3/2 and 4/2 multi-way valves ; servo-assisted; DN 4; flow rate: 300 l/min.; Namur flange

Design/Function

Type 5470 Namur can be easily mounted to a process valve with the same interface flange.

High switch reliable diaphragm seat valves as 3/2 and 4/2 way version. The main valve consists of three modules, the valve body with servo-diaphragm, plungers and seat seals as well as the P/R and Namur manifold.

The body and valve internal parts are made of high quality thermoplastic, the return spring is made of Stainless Steel.

A 16 mm rocker solenoid valve type 6106 with rectifier is used as pilot.

Advantages / Benefits

- **Easy assembly to process valves**
- **High flow rate at compact design**
- **Long service life even with non-lube conditions**
- **With manual override**
- **Various options for the supply ports 1 and 3**
- **High switch reliability**
- **Wide range of cable plugs with circuitry as accessories**
- **Low weight**

Applications

Fluids

Lubricated and unlubricated air, neutral gases

Applications

Control valves for pneumatic linear and rotary actuators (actuator systems) preferably for

- Food and beverage industry
- General processing industry
- Packing machine manufacturers.
- Textile industry
- Machine tool manufacturers
- Wood working machine manufacturers

bürkert
Easy Fluid Control Systems

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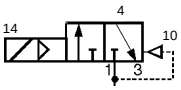
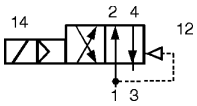
Technical data type 5470 Namur

Circuit functions

C 3/2 way valve,
when de-energized,
outlet port 4 exhausted



G 4/2 way valve
when de-energized,
pressure inlet port 1 connected
to outlet port 2,
outlet port 4 exhausted



Specifications

Circuit function	Orifice [mm]	Flow rate[1] QNn-value air [l/min]	Pressure range[2] [bar]	Power consumption [W]	Port connections
C (3/2)	4,0	300	2 - 8 2 - 10	1 2 and 3	Supply ports 1 and 3: plug-in coupling ø 6 mm or threaded port G 1/8 Service ports 2 and 4: Namur flange
G (4/2)	4,0	300	2 - 8 2 - 10	1 2 and 3	Supply ports 1 and 3: plug-in coupling ø 6 mm or threaded port G 1/8 Service ports 2 and 4: Namur flange

[1] Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve and at +20 °C.
[2] All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Valve specifications

Body material	PA (Polyamide)
Valve internal parts	Ultramid
Return spring	Stainless Steel
Seal material	NBR
Fluids	Lubricated, unlubricated compressed air, neutral gases
Media temperature	-10 up to +50 °C
Ambient temperature	-10 up to +55 °C
Port connections	
Connection 2 and 4	Namur flange
Connection 1 and 3 (variation)	• Plug-in coupling ∅ 6 mm • G 1/8
Response times [3] [4]	

	DC	AC*
Opening	15 ms	15 ms
Closing	12 ms	20 ms

* = with rectifier

Solenoid specifications

Operating voltage	24 V DC 110-120 V DC 220-240 V DC (for alternating current cable plug type 2506 with rectifier necessary)[4]
Voltage tolerance	±10 %
Electr. power consumption	1 W, 2 W, 3 W
Duty cycle	100 % continuously rated
Electr. connection	tag connectors acc. DIN 43650 Form C, for cable plug type 2526
Rating	IP 65 (with cable plug)
Ex-approval	(see data sheet Ex-versions)

Installation

Mounting position: any, preferably solenoid system upright

[3] Measured at connection 2; time from electrical switching to pressure increase to 90 % (opening) or pressure drop to 10 % (closing) of operational pressure of 6 bar.
The valves given apply for DC and AC.
[4] When using electronics (diodes for controlling LEDs or for rectifying), the closing time is delayed 8 up to 10 ms.

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Ordering chart valves type 5470 Namur (other versions on request)

Scope of delivery: All valves with manual override and with NBR seal; tag connectors acc. DIN 43 650 C sidewards; **with cable plug** (see accessories)
For DC-version cable plug 2506 Item No. 008 353 P (standard)
For UC-version cable plug 2506 Item No. 008 412 T

Service port connections 2 and 4: Namur flange

Circuit function	Orifice air [mm]	Flow rate QNn value connections [l/min]	Supply port connections 1 and 3	Pressure range [bar]	Voltage/ frequency [V/Hz]	Electrical power consumption [W]	Item No.	Item No. with one-way flow restrictor
C	4,0	300	Threaded port G 1/8	2 - 8	24/DC	1	139 396 S	
				2 - 10	24/DC	2	136 761 U	
					110-120/DC	3	136 762 V	
					220-240/DC	3	136 763 W	
			Plug-in coupling ø 6 mm	2 - 8	24/DC	1	139 397 T	
				2 - 10	24/DC	2	136 764 X	
					110-120/DC	3	136 765 Y	
					220-240/DC	3	136 766 Z	
G	4,0	300	Threaded port G 1/8	2 - 10	024/DC	2	136 767 S	
					110-120/DC	3	136 768 B	
					220-240/DC	3	136 769 C	
			Plug-in coupling ø 6mm	2 - 8	024/DC	1		139 398 C
				2 - 10	024/DC	2	136 770 H	
					110-120/DC	3	136 771 W	
					220-240/DC	3	136 772 X	
			Threaded port G 1/8	2 - 8	024/DC	1		139 399 D
				2 - 10	024/DC	2		136 773 Y
					110-120/DC	3		136 774 Z
					220-240/DC	3		136 775 S

*) For AC current the cable plug type 2506 with rectifier must be used, see accessories.

Ordering chart accessories

Accessory part	Characteristics	**Order No.**
Cable plug type 2506 1)	without circuit, 0 - 250 V	008 353 P
Cable plug type 2506 1)	with rectifier and varistor, 12 - 240 V	008 412 T
Cable plug type 2506 1)	with LED, 12 - 24 V	008 402 A
Cable plug type 2506 1)	with LED and varistor, 12 - 24 V	008 408 Q
Cable plug type 2506 1)	with LED, rectifier and varistor, 12 - 24 V	008 354 Q
Cable plug type 2506 1)	with LED, rectifier and varistor, 200 - 240 V	008 356 J

1) With these accessories, only a minimum of possible cable plugs with circuit are being mentioned. For other versions see data sheet type 2506. A flat seal and a fixing screw are part of the delivery scope of a cable plug.

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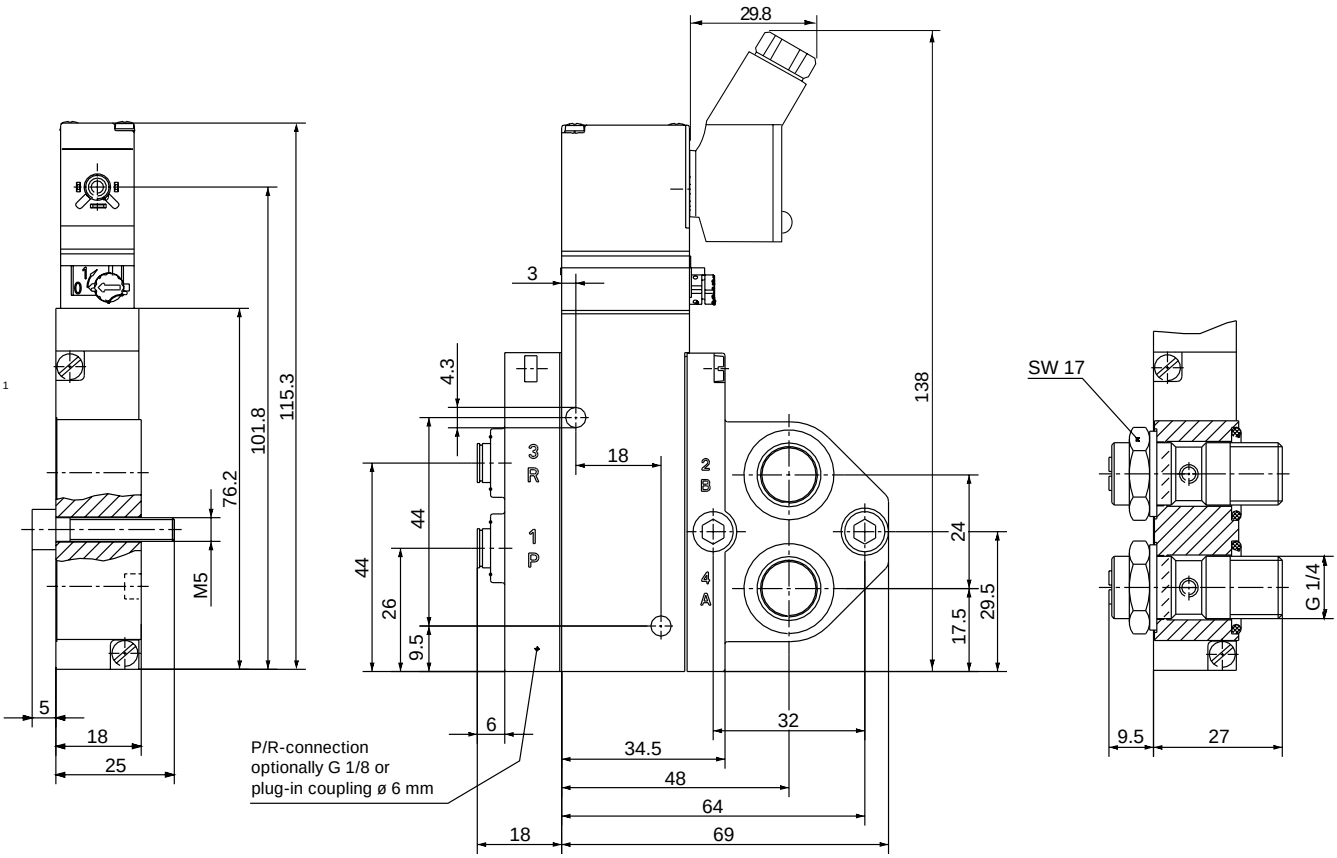
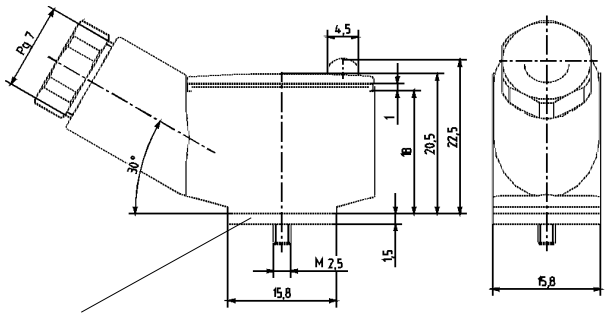
Dimensions [mm]

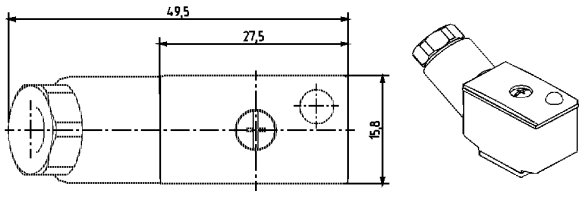
3/2 and 4/2 way valves, service ports 2 and 4 as Namur flange, tag connectors sidewards

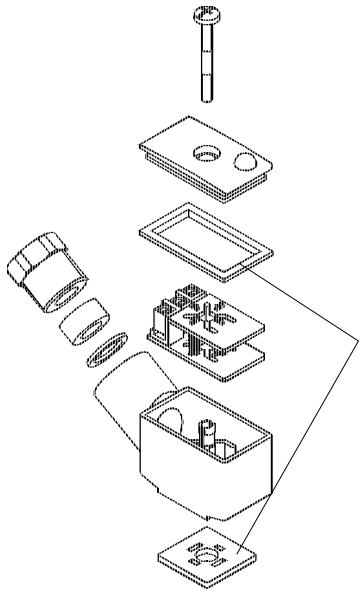


Cable plug type 2506



Flat seal





Attention!
Pay attention to a correct fit of the flat seal when mounting the cable plug!

Cable plug type 2506 (pin assignment acc. DIN 43650, Form C)

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