5/2 and 3/2 way solenoid valves; pilot-operated; 32 mm; DN 6; PN 2 to 8 bar; G 1/4 and NAMUR flange

Advantages/Benefits

- **Switches reliably, even with full throttling capability**
- **Safety position by mechanical return spring**
- **Low wear and maintenance thanks to good dry running characteristics**
- **Using the adapter plate, both 5/2 and 3/2-way functions in one device**
- **3/2-way function with exhaust feedback**
- **Corrosion resistant**
- **Various Ex-versions as option**

Construction / Function

The Type 6519 NAMUR is an extremely reliably-switching, diaphragm-driven, seat valve.
The valve, which is manufactured from high-quality plastic, can be operated in its 5/2 or 3/2 way function by means of the different mounting positions of the side-mounted connection plate, which is constructed as an adapter plate.
The 3/2 way function works with exhaust feedback into the spring space. In this way, the penetration of aggressive external air into the interior of the drive is prevented.

A small solenoid valve with an push-over coil is used as the standard pilot valve.
In the inactive state, an integrated mechanical return spring sets the valve into the safety position.
As standard, the electrical connections are made using the Type 2508 cable plug (to DIN 43 650 form A) or one of the versions corresponding to the Ex-Norm.

The NAMUR flange layout enables a simple field mounting of the valve directly onto the actuator drive.

Applications

Media

- Lubricated or unlubricated compressed air
- Instrument air
- Nitrogen

Application fields

Control valve for pneumatic linear and swivel drives of process fittings, particularly for

- Chemical industry
- Petro-chemical industry
- General process technology

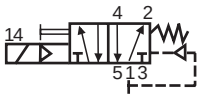
bürkert
Easy Fluid Control Systems

Solenoid valve, pilot-operated
with NAMUR adapter plate

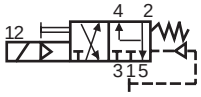
Type 6519 NAMUR

Technical Data Type 6519 NAMUR

5/2-way valve, in
de-energized position,
Pressure port
1 connected to port 2,
Output 4 exhausted



3/2-way valve with
exhaust recycling,
in de-energized position,
port 2 fed
back internally



Valve characteristics

Valve Function	DN	Flow rate[1] QNn value air	Pressure range[2]	Port connection
	[mm]	[l/min]	[bar]	
5/2 way	6,0	900	2–8	G 1/4 and NAMUR flange
3/2 way	6,0	900	2–8	G 1/4 and NAMUR flange

[1] measured at 6 bar input pressure and 1 bar pressure drop at the valve and 20°C.
[2] All pressure data as overpressure to ambient atmospheric pressure

Operational data (Armature)

Valve body	Polyamide (PA)
Sealing material	PB (NBR and PUR)
Media	Lubricated or unlubricated compressed air, Instrument air, Nitrogen
Media temperature	–25 to +60°C
Ambient temperature	–25 to +60°C
Response times[3]	
Open (On)	25 ms
Close (Off)	40 ms
Port connection	G 1/4 and NAMUR flange

[3] Measured at Connection 2; time from electrical switching to pressure increase to 90%, or pressure drop to 10% of operational pressure (6 bar). The values given apply for both AC and DC; with the UC model, the switch-off time increases by 10 to 15 ms.

Operational Data (Drive)

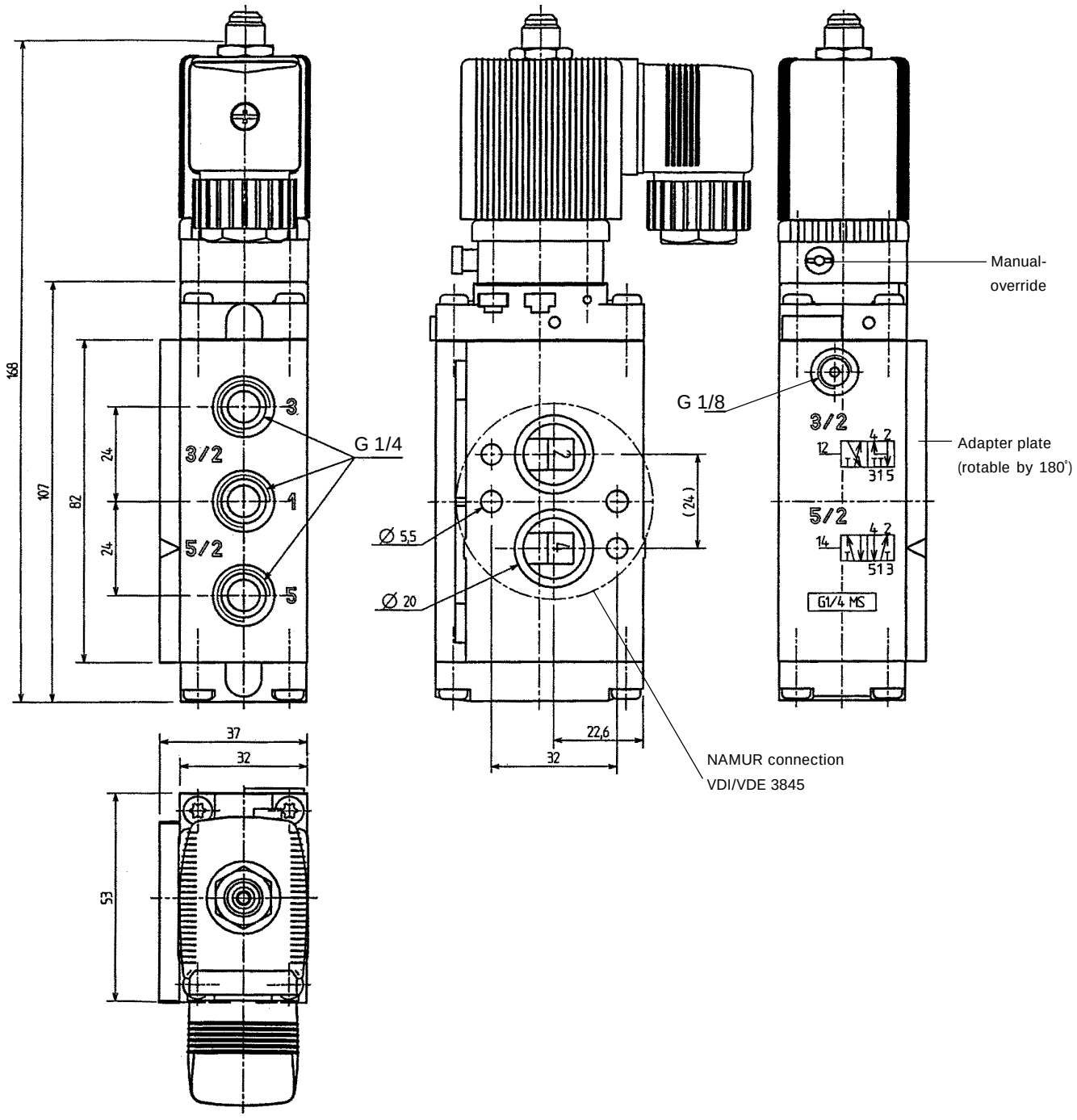
Operating voltage	24 VDC and AC 110 VAC 230 VAC
Voltage tolerance	± 10%
Power consumption	2 W for DC and AC
Duty cycle	100% continuously rated
Electrical connection	Cable plug Type 2508 (to DIN 43650 Form A)
Protection class	IP 65 (with cable plug)
Ex approval	EEx m (on request) Ex ed (on request) EEx i (on request)

Installation

The valve is delivered ex-works in the 5/2-way function. By rotating the adapter plate by 180°, the 3/2-way function is realised.

Mounting position	any, preferably solenoid system upright.

Dimensions (in mm)



Type 6519 NAMUR in standard construction with contact pattern to DIN 43 650 Form A;
Cable plug DIN 43650, form A, (0-250 V AC/DC) delivery standard.

Solenoid valve, pilot-operated
with NAMUR adapter plate

Type 6519 NAMUR

Ordering Table Type 6519 NAMUR

All valves with adapter plates (i-e., 5/2 and 3/2-way functions in one device), with manual operation and with G 1/4 connection sockets and NAMUR flange connection for mounting on the actuator drive.

(with standard-cable plug 0-250 V AC/DC)

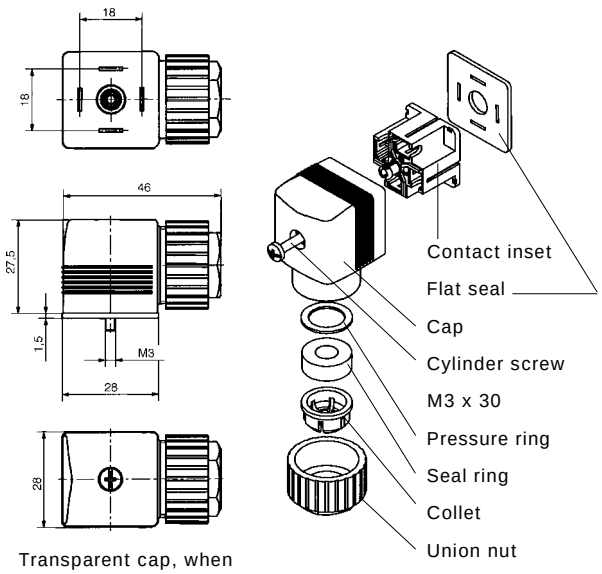
DN [mm]	Flow rate QNn value air [l/min]	Pressure range [bar]	Material connection	Voltage/ frequency [V/Hz]	Electrical power consumption [W]	**Order No.**
6,0	900	2-8	MS (nickel-plated)	24/DC	2	131 421 B
				24/50–60	2	131 422 C
				110/50–60	2	131 423 D
				230/50–60	2	131 424 E
6,0	900	2-8	VA	24/DC	2	131 425 F
				24/50–60	2	131 426 G
				110/50–60	2	131 427 H
				230/50–60	2	131 428 J

Ordering Table, Accessories

Instrument socket[1)]	Characteristics	**Order No.**
Type 2508	without wiring, 0 - 250V	008 376 N
Type 2508	with LED, 12 - 24 V	008 360 S
Type 2508	with LED and varistor, 12 - 24 V	008 367 M
Type 2508	with LED and varistor, 200 - 240 V	008 369 X
Other Type 2508 variants	with various wiring (see data sheet)	

[1)] With these accessories, only a minimum of the possible instrument sockets with wiring are presented. For other models, refer to the Type 2508 Data Sheet.

Dimensions Accessories (in mm)



Transparent cap, when wired with LED.

Ordering Chart for Accessories

Device/ Accessory	Features	**Order-No.**
Cable-plugs[1)] Type 2508	Standard cable plug, 0–250 V AC/DC (standard-delivery)[1)]	008 376 N
	with LED, 12–24 V AC/DC	008 360 S
	with LED, 100-120 V AC/DC	008 361 P
	with LED + varistor, 12–24 V AC/DC	008 367 M
	with LED + varistor, 100–120 V AC/DC	008 368 W
	with LED + varistor, 200–240 V AC/DC	008 369 X
	(optional wirings and connection specifications see data sheet Type 2508)	

[1)] The standard cable plug (0-250 V AC/DC), Order-No. 008 376 N is part of the standard delivery.
Ordering of optional cable plugs with separate ordering number.

A wide selection of further cable plugs is available (see special data sheet Type 2508)