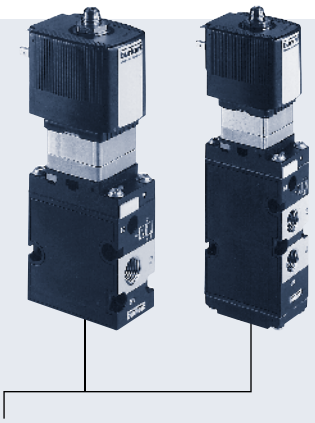
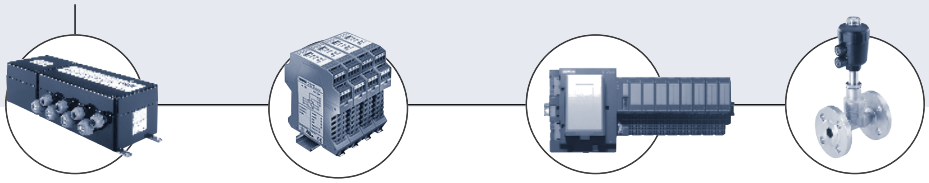
6518/6519 I.S.

5/2 and 5/3–way I.S. Solenoid Valve for pneumatic applications



- Large flow
- Intrinsically–safe operation
- Corrosion–resistant version for outdoor use

Type 6518/6519 I.S. can be combined with…



Profibus PA/ Fieldbus Founndation
Power I/O Box

Barriers

Remote I/O

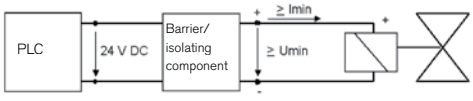
Process valves

The intrinsically–safe Type 6518 I.S. and 6519 I.S. valves consist of an intrinsically–safe pilot control and a pneumatic amplifier. The diaphragm–controlled valve seats work with very low friction, ensuring reliable switching of the valve, even after long shutdown periods. The valves work without a continuous air consumption and are used for the pneumatic control of double or single–acting actuators. The use of high quality materials makes it possible to use these valves in the open air and under chemical atmospheres.

Note:
These units may only be used in explosive atmospheres in the manner approved by FM and the Federal Institute of Physics and Technology (PTB), i.e., the permissible maximum electrical values must be complied with. Suitable barriers and isolating modules are available for this.

Technical data	
Orifice	5/16 (8.0 mm)
Body material Pilot valve Main valve	 303 Stainless steel or brass Polyamide, glass-fibre reinforced
Seal material	FKM, NBR and PUR
Media	Lubricated or unlubricated compressed air, instrument air, nitrogen
Ambient temperature	-13°F to 131°F (-25°C to +55°C)
Pneumatic connection Supply ports 1, 3, 5 Service ports 2 and 4	 Threaded port NPT 1/4 Threaded port NPT 1/4
Electrical connection	Tag connectors acc. to DIN 43650, Form A for connector Type 2508 (see accessories). Ensure correct polarity!
Protection class	IP 65 with connector
Environmental conditions	Open air, chemical atmosphere

Circuit function	Response times [brass]	
	Opening	Closing
C (3/2)	75	115
H (5/2)	75	115



Note:
The valve is intended for operation on 24 VDC outputs via the intermediate switching of a corresponding intrinsically-safe operating resource (isolating module or barrier). If required, request the "Recommended Barrier and Isolating Module" data sheet.

Electrical data Type of protection II 2G EEx ia IIC T5T6 PTB01 ATEX2101; FM CL 1, Div 1, ABCD		
Functional values for the valve switching function		
	at 68°F (+20°C)	at 131°F (+55°C)
Minimum switching current	29 mA	29 mA
Nominal resistance of the coil	310 Ω	360 Ω
Minimum terminal voltage	9.0 V	10.4 V
Permissible maximum values acc. to certificate of conformity		
Ui	35 V	
Ii	0.9 A	
Pi	1.1 W	
T-amb. max.	131°F (+55°C)	

DTS 1000082451 EN Version: C Status: RL (released | freigegeben | validé) printed: 20.01.2015

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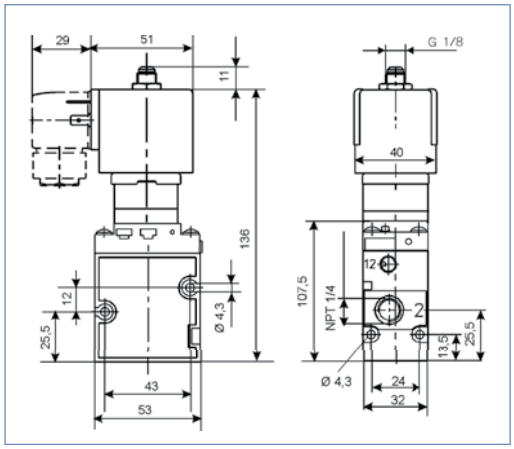
Fluid Control Systems

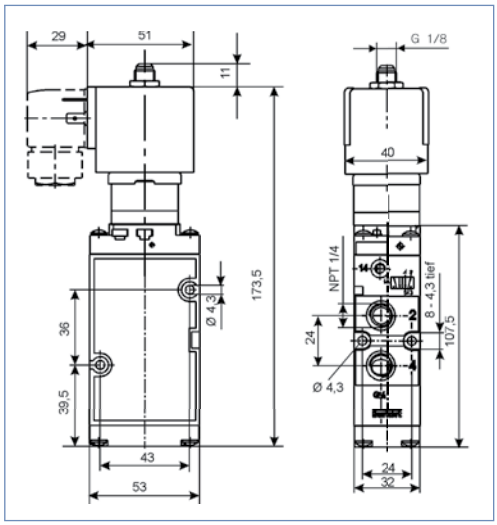
DTS 1000082451 EN Version: C Status: RL (released | freigegeben | validé) printed: 20.01.2015

Dimensions [mm]

Type 6518 3–way version

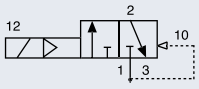
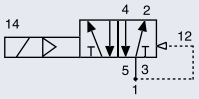


Type 6519 5–way version



Ordering charts for valves (other versions on request)

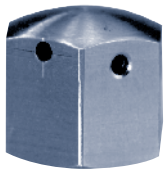
All valves with tag connectors acc. to DIN 43650, Form A, delivered without connector (see accessories)

Circuit function	Orifice [IN]	QNn value air [l/min]	Cv	Pressure range [PSI]	Seal material	Body material pilot valve	Pilot air thread insert material	Item no.
C 3/2-way valve NC 	8.0	1300	1.3	29 – 116	NBR and PUR	303 St. st.	Stainless steel	166 249 R
							St. st. 303, brass, nickel plated	166 250 N
H 5/2-way valve 	8.0	1300	1.3	29 – 116	NBR and PUR	303 St. st.	Stainless steel	166 254 E
							Brass, nickel plated	166 255 F

In the stainless steel version, the supplied fixing screws are also stainless steel.

Ordering chart for accessories

Accessories	Item no.
Stainless steel cap nut, for additional protection of the exhaust air channel from damp penetration	649 554
Cable plug Type 2508 acc. to DIN 43650 with blue compresion gland nut	438 574



Stainless steel cap nut

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.

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