

**2/2, 3/2 or 5/2 poppet valves
 electromagnetic actuated, directly controlled
 1/4 NPT ... 3/4 NPT, G 1/4 ... G 3/4 or manifold version**

**Direct acting solenoid valve for the control of
 hydraulic or pneumatic equipment**

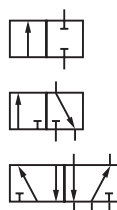
High flow

Up to 414 bar inlet pressure

**Reliable and long life, ideal for a one time
 installation**

**Certifications: ATEX, CSA, GOST K & R, IECEx,
 FM, CRN, CCOE IN-METRO**

Environmental protection; NEMA 4X, IP66/X8



Technical features

Medium:

Hydraulic and pneumatic –
 customer to specify and confirm
 compatibility

Operation:

Direct solenoid operated
 poppet valves

Mounting position:

Solenoid vertical

Flow:

0,8 Cv (11,5 Kv) ... 6,0 Cv (86,2 Kv)

Port size:

1/4 NPT, 1/2 NPT, G1/4, G1/2
 or manifold version

Operating pressure:

0 ... 20 bar (0 ... 290 psi)
 0 ... 50 bar (0 ... 725 psi)
 0 ... 207 bar (0 ... 3002 psi)
 0 ... 414 bar (0 ... 6005 psi)

Fluid temperature:

-20 ... +90°C (-4 ... +194°F)

Options to -60°C (-76°F)
 available on request

Ambient temperature:

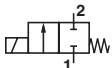
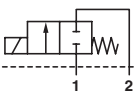
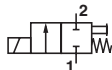
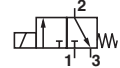
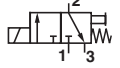
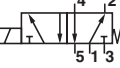
See table on page 2
 Air supply must be dry enough
 to avoid ice formation at
 temperatures below 2°C (+35°F).

Materials:

Valve body, trim, coil housing and
 top cover:
 stainless steel 1.4404 (316 L)
 O-rings seats & seals: high NBR

Other seal materials available on
 request

Technical data – standard models with conduit connection M20 x 1,5

Symbol	Port size	Function	Operating pressure (bar)	Material Seat seal	Manual override/ reset	ATEX certification	Power consumption 24 V d.c. (W)	Ambient temperature	Weight (kg)	Dimension No.	Model
	1/4 NPT	2/2 NC	0 ... 20	NBR	Without	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5	1	Y121AA1H1*S
	G 1/4	2/2 NC	0 ... 20	NBR	Without	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5	1	Y121AE1H1*S
	1/2 NPT	2/2 NC	0 ... 50	NBR	Without	Exd IIC T6	9,6	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	2	Y131AA3H1*S
	G 1/2	2/2 NC	0 ... 50	NBR	Without	Exd IIC T6	9,6	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	2	Y131AE3H1*S
	1/2 NPT	2/2 NC	15 ... 414	NBR	Without	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	3	Y191AA3J1*S
	G 1/2	2/2 NC	15 ... 414	NBR	Without	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	3	Y191AE3J1*S
	3/4 NPT	2/2 NC	0-10	NBR	Without	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	10	4	Y113AA5H1*S
	G 3/4	2/2 NC	0-10	NBR	Without	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	10	4	Y113AE5H1*S
	Manifold	2/2 NC	0 ... 207	NBR	Without	Exd IIC T6	9,6	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	6	5	Y161AKFJ1*S
	Manifold	2/2 NC	0 ... 414	NBR	Without	Exd IIC T6	9,6	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	6	5	Y191AKFJ1*S
	1/4 NPT	2/2 NC	0 ... 20	NBR	PBMR*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	6	Y121PA1H1*S
	G 1/4	2/2 NC	0 ... 20	NBR	PBMR*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	6	Y121PE1H1*S
	1/2 NPT	2/2 NC	0 ... 20	NBR	PBMR*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	7	Y121PA3H1*S
	G 1/2	2/2 NC	0 ... 20	NBR	PBMR*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	7	Y121PE3H1*S
	1/4 NPT	3/2 UNI	0 ... 20	NBR	Without	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	8	Y123AA1H1*S
	G 1/4	3/2 UNI	0 ... 20	NBR	Without	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	8	Y123AE1H1*S
	1/2 NPT	3/2 UNI	0 ... 20	NBR	Without	Exd IIC T6	9,6	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	9	Y123AA3H1*S
	G 1/2	3/2 UNI	0 ... 20	NBR	Without	Exd IIC T6	9,6	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	9	Y123AE3H1*S
	3/4 NPT	3/2 UNI	0 ... 20	NBR	Without	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	10	10	Y113AA5H1*S
	G 3/4	3/2 UNI	0 ... 20	NBR	Without	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	10	10	Y113AE5H1*S
	1/4 NPT	3/2 UNI	0 ... 20	NBR	PBMR*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	11	Y123PA1H1*S
	G 1/4	3/2 UNI	0 ... 20	NBR	PBMR*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	11	Y123PE1H1*S
	1/2 NPT	3/2 UNI	0 ... 20	NBR	PBMR*	Exd IIC T6	6,0	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	12	Y123PA3H1*S
	G 1/2	3/2 UNI	0 ... 20	NBR	PBMR*	Exd IIC T6	6,0	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	12	Y123PE3H1*S
	1/4 NPT	3/2 UNI	0 ... 20	NBR	A-L-L*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	13	Y123BA1H1*S
	G 1/4	3/2 UNI	0 ... 20	NBR	A-L-L*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	13	Y123BE1H1*S
	1/2 NPT	3/2 UNI	0 ... 20	NBR	A-L-L*	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	14	Y123BA3H1*S
	G 1/2	3/2 UNI	0 ... 20	NBR	A-L-L*	Exd IIC T6	15,1	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	14	Y123BE3H1*S
	1/4 NPT	3/2 UNI	0 ... 20	NBR	JSMO*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	15	Y123SA1H1*S
	G 1/4	3/2 UNI	0 ... 20	NBR	JSMO*	Exd IIC T6	4,5	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	5,5	15	Y123SE1H1*S
	1/4 NPT	5/2 UNI	0 ... 12	NBR	Without	Exd IIC T6	4,7	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	16	Y115AA1H1*S
	G 1/4	5/2 UNI	0 ... 12	NBR	Without	Exd IIC T6	4,7	T6 (-60 ... +48°C), T4 (-60 ... +90°C)	7,5	16	Y115AE1H1*S

* Insert voltage code - shown in option selector on page 3

Other product and body material available for more information contact Maxseal technical service

PBMR = Push button manual reset, A-L-L = Automatic latching lever, JSMO = Jack screw manual override

Option selector

Y1★★★★★★S

Operating pressure	Substitute
0 ... 20 bar	2
0 ... 50 bar	3
0 ... 207 bar	6
0 ... 414 bar	9
Number of ports	Substitute
2 /2 NC (standard)	1
2 /2 NO	2
3/2 NC (universal)	3
5/2	5
Operation	Substitute
Automatic	A
Automatic latching lever	B
Push button manual override	C
Push button manual reset	P
Jack screw manual override	S
Tamper proof manual reset	T
Port size	Substitute
1/4 NPT	A1
G 1/4	E1
1/2 NPT	A3
G 1/2	E3
3/4 NPT	A5
G 3/4	E5
Manifold	KF

Voltage	Substitute
18 /33 V d.c.	A
24 V d.c.	B
48 /50 V d.c. (50 V)	C
110 V d.c.	D
125 V d.c.	E
220 /240 V d.c. (240 V)	F
24 V a.c.	G
110 V a.c.	J
12 V d.c.	L
220 /240 V a.c. (240 V)	M
Conduit connection	Substitute
M20 x 1.5 mm	1
1/2 NPT	2
Seat /seal material	Substitute
High Nitrile (standard)	H
FKM	V

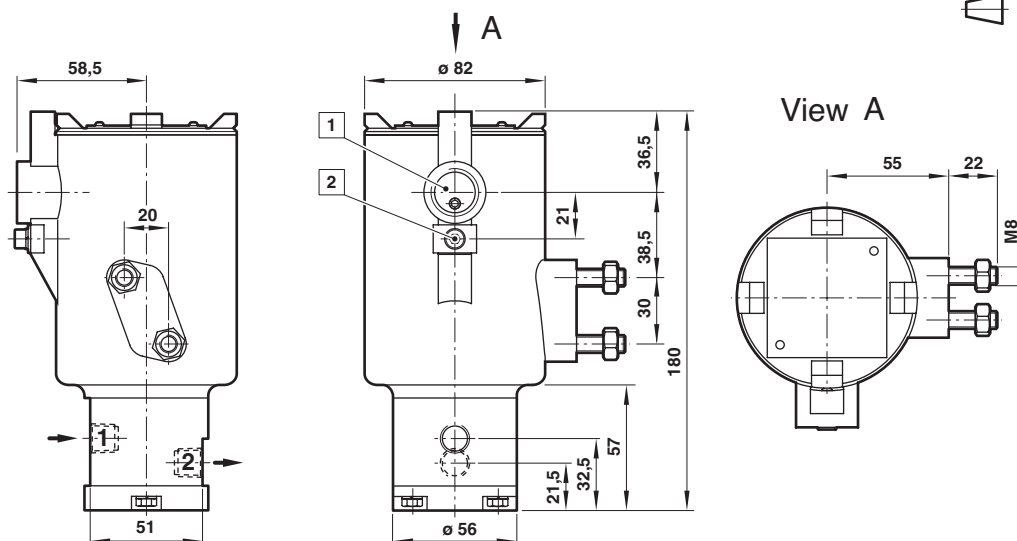
Dimensions

Dimensions shown in mm

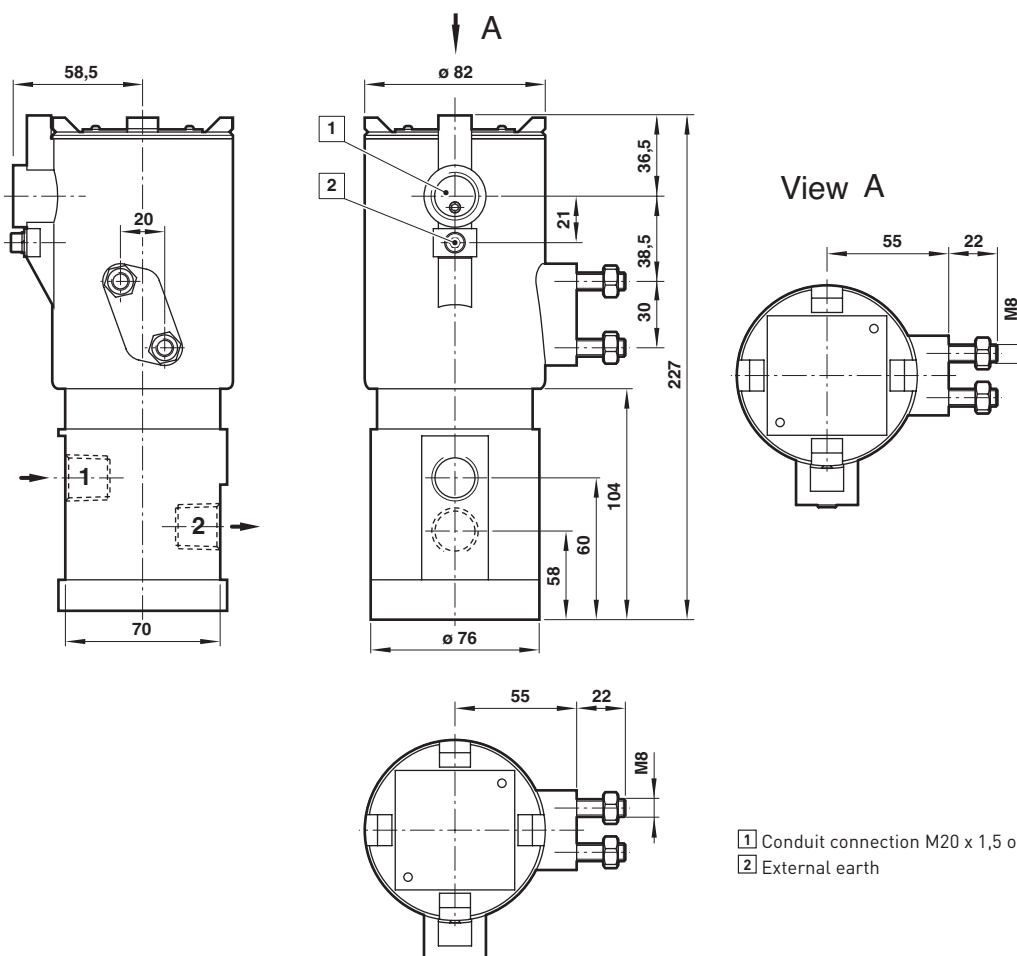
Projection/First angle



1



2



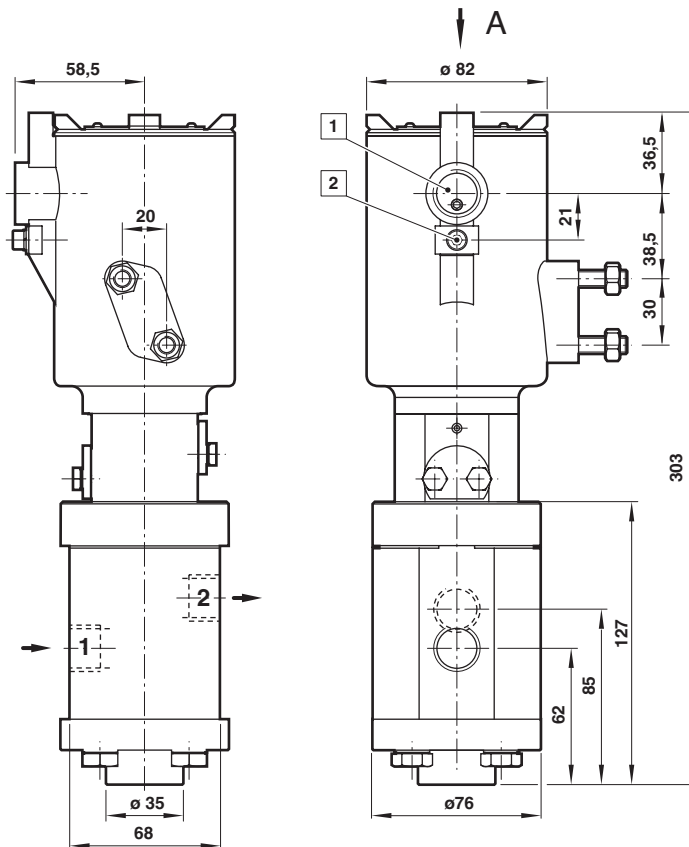
- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth

Dimensions shown in mm

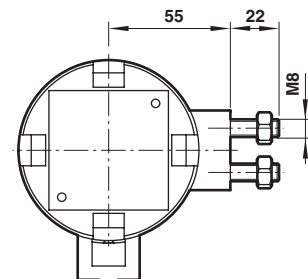
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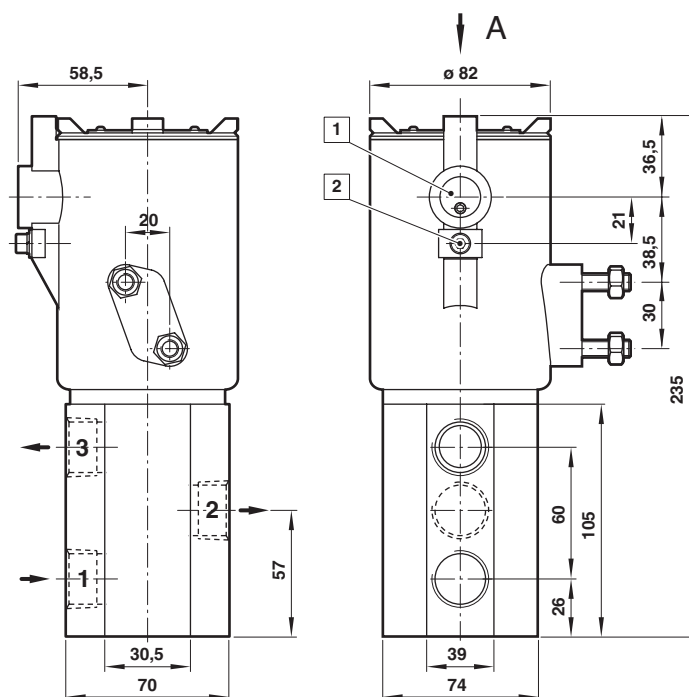
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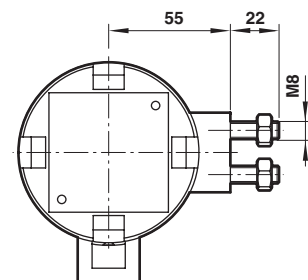
View A



4



View A

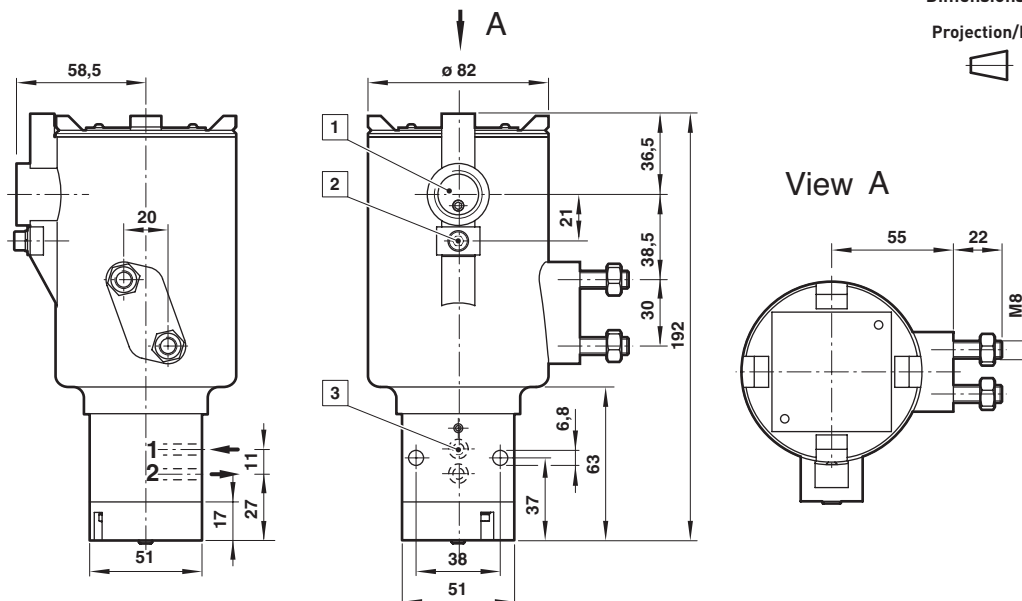


- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth

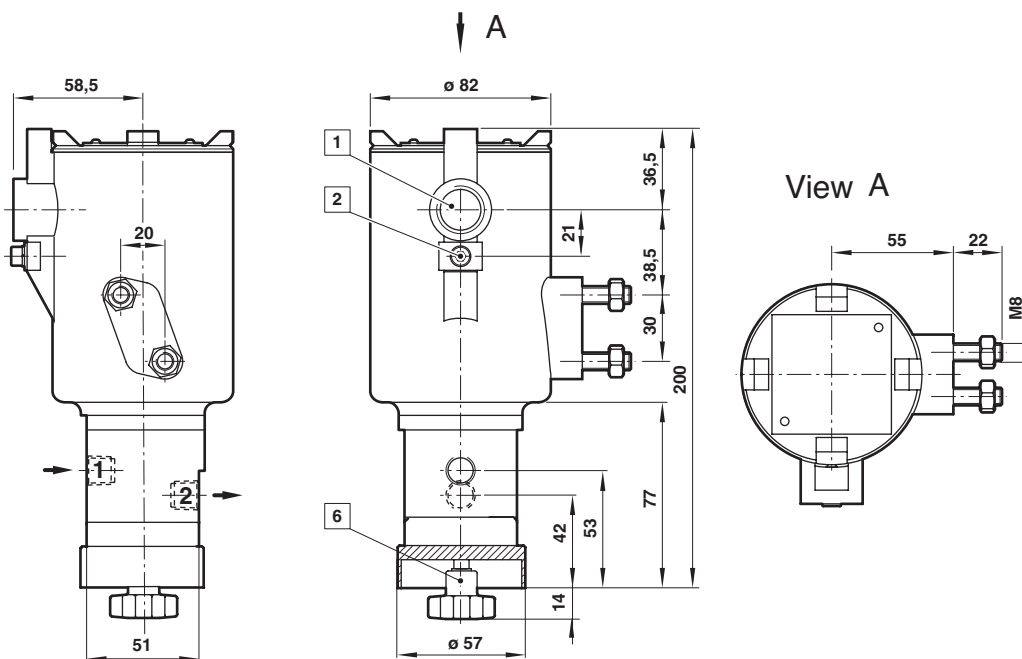
5

Dimensions shown in mm

Projection/First angle



6



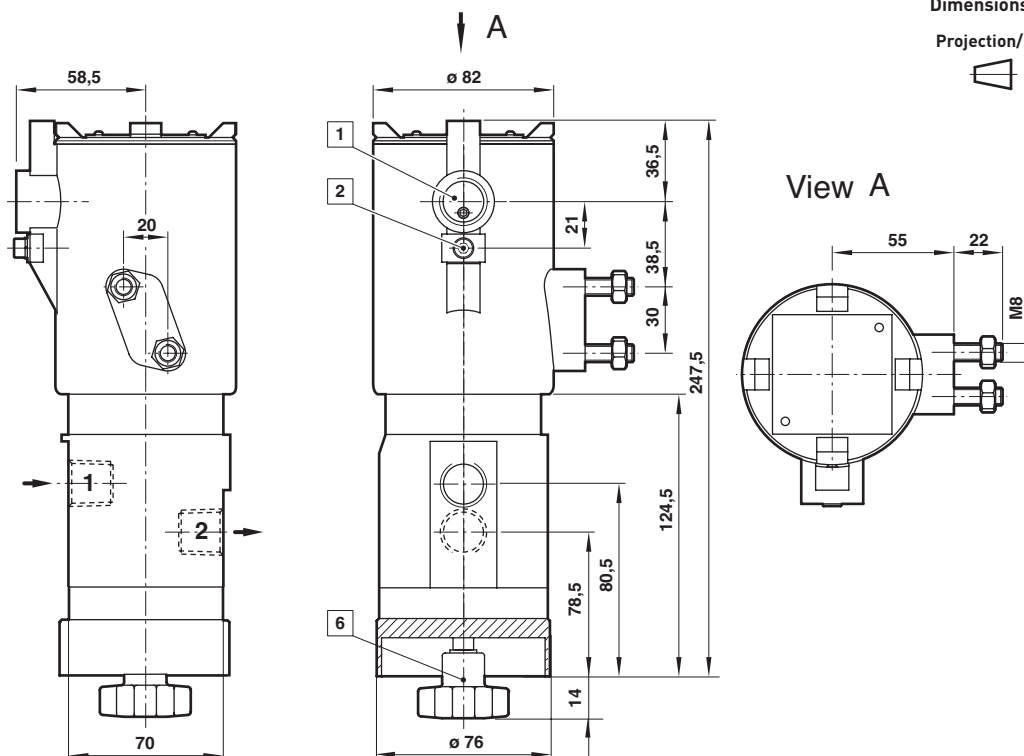
- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth
- 3 $\varnothing$ 5 mm drilled ports supplied with O-rings
- 6 Push button manual reset

Dimensions shown in mm

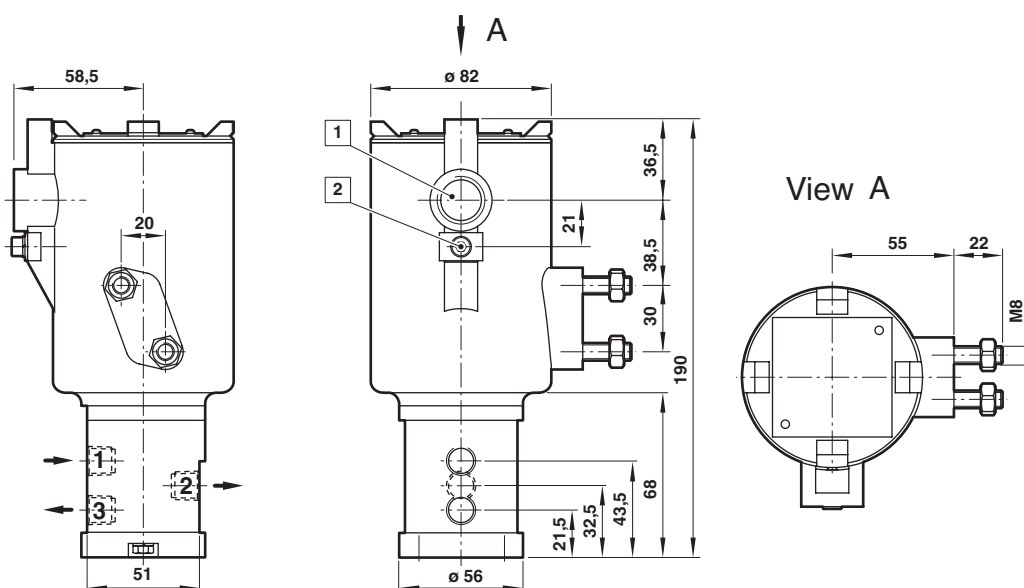
Projection/First angle



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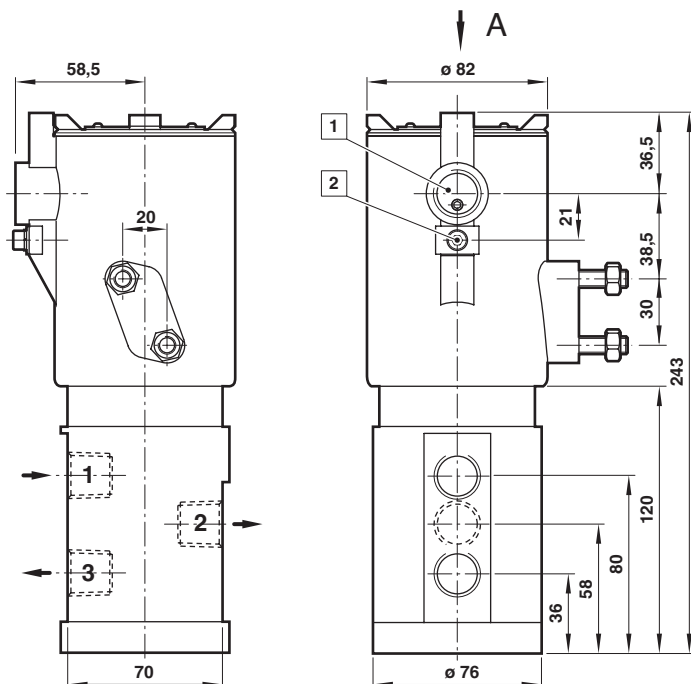


- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth
- 6 Push button manual reset

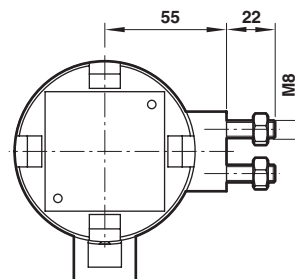
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Dimensions shown in mm

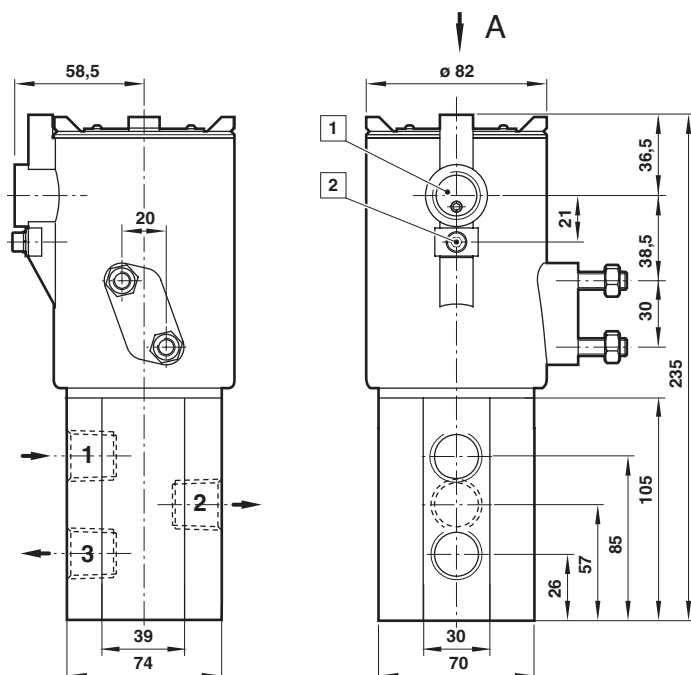
Projection/First angle



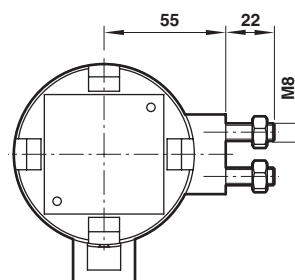
View A



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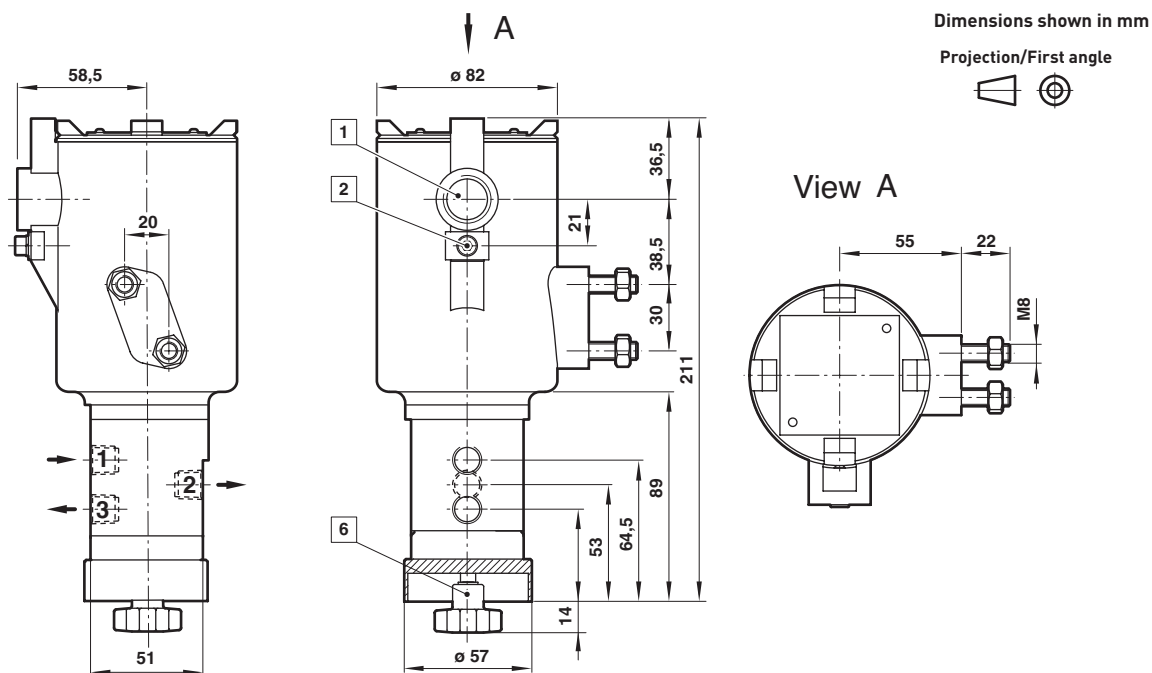


View A

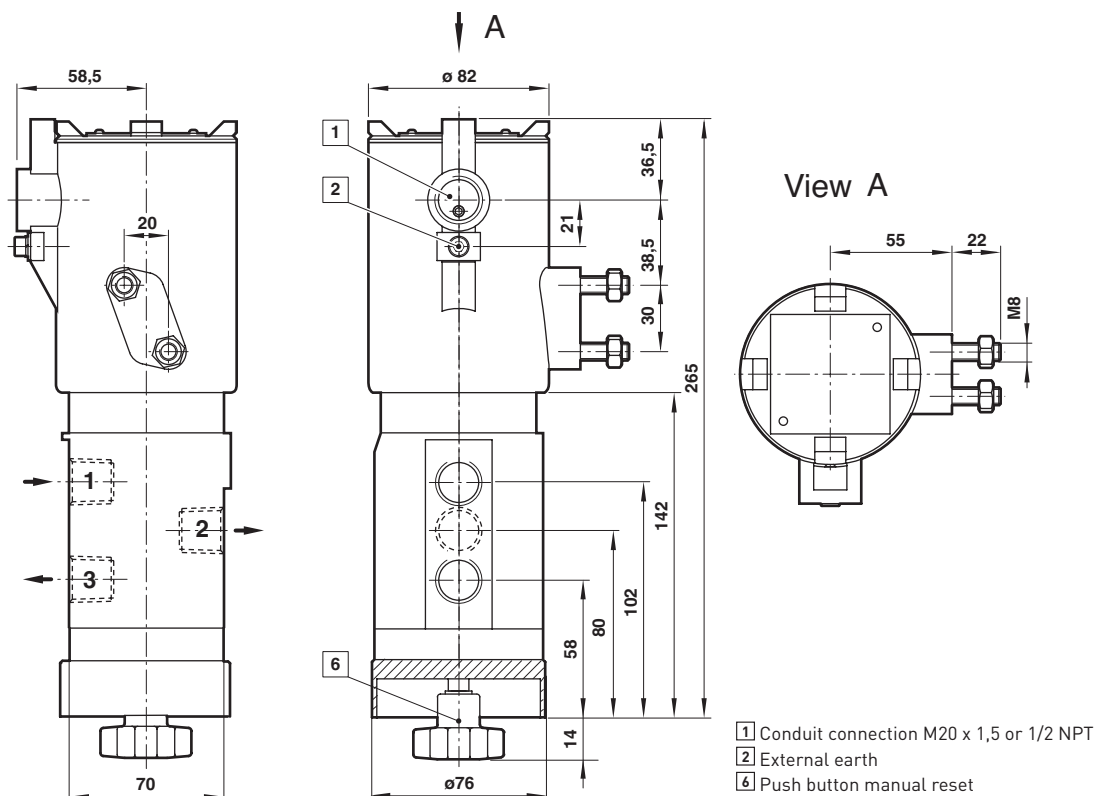


- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth

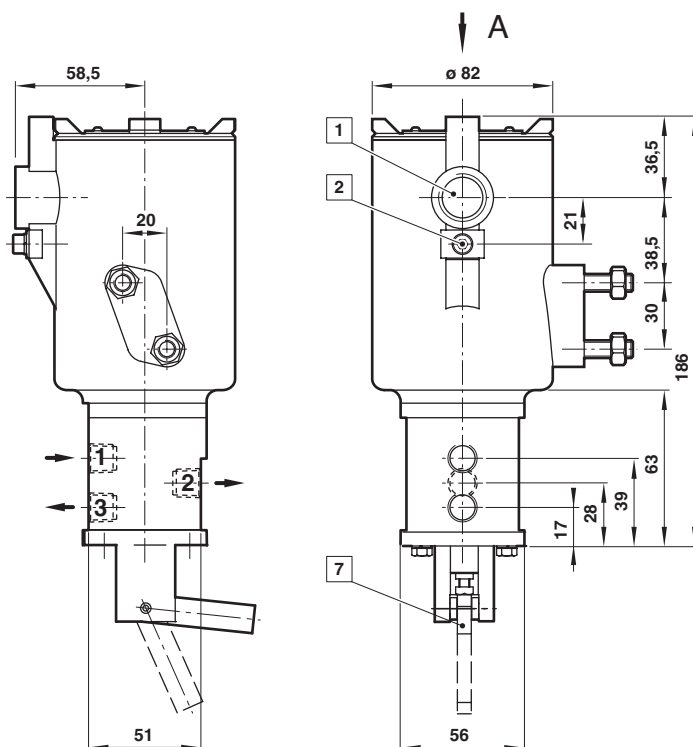
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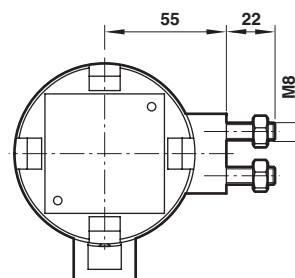


Dimensions shown in mm

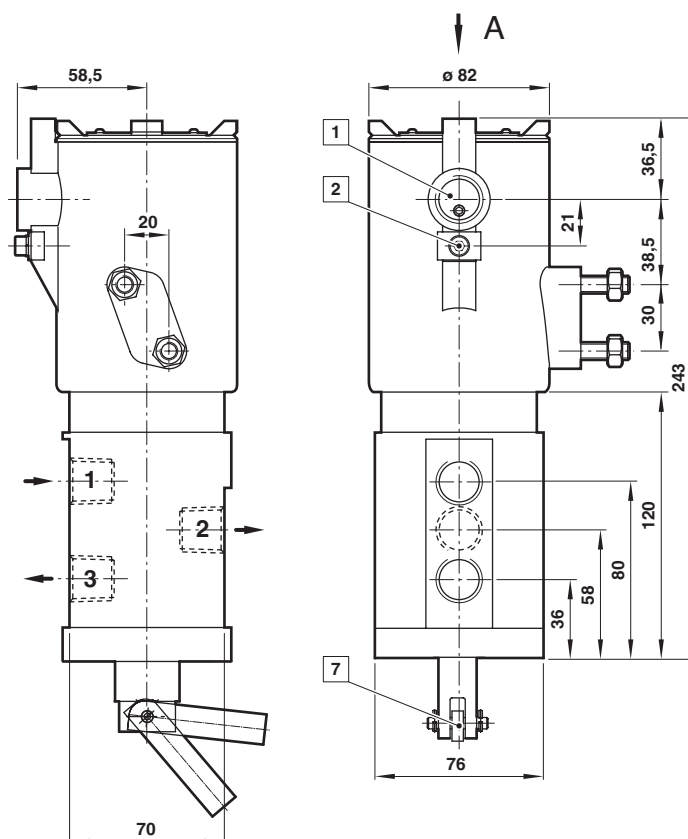
Projection/First angle



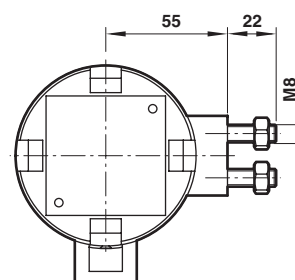
View A



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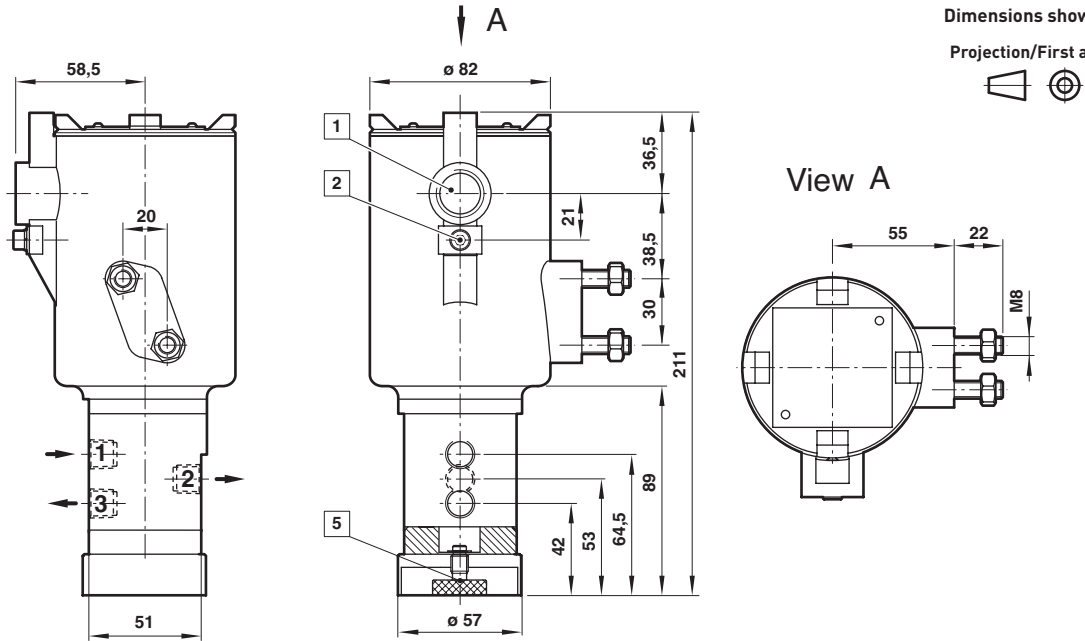


View A

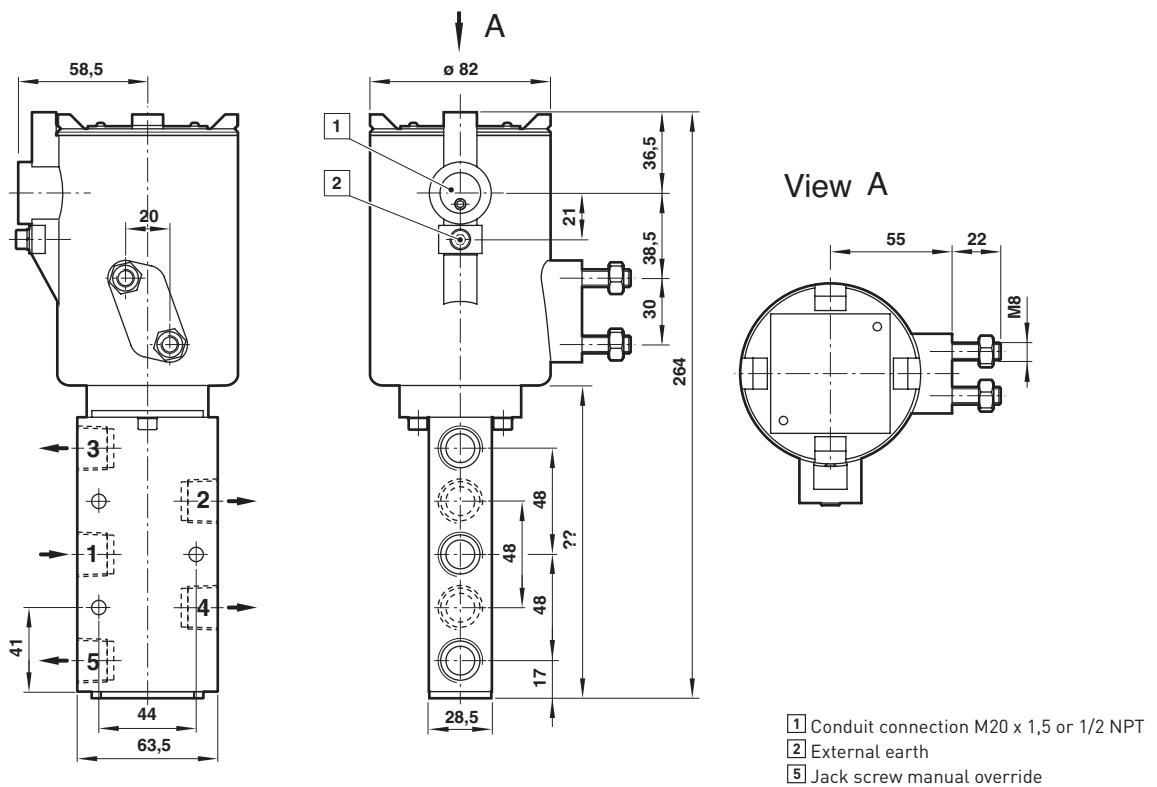


- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth
- 7 Automatic latching lever

15



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Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in pneumatic systems and to provide adequate safeguards to prevent personal injury or damage to

equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Functional safety (SIL):

Suitable for certain applications can only be evaluated through examination of each safety-related overall system with regard to the requirements of IEC 61508/61511.