

4/2 Directional Control Valves



Nominal size 4
For double-acting cylinders
Solenoid pilot operated poppet valve
NAMUR pattern flange mounting
Port size G 1/8
Operating pressure 1.5 to 10 bar

Catalog Register
P11

Publication 7502832.06.08.95

**OBSOLETE
DOCUMENT**
Technical
Reference
Only

Description

Solenoid valve for filtered, lubricated¹⁾ or non-lubricated air

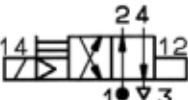
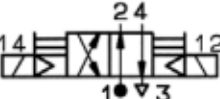
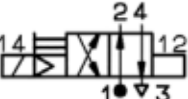
Flow direction: Fixed
Temperature range: -10 to +60°C
Material:
Body: Anodized aluminium
Pilot valve flange: Synthetic material (PBT)
Seals: NBR (Perbunan)
AU (Polyester-Urethane)

Features

- Standard manual override with and without detent
- Mounting position optional
- Compact design
- Exhaust air muffled
- High flow rate
- Common exhaust line
- Maintenance-free
- Easily interchangeable solenoid system
- Connector interface to DIN 43650 Form B
- Low power consumption, min. 2.5 or 5 W



Parameters

Symbol ¹⁾	Nom. size	Pipe connection		Operating pressure [bar]		Flow rate Q _N	Switching time ²⁾ [ms]		Weight	Sectional drawing	Dimensional drawing	Cat-No.			
		1	3	2	4	min.	max.	[l/min]	ON	OFF	[kg]	No.	No.	Valve	Solenoid
	Power consumption 5 W (6 VA)													See solenoid specification	
	4	G1/8	Flange	1.5	10	700	18	10	0.3	01	01	2625447			
	Power consumption 5 W (6 VA)													See solenoid specification	
	4	G1/8	Flange	1.5	10	700	13	13	0.4	02	02	2625547			
	Power consumption 2.5 W													See solenoid specification	
	4	G1/8	Flange	1.5	10	700	24	12	0.3	01	01	2625449			

¹⁾ Oil recommendation: Shell Hydrol DO 32, ESSO Febis K 32 (as of July 1992) or comparable oils with DVI values < 8 (DIN 53521) and ISO viscosity class 32-46 (DIN 51519).

²⁾ at 6 bar acc. to VDI 3290 with DC solenoid

³⁾ Port 3 not throttleable

Further versions available on request

- Power consumption 1.5 W

Solenoids with/without connectors

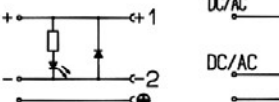
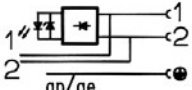
Acc. to DIN 43650, Form B

Standard voltages: 24 VDC, 230 VAC. Further voltages available on request. Design acc. to VDE 0580. 100% duty cycle. For further information, see Publication 7502063.

Picture	Connector interface to DIN 43650	Degree of protection to DIN 40050	Rated power		Temperatures ¹⁾ [°C]			Cat. No.
			DC [W]	AC [VA]	Fluid max.	Ambience	Max. sum	
	Form B	IP 00	2.5 5 —	— — 6	80 80 80	–25 to +60 –25 to +60 –25 to +40	110 110 100	0151 0150 0152
		IP 65	2.5 5 —	— — 6	80 80 80	–25 to +60 –25 to +60 –25 to +40	110 110 100	0161 0160 0162

¹⁾ Temperatures refer to the respective solenoid. The permissible temperatures for the valve have not been considered here. The max. temperature sum composed of fluid and ambient temperature, must not be exceeded.

Solenoid connectors – Degree of protection acc. to DIN 40050, IP 65

Picture	Designation	Electrical diagram	Operating temperature [°C]	Operating voltage [V]	Cat. No.
	Connector acc. to DIN 43650, Form B. Without cable and without LED		–40...+125	12...250 DC/AC	0680003
	Connector acc. to DIN 43650, Form B. Without cable. With LED and quenching diode or fluorescent lamp		–40...+100 –40...+100	15...30 DC 150...250 DC/AC	0664811 0664812
	Connector acc. to DIN 43650, Form B. With cable 3 m Without LED		–40...+90	12...250 DC/AC	0681494
	Connector acc. to DIN 43650, Form B. With cable 3 m and with LED or Zener diode		–20...+80	24 DC/AC	0680208

Protection classes EEx e and EEx m

Standard voltages 24 VDC, 230 VAC. Further voltages available on request. Design to VDE 0580 or VDE 0171. 100% duty cycle. For further information, see Publication 7502548.

Picture	Protection class	Degree of protection to DIN 40050	Rated power		Perm. temperatures [°C] Fluid and ambience	Features	Cat. No.
			DC [W]	AC [VA]			
	EEx e II T4	IP 65	5 3	—	–20 to +80	— —	3150 3155
	EEx m II T4	IP 65	5 —	— 6	–20 to +80	Varistor Varistor Rectifier	3160 3161
			3	—		Varistor	3170

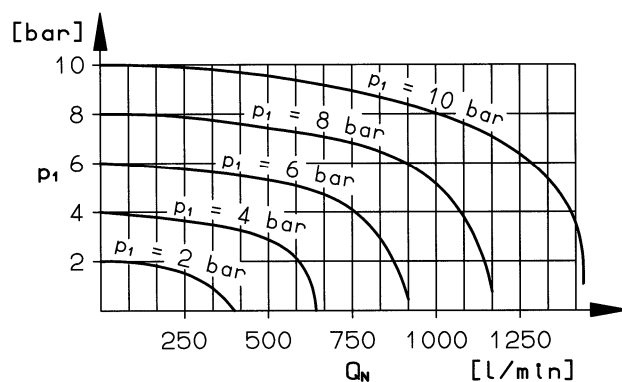
Further versions available on request

Attention: Valves and solenoids can only be combined if their electric characteristics correspond with each other (see Parameters, Page 1).

Cat. No. (example): $\frac{\text{Valve}}{2625447.} \frac{\text{Solenoid}}{0150}$

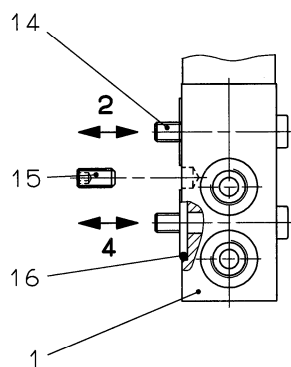
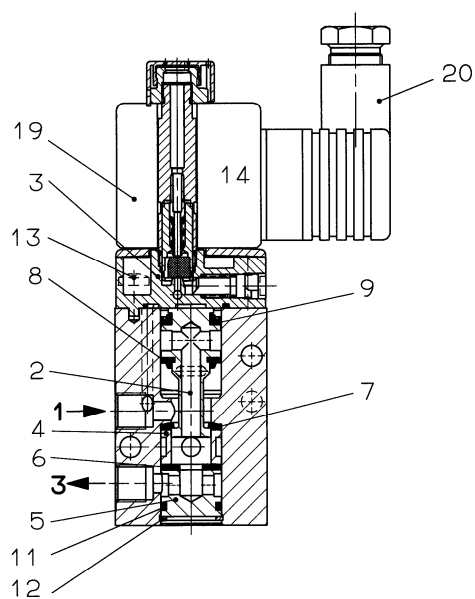
Indicate voltage [V] and frequency [Hz]

Characteristic curves (Flow diagram of valve)



Sectional drawing

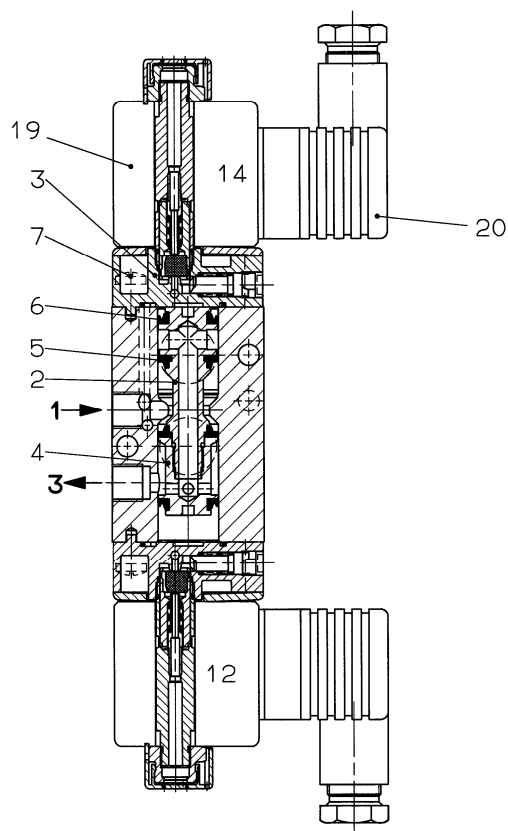
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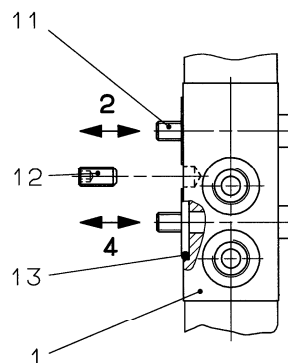
- 1 Body assly.
- 2 Piston
- 3 3/2 pilot valve
- 4 Bush
- 5 Bush
- 6 Sealing disc
- 7 Sealing disc
- 8 Moulded piece
- 9 Lip ring
- 11 O-ring
- 12 Retaining ring
- 13 Screw
- 14 Socket head screw
- 15 Coding stud
- 16 O-ring
- 19 Solenoid
- 20 Connector

Sectional drawing

02

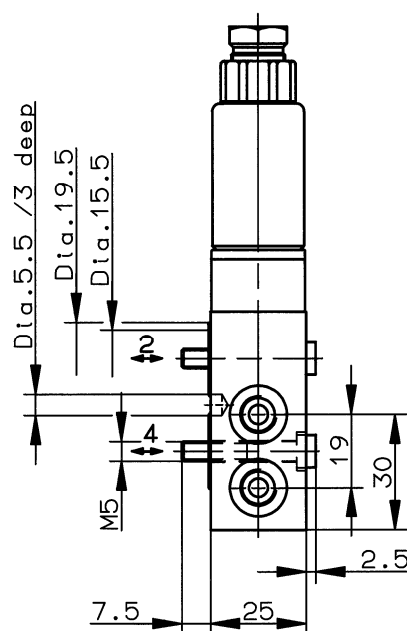
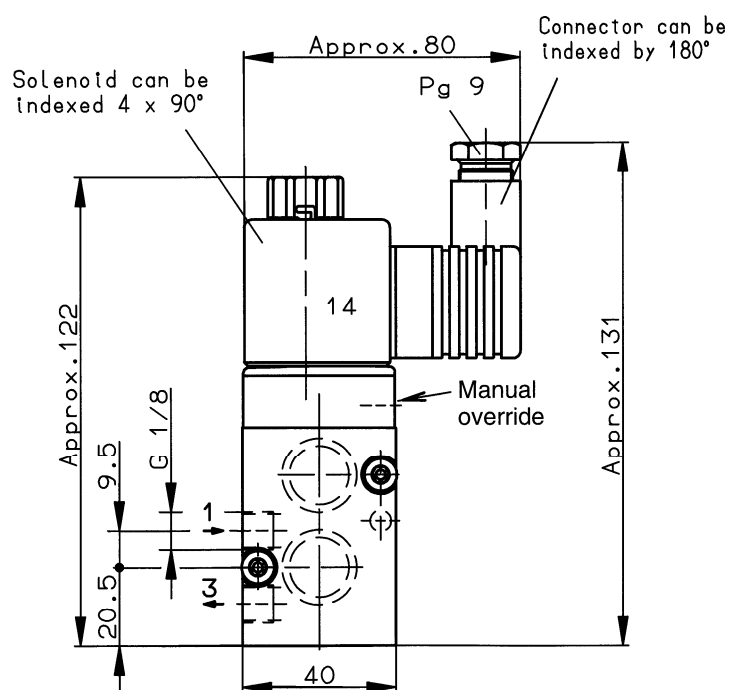


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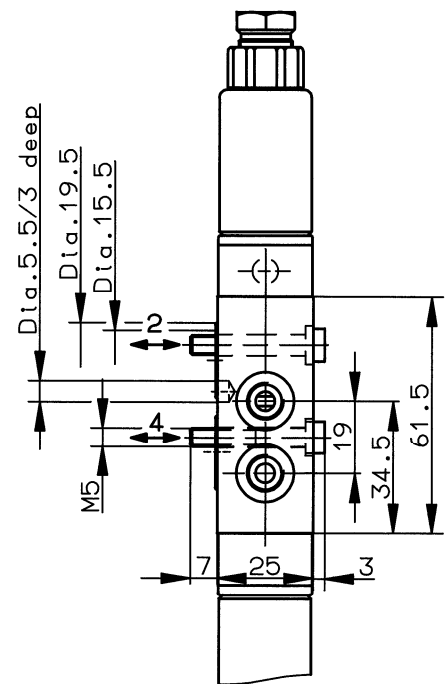


Dimensional drawing [mm]

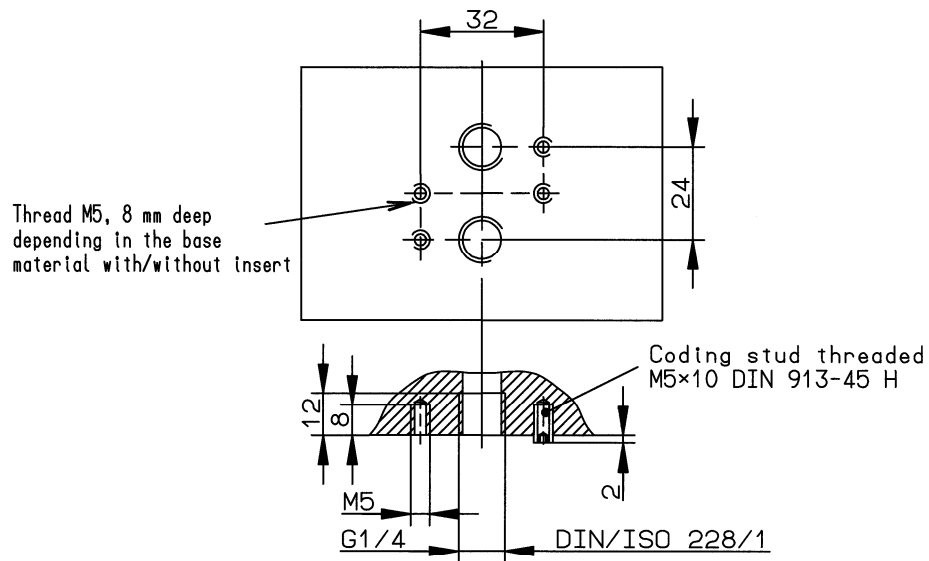
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NAMUR hole pattern



NAMUR fittings

Description	Use	For additional information, see publication	Weight [kg]	Cat.No.
Flange plate	Direct attachment to pneumatic lifting drives with NAMUR ridge; in the case of wall mounting, dependent on position of piping	HERION 7502242	0.49	0559857
Clamp	Used in conjunction with flange plate for attachment to pneumatic lifting drives with NAMUR post		0.10	0540593
Silencer	Pressure connection G 1/8. Max. back pressure 6 bar	HERION 7501080	0.01	0014500