

85660 2/2-way piston valves

- > Port size: DN 15 ... 50, Flange connection Pressure rating PN 40
- > Compact build piston valve
- > Functional design
- > High flow rate
- > Piston guided in PTFE rings

- > Long lifetime
- > Solenoid interchangeable without tools (Click-on®)
- > International approvals











Technical features

Medium:

Neutral gases and liquid fluids

Switching function:

Normally closed

Operation:

Indirectly solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

DN 15, DN 20, DN 25, DN 32, DN 40, DN 50

Operating pressure:

0,5 ... 40 bar (7 ... 580 psi)

Fluid temperature:

-20 ... +90°C (-4 ... +194°F)

Ambient temperature:

-20 ... +50°C (-4 ... +122°F)

Material:

Body: Cast steel (1.0619), Brass (CW617N) Seat seal: NBR

Internal parts: Stainless steel,

Brass, PTFE

For contaminated fluids insertion of a strainer is recommended.

Technical data - standard models

Symbol	Orifice	Flow kv value *1)	Operating pressure *	2)	Weight	Model
	(mm)	(m³/h)	(bar)	(psi)	(kg)	
Z D D D D	15	4,4	0,5 40	7,25 580	3,2	8566200.9151.xxxxx
	20	7	0,5 40	7,25 580	3,6	8566300.9151.xxxxx
	25	10,5	0,5 40	7,25 580	4,2	8566400.9151.xxxxx
	32	25	0,5 40	7,25 580	7,2	8566500.9151.xxxxx
	40	27	0,5 40	7,25 580	7,6	8566600.9151.xxxxx
	50	43	0,5 40	7,25 580	8,8	8566700.9151.xxxxx

xxxxx Please insert voltage and frequency codes

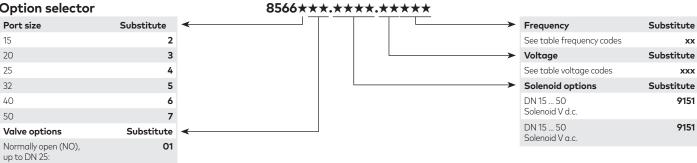


^{*1)} Cv-value (US) ≈ kv value x 1,2

 $^{^*}$ 2) For gases and liquid fluids up to 60 mm 2 /s (cSt)



Option selector



Operating pressure 0,5 ... 35 bar (7,25 ... 507 psi) from DN 32: Operating pressure 0,5 ... 25 bar (7,25 ... 362 psi) 02 Manual override Seat seal FPM, 03 Fluid temperature –10 ... +110°C (-14 ... +230°F) Seat seal PTFE, 06 Fluid temperature -10 ... +110°C (-14 ... +230°F) Operating pressure 1 ... 25 bar (14,5 ... 362 psi) Leakage rate E acc. to DIN EN 12266-1 for fluids of group 1 and 2 of the Pressure Equipment Directive 97/23/EC Seat seal EPDM, for hot water, 14 Fluid temperature –20 ... +110°C (-4 ... +230°F) Flanges acc. to ASME B 16.5 150 lb/sq. In. 47 Flanges 48

Standard solenoid systems

acc. to ASME B 16.5 300 lb/sq. In.

Voltage and Frequency Solenoid 9151 *3)						
Code			Voltage Frequency		Power consumption	
Voltage	Frequency			Inrush	Holding	
024	00	24 V d.c.	-	17 W	17 W	
024	50	24 V a.c.	50 Hz	45 VA	35 VA	
110	50	110 V a.c.	50 Hz	45 VA	35 VA	
120	50	120 V a.c.	60 Hz	45 VA	35 VA	
230	50	230 V a.c.	50 Hz	45 VA	35 VA	



Further versions on request!

Electrical details for all solenoid systems

Design	DIN VDE 0580		
Voltage range	±10%		
Duty cycle	100% ED		
Protection class	EN 60529 IP65		
Socket	Form A acc. to DIN EN 175301-803 (included)		

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

ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc	IP65	9176	24 V d.c., 110 V a.c., 230 V a.c.
2G 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/ T95°C Db up to DN 25: Operating pressure 0,5 16 bar (7,25 232 psi) from DN 32: Operating pressure 0,5 10 bar (7,25 145 psi)	IP66	468x	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126	24 V d.c., 110 V a.c., 230 V a.c.

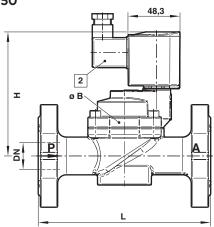
Attention!

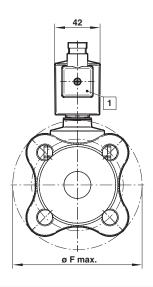
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.



Dimensions

DN 15 ... 50





Dimensions in mm Projection/First angle



- 1 Solenoid rotatable 360°
- 2 Socket turnable 4 x 90° (Socket included)

Orifice (mm)	øΒ	ø F max.	н	L	Model
15	44	96	96	130	8566200.9151.xxxxx
20	50	110	108,5	150	8566300.9151.xxxxx
25	62	115	115	160	8566400.9151.xxxxx
32	92	140	138,5	180	8566500.9151.xxxxx
40	92	150	143,5	200	8566600.9151.xxxxx
50	109	165	156,5	230	8566700.9151.xxxxx

Contact face acc. to DIN EN 1092-1/B

Note to Pressure Equipment Directive (PED):

The valves of this series up to and including DN 25 (G1) are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice wellknown in the member countries. The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

For valves > DN 25 (G1) Art. 4 § (1) Letter d) applies:

The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2014/30/EU) satisfield.

Note to EAC marking:

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.