Plunger valve, 2/2-way, direct-acting

- Media-separated plunger valves up to DN12
- Suitable for high and low temperature ranges (-200 °C...+180 °C)
- Energy-saving double coil technology with Kick and Drop variant

Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with

Type 2518
Cable plug,
form A according to
DIN EN 175301-803

Type description

The valve 6026 is a direct-acting, media-separated 2/2-way plunger valve. The thermal and hermetic isolation of the coil and body by means of stainless steel bellows allows both extreme medium temperatures as well as aggressive media. This design avoids the build-up of condensation between the fluid part and coil or an unacceptable heating up or freezing of the coil. The coils are moulded with chemically resistant epoxy. The valve is therefore particularly suitable for applications with critical media. The use of highly resistant body and seal materials such as stainless steel and PTFE make the valve suitable for critical chemical applications. To reduce power consumption in operation, coils with "Kick and Drop" (KD) electronics assembly (double coil technology) are available. In combination with a plug to DIN EN 175301 - 803 Form A, the valves satisfy degree of protection IP65.

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Visit product website

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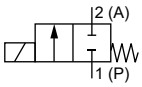
1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 5.
Material	
Seal	PTFE
Body	Brass with stainless steel seat 1.4581 Stainless steel with stainless steel seat 1.4581
Metal bellows	Stainless steel 1.4541
Weight	1.1 kg
Orifice	DN 3.0...DN 12.0
Circuit function	A Further information can be found in chapter "2. Circuit functions" on page 3.
Thermal insulation class of solenoid coil	Epoxy coil class H
Performance data	
Duty cycle	Continuous operation 100 % ED Intermittent operation 50 % ED max. 6 switchings/minute [2.)]
Electrical data	
Operating voltage	24 UC [1.)] 110/120 V 50/60 Hz 230/240 V 50/60 Hz
Power consumption	85/8.5 W (orifice 8.0...12.0) 44/6.5 W (orifice 3.0...6.0)
Voltage tolerance	± 10 %
Medium data	
Operating medium	Neutral gases and fluidics
Medium temperature	- 200 °C...+ 180 °C
Viscosity	Max. 21 mm^2/s
Process/Port connection & communication	
Electrical connection	Plug contacts according to DIN EN 175 301 - 803 form A for cable plug **Type 2518** ▶. Further information can be found in chapter "Cable plug Type 2518, form A according to DIN EN 175301 - 803" on page 8.
Approvals and conformities	
Protection class	IP65 with cable plug
Explosion protection	Further information can be found in chapter "3.4. Explosion protection" on page 4.
North America (USA/Canada)	Further information can be found in chapter "3.5. North America (USA/Canada)" on page 4.
Others	Further information can be found in chapter "3.6. Others" on page 5.
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	Max. + 55 °C

1.) DC and AC (50...60 Hz)

2.) Further information can be found in the **operating instructions Type 6026** ▶.

2. Circuit functions

Symbol	Description
	**Circuit function A (CF A)** 2/2-way solenoid valve Direct-acting Normally closed

3. Approvals and conformities

3.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available versions can be supplied with the below mentioned approvals or conformities.

3.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

3.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

3.4. Explosion protection

<table>
<tr><th>Approval</th><th>Description</th></tr>
<tr><td></td><td>Optional: Explosion protection according to category 2 (zone 1/21)

Ex marking of the components according to the following table:

<table>
<tr><th colspan="2">Coil Type AC19</th></tr>
<tr><th>Coils with cable outlet</th><th>Coils with terminal box</th></tr>
<tr><td>ATEX:
EPS 16 ATEX 1072 X
II 2G Ex mb IIC T4 Gb
II 2D Ex mb IIIC T130 °C Db

IECEx:
IECEx EPS 16.0030X
Ex mb IIC T4 Gb
Ex mb III C T130 °C Db</td><td>ATEX:
EPS 16 ATEX 1072 X
II 2G Ex eb mb IIC T4 Gb
II 2D Ex mb tb IIIC T130 °C Db

IECEx:
IECEx EPS 16.0030X
Ex eb mb IIC T4 Gb
Ex mb tb III C T130 °C Db</td></tr>
</table>
</td></tr>
</table>

3.5. North America (USA/Canada)

Approval	Description
c UL us LISTED SOLENOID FOR USE IN HAZARDOUS LOCATIONS E504714	**Optional: UL Hazardous Locations – Explosion Protection (valid for coils)** UL Listed for Hazardous Locations for USA and Canada Class I, Zone 1 Class I, Division 2, Group A, B, C and D Class II + III, Division 2, Group F and G
c UL us	**Optional: UL Recognized for the USA and Canada (valid for coils)** The coils are UL Recognized for the USA and Canada according to: • UL 429 (electrically operated valves) • CAN/CSA-C22.2 No. 139

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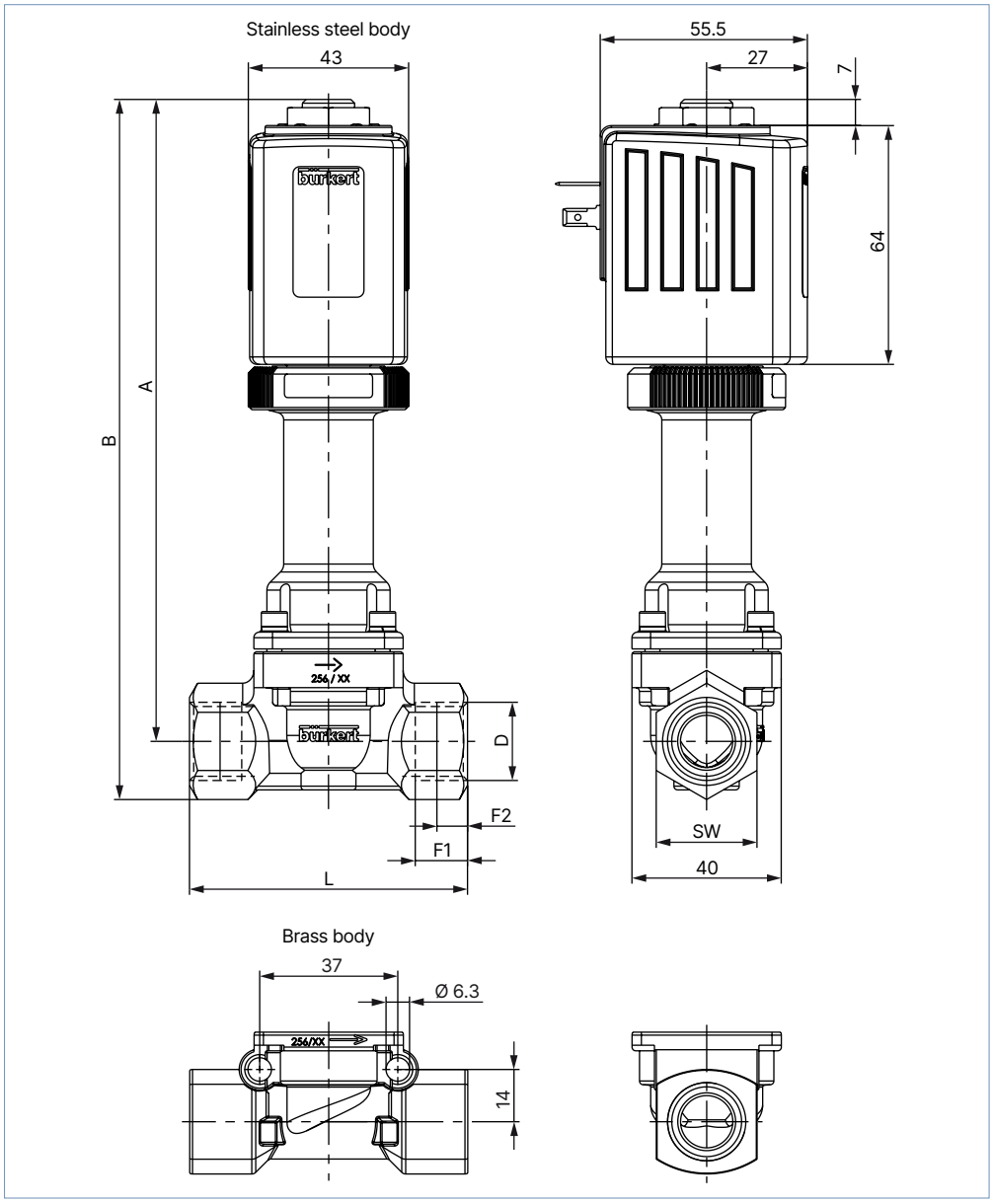
3.6. Others

Oxygen

Conformity	Description
O_2	**Optional: Suitability for oxygen (valid for the variable code NL02)** The products are suitable for use with gaseous oxygen, according to the manufacturer's declaration.

4. Dimensions

Note:
Dimensions in mm



Port connection	Material	A	B	D	F1	F2	L	SW
GM82	Brass	173	184	G ¼	12	–	56	22
NM82	Brass	173	184	NPT ¼	10	5.8	56	22
GM83	Brass	173	184	G ⅜	12	–	56	22
NM83	Brass	173	184	NPT ⅜	10.3	6	56	22

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GM84	Brass	172	186	G ½	14	–	74.5	27
NM84	Brass	172	186	NPT ½	13.7	8.2	74.5	27
GM82	Stainless steel	172	184.7	G ¼	12	–	74.5	27
NM82	Stainless steel	172	184.7	NPT ¼	10	5.8	74.5	27
GM84	Stainless steel	172	187.6	G ½	14	–	74.5	27
NM84	Stainless steel	172	187.6	NPT ½	13.5	8.1	74.5	27

5. Performance specifications

5.1. Power consumption

Orifice	K_V value water	Pressure range	Power consumption		Switching times [3.]	
[mm]	[m^3/h] [1.]	[bar] [2.]	Inrush [W]	Hold [W]	Opening [ms]	Closing [ms]
3.0	0.25	0...10	85	8	100...200	300...500
4.0	0.50	0...10				
5.0	0.65	0...10				
6.0	0.80	0...10				
8.0	0.90	0...10				
10.0	1.50	0...5				
12.0	1.80	0...3				

1.) Measurement at + 20 °C, 1 bar at the valve outlet and free outlet
2.) Pressure data: overpressure to atmospheric pressure
3.) Measurement at + 20 °C, 6 bar at the valve inlet and free outlet, opening: pressure build-up 0...90 %, closing: pressure reduction 100...10 %

6. Ordering information

6.1. Bürkert eShop

Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

Order online now

6.2. Bürkert product filter

Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements?
Use the Bürkert product filter and find suitable articles for your application quickly and easily.

Try out our product filter

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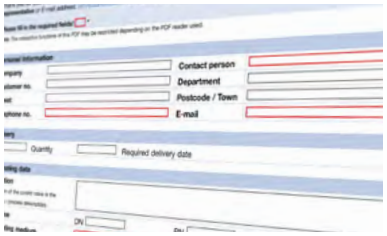
6.3. Bürkert Product Enquiry Form



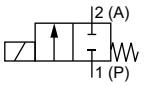
Bürkert Product Enquiry Form – Your enquiry quickly and compactly

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

Fill out the form now

6.4. Ordering chart

Note:
Further versions are available on request.

Circuit function	Port connection	Orifice	K_v value	Pressure range	Body material	Article no. per voltage/frequency		
						024/UC	110...120/ 50...60	230...240/ 50...60
		[mm]	[m³/h]	[bar]		[V/Hz]	[V/Hz]	[V/Hz]
CF A 2/2-way solenoid valve Direct-acting Normally closed 	G ¼	3.0	0.25	0...10	Brass	20080803	20080804	20080807
	G ⅜	3.0	0.25	0...10	Brass	20080808	20080810	20080812
	G ¼	3.0	0.25	0...10	Stainless steel	20080813	20080815	20080816
	G ¼	4.0	0.5	0...10	Brass	20080817	20080820	20080821
	NPT ¼	4.0	0.5	0...10	Brass	20080825	20080826	20080828
	G ⅜	4.0	0.5	0...10	Brass	20080822	20080823	20080824
	NPT ⅜	4.0	0.5	0...10	Brass	20080829	20080831	20080832
	G ¼	4.0	0.5	0...10	Stainless steel	20047000	20080833	20047091
	NPT ¼	4.0	0.5	0...10	Stainless steel	20080837	20080839	20080840
	G ½	4.0	0.5	0...10	Stainless steel	20080834	20080835	20080836
	G ¼	5.0	0.65	0...10	Brass	20080841	20080842	20080843
	G ½	5.0	0.65	0...10	Brass	20080847	20080848	20080849
	G ⅜	5.0	0.65	0...10	Brass	20080844	20080845	20080846
	G ¼	6.0	0.8	0...10	Brass	20080850	20080852	20080854
	NPT ¼	6.0	0.8	0...10	Brass	20080868	o. r.	o. r.
	G ½	6.0	0.8	0...10	Brass	20080861	20080863	20080867
	NPT ½	6.0	0.8	0...10	Brass	20080870	20080871	20080872
	G ⅜	6.0	0.8	0...10	Brass	20080856	20080858	20080860
	G ¼	6.0	0.8	0...10	Stainless steel	20047001	20080876	20047098
	NPT ¼	6.0	0.8	0...10	Stainless steel	20080883	20080884	20080885
	G ½	6.0	0.8	0...10	Stainless steel	20080879	20080881	20080882
	NPT ½	6.0	0.8	0...10	Stainless steel	20080886	20080887	20080889
	G ½	8.0	0.9	0...10	Brass	352624	352625	352626
	G ⅜	8.0	0.9	0...10	Brass	357466	357467	357468
	G ½	8.0	0.9	0...10	Stainless steel	352605	352606	352607
	NPT ½	8.0	0.9	0...10	Stainless steel	352637	352638	352639
	G ½	10.0	1.5	0...5	Brass	352627	352628	352629
	NPT ½	10.0	1.5	0...5	Brass	352653	352654	352655
	G ½	10.0	1.5	0...5	Stainless steel	352609	352610	352611
	NPT ½	10.0	1.5	0...5	Stainless steel	352640	352641	352642
	G ½	12.0	1.8	0...3	Brass	352630	352631	352632
	NPT ½	12.0	1.8	0...3	Brass	352657	352658	352659
	G ½	12.0	1.8	0...3	Stainless steel	352612	352613	352614
	NPT ½	12.0	1.8	0...3	Stainless steel	352643	352644	352645

o. r. = on request

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Further versions on request

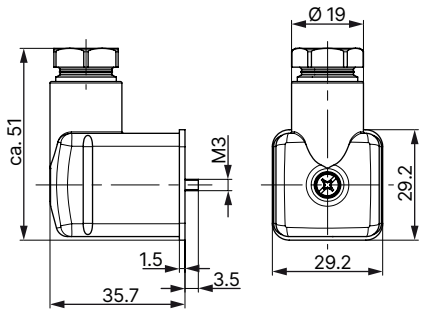
Approval
Further information can be found in chapter "3. Approvals and conformities" on page 4.

6.5. Ordering chart accessories

Cable plug Type 2518, form A according to DIN EN 175301 - 803

Note:

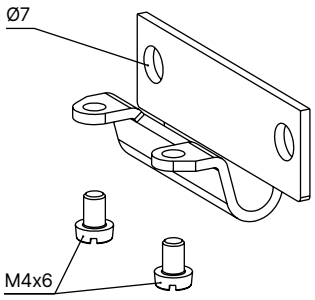
- Dimensions in mm
- For further versions see data sheet **Type 2518** ▶.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry (AC/DC)	0...250 V AC/DC	314802
		With LED (AC/DC)	12...24 V AC/DC	314812
		With LED and varistor (AC/DC)	12...24 V AC/DC	314820
		With rectifier, LED and varistor	12...24 V AC/DC	314816
		Without circuitry (AC/DC) with silicone seal for higher ambient temperature	0...250 V AC/DC	361687

Mounting set stainless steel body

Note:

- A mounting clamp and 2 cylinder screws M4 × 6 are included in the scope of delivery.
- Only for stainless steel version
- 29 mm separation between the M4 threaded holes
- 48 mm separation between the Ø 7 bores

Description	Article no.
	260250

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