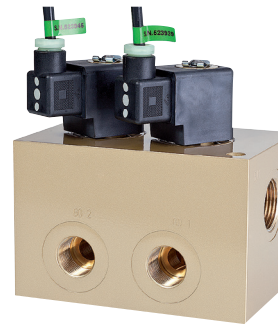


83790 2/2-way piston valves

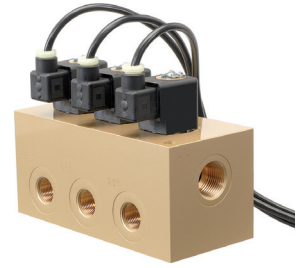
- Port size:
DN 15, G3/4 ... 1
- High pressure solenoid valves
- Further customized solutions available upon request, e.g. 350 bar version
- International approvals



8590649.9841



8590556.9841



8590365.9841



Technical features

Medium:
For compressed natural gas (CNG)

Switching function:
Normally closed

Operation:
Indirectly solenoid actuated

Mounting position:
Optional, preferably solenoid vertical on top

Flow direction:
Determined

Port size:
G1/4, G3/4, G1

Operating pressure:
10 ... 250 bar (14,5 ... 3620 psi)

Leakage:
Internal Leakage acc. to DIN EN 12266-1 Leakage "E"
External Leakage acc. to DIN EN 12266-1 Leakage "A"

Fluid temperatur:
Solenoid 984x: –20 ... +60°C (–4 ... +140°F)
Solenoid 6126: –20 ... +60°C (–4 ... +140°F)
Solenoid 428x: –40 ... +50°C (–40 ... +122°F)

Fluid temperatur:
Solenoid 468x: –40 ... +50°C (–40 ... +122°F)
Solenoid 382x: –20 ... +60°C (–4 ... +140°F)

Ambient temperatur:
Solenoid 984x: –20 ... +50°C (–4 ... +122°F)
Solenoid 6126: –20 ... +40°C (–4 ... +104°F)
Solenoid 428x: –40 ... +50°C (–40 ... +122°F) T4; T5 see page 2
Solenoid 468x: –40 ... +50°C (–40 ... +122°F) T4; T5 see page 2
Solenoid 382x: –20 ... +60°C (–4 ... +140°F)

Material:
Body: Brass
Seat seal: Polymer
Internal parts: Brass, Stainless steel, Polymer

Installation of a 40 µm filter in front of the valve is required!

Technical data – standard models

Execution	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar) (psi)	Weight (kg)	Model
Single valve	G3/4	13	3,0	10 ... 250 145 ... 3626	4,8	8590649.984x.xxxxx
Single valve	G3/4	15	4,5	10 ... 250 145 ... 3626	5,0 5,1 4,7	8590649.382x.xxxxx 8590649.428x.xxxxx 8590649.468x.xxxxx 8590649.6126.xxxxx
2-station manifold with integrated non return pressure valves for the 2-bank control	1 x G1 Eingang 2 x G3/4 Ausgang 2 x G1/4 für Druckmessumformer *3)	13		10 ... 250 145 ... 3626	12,5	8590556.984x.xxxxx
2-station manifold with integrated non return pressure valves for the 2-bank control	1 x G1 Eingang 2 x G3/4 Ausgang 2 x G1/4 für Druckmessumformer *3)	15		10 ... 250 145 ... 3626		8590556.382x.xxxxx 8590556.428x.xxxxx 8590556.468x.xxxxx 8590556.6126.xxxxx
3-station manifold with integrated no return pressure valves for the 3-bank control	1 x G1 Eingang 3 x G3/4 Ausgang 3 x G1/4 für Druckmessumformer *3)	13		10 ... 250 145 ... 3626	17,3	8590365.984x.xxxxx
2-station manifold with integrated non return pressure valves for the 2-bank control	1 x G1 Eingang 3 x G3/4 Ausgang 3 x G1/4 für Druckmessumformer *3)	15		10 ... 250 145 ... 3626		8590365.382x.xxxxx 8590365.428x.xxxxx 8590365.468x.xxxxx 8590365.6126.xxxxx

xxxxx Please insert voltage and frequency codes *1) Cv-value (US) ≈ kv value x 1,2 *2) Static test pressure PT = 375 bar *3) Not included

More multi station variants (with or without integrated non return pressure valves, integrated filter, ...) on request. Orifices and solenoid types may be combined in one block if necessary. According to PED 2014/68/EU and ATEX 2014/34/EU!

Option selector

Port size	Substitute
Single valve	649
2-station manifold with integrated non return pressure valves for the 2-bank control	556
3-station manifold with integrated no return pressure valves for the 3-bank control	365

8590★★★★★★★★

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage Codes	xxx
Solenoid options	Substitute
Solenoid with 10 m cable ends Protection class according to - II 2 G Ex mb IIC T4 Gb - II 2 D Ex mb tb IIIC T130°C Db	9845
For d.c. with 1/2 - 14 NPT female thread and 460 mm flying leads Protection class acc. to ANSI/NEMA USA: FM approved (File-No. 2Z2A6.AE) Canada: CSA certified (File-No. LR 57643-6) Solenoids in temperature class T3C (160°C) are useable in Ex-areas (see table Ex-areas)	3826
For a.c. with integrated rectifier with 1/2 - 14 NPT female thread and 460 mm flying leads Protection class acc. to ANSI/NEMA USA: FM approved (File-No. 2Z2A6.AE) Canada: CSA certified (File-No. LR 57643-6) Solenoids in temperature class T3C (160°C) are useable in Ex-areas (see table Ex-areas)	3827
Solenoid with terminal box cable Protection class according to - II 2 G Ex eb mb IIC T4/T5 Gb - II 2 D Ex tb IIIC T 130°C Db IP66 Ambient temperature: T4 -40 ... +50°C (-40 ... +122°F) T5 -40 ... +40°C (-40 ... +104°F) No screwed cable gland included in scope of delivery! Explosion protection ensured only with Ex screwed cable gland made of plastic! Cable gland limits maximum & minimum ambient temperature.	428x
Solenoid with terminal box cable gland M20 x 1,5 (cabel clamp ø 10 ... 14 mm) 1/2 ... 1/4 NPT (cabel clamp ø 7,5 ... 11,9 mm) Protection class according to - II 2 G Ex db mb IIC T4/T5 Gb - II 2 D Ex tb IIIC T 130°C Ambient temperature: T4 -40 ... +50°C (-40 ... +122°F) T5 -40 ... +40°C (-40 ... +104°F)	468x

Actuation solenoids – Technical data and connection type

Solenoid	Code Voltage	Code Frequency	Voltage	Frequency	Power consumption		Connection
					Inrush	Holding	
3826	024	00	24 V DC	-	13,6 VA	13,6 VA	1/2" Conduit 3 connection strands, length 460 mm cable gland 1/2-14 NPT
3827	230	49	230 V AC	40 ... 60 Hz	15,4 VA	15,4 VA	1/2" Conduit 3 connection strands, length 460 mm cable gland 1/2-14 NPT
4280	024	00	24 V DC	-	11,4 W	11,4 W	cable gland M20 x 1,5 Note: A cable gland made from plastic must be chosen during order.
4281	230	49	230 V AC	40 ... 60 Hz	15,2 VA	15,2 VA	cable gland M20 x 1,5 Note: A cable gland made from plastic must be chosen during order.
4680	024	00	24 V DC	-	11,4 W	11,4 W	connection housing for cables 7,5-11,9 mm cable gland 1/2-14 NPT
4681	230	49	230 V AC	40 ... 60 Hz	15,2 VA	15,2 VA	connection housing for cables 7,5-11,9 mm cable gland 1/2-14 NPT
4682	024	00	24 V DC	-	11,4 W	11,4 W	connection housing for cables 10-14 mm cable gland M20 x 1,5
4683	230	49	230 V AC	40 ... 60 Hz	15,2 VA	15,2 VA	connection housing for cables 10-14 mm cable gland M20 x 1,5
6126	024	00	24 V DC	-	14 W	14 W	connection housing for cables 7-9 mm cable gland M16 x 1,5
6126	230	49	230 V AC	40 ... 60 Hz	16 VA	16 VA	connection housing for cables 7-9 mm cable gland M16 x 1,5
9841	024	00	24 V DC	-	10,1 W	10,1 W	with 3 m connection cable
9844	024	00	24 V DC	-	10,1 W	10,1 W	with 5 m connection cable
9845	024	00	24 V DC	-	10,1 W	10,1 W	with 10 m connection cable

Electrical details for all solenoid systems

Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65 (exception 428x: IP66)

According to DIN VDE 0580 at a solenoid temperature of +20°C.

At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Additional solenoid systems for hazardous areas

Solenoid	ATEX category	Ex-protection class	IP-protection class
42xx	II2G II2D	Ex eb mb IIC T4/T5 Gb Ex tb IIIC T130°C Db (0077)	IP66
46xx	II2G II2G II2D	Ex db mb IIC T4/T5 Gb Ex eb mb IIC T4/T5 Gb Ex tb IIIC T130°C Db	IP66 / Connection IP00
984x	II2G II2D	Ex mb IIC T4 Gb Ex mb tb IIIC T130°C Db	IP65
6126	II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66

Solenoid systems with FM approval (USA)

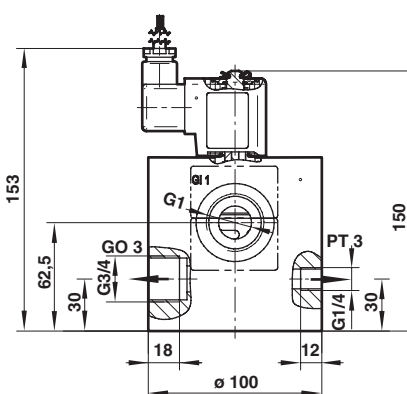
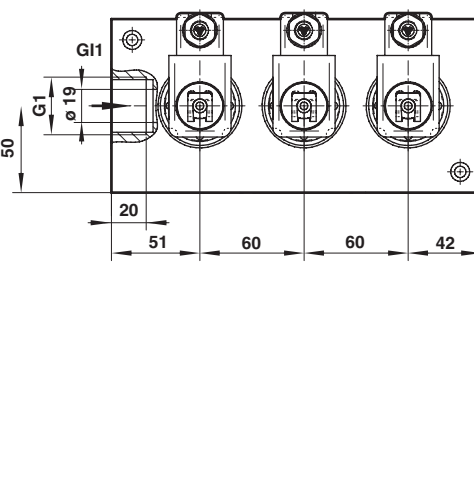
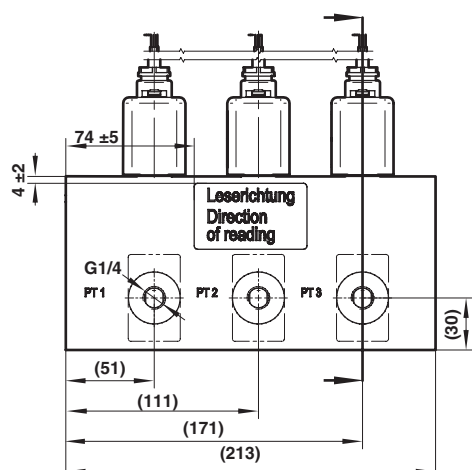
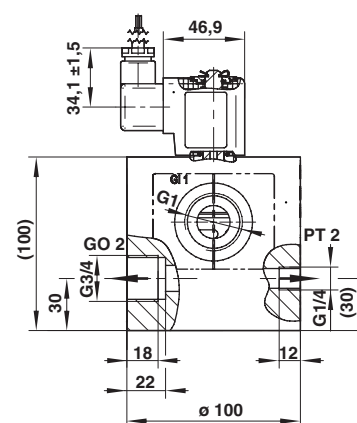
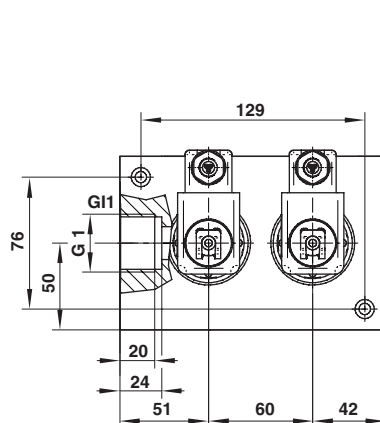
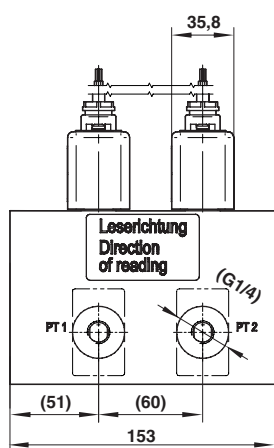
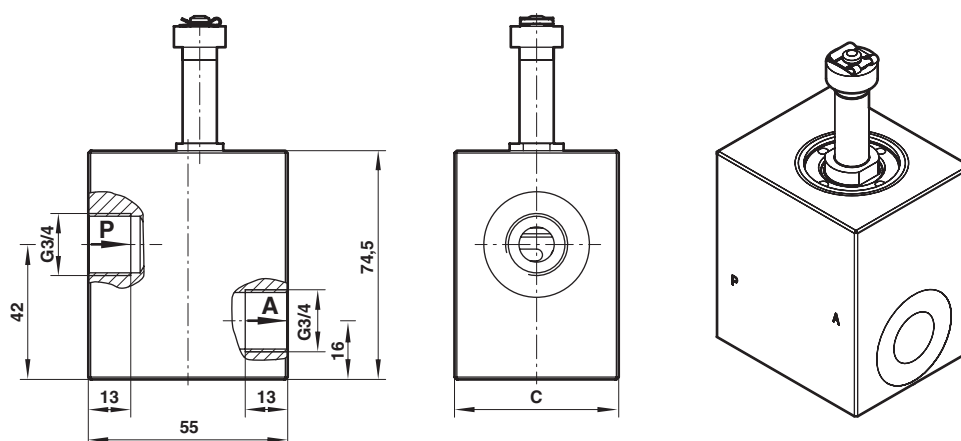
Solenoid	ANSI/NEMA	FM approval
382x	1,3,4,4X,6,6P,7 and 9	FM approved (File Nr. 2Z2A6.AE)

Admissible Ex areas (USA)

Solenoid 382x	Class	Division	Groups
Gases + fumes	I	1 and 2	A ... D
Dusts	II	1 and 2	E ... G
Fibres + fluffs	III	1 and 2	–

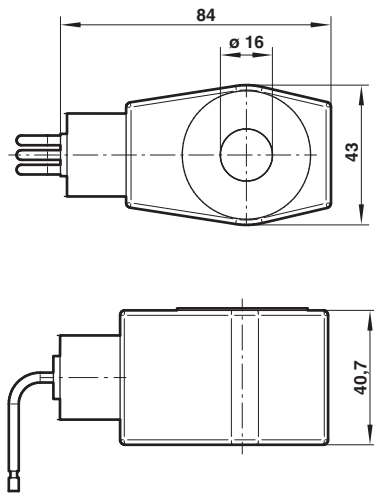
Dimensions

Dimensions in mm
Projection/first angle

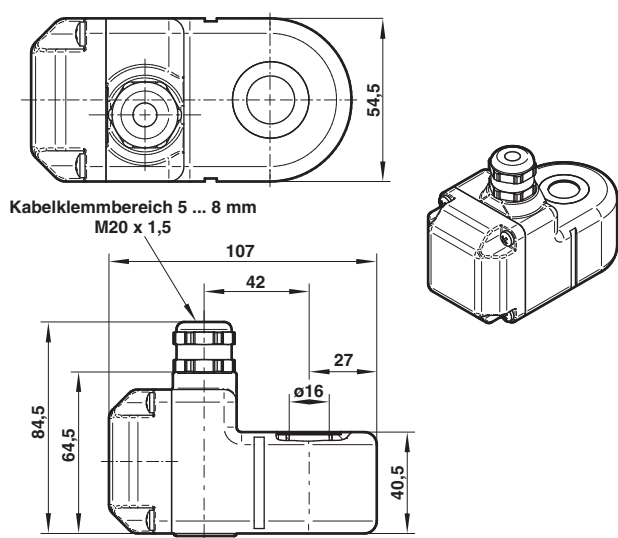


Dimensions Solenoids

38xx



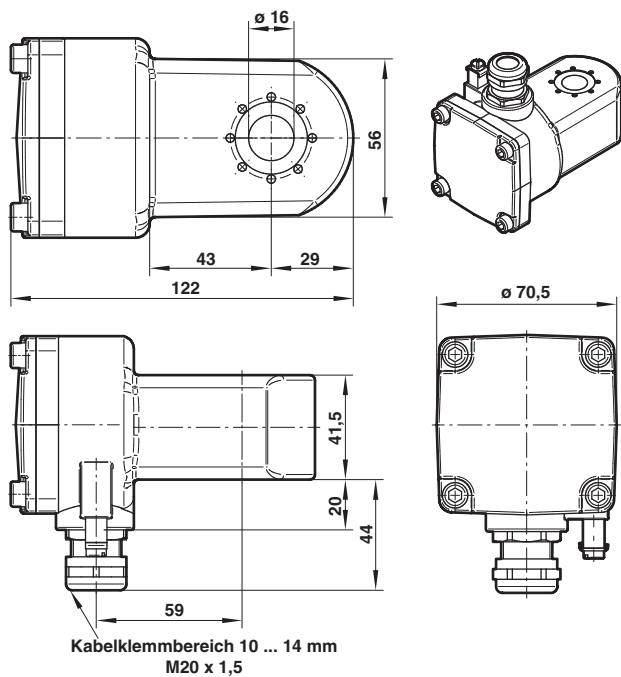
42xx



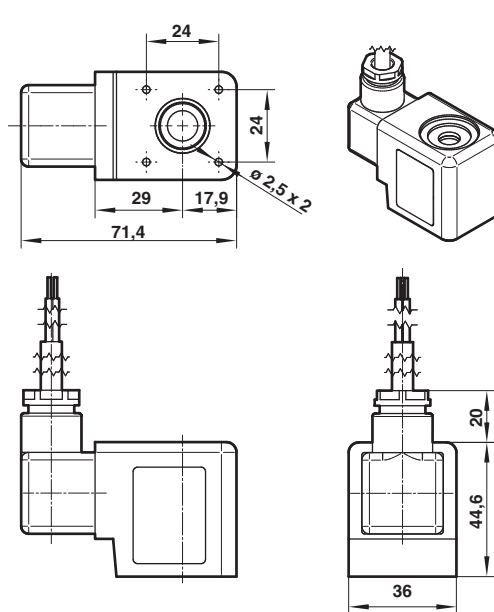
Dimensions in mm
Projection/first angle



46xx



98xx



6126

