# 3/2, 5/2 and 5/3 way valves; pilot-operated; DN 8 and 9; flow rate: 1300 l/min; G 1/4 port connection



# Design/Function

Types 6518 / 6519 feature with high switch reliability diaphragm-driven seat valves (3/2 and 5/2 way) or spool valves (5/3 way).

The body is made of high quality thermoplastic (3/2 and 5/2 way) or aluminium (5/3 way). They represent a range and can be jointed together.

The valve width of 32 mm allows high flow rates.

A compact solenoid valve with push-over coil is used as pilot.

Tag connectors are used for the electrical contact (acc. DIN 43 650 Form A) with the cable plug type 2508 or a propriate type of the protected versions.

Types 6518 and 6519 can be used as single valves or as serial blocks.

The block assembly is made with pneumatic modules type MP07 and integrated lock technology and screwing.

## Advantages / Benefits

- Optimal system solutions due to high level of modularity
- ► High flow rates
- ► No stick-slip effect
- ► High switch reliability, even at full flow restriction
- ▶ Push-over coil in 4 x 90° turned positions lockable, any position in between
- Wide range of cable plugs with circuitry as accessories
- ➤ SS threaded ports and several classes of protection on request

# **Applications**

### Fluids

- Compressed air and neutral gases
- Technical vacuum on request

## **Applications**

Control valves (single valves, valve blocks) for pneumatic linear- and turned actuators preferably for

- Food and beverage industry
- General processing industry
- Packing machine manufact.
- Textile industry
- Tool-machine manufacturers
- Wood processing machine manufacturers



## Technical Data type 6518/6519

#### Circuit functions

C 3/2 way valve type 6014, in de-energized position port 2 exhausted



**D** 3/2 way valve, in de-energized position port 2 pressurized





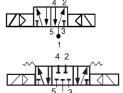
H 5/2 way valve, in de-energized position port 2 pressurized, port 4 exhausted

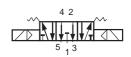
5/2 way valve, impuls version (on request)

L 5/3 way valve, in middle position all ports locked

N 5/3 way valve, in middle position ports 2 and 4 exhausted







## **Specifications**

Circuit function	Orifice	Flow rate <sup>1)</sup>	Pressure range <sup>2)</sup>	Port connection
		QNn-valvue air		
	[mm]	[l/min]	[bar]	threaded port
C and D (3/2)	8,0	1300	2- 8	G 1/4
H (5/2)	8,0	1300	2- 8	G 1/4
L and N (5/3)	9,0	1300	3–10	G 1/4

Measured at 6 bar input pressure and 1 bar pressure drop at the valve and at +20°C. 2) All pressure data as overpressure to ambient atmospheric pressure.

#### Valve specifications

#### Polyamide (PA) Valve body 5/3 way, aluminium

anodised

Threaded port Brass,

material

NBR and PUR Sealing material (3/2 and 5/2 way) or

NBR (5/3 way)

Media Lubricated compressed air,

neutral gases, technical

Stainless Steel on request

vacuum (on request)

-10 up to +50 °C Media temperature

Ambient temperature -10 up to +55 °C

Response times3)

Port connections

Open (On) 20 ms Close (Off) 40 ms

<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 (6 bar). The values given apply for DC and AC; The time off increases by 10 up to 15 ms for UC-versions.

G 1/4

Operating voltage 24 V/DC and AC

110 V AC (50-60 Hz) 230 V AC (50-60 Hz)

Voltage tolerance ±10 %

2 W at DC and AC Electrical

power consumption

Duty cycle 100 % continuously rated

Electr. connection tag connectors acc. DIN 43650

Form A for cable plug type 2508 (see accessories)

Rating IP 65 (with cable plug)

Ex-approval (see data sheet Ex-versions)

## Installation

- Block assembly on MP07 with DIN-rail 50022 or 50023
- · Single assembly with screwing on one side

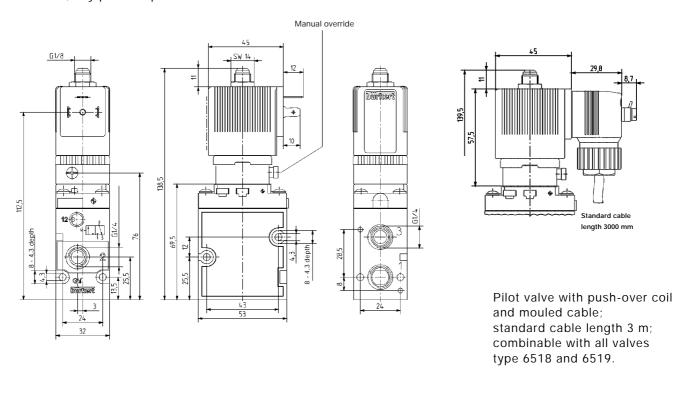
Mounting position any, preferably solenoid

system upright

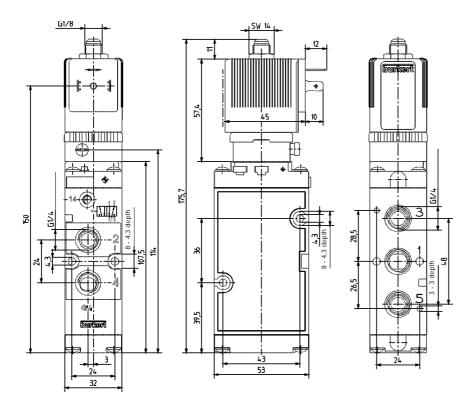
Solenoid specifications

## Dimensions single valve [mm]

**Type 6518** (3/2 way valve), circuit function C and D; push-over coil in 4 x 90° turned positions lockable and in between, any position possible

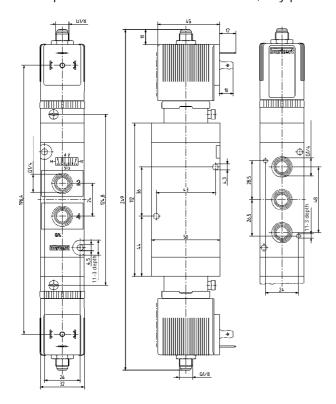


Type 6519 (5/2 way valve), circuit function H, push-over coil in 4 x  $90^{\circ}$  turned positions lockable and in between, any position possible

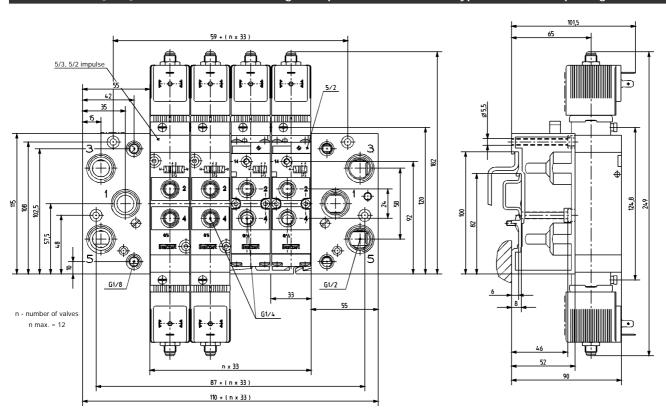


## Dimensions single valve [mm]

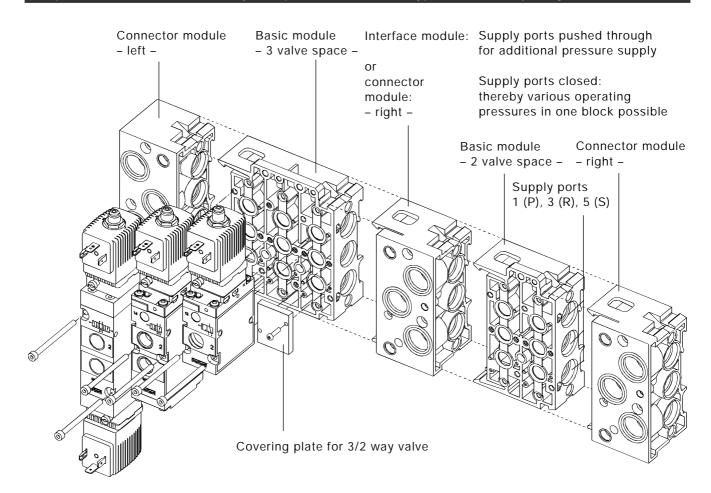
Type 6519 (5/3 way valve), circuit function L and N; push-over coil in 4 x  $90^{\circ}$  turned positions lockable and in between, any position possible



# Dimensions [mm] block and wall mounting with pneumatic modules type MP07, coil spacing 33 mm



## Exploded view of block assembly with pneumatic modules type MP07, coil spacing 33 mm



Example of a valve block. Single modules or pre-mounted blocks are available. When ordering, please inform on the individual modules and the desired configuration from right to left.

## Ordering chart pneumatic modules type MP07

Version	Item No.
Connector module left G 1/2	635 324 S
Connector module right G 1/2	635 331 Z
Interface module	637 505 T
Basic module 2 valve space universal (for 3/2, 5/2 and 5/3 way), inclusive fixing screws for valves	635 319 D
Basic module 3 valve space universal (for 3/2, 5/2 and 5/3 way), inclusive fixing screws for valves	635 342 C
Covering plate (to cover the left-free valve spaces on the basic modules)	635 335 V
Covering plate for 3/2 way valves (to cover the left-free connections)	635 337 X

## Ordering chart type 6518/6519 (other versions on request)

Scope of delivery: All valves with port connection G 1/4

• Standard version with tag connectors on the side (pin assignment acc. to DIN 43 650 A), without cable plug (see accessories)

					Standard version		
Circuit	Orifice	Sealing	Flow rate	Pressure	Voltage/	Electrical	Item No.
function		material	QNn value	range	frequency	power	
			air			consumpt.	
	[mm]		[l/min]	[bar]	[V/Hz]	[W]	Standard
C (3/2)	8,0	NBR + PUR	1300	2- 8	24/DC	2	132 457 Q
					24/50-60	2	132 458 Z
					110/50-60	2	132 459 S
					230/50-60	2	132 460 X
D (3/2)	8,0	NBR + PUR	1300	2- 8	24/DC	2	132 461 L
					24/50-60	2	132 462 M
					110/50-60	2	132 463 N
					230/50-60	2	132 464 P
H*) (5/2)	8,0	NBR + PUR	1300	2- 8	24/DC	2	132 465 Q
					24/50-60	2	132 466 R
					110/50-60	2	132 467 J
					230/50-60	2	132 468 T
L (5/3)	9,0	NBR	1300	3–10	24/DC	2	132 469 U
					24/50-60	2	132 470 Z
					110/50-60	2	132 471 N
					230/50-60	2	132 472 P
N (5/3)	9,0	NBR	1300	3–10	24/DC	2	132 473 Q
					24/50-60	2	132 474 R
					110/50-60	2	132 475 J
					230/50-60	2	132 476 K

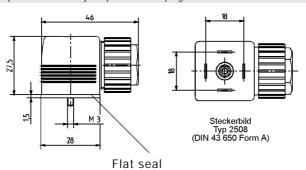
<sup>&</sup>lt;sup>3</sup> Circuit function H (5/2 way) as impulse version on request.

## Ordering chart accessories

Accessory part	Characteristics	Item No.
Cable plug type 2508 <sup>1)</sup>	without circuit, 0 - 250 V	008 376 N
Cable plug type 2508 <sup>1)</sup>	with LED, 12 - 24 V	008 360 S
Cable plug type 2508 <sup>1)</sup>	with LED and varistor, 12 - 24 V	008 367 M
Cable plug type 2508 <sup>1)</sup>	with LED and varistor, 200 - 240 V	008 369 X
Blanking screw	G 1/8	780 141 H
Blanking screw	G 1/4	780 142 A
Blanking screw	G 1/2	780 144 C
Silencer	G 1/8	005 305 D
Silencer	G 1/4	005 064 W
Silencer	G 1/2	005 062 U
Indicating tag	64 pieces	635 416 P

<sup>&</sup>lt;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 2508. A flat seal and a fixing screw are part of the delivery scope of a cable plug.

Dimension of the cable plug type 2508



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

In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice.

803-GB/ 1-0149

the cable plug!