

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



### 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

### 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.

### Applications

#### Fluids

Lubricated and unlubricated air, neutral gases

#### Applications

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

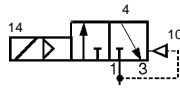
- Food and beverage industry
- General processing industry
- Packing machine manufacturers.
- Textile industry
- Machine tool manufacturers
- Wood working machine manufacturers

**bürkert**  
Easy Fluid Control Systems

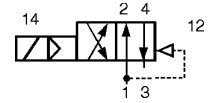
**Technical data type 5470 Namur**

**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 <sup>1)</sup> Q <sub>Nn</sub> -value air [l/min]	Pressure range <sup>2)</sup> [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

<sup>1)</sup> Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve and at +20 °C.  
<sup>2)</sup> 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 Ø 6 mm • G 1/8
Response times <sup>3) 4)</sup>	
Opening	DC 15 ms   AC* 15 ms
Closing	DC 12 ms   AC* 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) <sup>4)</sup>
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

<sup>3)</sup> 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.

<sup>4)</sup> When using electronics (diodes for controlling LEDs or for rectifying), the closing time is delayed 8 up to 10 ms.

**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 sideways;  
**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 Q <sub>Nn</sub> 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	
				2 - 10	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	
				2 - 10	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.

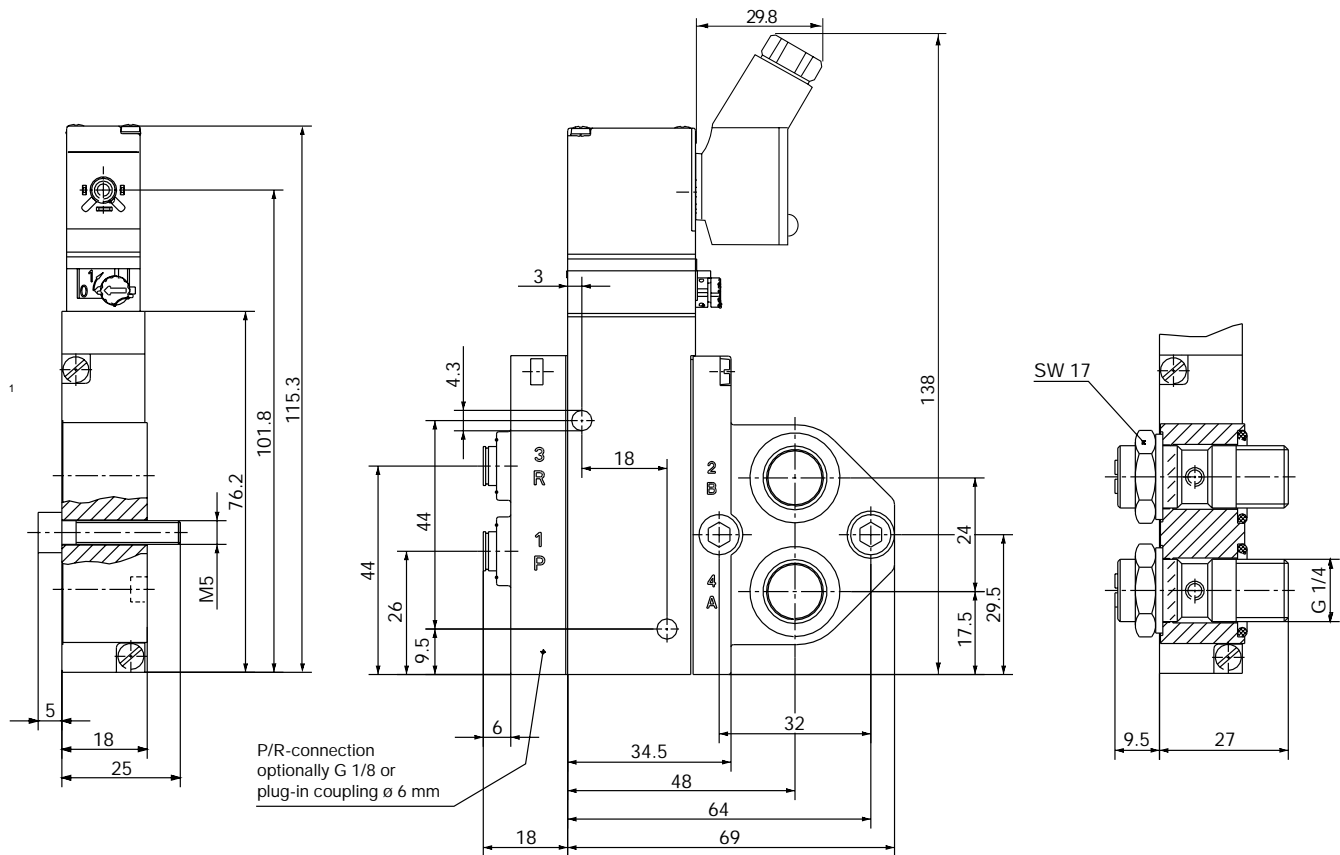
**Ordering chart accessories**

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

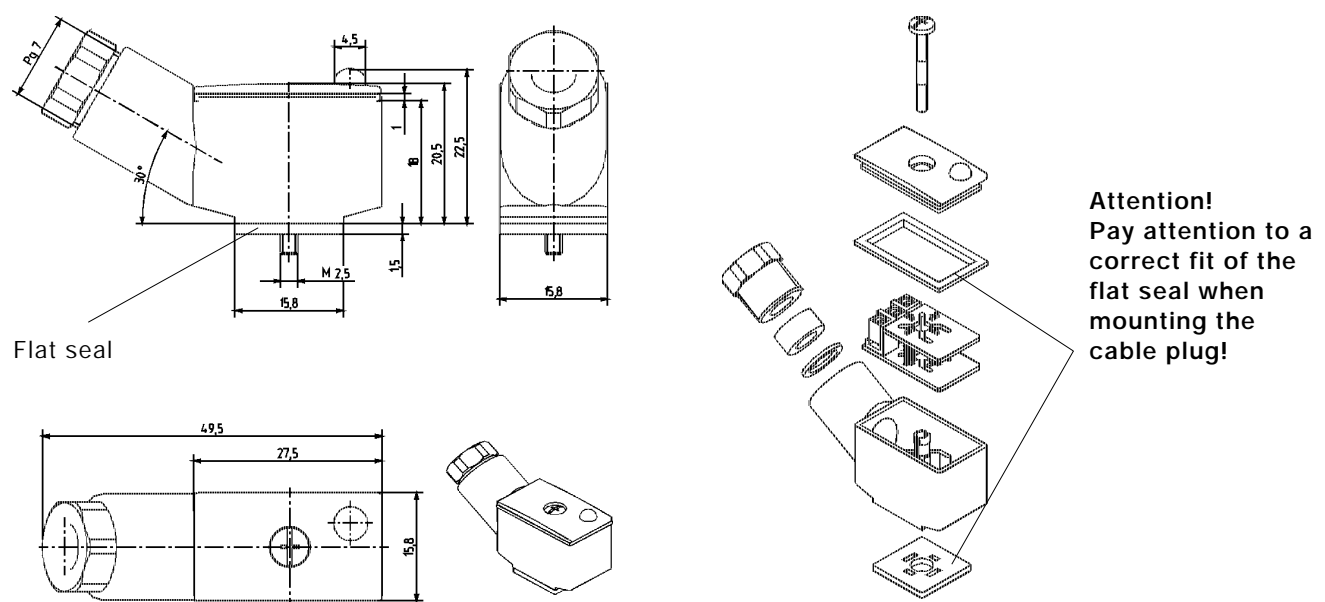
<sup>1)</sup> With these accessories, only a minimum of possible cable plugs with circuit are being mentioned. For other versions see data sheet type 2506. A flat seal and a fixing screw are part of the delivery scope of a cable plug.

**Dimensions [mm]**

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



**Cable plug type 2506**



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