

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



Advantages / Benefits

- ▶ EEx m II T5 and T6 or EEx me II T5 and T6 approved
- ▶ High flow rates
- ▶ Maintenance-free and no wear due to high level dry run properties
- ▶ Multi station manifold possible through modular design
- ▶ High switch reliability, even at full flow restriction
- ▶ Coil can be locked in 4 x 90° positions or freely moved in between, as required

Design/Function

Types 6518/19 Ex are high switch reliable 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 aluminum (5/3-way). They are compatible and can be used in any combination.

The valve width of 32 mm allows high flow rates.

A compact solenoid valve with push-over coil is used as pilot. Types 6518/19 Ex 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.



Applications

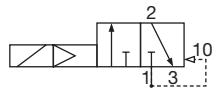
- Applications:**
- Chemical industry
 - Pharmaceutical processing equipment
 - Industrial waste water treatment
 - Oil and gas industry

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Fluid Control Systems

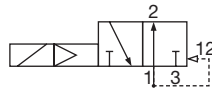
Technical Data Type 6518/6519

Circuit functions

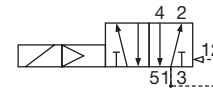
C 3/2-way valve, in de-energized position port 2 exhausted



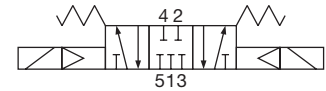
D 3/2-way valve, in de-energized position port 2 pressurized



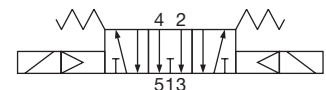
H 5/2-way valve, in de-energized position port 2 pressurized, port 4 exhausted



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 [mm]	Flow rate ¹⁾ Q _{Nn} -Value (air) [l/min]	Pressure range ²⁾ [bar]	Response times ³⁾		Port connection (threaded port)	Weight [kg]
				opening [ms]	closing [ms]		
C and D (3/2)	8.0	1300	2 – 8	20	50	G 1/4	0.6
H (5/2)	8.0	1300	2 – 8	20	50	G 1/4	0.7
L and N (5/3)	9.0	1300	3 – 10	20	50	G 1/4	1.1

¹⁾ 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.

³⁾ 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.

Valve Specifications

Valve body	Polyamide (PA) 5/3-way, aluminum anodized
Threaded port material	Brass, Stainless Steel
Seal material	NBR and PUR (3/2- and 5/2-way) or NBR (5/3-way)
Media	Lubricated or unlubricated compressed air, neutral gases
Media temperature	-10 up to +50°C
Ambient temperature	-10 up to +50°C

Solenoid Specifications

Operating voltage 24, 110, 230 V/UC

Voltage tolerance ±10%

Power consumption (PC)	Temp. class	Coil size	PC
Block mounting	T5 coil 6518	32 mm	3.0 W
	T5 coil 6519	32 mm	3.0 W
Single mounting	T6 coil 6518	40 mm	1.8 W
	T6 coil 6519	40 mm	1.8 W

Duty cycle 100% continuously rated

Electr. connection

- with 3 m cable
- with terminal box

Rating IP 65

Ex-approval EEx m II T5 and T6 or
EEx me II T5 and T6

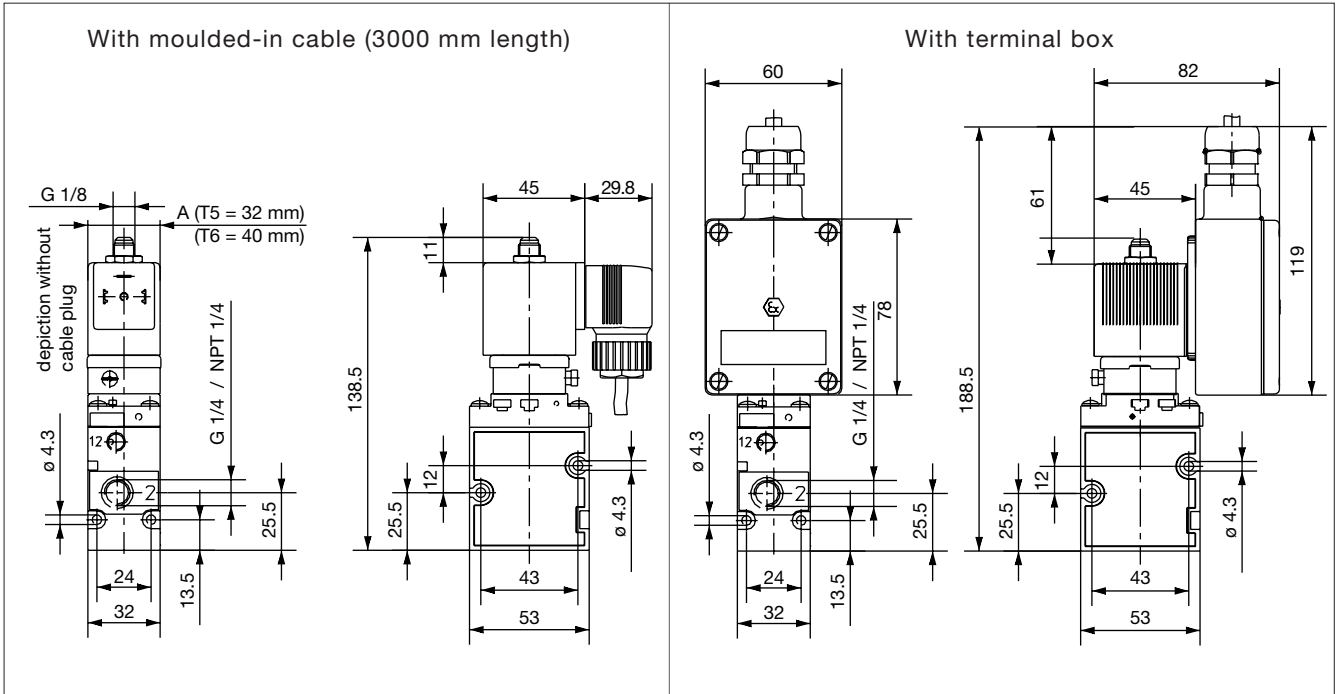
Installation

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

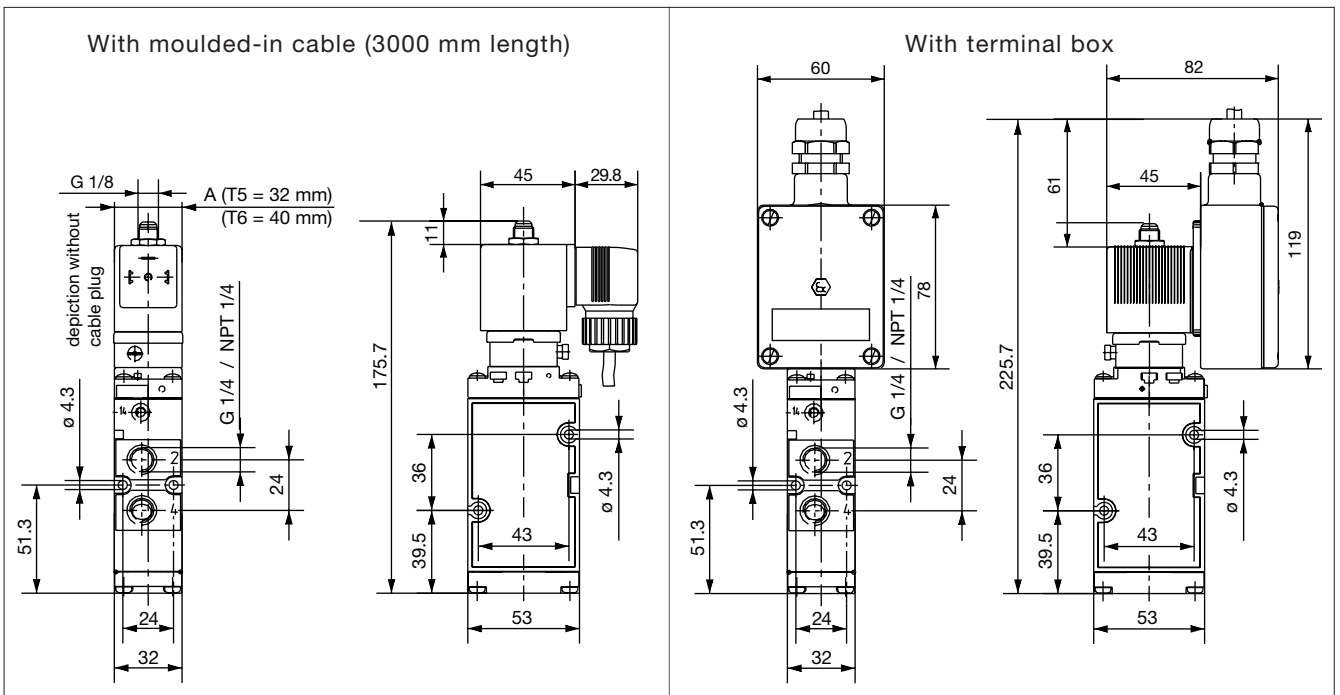
Mounting position Any, preferably solenoid system upright

Dimensions [mm]

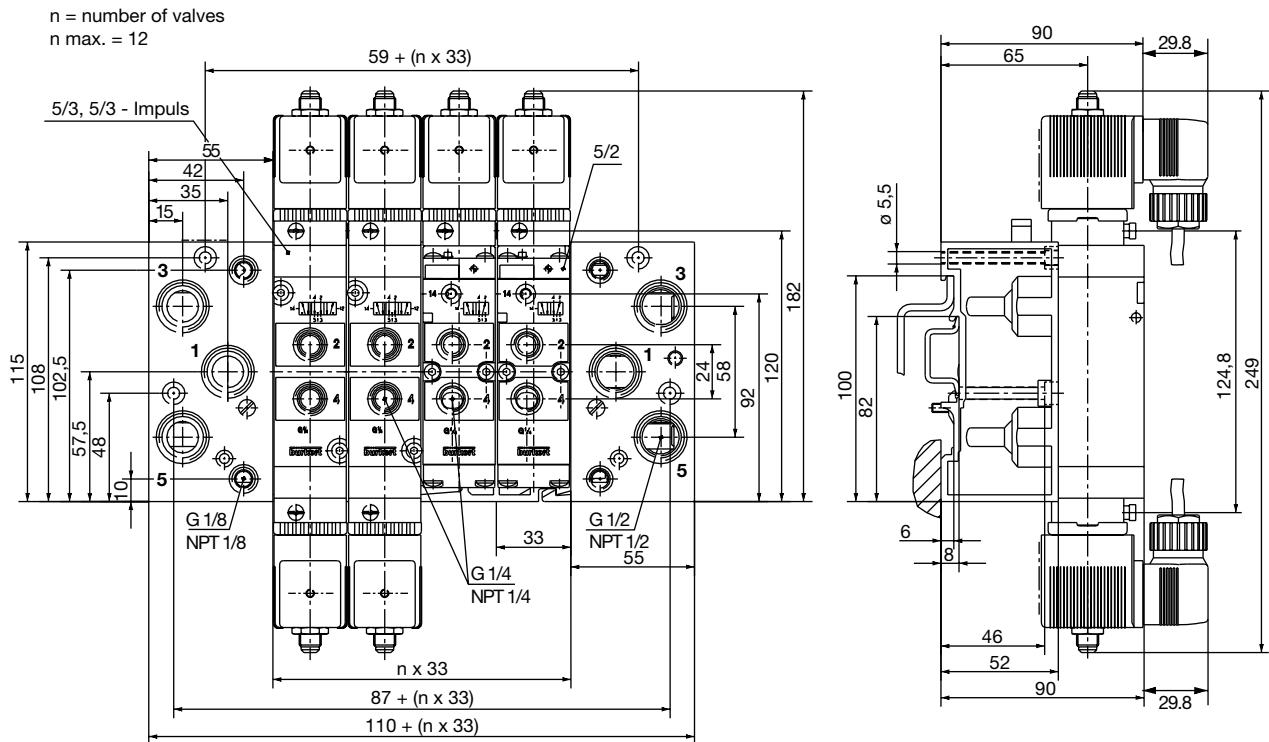
Type 6518 (3/2-way valve), circuit function C and D; push-over coil can be locked in 4 x 90° positions or freely moved in between, as required



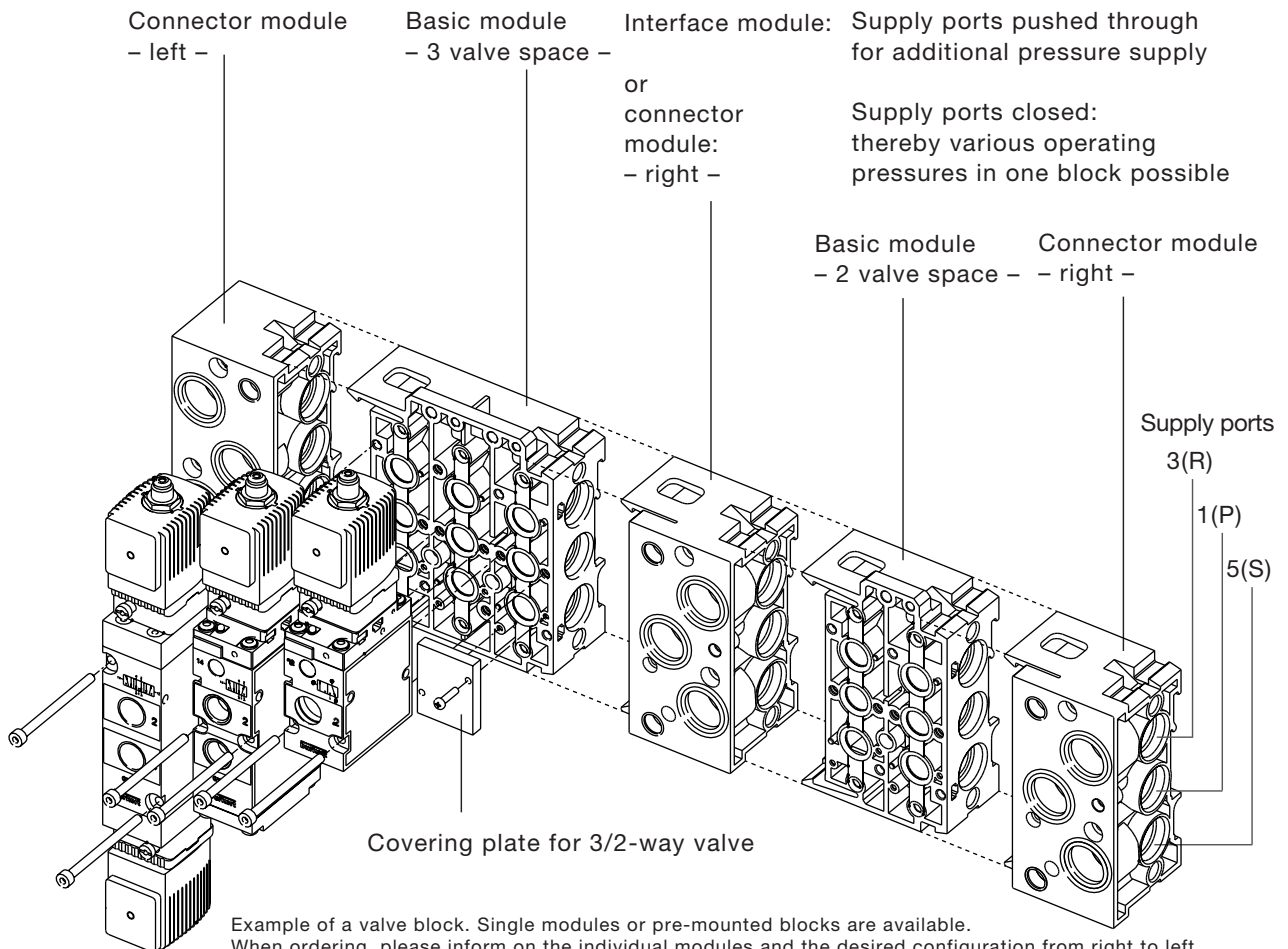
Type 6519 (5/2-way valve), circuit function H, L and N, push-over coil can be locked in 4 x 90° positions or freely moved in between, as required



Block and Wall Mounting with Pneumatic Modules Type MP07, Coil Spacing 33 mm



Block Assembly with Pneumatic Modules Type MP07, Coil Spacing 33 mm



Ordering Chart Type 6518/6519 Ex (Other Versions on Request)

Type 6518 Ex

Circuit function	Supply port connection	Service port connection	Orifice [mm]	Pressure range [bar]	Body material	Seal material	Ex approval	Item-No.		
								024/UC	110/UC	230/UC
Block Assembly with 3 m cable length										
C 3/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx m II T5	134 716 M	134 717 N	134 718 X
D 3/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx m II T5	134 719 Y	134 720 V	134 721 J
Single Valve with 3 m cable length										
C 3/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx m II T6	139 437 K	139 438 U	139 439 V
D 3/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx m II T6	139 443 Z	139 444 S	139 445 T
Single Valve with terminal box										
C 3/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx me II T6	139 440 A	139 441 X	139 442 Y
D 3/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx me II T6	139 446 U	139 447 V	139 448 E

Type 6519 Ex

Circuit function	Supply port connection	Service port connection	Orifice [mm]	Pressure range [bar]	Body material	Seal material	Ex approval	Item-No.		
								024/UC	110/UC	230/UC
Block Assembly with 3 m cable length										
H 5/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx m II T5	134 722 K	134 723 L	134 724 M
Single Valve with 3 m cable length										
H 5/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx m II T6	139 458 G	139 459 H	139 460 E
Single Valve with terminal box										
H 5/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx me II T5	137 397 R	139 461 T	139 462 U
H 5/2	G 1/4	G 1/4	8.0	2 – 8	PA	NBR + PUR	EEx me II T6	139 463 V	139 464 W	139 465 X
Single Valve with terminal box										
L 5/3	G 1/4	G 1/4	9.0	2 – 10	AL	NBR	EEx me II T5	134 725 N	134 726 P	134 727 Q
N 5/3	G 1/4	G 1/4	9.0	2 – 10	AL	NBR	EEx me II T5	134 728 Z	134 729 S	134 730 X

Ordering Chart Accessories

Accessory part	Characteristics	Item-No.
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

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

