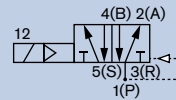


# 5/2-way Solenoid Valve for pneumatics, Ex i-Version

6519 Ex i

## G 1/4"

- Intrinsically safe version
- High flow rate
- High switching reliability
- Corrosion-resistant construction



The 6519 Ex i valve consists 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.

### Technical Data

<b>Orifice</b>	DN8.0 mm
<b>Body materials</b>	
Pilot valve	Stainless steel 1.4305 or brass
Main valve	Polyamide, glass-fibre reinforced
<b>Thread insert material</b>	Stainless steel or brass, nickel-plated
<b>Seal material</b>	NBR and PUR
<b>Pneumatic connection</b>	
Supply ports 1,3,5	Threaded port G 1/4"
Service ports 2 and 4	Threaded port G 1/4"
<b>Electrical connection</b>	Tag connector acc. to DIN EN 175301-803 Form A (previously DIN 43650) for cable plug Type 2508 (not included). Ensure correct polarity!
<b>Protection class</b>	IP65 with cable plug
<b>Ambient temperature</b>	-25 °C to +55 °C
<b>Medium</b>	Lubricated or non-lubricated compressed air, instrument air, nitrogen
<b>Environmental conditions</b>	Open air, chemical atmosphere
<b>For use in zone</b>	1, 2, 21 and 22
<b>Response times <sup>1)</sup></b>	
Opening	75 ms
Closing	115 ms

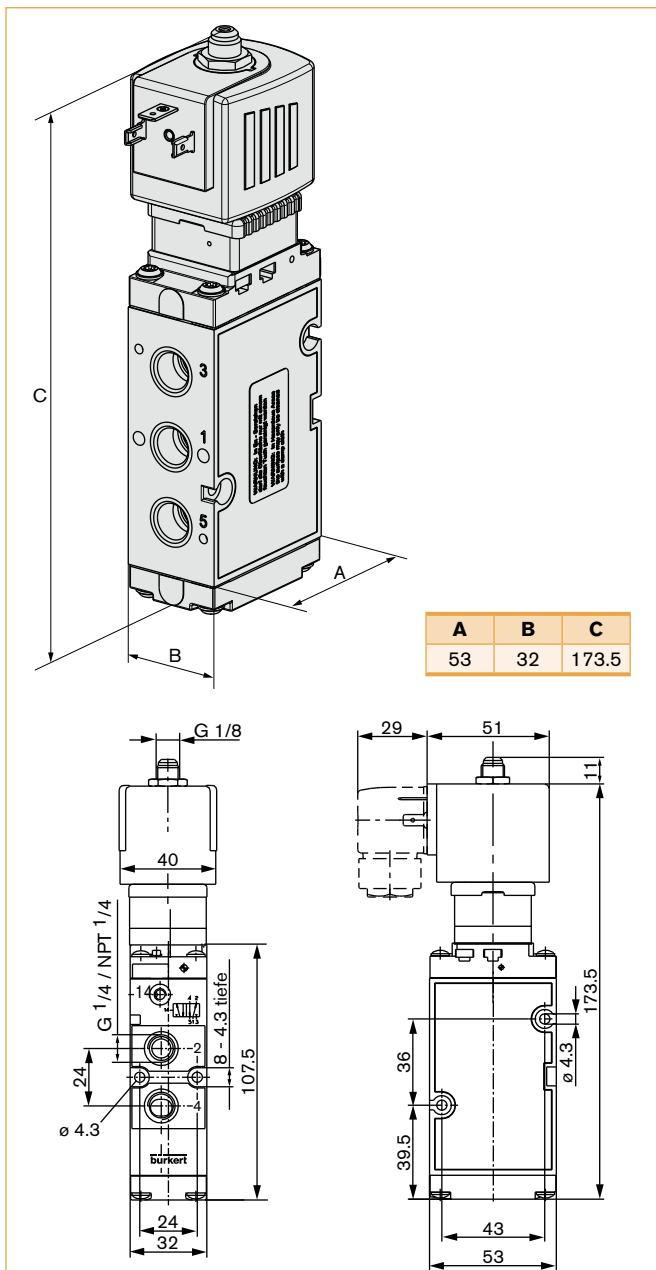
<sup>1)</sup> Measured at valve outlet at 6 bar and +20°C acc. to ISO 12238.  
 Opening: Pressure rise 0 to 90%  
 Closing: Pressure drop 100 to 10%

**Note:** Valves with Ex i coil are not suitable for block construction.

### Options

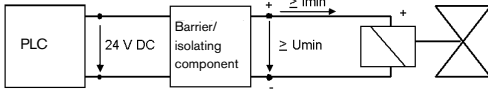
- With manual override
- High impedance coil

Envelope Dimensions [mm] (see datasheet for details)



## Note

The units may only be used in explosive atmospheres in the manner approved by 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.



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 - coil AC10 Ex i

<b>Approval</b>	II 2G Ex ia IIC T6 PTB 01 ATEX 2101 II 2D Ex ia D21 T 80°C		
<b>Functional values for valve switching function<sup>1)</sup></b>	<b>at +20°C</b>	<b>at +55°C</b>	
	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	
<b>Permissible maximum values acc. to certificate of conformity</b>			
U <sub>i</sub>	35 V		
I <sub>i</sub>	0.9 A		
P <sub>i</sub>	1.1 W		

<sup>1)</sup> With high impedance coil on request

## Ordering Chart

Circuit function	Orifice [mm]	Seal material (Body material)	Port connection threaded port [inch]	QNm-value air <sup>1)</sup> [l/min]	Pressure range <sup>2)</sup> [bar]	Mass [g]	Body material pilot valve	Pilot air thread insert material	Item no.
<b>Type 6519 threaded version Ex i</b>									
H 5/2-way valve, servo-assisted, in de-energized position port 2 pressurized, port 4 exhausted	8.0	NBR and PUR (Polyamide)	G 1/4	1300	2 - 8	670	St. St. 1.4305	St. St.	144 484
								brass, nickel plated	144 485
							Brass	brass, nickel plated	147 252

<sup>1)</sup> Flow rate: QNm value air [l/min]: Measured at +20 °C, 6 bar pressure at valve inlet, 1 bar pressure difference

<sup>2)</sup> Pressure values [bar]: Gauge pressures with respect to the prevailing atmospheric pressure