406.07.V		CA.PMA.1406
PPS.2010.07.V		CA.PMA.2010
PPS.3015.07.V		CA.PMA.3015

	TPU	VITON
UV ageing, weather -resistance	☺	☺
Low temperature limit	-40°C	-10°C
High temperature limit (continuous)	80°C	180°C
High temperature limit (< 30 sec.)	120°C	210°C
Leaving few marks	☺	☺



GRF14.95.08
 GRF20.95.08
 GRF30.95.08
 GRF14.95.08.V
 GRF20.95.08.V
 GRF30.95.08.V

PAC.20.16P.03
 PAC.20.16P.03.V



GZA.10.08.6
 GZA.10.08.6.V
 GZA.10.12.6
 GZA.10.12.6.V

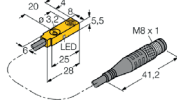
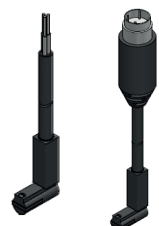
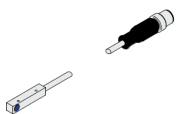


PPS.1406.07.V
 PPS.2010.07.V
 PPS.3015.07.V



Glue bonding procedure pad rubber in Lay on pad holder Aluminium

CA.VSX.LOCTITE	1. Surface cleaning of rubber in Lay with sandpaper
	2. Surface cleaning of Aluminium with sandpaper
	3. Put Primer LOCTITE 770 on pad RUBBER in Lay
	4. Put glue LOCTITE 406 on pad holder Aluminium
	5. Stick pad Rubber in Lay on pad holder Aluminium

	DS1HPC08	CA.09.05.009					
	DS1HNC8	CA.09.05.009.NC CA.09.05.009.NO					
	GRZ.20.SC.PNP	CA.GRZ.20.S CA.GRZ.20.W CA.GRZ.20.WL GRZ.20.FING.S	CA.GTS.1004.1215 CA.GTS.1004.1415 CA.GTS.1004.1915 GTS.04.15	CA.GTS.1003.1215 CA.GTS.1003.1415 CA.GTS.1003.1915 GTS.03.15			
	GRZ.20.SC.NPN	CA.GRZ.20.WN CA.GRZ.20.SN CA.GRZ.20.WLN GRZ.20.FING.SN	CA.GTS.1004.15N CA.GTS.1004.125N CA.GTS.1004.145N	CA.GTS.1003.15N CA.GTS.1003.125N CA.GTS.1003.145N CA.GTS.1003.195N			
	KT38PM8 KT38P3M	CA.GRF.1435 CA.GRF.2035 CA.GRF.3035 CA.GRF.1495 CA.GRF.2095 CA.GRF.3095 CA.GRF.1490 CA.GRF.2090 CA.GRF.3090 CA.GRF.1495.G CA.GRF.2095.G CA.GRF.3095.G CA.GRF.1495.GW CA.GRF.2095.GW CA.GRF.3095.GW CA.GRF.1495.VSX CA.GRF.2095.VSX CA.GRF.3095.VSX CA.GRF.2035.WE CA.GRF.3035.WE	CA.11.17.001 CA.11.17.002 CA.11.17.003 CA.11.17.004 CA.11.17.005 CA.11.17.006 CA.11.17.007 CA.11.17.008 CA.11.17.009 CA.11.17.010 CA.11.18.001 CA.11.18.002 CA.11.18.003 CA.11.18.004 CA.11.18.005 CA.11.18.006 CA.11.18.007 CA.11.18.008 CA.11.18.009 CA.11.18.010	CA.09.05.010 CA.09.05.010.NC CA.09.05.010.NO CA.09.05.010.L CA.09.05.011 CA.09.05.010.NC CA.09.05.010.NO CA.09.05.011.L CA.09.05.012 CA.09.05.012.NC CA.09.05.012.NO CA.09.05.012.L CA.09.05.013 CA.09.05.014	CA.KHZ.20141005 CA.KHZ.20143005 CA.KHZ.32201518 CA.KHZ.32203018 CA.KHZ.32205018		
	KT38NM8 KT38N3M				CA.JDR.141005 CA.JDR.142505 CA.JDR.201005 CA.JDR.301518 CA.JDR.303018 CA.JDR.305018		
	KT58PM8 KT58P3M	CA.PAC20.16S CA.PAC20.16SP CA.PAC20.16W CA.GRZ.10.08.S CA.GZA.AA24.NOSP	CA.11.17.001 CA.11.17.002 CA.11.17.003 CA.11.17.004 CA.11.17.005 CA.11.17.006 CA.11.17.007 CA.11.17.008 CA.11.17.009 CA.11.17.010 CA.11.18.001 CA.11.18.002 CA.11.18.003 CA.11.18.004 CA.11.18.005 CA.11.18.006 CA.11.18.007 CA.11.18.008 CA.11.18.009 CA.11.18.010	CA.09.05.010 CA.09.05.010.NC CA.09.05.010.NO CA.09.05.010.L CA.09.05.011 CA.09.05.010.NC CA.09.05.010.NO CA.09.05.011.L CA.09.05.012 CA.09.05.012.NC CA.09.05.012.NO CA.09.05.012.L CA.09.05.013 CA.09.05.014	CA.KHZ.20141005 CA.KHZ.20143005 CA.KHZ.32201518 CA.KHZ.32203018		
	KT58NM8 KT58N3M	CA.PAC20.16SN CA.PAC20.16SPN CA.PAC20.16WN CA.GRZ.10.08.SN CA.GZA.AA24.NOSN			CA.JDR.141005 CA.JDR.142505 CA.JDR.201005 CA.JDR.301518 CA.JDR.303018 CA.JDR.305018		
	KT58REQD	CA.GRZ.10.08.S2F CA.GZA.AA24.NOS2					
	MMD.IL5AP3AVF80	CA.GZA.10.12.MS CA.GZA.10.12.S CA.GZA.10.12.S4 CA.GZA.10.12.S9 CA.GZA.10.12.SG					
	MMD.IL5AN3AVF80	CA.GZA.10.12.MSN CA.GZA.10.12.SN CA.GZA.10.12.S4N CA.GZA.10.12.S9N CA.GZA.10.12.SGN					
	SMC.D.Y7PSAPC	CA.09.05.009.L					
	SMC.D.Y59ASAPC						

CODE	P	CODE	P	CODE	P	CODE	P	CODE	P
CA.01.01.001	5	CA.05.02.009	18	CA.08.29.005	22	CA.09.05.011	32	CA.11.15.001	42
CA.01.01.002	5	CA.05.02.009.6N	18	CA.08.29.006	22	CA.09.05.011.L	32	CA.11.15.002	42
CA.01.01.003	5	CA.05.02.010	18	CA.08.29.007	22	CA.09.05.011.NC	32	CA.11.15.003	42
CA.01.01.004	5	CA.05.02.010.6N	18	CA.08.29.008	22	CA.09.05.011.NO	32	CA.11.15.004	42
CA.01.01.006	6	CA.05.02.011	18	CA.08.29.009	22	CA.09.05.012	32	CA.11.15.005	42
CA.01.01.007	6	CA.05.02.012	18	CA.08.29.010	22	CA.09.05.012.L	32	CA.11.17.001	42
CA.01.01.008	5	CA.07.01.001	21	CA.08.29.011	22	CA.09.05.012.NC	32	CA.11.17.002	42
CA.01.01.009	5	CA.07.01.002	21	CA.08.29.012	22	CA.09.05.012.NO	32	CA.11.17.003	42
CA.01.01.011	5	CA.08.01.001	26	CA.08.29.013	22	CA.09.05.013	32	CA.11.17.004	42
CA.01.01.012	5	CA.08.01.002	26	CA.08.30.001	25	CA.09.05.014	32	CA.11.17.005	42
CA.01.01.013	5	CA.08.01.003	26	CA.08.30.002	25	CA.09.13.05.15	34	CA.11.17.006	42
CA.01.01.014	5	CA.08.01.004	26	CA.08.30.003	25	CA.09.13.05.15.S	34	CA.11.17.007	42
CA.01.01.015	6	CA.08.01.005	26	CA.08.30.004	25	CA.09.13.10.25	34	CA.11.17.008	42
CA.01.01.015.F	6	CA.08.01.006	26	CA.08.30.005	25	CA.09.13.10.25.S	34	CA.11.17.009	42
CA.01.01.016	6	CA.08.03.001	26	CA.08.30.006	25	CA.09.13.15.35	34	CA.11.17.010	42
CA.01.01.016.F	6	CA.08.03.002	26	CA.08.30.007	25	CA.09.13.15.35.S	34	CA.11.18.001	42
CA.01.01.017	6	CA.08.03.003	26	CA.08.30.008	25	CA.09.13.20.45	34	CA.11.18.002	42
CA.01.01.017.F	6	CA.08.03.004	26	CA.08.30.009	25	CA.09.13.20.45.S	34	CA.11.18.003	42
CA.01.02.001	6	CA.08.03.005	26	CA.08.30.010	25	CA.09.14.06	34	CA.11.18.004	42
CA.01.02.002	6	CA.08.03.006	26	CA.08.30.012	25	CA.09.14.07	34	CA.11.18.005	42
CA.01.02.002.X	6	CA.08.03.007	26	CA.08.31.001	22	CA.09.14.09	34	CA.11.18.006	42
CA.01.02.003	6	CA.08.03.008	26	CA.08.31.002	22	CA.09.14.10	34	CA.11.18.007	42
CA.01.02.003B	6	CA.08.03.009	26	CA.08.31.003	22	CA.09.14.14	34	CA.11.18.008	42
CA.01.02.004	6	CA.08.03.010	26	CA.08.31.004	22	CA.09.14.14.S	34	CA.11.18.009	42
CA.01.02.004.X	6	CA.08.03.011	26	CA.08.31.005	22	CA.09.14.17	34	CA.11.18.010	42
CA.01.02.004A	6	CA.08.09.05	46	CA.08.31.006	22	CA.09.14.17.S	34	CA.12.05.001	44
CA.01.02.004A.X	6	CA.08.09.14	46	CA.08.31.007	22	CA.09.14.19	34	CA.12.05.002	44
CA.01.02.007	6	CA.08.09.18	46	CA.08.31.008	22	CA.09.14.19.S	34	CA.12.05.003	44
CA.01.02.008	6	CA.08.14.001	46	CA.08.31.009	22	CA.09.14.22	34	CA.12.05.004	45
CA.01.02.008.X	6	CA.08.14.002	46	CA.08.31.010	22	CA.09.14.25	34	CA.12.05.005	45
CA.01.08.003	47	CA.08.14.003	46	CA.08.31.011	22	CA.09.14.25.S	34	CA.12.05.006	45
CA.01.08.004	47	CA.08.14.004	46	CA.08.31.012	22	CA.09.14.35	34	CA.12.05.007	45
CA.01.08.005	47	CA.08.14.005	46	CA.08.32.D09	23	CA.09.14.35.S	34	CA.12.05.008	45
CA.01.08.006	47	CA.08.14.006	46	CA.08.32.D12	23	CA.09.14.45	34	CA.12.05.009	45
CA.01.08.007	47	CA.08.14.011	46	CA.08.32.D14	23	CA.09.14.55	34	CA.12.05.012	45
CA.01.08.008	47	CA.08.14.012	46	CA.08.32.D20	23	CA.09.15.001	34	CA.12.05.013	45
CA.04.02.10.X	13	CA.08.14.013	46	CA.08.32.D25	23	CA.09.15.002	34	CA.12.05.014	45
CA.04.02.14.X	13	CA.08.14.014	46	CA.08.32.D32	23	CA.09.15.003	34	CA.12.05.015	44
CA.04.02.20.X	13	CA.08.14.015	46	CA.08.32.D42	23	CA.09.15.004	34	CA.12.05.016	44
CA.04.02.30.X	13	CA.08.14.018	46	CA.08.32.D52	23	CA.09.15.005	34	CA.12.05.017	44
CA.04.10.004	39	CA.08.14.019	46	CA.08.32.D62	23	CA.09.15.006	34	CA.12.05.018	44
CA.04.10.005	39	CA.08.14.021	46	CA.08.33.D12	25	CA.09.15.007	34	CA.12.05.019	44
CA.04.10.006	39	CA.08.14.022	46	CA.08.33.D14	25	CA.09.15.008	34	CA.12.05.020	44
CA.04.10.007	39	CA.08.26.D16.AS	23	CA.08.33.D20	25	CA.09.16.001	34	CA.12.05.021	44
CA.04.10.30.1	39	CA.08.26.D20.AS	23	CA.08.33.D25	25	CA.09.16.002	34	CA.12.05.022	44
CA.04.10.30.2	39	CA.08.26.D25.AS	23	CA.08.33.D32	25	CA.09.16.003	34	CA.12.05.023	44
CA.04.10.36.1	39	CA.08.26.D33.AS	23	CA.08.33.D42	25	CA.09.16.004	34	CA.12.05.024	44
CA.04.10.36.2	39	CA.08.26.D43.AS	23	CA.08.33.D5	25	CA.09.16.005	34	CA.12.05.028	45
CA.04.10.45.1	39	CA.08.26.D53.AS	23	CA.08.33.D52	25	CA.09.16.006	34	CA.12.05.029	45
CA.04.10.45.2	39	CA.08.26.D63.AS	23	CA.08.33.D60	25	CA.09.16.007	34	CA.12.05.030	45
CA.04.10.56.1	39	CA.08.26.D78.AS	23	CA.08.33.D7	25	CA.09.16.008	34	CA.12.05.031	45
CA.04.10.56.2	39	CA.08.27.001	24	CA.08.33.D9	25	CA.09.16.009	34	CA.12.05.034	45
CA.04.10.75.1	39	CA.08.27.002	24	CA.08.36.D10	27	CA.09.17.0515.X	34	CA.12.05.035	45
CA.04.10.75.2	39	CA.08.27.003	24	CA.08.36.D10.60	27	CA.09.17.1025.X	34	CA.12.05.036	45
CA.04.12.001	39	CA.08.27.004	24	CA.08.36.D15	27	CA.09.17.1535.X	34	CA.12.05.037	45
CA.04.12.002	39	CA.08.27.005	24	CA.08.36.D15.60	27	CA.09.17.2045.X	34	CA.12.05.038	44
CA.04.20.08.X	34	CA.08.27.006	24	CA.08.36.D20	27	CA.09.18.1014.X	34	CA.12.05.039	44
CA.04.20.10.X	13	CA.08.28.001	24	CA.08.36.D20.60	27	CA.09.18.1719.X	34	CA.12.05.040	44
CA.04.20.12.X	13	CA.08.28.002	24	CA.08.36.D25	27	CA.09.18.2225.X	34	CA.12.05.042	45
CA.04.20.14.X	13	CA.08.28.003	24	CA.08.36.D25.60	27	CA.09.18.35.JU	34	CA.12.05.044	44
CA.04.20.20.X	13	CA.08.28.004	24	CA.08.36.D35	27	CA.09.18.4555.JU	34	CA.12.05.047	44
CA.05.01.001	18	CA.08.28.005	24	CA.08.36.D35.60	27	CA.11.04.001	42	CA.12.05.048	44
CA.05.01.002	18	CA.08.28.006	24	CA.08.36.D52	27	CA.11.04.002	42	CA.12.05.049	44
CA.05.01.003	18	CA.08.28.007	24	CA.08.36.D52.60	27	CA.11.04.003	42	CA.12.05.050	44
CA.05.01.004	18	CA.08.28.008	24	CA.08.36.D75	27	CA.11.04.004	42	CA.12.05.051	44
CA.05.01.005	18	CA.08.28.009	24	CA.08.36.D75.60	27	CA.11.04.005	42	CA.12.05.M5ALHU3	45
CA.05.01.005.6N	18	CA.08.28.010	24	CA.09.05.009	32	CA.11.04.006	42	CA.12.05.M5ALHU4	45
CA.05.01.006	18	CA.08.28.011	24	CA.09.05.009.L	32	CA.11.04.007	42	CA.12.05.M5ALHU6	45
CA.05.01.006.6N	18	CA.08.28.012	24	CA.09.05.009.NC	32	CA.11.06.001	47	CA.12.05.M5AU3	45
CA.05.01.010	18	CA.08.28.013	24	CA.09.05.009.NO	32	CA.11.08.001.X	43	CA.12.05.M5AU4	45
CA.05.01.011	18	CA.08.29.001	22	CA.09.05.010	32	CA.11.08.002.X	43	CA.12.05.M5AU6	45
CA.05.01.50	18	CA.08.29.002	22	CA.09.05.010.L	32	CA.11.08.003.X	43	CA.12.06.001	47
CA.05.02.002	18	CA.08.29.003	22	CA.09.05.010.NC	32	CA.11.08.004.X	43	CA.12.06.002	47
CA.05.02.004	18	CA.08.29.004	22	CA.09.05.010.NO	32	CA.11.08.005.X	43	CA.12.06.003	47

CODE	P	CODE	P	CODE	P	CODE	P	CODE	P
CA.12.06.004	47	CA.CUDL.03	5	CA.GGB.14181840	20	CA.GPG.2	4	CA.GSEG.201445	21
CA.12.06.005	47	CA.CUDL.150	5	CA.GGB.14181880	20	CA.GPG.3	4	CA.GSEG.201490	21
CA.12.06.006	47	CA.CUDL.160	5	CA.GGB.201414100	20	CA.GPM0	4	CA.GTS.1003.1212	30
CA.12.06.007	47	CA.CUDL.90	5	CA.GGB.201414150	20	CA.GPM0.X	4	CA.GTS.1003.1214	30
CA.12.06.008	47	CA.CUSL.200.G	5	CA.GGB.20141450	20	CA.GPM1	4	CA.GTS.1003.1215	30
CA.15.01.001	46	CA.CUSL.200.I	6	CA.GGB.201418100	20	CA.GPM1.X	4	CA.GTS.1003.125N	30
CA.15.01.002	46	CA.CUSL.200.R	5	CA.GGB.201418150	20	CA.GPM1S	4	CA.GTS.1003.1415	30
CA.15.01.003	46	CA.DB.05.25	36	CA.GGB.20141850	20	CA.GPM2	4	CA.GTS.1003.145N	30
CA.15.01.004	46	CA.DB.05.32	36	CA.GGD.10050510	19	CA.GPM2.X	4	CA.GTS.1003.1717	30
CA.15.01.005	46	CA.DB.10.25	36	CA.GGD.10050530	19	CA.GPM2S	4	CA.GTS.1003.1915	30
CA.15.01.006	46	CA.DB.10.32	36	CA.GGD.14181815	19	CA.GPM3	4	CA.GTS.1003.1919	30
CA.15.01.007	46	CA.DB.15.25	36	CA.GGD.14181840	19	CA.GPM3.X	4	CA.GTS.1003.195N	30
CA.15.01.008	46	CA.DB.15.32	36	CA.GGD.20141820	19	CA.GPM3S	4	CA.GTS.1003.2929	30
CA.15.01.009	46	CA.EPL.25.170	8	CA.GGD.20141850	19	CA.GPR1.0	4	CA.GTS.1004.1212	30
CA.15.01.010	46	CA.EPL.25.220	8	CA.GGDG.10050510	19	CA.GPR2.1	4	CA.GTS.1004.1214	30
CA.15.01.011	46	CA.EPL.25.270	8	CA.GGDG.10050530	19	CA.GPR3.2	4	CA.GTS.1004.1215	30
CA.15.01.012	46	CA.EPL.25.320	8	CA.GGDG.14181815	19	CA.GRF.1435	31	CA.GTS.1004.125N	30
CA.15.01.014	46	CA.EPL.50.25.170	8	CA.GGDG.14181840	19	CA.GRF.1490	31	CA.GTS.1004.1415	30
CA.15.01.015	46	CA.EPL.50.25.220	8	CA.GGDG.20141820	19	CA.GRF.1495	31	CA.GTS.1004.145N	30
CA.15.01.016	46	CA.EPL.50.25.270	8	CA.GGDG.20141850	19	CA.GRF.1495.G	31	CA.GTS.1004.1717	30
CA.15.01.019	46	CA.EPL.50.25.320	8	CA.GGE.10.M5.M5	20	CA.GRF.1495.GW	31	CA.GTS.1004.1919	30
CA.15.01.020	46	CA.EVB.100.JU	10	CA.GGE.14.18.18	20	CA.GRF.1495.VSX	31	CA.GTS.1004.2929	30
CA.19.03.001	51	CA.EVB.100.X	10	CA.GGE.20.14.14	20	CA.GRF.2035	31	CA.GVR.1010.30	14
CA.ADK.JU.4040	8	CA.EVB.75.X	10	CA.GGE.20.14.18	20	CA.GRF.2035.WE	31	CA.GVR.1010.60	14
CA.ADK.JU.8040	8	CA.F1	38	CA.GGE.201414150	20	CA.GRF.2090	31	CA.GVR.1010.90	14
CA.ADK.L.1810	8	CA.F1S	38	CA.GGE.201818150	20	CA.GRF.2095	31	CA.GVR.1414.120	14
CA.ADK.L.1818	8	CA.F3	38	CA.GGS100515	18	CA.GRF.2095.G	31	CA.GVR.1414.40	14
CA.ADK.X.2510	8	CA.F3LS	38	CA.GGS100520	18	CA.GRF.2095.GW	31	CA.GVR.1414.80	14
CA.ADK.X.2518	8	CA.F5	38	CA.GGS100530	18	CA.GRF.2095.VSX	31	CA.GVR.2020.100	14
CA.ADK.X.2525	8	CA.F5LS	38	CA.GGS141815	18	CA.GRF.3035	31	CA.GVR.2020.150	14
CA.ADK.X.5025	8	CA.F5S	38	CA.GGS141840	18	CA.GRF.3035.WE	31	CA.GVR.2020.50	14
CA.ADZ.12.14	42	CA.F9P	38	CA.GGS201425	18	CA.GRF.3090	31	CA.GVR.3030.140	14
CA.ADZ.16.14	42	CA.F9PS	38	CA.GGS201445	18	CA.GRF.3095	31	CA.GVR.3030.200	14
CA.ADZ.20.14	42	CA.FD1	38	CA.GGSM100515	18	CA.GRF.3095.G	31	CA.GVR.3030.80	14
CA.ADZ.25.20	42	CA.FD3	38	CA.GGSM100520	18	CA.GRF.3095.GW	31	CA.GWP.1000	7
CA.ADZ.32.20	42	CA.FD5	38	CA.GGSM100530	18	CA.GRF.3095.VSX	31	CA.GWP.3U	7
CA.ADZ.32.20.90	42	CA.FD9P	38	CA.GGSM141815	18	CA.GRZ.10.08.S	29	CA.GWP.4.16	7
CA.ADZ.32.25	42	CA.FN1	40	CA.GGSM141840	18	CA.GRZ.10.08.S2F	29	CA.GWP.4.17	7
CA.AGP.20.G	41	CA.FN10	40	CA.GGSM201425	18	CA.GRZ.10.08.SN	29	CA.GWP.4.25	7
CA.AGP.20.G.20	41	CA.FN10C	41	CA.GGSM201445	18	CA.GRZ.20.A	29	CA.GWP.4.8	7
CA.AGP.20.M	41	CA.FN10K	40	CA.GGV.10050510	19	CA.GRZ.20.E	29	CA.GWP.4.9	7
CA.AGP.20.M.20	41	CA.FN10L	40	CA.GGV.10050530	19	CA.GRZ.20.LL	29	CA.GWP.4U	7
CA.ANS.14	31	CA.FN1C	41	CA.GGV.14181815	19	CA.GRZ.20.R	29	CA.GWP.5.10	7
CA.ANS.20	31	CA.FN1K	40	CA.GGV.14181840	19	CA.GRZ.20.S	29	CA.GWP.5.11	7
CA.ANS.30	31	CA.FN1L	40	CA.GGV.20141820	19	CA.GRZ.20.SN	29	CA.GWP.5.12	7
CA.APG.20.10.30	33	CA.FN3	40	CA.GGV.20141850	19	CA.GRZ.20.W	29	CA.GWP.5.15	7
CA.APG.25.14.40	33	CA.FN3C	41	CA.GGVE.10050510	19	CA.GRZ.20.WL	29	CA.GWP.5.17	7
CA.APG.32.14.40	33	CA.FN3K	40	CA.GGVE.10050530	19	CA.GRZ.20.WLN	29	CA.GWP.5.20	7
CA.APG.40.14.50	33	CA.FN3L	40	CA.GGVE.14181815	19	CA.GRZ.20.WN	29	CA.GWP.5.22	7
CA.APG.40.20.50	33	CA.FN5	40	CA.GGVE.14181840	19	CA.GSE.1018M530	20	CA.GWP.5.25	7
CA.APG.50.20.50	33	CA.FN5C	41	CA.GGVE.20141820	19	CA.GSE.1018M560	20	CA.GWP.5.25.3	7
CA.APG.65.20.50	33	CA.FN5K	40	CA.GGVE.20141850	19	CA.GSE.1018M590	20	CA.GWP.5.28	7
CA.APGE.10.10.30	33	CA.FN5L	40	CA.GGVG.10050510	19	CA.GSE.10M5M530	20	CA.GWP.5.30	7
CA.APGE.16.14.40	33	CA.FNP1	40	CA.GGVG.10050530	19	CA.GSE.10M5M560	20	CA.GWP.5.35	7
CA.APGE.20.20.50	33	CA.FNP10	40	CA.GGVG.14181815	19	CA.GSE.10M5M590	20	CA.GWP.5.38	7
CA.APGE.25.20.50	33	CA.FNP10C	41	CA.GGVG.14181840	19	CA.GSE.141818120	20	CA.GWP.5.40	7
CA.APGE.32.20.50	33	CA.FNP1C	41	CA.GGVG.20141820	19	CA.GSE.14181840	20	CA.GWP.5.40.3	7
CA.APGE.40.20.50	33	CA.FNP3	40	CA.GGVG.20141850	19	CA.GSE.14181880	20	CA.GWP.5.50	7
CA.ATE.05	38	CA.FNP3C	41	CA.GHV.100	5	CA.GSE.201418100	20	CA.GWP.5.52	7
CA.ATE.10	38	CA.FNP5	40	CA.GHV.160	5	CA.GSE.201418150	20	CA.GWP.5.60	7
CA.ATE.20	38	CA.FNP5C	41	CA.GHV.250	5	CA.GSE.20141850	20	CA.GWP.5.75	7
CA.ATE.30	38	CA.GAR.10.1000	8	CA.GHV.60	5	CA.GSE.301414140	20	CA.GWP.5.9	7
CA.ATE.50	38	CA.GAR.14.1000	8	CA.GLA.1010.30	14	CA.GSE.301414200	20	CA.GWP.500	7
CA.ATK.10.10.30	49	CA.GAR.20.1000	8	CA.GLA.1010.60	14	CA.GSE.30141480	20	CA.GWP.5LM	7
CA.ATK.10.10.60	49	CA.GAR.30.1000	8	CA.GLA.1010.90	14	CA.GSEG.100515	21	CA.GWP.5U	7
CA.ATK.10.10.90	49	CA.GAZ.12.10.60	43	CA.GLA.1414.120	14	CA.GSEG.100530	21	CA.GWP.6.12	7
CA.ATK.10.14.120	49	CA.GAZ.16.14.60	43	CA.GLA.1414.40	14	CA.GSEG.100545	21	CA.GWP.6.16	7
CA.ATK.10.14.40	49	CA.GAZ.20.20.60	43	CA.GLA.1414.80	14	CA.GSEG.100590	21	CA.GWP.6.20	7
CA.ATK.10.14.80	49	CA.GAZ.25.20.60	43	CA.GLA.2020.100	14	CA.GSEG.120545	21	CA.GWP.6.22	7
CA.BVAE.322010	36	CA.GAZ.32.20.60	43	CA.GLA.2020.150	14	CA.GSEG.120590	21	CA.GWP.6.25	7
CA.BVAE.32201020	36	CA.GGB.10050530	20	CA.GLA.2020.50	14	CA.GSEG.141815	21	CA.GWP.6.25.3	7
CA.BVAE.32201025	36	CA.GGB.10050560	20	CA.GLA.2030	14	CA.GSEG.141830	21	CA.GWP.6.28	7
CA.CUDL.01	5	CA.GGB.10050590	20	CA.GLA.3030	14	CA.GSEG.141845	21	CA.GWP.6.35	7
CA.CUDL.02	5	CA.GGB.141818120	20	CA.GPG.1	4	CA.GSEG.141890	21	CA.GWP.6.40	7

CODE	P
CA.GWP.6.50	7
CA.GWP.6.52	7
CA.GWP.6.90	7
CA.GWP.6U	7
CA.GZ.32	37
CA.GZ.3220	37
CA.GZ.322010	37
CA.GZ.32201020	37
CA.GZ.32201025	36
CA.GZ.3225	37
CA.GZA.10.08	28
CA.GZA.10.08.18	28
CA.GZA.10.08.19	28
CA.GZA.10.08.G	28
CA.GZA.10.08.LL	28
CA.GZA.10.12	28
CA.GZA.10.12.14	28
CA.GZA.10.12.18	28
CA.GZA.10.12.19	28
CA.GZA.10.12.AH	28
CA.GZA.10.12.AHV	28
CA.GZA.10.12.C	28
CA.GZA.10.12.G	28
CA.GZA.10.12.L	28
CA.GZA.10.12.LL	28
CA.GZA.10.12.M	28
CA.GZA.10.12.M50	28
CA.GZA.10.12.MC	28
CA.GZA.10.12.MS	28
CA.GZA.10.12.MSN	28
CA.GZA.10.12.S	28
CA.GZA.10.12.S4	28
CA.GZA.10.12.S4N	28
CA.GZA.10.12.S9	28
CA.GZA.10.12.S9N	28
CA.GZA.10.12.SG	28
CA.GZA.10.12.SGN	28
CA.GZA.10.12.SN	28
CA.GZA.AA24	32
CA.GZA.AA24.NO	32
CA.GZA.AA24.NOS2	32
CA.GZA.AA24.NOSN	32
CA.GZA.AA24.NOSP	32
CA.HEH.30.50	36
CA.JDR.141005	43
CA.JDR.142505	43
CA.JDR.201005	43
CA.JDR.301518	43
CA.JDR.303018	43
CA.JDR.305018	43
CA.JU.4040.1000	7
CA.JU.4040.2000	7
CA.JU.8040.1000	7
CA.JU.8040.2000	7
CA.KB.10	33
CA.KB.16	33
CA.KB.20	33
CA.KB.25	33
CA.KB.32	33
CA.KBH.12.10.60	43
CA.KBH.16.14.90	43
CA.KBH.16.16.125	43
CA.KBH.20.14.90	43
CA.KBH.20.16.125	43
CA.KBH.25.16.125	43
CA.KBH.32.20.125	43
CA.KBVJU.4040	9
CA.KBVJU.4080	9
CA.KBVJU.8040	9
CA.KBVL.1810	9
CA.KBVL.1818	9
CA.KBVX.2510	9
CA.KBVX.2518	9
CA.KBVX.2525	9

CODE	P
CA.KBVX.2550	9
CA.KBVX.5025	9
CA.KHZ.20141005	43
CA.KHZ.20143005	43
CA.KHZ.32201518	43
CA.KHZ.32203018	43
CA.KHZ.32205018	43
CA.KKS.10.10	11
CA.KKS.14.14	11
CA.KKS.20.10	11
CA.KKS.20.14	11
CA.KKS.20.20	11
CA.KPLJU.4025	9
CA.KPLJU.4040	9
CA.KPLJU.8040	9
CA.KPLJU.8080	9
CA.KPLL.1818	9
CA.KPLX.2518	9
CA.KPLX.2525	9
CA.KPLX.5025	9
CA.KPLX.5050	9
CA.KSW.10.L	13
CA.KSW.10.X	13
CA.KSW.14.X	13
CA.KSW.20.JU	13
CA.KSW.20.X	13
CA.KSW.30.JU	13
CA.KVB.JU20	10
CA.KVB.JU30	10
CA.KVB.KG.JU20	11
CA.KVB.KG.X10	11
CA.KVB.KG.X14	11
CA.KVB.L10	10
CA.KVB.X14	10
CA.KVB.X20	10
CA.L.1810.1000	7
CA.L.1810.2000	7
CA.L.1818.1000	7
CA.L.1818.2000	7
CA.LAL.1.5	4
CA.LAL.1.7	4
CA.LAL.2.5	4
CA.LAL.2.7	4
CA.LAL.3.6	4
CA.LAL.3.8	4
CA.MPG.20	33
CA.MPG.20	33
CA.MPG.25	33
CA.MPG.25	33
CA.MPG.32	33
CA.MPG.32	33
CA.MPG.40	33
CA.MPG.40	33
CA.MPG.50	33
CA.MPG.50	33
CA.MPG.64	33
CA.MPG.64	33
CA.MR.05M	38
CA.MR.10M	38
CA.MR.20M	38
CA.MR.30AM	38
CA.MR.50AM	38
CA.PAA.AP	41
CA.PAA.AP.D	41
CA.PAA.CF	41
CA.PAA.CF.D	41
CA.PAA.SP	41
CA.PAC20.169	28
CA.PAC20.16A	28
CA.PAC20.16E	28
CA.PAC20.16K	28
CA.PAC20.16P	28
CA.PAC20.16R	28
CA.PAC20.16S	28

CODE	P
CA.PAC20.16S9	28
CA.PAC20.16S9N	28
CA.PAC20.16SN	28
CA.PAC20.16SP	28
CA.PAC20.16SPN	28
CA.PAC20.16W	28
CA.PAC20.16WN	28
CA.PKS.1010.15	14
CA.PKS.1414.20	14
CA.PKS.2020.26	14
CA.PKS.3030.38	14
CA.PMA.1406	43
CA.PMA.2010	43
CA.PMA.3015	43
CA.RBL.30	32
CA.RID.1410	15
CA.RID.2014	15
CA.RID.3020	15
CA.S120	38
CA.S2	38
CA.S4	38
CA.S5	38
CA.S7P	38
CA.SAR.2025	20
CA.SAR.2050	20
CA.SAT.3610	39
CA.SAT.4510	39
CA.SAT.5610	39
CA.SAT.5614	39
CA.SAT.5620	39
CA.SAT.7510	39
CA.SAT.7514	39
CA.SAT.7520	39
CA.SBP.10.G02	47
CA.SBP.15.G02	47
CA.SBP.20.G03	47
CA.SCAG.12P00E	46
CA.SCAR.12P00E	46
CA.SCM.10.X	13
CA.SCM.12.X	13
CA.SCM.14.X	13
CA.SCM.20.X	13
CA.SDN.1010	17
CA.SDN.1025	17
CA.SDN.1420	17
CA.SDN.1435	17
CA.SDN.2025	17
CA.SDN.2050	17
CA.SDNG.1010	17
CA.SDNG.1025	17
CA.SDNG.1420	17
CA.SDNG.1435	17
CA.SDNG.2025	17
CA.SDNG.2050	17
CA.SDR.1010	17
CA.SDR.1025	17
CA.SDR.1420	17
CA.SDR.1435	17
CA.SDR.2025	17
CA.SDR.2050	17
CA.SDRG.1010	17
CA.SDRG.1025	17
CA.SDRG.1420	17
CA.SDRG.1435	17
CA.SDRG.2025	17
CA.SDRG.2050	17
CA.SDS.02	51
CA.SDS.04	51
CA.SDS.06	51
CA.SDS.08	51
CA.SGB.14.14.X	21
CA.SGB.18.18.X	21
CA.SGB.5.5.X	21
CA.SLP.05.SI	47

CODE	P
CA.SLP.07.SI	47
CA.SMN.142010	16
CA.SMN.143510	16
CA.SMN.202514	16
CA.SMN.202520	16
CA.SMN.205014	16
CA.SMN.205020	16
CA.SMNG.142010	16
CA.SMNG.143510	16
CA.SMNG.202514	16
CA.SMNG.205014	16
CA.SN10	40
CA.SN20	40
CA.SN3	40
CA.SN5	40
CA.SNP10	40
CA.SNP20	40
CA.SNP3	40
CA.SNP5	40
CA.SSN.10100505	16
CA.SSN.10250505	16
CA.SSN.14201818	16
CA.SSN.14351818	16
CA.SSN.20251418	16
CA.SSN.20501418	16
CA.SSNG.10100505	16
CA.SSNG.10250505	16
CA.SSNG.14201818	16
CA.SSNG.14351818	16
CA.SSNG.20251418	16
CA.SSNG.20501418	16
CA.STA.45	39
CA.STA.56	39
CA.STA.75	39
CA.STF.30	38
CA.STF.36	38
CA.STF.45	38
CA.STF.56	38
CA.STF.75	38
CA.SV.JU.6	8
CA.SV.X.5	8
CA.SVB.JU.40.40	9
CA.SVB.X.25.25	9
CA.SVB.X.25.50	9
CA.SVB.X.50.25	9
CA.SVB.X.50.50	9
CA.SWM0	4
CA.SWM1	4
CA.SWM1S	4
CA.SWM2	4
CA.SWM2S	4
CA.SWM3	4
CA.SWM3S	4
CA.TIK.14007	31
CA.TIK.20007	31
CA.TIK.30007	31
CA.UDHE.32102020	36
CA.UDHE.32102020	36
CA.UDHE.32203020	36
CA.UDHE.32203020	36
CA.VBG.JU.40.160	10
CA.VBG.JU.40.80	10
CA.VBG.X.25.100	10
CA.VBG.X.25.50	10
CA.VBG.X.50.50	10
CA.VBL.50.50	10
CA.VBL.50.75	10
CA.VBL.80.120.JU	10
CA.VBL.80.80.JU	10
CA.VBT.JU.120	10
CA.VBT.X.50.75	10
CA.VBT.X.75.100	10
CA.VBW.JU.0.90	10
CA.VBW.JU.0.90	10

CODE	P
CA.VBW.X.0.90	10
CA.VBW.X.0.90	10
CA.VLR.10.30	14
CA.VLR.10.60	14
CA.VLR.10.90	14
CA.VLR.14.120	14
CA.VLR.14.40	14
CA.VLR.14.80	14
CA.VLR.20.100	14
CA.VLR.20.150	14
CA.VLR.20.50	14
CA.VLR.30.140	14
CA.VLR.30.200	14
CA.VLR.30.80	14
CA.VSX.1440	20
CA.VSX.LOCTITE	53
CA.VTB.JU.141818	44
CA.VTB.JU.181818	44
CA.VTB.JU.241818	44
CA.VTB.JU.281818	44
CA.VTB.X.141818	44
CA.VTB.X.181818	44
CA.VTB.X.241818	44
CA.VTB.X.281818	44
CA.WIV.JU.40	8
CA.WIV.JU.40.E	8
CA.WIV.JU.80.E	8
CA.WIV.X.25.0	8
CA.WIV.X.25.E	8
CA.WIV.X.25.M	8
CA.WIV.X.50.25	8
CA.WKA.10.10.30	14
CA.WKA.10.10.60	14
CA.WKA.10.10.90	14
CA.WKA.14.14.120	14
CA.WKA.14.14.40	14
CA.WKA.14.14.80	14
CA.WKA.20.20.100	14
CA.WKA.20.20.150	14
CA.WKA.20.20.50	14
CA.WKA.30.30.140	14
CA.WKA.30.30.200	14
CA.WKA.30.30.80	14
CA.WLS.14.18.X	21
CA.WLS.18.18.X	21
CA.WLS.M5.M5.X	21
CA.WSD.L.M5.M5	21
CA.WSD.X.14.18	21
CA.WSD.X.18.18	21
CA.WSL.1040.U.L	12
CA.WSL.1040.U.X	12
CA.WSL.1040.VU.X	12
CA.WSL.1050.G.X	12
CA.WSL.1060.VU.X	12
CA.WSL.1080.VU.X	12
CA.WSL.1440.U.L	12
CA.WSL.1440.U.X	12
CA.WSL.1440.VU.X	12
CA.WSL.1450.U.X	12
CA.WSL.1450.VU.X	12
CA.WSL.1460.G.X	12
CA.WSL.2060.G.X	12
CA.WSL.2060.U.X	12
CA.WSL.2060.VU.X	12
CA.WSL.2070.U.JU	12
CA.WSL.2070.U.X	12
CA.WSL.2070.VU.X	12
CA.WSL.2080.VU.X	12
CA.WSL.2570.VU.X	12
CA.WSL.3060.VU.J	12
CA.WSL.3070.U.JU	12
CA.WSL.3070.VU.J	12
CA.WSL.GA.10.X	13
CA.WSL.GA.14.X	13

CODE	P	CODE	P	CODE	P	CODE	P	CODE	P
CA.WSL.GA.20.X	13	FS.DHEB22EUEL/USL	35	KIT.08.03.D12.9	26	KIT.08.30.D63.11	25	KT38P3M	50
CA.WSL.GA.30.X	13	FS.DHEB27EDEL/DSL	35	KIT.08.03.D15.4	26	KIT.08.30.D63.21	25	KT38PM8	50
CA.WSL.KG.JU.20	13	FS.DHEB27EDEL/DSL	35	KIT.08.03.D15.9	26	KIT.08.30.D78.24	25	KT58N3M	50
CA.WSL.KG.X.10	13	FS.DHEB27EUEL/USL	35	KIT.08.03.D20.4	26	KIT.08.31.D06.14	22	KT58NM8	50
CA.WSL.KG.X.14	13	FS.DHEB27EUEL/USL	35	KIT.08.03.D20.9	26	KIT.08.31.D11.4	22	KT58P3M	50
CA.WSS.JU.14.18	21	FS.DHEB33EDEL/DSL	35	KIT.08.03.D25.10	26	KIT.08.31.D11.9	22	KT58PM8	50
CA.WSS.JU.14.18	21	FS.DHEB33EDEL/DSL	35	KIT.08.03.D30.10	26	KIT.08.31.D14.4	22	MMD.IL5AN3AVF80	50
CA.WSS.L.M5.M5	21	FS.DHEB33EUEL/USL	35	KIT.08.03.D35.11	26	KIT.08.31.D14.9	22	MMD.IL5AP3AVF80	50
CA.WSS.L.M5.M5	21	FS.DHEB33EUEL/USL	35	KIT.08.03.D45.11	26	KIT.08.31.D16.4	22	MMD.UK6AHN0EUL	48
CA.WSS.X.14.18	21	FS.DHEB41EDEL/DSL	35	KIT.08.03.D60.11	26	KIT.08.31.D16.9	22	MMD.UK6AHP0EUL	48
CA.WSS.X.14.18	21	FS.DHEB41EDEL/DSL	35	KIT.08.26.D16.4	23	KIT.08.31.D20.4	22	OM.E39-R1S	51
CA.WSS.X.18.18	21	FS.DHEB41EUEL/USL	35	KIT.08.26.D16.9	23	KIT.08.31.D20.9	22	OM.E3Z-D66.OMS	48
CA.WSS.X.18.18	21	FS.DHEB41EUEL/USL	35	KIT.08.26.D20.4	23	KIT.08.31.D22.4	22	OM.E3Z-D86.OMS	48
CA.WST.10	15	FS.DHEB51EDEL/DSL	35	KIT.08.26.D20.9	23	KIT.08.31.D22.9	22	OM.E3Z-LL66.OMS	48
CA.WST.10.L	12	FS.DHEB51EDEL/DSL	35	KIT.08.26.D25.4	23	KIT.08.31.D25.4	22	OM.E3Z-LL86.OMS	48
CA.WST.10.X	12	FS.DHEB51EUEL/USL	35	KIT.08.26.D25.9	23	KIT.08.31.D25.9	22	OM.E3Z-LS66.OMS	48
CA.WST.1010.L	12	FS.DHEB51EUEL/USL	35	KIT.08.26.D33.11	23	KIT.08.31.D33.11	22	OM.E3Z-LS86.OMS	48
CA.WST.1014.X	12	FS.DHEB63EDEL/DSL	35	KIT.08.26.D33.21	23	KIT.08.31.D33.21	22	OM.E3Z-LT66.OMS	48
CA.WST.14	15	FS.DHEB63EDEL/DSL	35	KIT.08.26.D43.11	23	KIT.08.31.D43.11	22	OM.E3Z-LT86	48
CA.WST.14.L	12	FS.DHEB63EUEL/USL	35	KIT.08.26.D43.21	23	KIT.08.31.D43.21	22	OM.E3Z-R66.OMS	48
CA.WST.14.X	12	FS.DHEB63EUEL/USL	35	KIT.08.26.D53.11	23	KIT.08.31.D53.11	22	OM.E3Z-R86.OMS	48
CA.WST.1414.X	12	FS.DHEB8EDEL/DSL	35	KIT.08.26.D53.21	23	KIT.08.31.D53.21	22	OM.XS2F.M124A5M	49
CA.WST.20	15	FS.DHEB8EDEL/DSL	35	KIT.08.26.D63.11	23	KIT.08.31.D63.21	22	OM.XS2F.M124S5M	49
CA.WST.20.JU	12	FS.DHEB8EUEL/USL	35	KIT.08.26.D63.21	23	KIT.08.31.D78.24	22	OM.XS3F.M83A5M	49
CA.WST.20.X	12	FS.DHEB8EUEL/USL	35	KIT.08.26.D78.24	23	KIT.08.32.D09.26	23	OM.XS3F.M83S5M	49
CA.WST.2014.X	12	GRF14.95.0708	31	KIT.08.27.L24.1A	24	KIT.08.32.D12.4	23	OM.XS3F.M84A5M	49
CA.WST.2022.JU	12	GRF14.95.08	31	KIT.08.27.L30.1A	24	KIT.08.32.D12.9	23	OM.XS3F.M84S5M	49
CA.WST.30.JU	12	GRF14.95.08	33	KIT.08.27.L36.1A	24	KIT.08.32.D14.4	23	PAC.20.16P.03	28
CA.WST.30.X	12	GRF14.95.08.V	31	KIT.08.27.L45.13	24	KIT.08.32.D14.9	23	PAC.20.16P.03	33
CA.X.2510.1000	7	GRF14.95.08.V	33	KIT.08.27.L60.13	24	KIT.08.32.D20.4	23	PAC.20.16P.03.V	28
CA.X.2510.2000	7	GRF14.VSX	31	KIT.08.27.L75.13	24	KIT.08.32.D20.9	23	PAC.20.16P.03.V	33
CA.X.2518.1000	7	GRF20.95.0708	31	KIT.08.28.D05	24	KIT.08.32.D25.4	23	PIA.275X275X2	52
CA.X.2518.2000	7	GRF20.95.08	31	KIT.08.28.D06	24	KIT.08.32.D25.9	23	SWM1.8	4
CA.X.2525.1000	7	GRF20.95.08	33	KIT.08.28.D08	24	KIT.08.32.D32.11	23	SWM2.8	4
CA.X.2525.2000	7	GRF20.95.08.V	31	KIT.08.28.D10	24	KIT.08.32.D32.21	23	SWM3.8	4
CA.X.5025.1000	7	GRF20.95.08.V	33	KIT.08.28.D15	24	KIT.08.32.D42.11	23	VES.N5AP	38
CA.X.5025.2000	7	GRF20.VSX	31	KIT.08.28.D20	24	KIT.08.32.D42.21	23	VES.N10LAP	38
CA.ZFN1	41	GRF30.95.0708	31	KIT.08.28.D25	24	KIT.08.32.D52.21	23	VES.N10LPF	38
CA.ZFN10	41	GRF30.95.08	31	KIT.08.28.D30	24	KIT.08.32.D62.21	23	VES.N20AP	38
CA.ZFN3	41	GRF30.95.08.V	31	KIT.08.28.D35	24	KIT.08.33.D12.4	25	VES.N20AJ	38
CA.ZFN5	41	GRF30.VSX	31	KIT.08.28.D40	24	KIT.08.33.D12.9	25	VES.N20AJL	38
CA.ZFNP1	41	GRZ.20.SC.NPN	50	KIT.08.28.D50	24	KIT.08.33.D14.4	25	VES.N20PF	38
CA.ZFNP10	41	GRZ.20.SC.PNP	50	KIT.08.28.D60	24	KIT.08.33.D14.9	25	VES.N30AP	38
CA.ZFNP3	41	GTS.03.12	30	KIT.08.28.D80	24	KIT.08.33.D20.4	25	VES.N30AJ	38
CA.ZFNP5	41	GTS.03.14	30	KIT.08.29.D05	22	KIT.08.33.D20.9	25	VES.N30AJL	38
CA.ZTB.1040	14	GTS.03.15/15.N	30	KIT.08.29.D06	22	KIT.08.33.D25.4	25	VES.N30PF	38
CA.ZTB.1060	14	GTS.03.17	30	KIT.08.29.D08	22	KIT.08.33.D25.9	25		
CA.ZTB.1460	14	GTS.03.19	30	KIT.08.29.D10	22	KIT.08.33.D32.11	25		
CA.ZTB.1480	14	GTS.03.29	30	KIT.08.29.D15	22	KIT.08.33.D32.21	25		
CA.ZTB.20100	14	GTS.03.G18	30	KIT.08.29.D20	22	KIT.08.33.D42.11	25		
CA.ZTB.30100	14	GTS.04.12	30	KIT.08.29.D25	22	KIT.08.33.D42.21	25		
CA.ZTS.14	31	GTS.04.14	30	KIT.08.29.D30	22	KIT.08.33.D5.25	25		
CA.ZTS.20	31	GTS.04.15/15.N	30	KIT.08.29.D35	22	KIT.08.33.D52.11	25		
CA.ZTS.30	31	GTS.04.17	30	KIT.08.29.D40	22	KIT.08.33.D52.21	25		
CA-WLS.14.14.JU	21	GTS.04.19	30	KIT.08.29.D50	22	KIT.08.33.D60.21	25		
FS.DHEB10EDEL/DSL	35	GTS.04.29	30	KIT.08.29.D60	22	KIT.08.33.D7.26	25		
FS.DHEB10EDEL/DSL	35	GTS.04.G18	30	KIT.08.29.D80	22	KIT.08.33.D9.26	25		
FS.DHEB10EUEL/USL	35	GZA.10.08.6	29	KIT.08.30.D06.14	25	KIT.08.36.D10	27		
FS.DHEB10EUEL/USL	35	GZA.10.08.6.V	29	KIT.08.30.D11.4	25	KIT.08.36.D10.60	27		
FS.DHEB12EDEL/DSL	35	GZA.10.12.6	29	KIT.08.30.D11.9	25	KIT.08.36.D15	27		
FS.DHEB12EDEL/DSL	35	GZA.10.12.6.V	29	KIT.08.30.D14.4	25	KIT.08.36.D15.60	27		
FS.DHEB12EUEL/USL	35	KIT.08.01.D11.4	26	KIT.08.30.D14.9	25	KIT.08.36.D20	27		
FS.DHEB12EUEL/USL	35	KIT.08.01.D11.9	26	KIT.08.30.D16.4	25	KIT.08.36.D20.60	27		
FS.DHEB14EDEL/DSL	35	KIT.08.01.D16.4	26	KIT.08.30.D16.9	25	KIT.08.36.D25	27		
FS.DHEB14EDEL/DSL	35	KIT.08.01.D16.9	26	KIT.08.30.D20.4	25	KIT.08.36.D25.60	27		
FS.DHEB14EUEL/USL	35	KIT.08.01.D20.1	26	KIT.08.30.D20.9	25	KIT.08.36.D35.1	27		
FS.DHEB14EUEL/USL	35	KIT.08.01.D30.2	26	KIT.08.30.D25.4	25	KIT.08.36.D35.2	27		
FS.DHEB18EDEL/USL	35	KIT.08.01.D40.2	26	KIT.08.30.D25.9	25	KIT.08.36.D35.60	27		
FS.DHEB18EDEL/USL	35	KIT.08.01.D50.3	26	KIT.08.30.D33.11	25	KIT.08.36.D52	27		
FS.DHEB18EUEL/USL	35	KIT.08.03.D06.5	26	KIT.08.30.D33.21	25	KIT.08.36.D52.60	27		
FS.DHEB18EUEL/USL	35	KIT.08.03.D08.6	26	KIT.08.30.D43.11	25	KIT.08.36.D75	27		
FS.DHEB22EDEL/DSL	35	KIT.08.03.D10.4	26	KIT.08.30.D43.21	25	KIT.08.36.D75.60	27		
FS.DHEB22EDEL/DSL	35	KIT.08.03.D10.9	26	KIT.08.30.D53.11	25	KT38N3M	50		
FS.DHEB22EUEL/USL	35	KIT.08.03.D12.4	26	KIT.08.30.D53.21	25	KT38NM8	50		

With 13 years of experience in the automation business in the field of Plastic Molding Technology, the company FPservices stems from its founder experience, who, after have worked as supervisor and as production/manufacturing manager in companies involved in plastic molding business, in 2003 dedicates itself to the foundation of the company FPservices.

Martech Sales & Associates Inc.

1111 Davis Dr., Unit 1
Newmarket, Ont Canada L3Y 9E5
Tel: 1 905 716-5856
Email: info@martechsales.com
Web: www.martechsales.com

Via Morandi, 186 - 40060 Toscanella di Dozza (BO) Italy
Tel. +39 0542 674298 - Fax: +39 0542 899926
e-mail: info@fpservices.it - www.fpservices.it

