



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

- Direct-acting and compact valve up to diameter of DN 6.0
- Vibration-proof, bolted coil system
- Explosion proof versions
- Energy-saving version with Kick and Drop available



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

#### Can be combined with

	<p><b>Type 1087</b> Timer, form A according to DIN EN 175301 - 803</p>	▶
	<p><b>Type 2518</b> Cable plug, form A according to DIN EN 175301 - 803</p>	▶
	<p><b>Type 2509</b> Cable plug, form A according to DIN EN 175301 - 803</p>	▶

#### Type description

Valve 6013 is a direct-acting plunger valve. The stopper and plunger guide tube are welded together to enhance pressure resistance and leak-tightness. Various seal material combinations are available depending on the application. A Bürkert-specific flange design (SFB) enables space-saving arrangement of valves on a manifold. Kick and Drop coils are available for the reduction of electrical power consumption during operation.

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## 1. General technical data

### 1.1. Standard version

Product properties	
Dimensions	Further information can be found in chapter <a href="#">“5. Dimensions” on page 9.</a>
Material	
Seal	FKM, PTFE/Graphite (EPDM on request)
Body	Brass, stainless steel 1.4305/303
Coil	Polyamide or epoxy
Orifice	DN 2.0...DN 6.0
Circuit function	A and B Further information can be found in chapter <a href="#">“2. Circuit functions” on page 5.</a>
Thermal insulation class of solenoid coil	Polyamide coil class B Epoxy coil class H
Performance data	
Duty cycle/single valve with block assembly on manifold	100 % continuous operation Intermittent operation 60 % (30 min) or with 5 W coil (on request)
Electrical data	
Operating voltage	
Standard version	12 V/DC, 24 V/DC, 24 V/50 Hz, 24 V/60 Hz, 120 V/50 Hz, 230 V/50 Hz, 240 V/60 Hz
Power consumption	Further information can be found in chapter <a href="#">“6. Performance specifications” on page 11.</a>
Voltage tolerance	± 10 %
Medium data	
Operating medium	
Standard version	Technical vacuum, neutral gases and fluids (e.g. compressed air, water, hydraulic oil)
Analytical version	Neutral medium which do not attack the body and seal materials Further information can be found in chapter <a href="#">“4.1. Bürkert resistApp” on page 8.</a>
Medium temperature	
With FKM	14 °F...+212 °F (PA coil), 14 °F...+248 °F (Epoxy coil), -40 °F on request
With PTFE/Graphite	-40 °F...+356 °F (further information can be found in chapter <a href="#">“4.1. Bürkert resistApp” on page 8)</a>
With FKM, circuit function B	14 °F...212 °F (AC), 14 °F...248 °F (DC)
Viscosity	Max. 21 cSt (21 mm <sup>2</sup> /s)
Process/Port connection & communication	
Electrical connection	<ul style="list-style-type: none"> <li>Plug contacts according to DIN EN 175 301 -803 form A for cable plug <b>Type 2509</b> ▶ Further information can be found in chapter <a href="#">“Cable plug Type 2509, form A according to DIN EN 175301 -803” on page 19.</a></li> <li>Plug contacts according to DIN EN 175 301 -803 form A for cable plug <b>Type 2518</b> ▶ Further information can be found in chapter <a href="#">“Cable plug Type 2518, form A according to DIN EN 175301 -803” on page 19.</a></li> </ul>
Port connection	
Standard version	G 1/8, G 1/4, G 3/8, NPT 1/8, NPT 1/4, NPT 3/8, manifold (SFB)
Analytical version	G 1/8, G 1/4, NPT 1/8, NPT 1/4
Approvals and conformities	
Degree of protection	IP65 with cable plug, IP67 with cable plug <b>Type 2518</b> ▶ UL hazloc 2 with cable plug <b>Type 2509</b> ▶ NEMA 4X with cable plug <b>Type 2509</b> ▶ with stainless steel versions
Explosion protection	Further information can be found in chapter <a href="#">“3.4. Explosion protection” on page 6.</a>
North America (USA/Canada)	Further information can be found in chapter <a href="#">“3.5. North America (USA/Canada)” on page 6.</a>
Environment and installation	
Installation position	As required, preferably with actuator upright
Installation instructions	No oils, fats or silicone to be used during installation
Ambient temperature	Max. +131 °F (higher temperatures on request)

## 1.2. Analytical version

### Solenoid valves for higher requirements

This version is particularly suitable for switching from extremely pure gaseous medium. All medium-affected parts are submitted to additional purification processes, so that the medium is not contaminated under any circumstances.

The tightness test takes place at the helium leak detector from a min. of  $10^{-4}$  mbar l/sec.

#### Product properties

##### Material

Seal	Silicon, oil and fat free version Tightness $< 10^{-4}$ mbar l/s
Body	Brass, stainless steel 1.4305/303

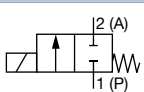
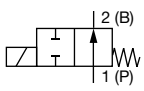
##### Medium data

Operating medium	Neutral medium, which does not attack the body and seal materials Further information can be found in chapter "4.1. Bürkert resistApp" on page 8.
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##### Environment and installation

Installation instructions	No oils, fats or silicone to be used during installation
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## 2. Circuit functions

Symbol	Description
	<b>Circuit function A (CF A)</b> 2/2-way solenoid valve Direct-acting Normally closed
	<b>Circuit function B (CF B)</b> 2/2-way solenoid valve Direct-acting Normally open

## 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

Approval	Description						
  	<p><b>Optional: Explosion protection according to category 2 (zone 1/21)</b></p> <p>Ex marking of the components according to the following table:</p> <table border="1"> <thead> <tr> <th colspan="2">Coil Type AC10</th> </tr> <tr> <th>Coils with cable outlet</th> <th>Coils with terminal box</th> </tr> </thead> <tbody> <tr> <td> <b>ATEX:</b>                      EPS 18 ATEX 1232 X                      II 2G Ex mb IIC T4 Gb                      II 2D Ex mb IIIC T130 °C Db   <b>IECEX:</b>                      IECEX EPS 18.0110 X                      Ex mb IIC T4 Gb                      Ex mb IIIC T130 °C Db                 </td> <td> <b>ATEX:</b>                      EPS 18 ATEX 1232 X                      II 2G Ex eb mb IIC T4 Gb                      II 2D Ex mb tb IIIC T130 °C Db   <b>IECEX:</b>                      IECEX EPS 18.0110 X                      Ex eb mb IIC T4 Gb                      Ex mb tb IIIC T130 °C Db                 </td> </tr> </tbody> </table>	Coil Type AC10		Coils with cable outlet	Coils with terminal box	<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db  <b>IECEX:</b> IECEX EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db	<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db  <b>IECEX:</b> IECEX EPS 18.0110 X Ex eb mb IIC T4 Gb Ex mb tb IIIC T130 °C Db
	Coil Type AC10						
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<p><b>Optional: Explosion protection according to category 3 (zone 2/22)</b></p> <p>Ex marking of the components according to the following table:</p> <table border="1"> <thead> <tr> <th colspan="2">Coil Type AC10</th> </tr> <tr> <th colspan="2">Coil with plug contacts form A and cable plug Type 2509</th> </tr> </thead> <tbody> <tr> <td colspan="2"> <b>ATEX:</b>                      EPS 18 ATEX 1232 X                      II 2G Ex mb IIC T4 Gb                      II 2D Ex mb IIIC T130 °C Db   <b>IECEX:</b>                      IECEX EPS 18.0110 X                      Ex mb IIC T4 Gb                      Ex mb IIIC T130 °C Db                 </td> </tr> </tbody> </table>	Coil Type AC10		Coil with plug contacts form A and cable plug Type 2509		<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db  <b>IECEX:</b> IECEX EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db		
Coil Type AC10							
Coil with plug contacts form A and cable plug Type 2509							
<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db  <b>IECEX:</b> IECEX EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db							

3.5. North America (USA/Canada)

Approval	Description
	<p><b>Optional: UL Listed for the USA (valid for valves)</b></p> <p>The valves are UL Listed for the USA according to:</p> <ul style="list-style-type: none"> <li>UL 429 (electrically operated valves)</li> </ul>
	<p><b>Optional: UL Hazardous Locations – Explosion Protection (valid for coils)</b></p> <p>UL Listed for Hazardous Locations for USA and Canada</p> <p>Class I, Zone 1                      Class I, Division 2, Group A, B, C and D                      Class II + III, Division 2, Group F and G</p>
	<p><b>Optional: UL Recognized for the USA (valid for valves)</b></p> <p>The valves are UL Recognized for the USA according to:</p> <ul style="list-style-type: none"> <li>UL 429 (electrically operated valves)</li> </ul>
	<p><b>Optional: CSA for Canada (valid for valves)</b></p> <p>The valves are CSA approved for Canada according to:</p> <ul style="list-style-type: none"> <li>CSA 139 (electrically operated valves)</li> </ul>
	<p><b>Optional: FM (Factory Mutual) – Explosion Protection (valid for coils)</b></p> <p>FM for Hazardous Locations for USA and Canada</p> <p>Class I, Zone 1                      Class I, Division 1, Groups A, B, C and D                      Class II + III, Division 1, Groups E, F and G</p>

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### 3.6. Drinking water

Conformity	Description
	<p><b>Suitable for use in drinking water applications</b> The materials comply with the assessment principles (UBA) for materials in contact with drinking water (TrinkwasserV).</p> <p><b>PA body:</b> PF36: Suitable for products with a maximum temperature of 60 °C (warm water)</p> <p><b>PPS/brass/stainless steel body:</b> PF39: Suitable for products with a maximum temperature of 85 °C (hot water)</p>

### 3.7. Foods and beverages/Hygiene

Conformity	Description
FDA	<p><b>FDA – Code of Federal Regulations (valid for the variable code PL02, PL03)</b> All wetted materials are compliant with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA) according to the manufacturer’s declaration.</p>
USP	<p><b>United States Pharmacopeial Convention (USP) (valid for the variable code PL04)</b> All wetted materials are biocompatible according to the manufacturer’s declaration.</p>
	<p><b>EC Regulation 1935/2004 of the European Parliament and of the Council (valid for the variable code PL01, PL02)</b> All wetted materials are compliant with EC Regulation 1935/2004/EC according to the manufacturer’s declaration.</p>

### 3.8. Others

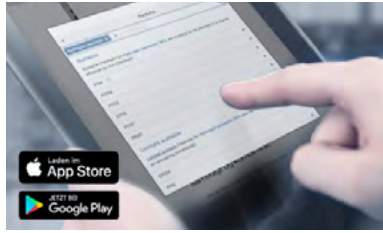
#### Fuel gases

Conformity	Description
	<p><b>Fuel gases (valid for the variable code PO16)</b> The products comply with:</p> <ul style="list-style-type: none"> <li>• Regulation (EU) 2016/426 – Appliances burning gaseous fuels and</li> <li>• DVGW DIN EN 161 (Automatic shut-off valves for gas burners and gas appliances) and</li> </ul>
	<p><b>Optional: DIN EN 549:2023-07 certification</b> The wetted valve seals are compliant with DIN EN 549:2023-07 (Rubber materials for seals and diaphragms for gas appliances and gas equipment) for medium temperatures of 0 °C...+ 80 °C.</p>

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## 4. Materials

### 4.1. Bürkert resistApp



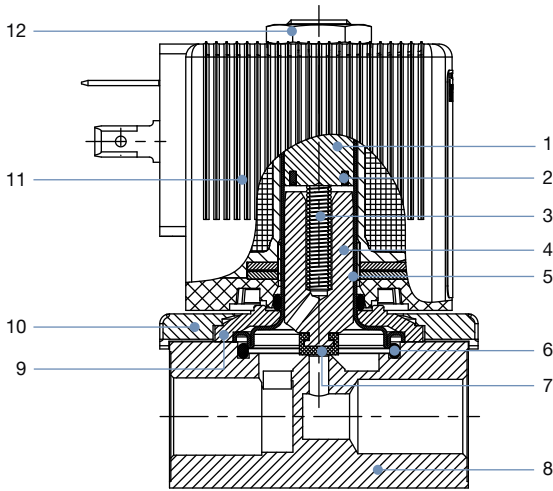
#### Bürkert resistApp – Chemical resistance chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

### 4.2. Material specifications

#### Standard version



No.	Element	Material
1	Stopper	Stainless steel 1.4105/430F
2	Shading ring	Cu (brass version) Ag (stainless steel version)
3	Spring	Stainless steel 1.4310/301
4	Magnetic core	Stainless steel 1.4105/430F
5	Armature guide tube	Stainless steel 1.4303/305/308
6	Seal	FKM Graphite (high temp. version)
7	Armature seal	FKM PTFE (high temp. version)
8	Valve body	Brass Stainless steel 1.4305/303
9	Sub-base	Steel, surface finish thick-film passivated (brass version) Stainless steel 1.4301/304 (stainless steel version)
10	Cover	Polyamide
11	Coil	PA (polyamide) Epoxy (high temp. version)
12	Locknut	Steel, surface finish thick-film passivated (brass version) Stainless steel 1.4305/303 PTFE coated (stainless steel version)

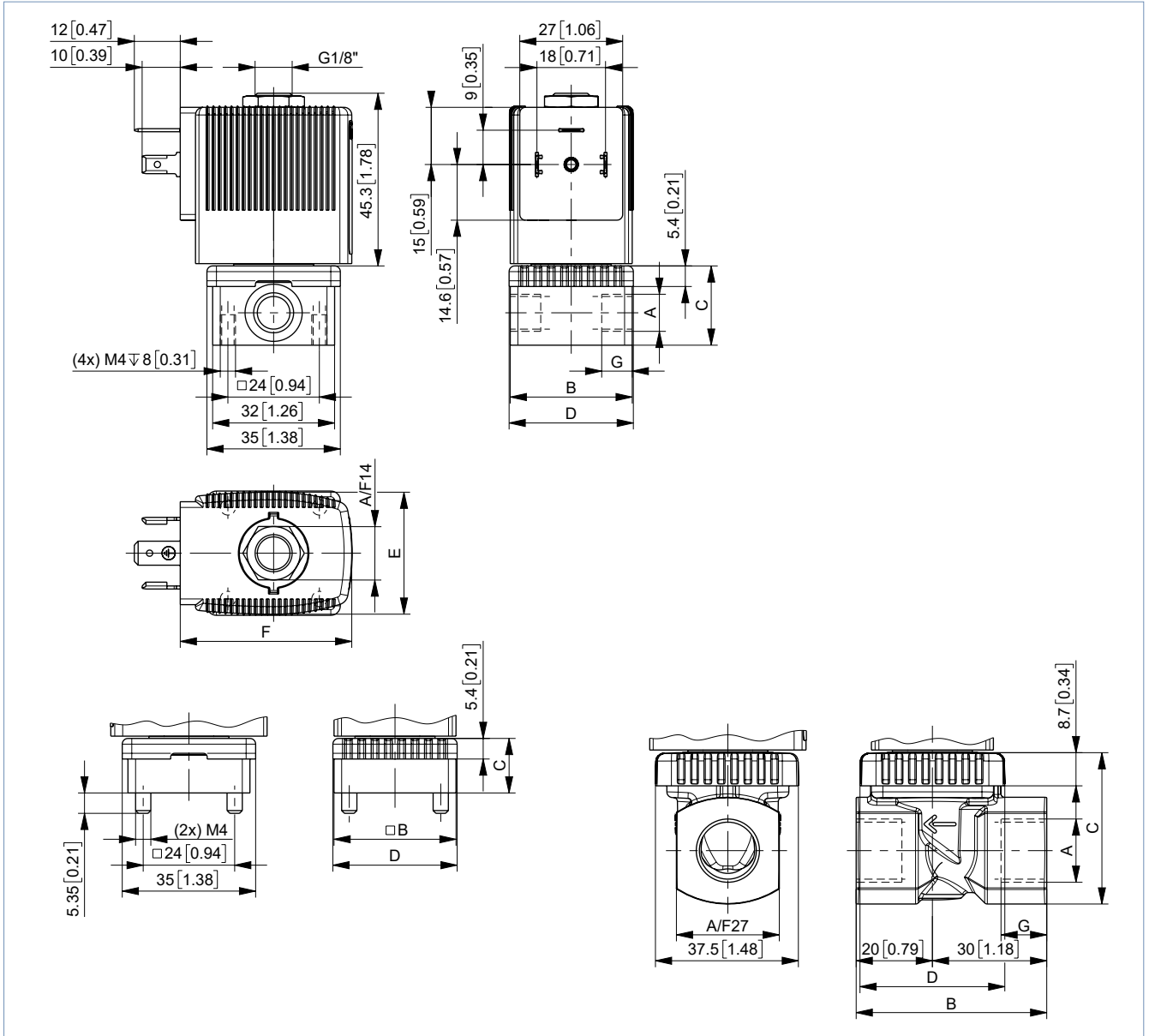


## 5. Dimensions

### 5.1. Standard version

**Note:**

Dimensions in mm [inch]



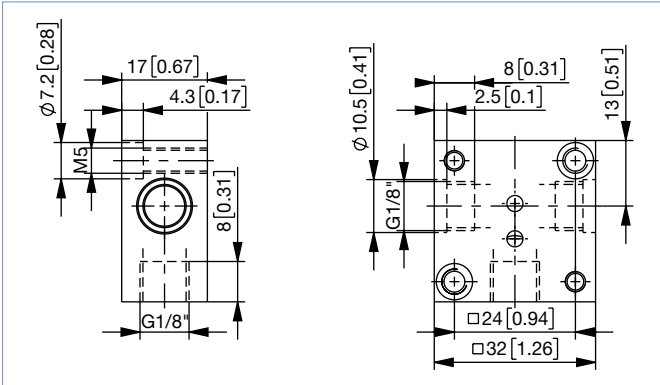
Port connection	A	B	C		D		G		
	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
Thread	G/NPT 1/8	32	1.26	20.8	0.82	32.6	1.28	8	0.31
	G/NPT 1/4	46	1.81	26.8	1.06	49	1.93	12	0.47
	G/NPT 3/8	50	1.97	39.8	1.57	38	1.5	12	0.47
Flange	-	32	1.25	14.3	0.56	32.6	1.28	-	-

Coil size	E		F	
	[mm]	[inch]	[mm]	[inch]
5	32	1.26	20.8	0.82
6	46	1.81	26.8	1.06

### 5.2. Single manifold

**Note:**

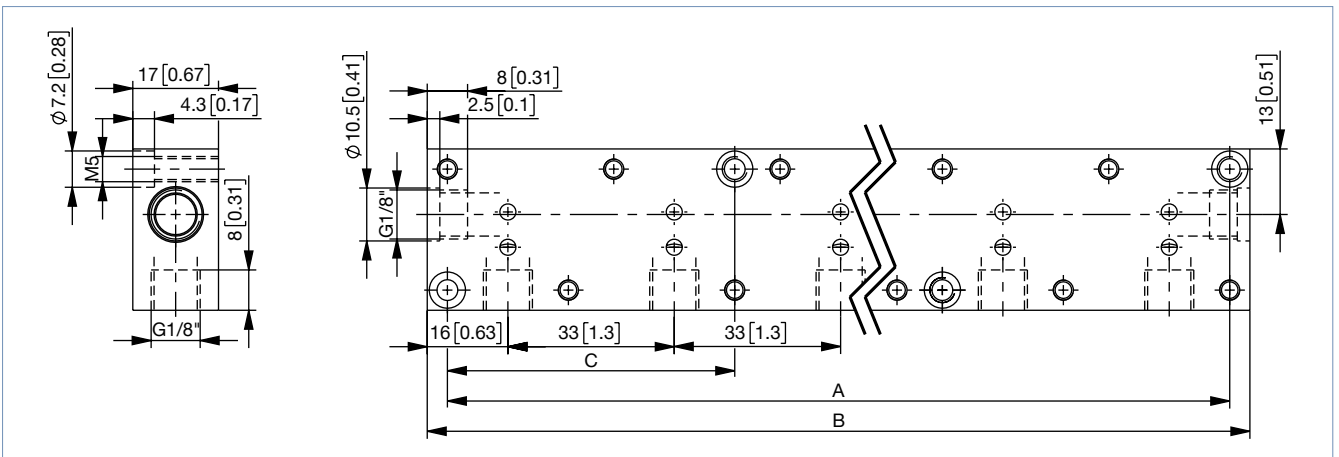
- Dimensions in mm [inch]
- Refer to “5.4. Manifolds for block mounting” on page 11 for more information about the installation of manifolds.



### 5.3. Multiple manifold

**Note:**

- Dimensions in mm [inch]
- The manifold is only possible with coil size 5 (32 mm [1.26 inch]).
- Brass or stainless steel manifold is available on request.



Accessory part	Quantity of valve places	Hole spacing A		Total length B		Hole spacing C		Article no.
		[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	
Multiple manifold (in aluminium)	2	57	2.24	65	2.56	-	-	005023
	3	90	3.54	98	3.86	-	-	005286
	4	123	4.84	131	5.16	-	-	005287
	5	156	6.14	164	6.46	57	2.24	005035
	6	189	7.44	197	7.76	57	2.24	005038
	8	255	10.04	263	10.35	90	3.54	005386
	10	321	12.64	329	12.95	90	3.54	005764
Single manifold (in aluminium)								005020
Connector nipple with O-ring to connect from manifold								005040
Covering plate with screws and O-ring for locking unoccupied valve positions								005630

### 5.4. Manifolds for block mounting

**Note:**

- Close open ports for valves that are not required with cover plates (see accessories).
- Fasten the manifolds to a standard rail.
- Refer to chapter “5.3. Multiple manifold” on page 10 for more information about the dimensions.

With manifold mounting, please comply with the permissible duty cycle (5 W models with 100 % continuous rating or standard 8 W model with 60 % duty cycle). The pressure port for the manifold is designated with P (R) and the outlet port with A (B). Only connect together ports with the same designation.

2/2-way valves of Type 6013 can be operated together on a manifold with 3/2-way valves of Type 6014, circuit function C (not D or T!) if the operating pressures matches according to the rating plates. The manifolds can also be expanded if the valve functions are taken into consideration. Connector nipples with O-rings are used to connect the P (R) ports.

## 6. Performance specifications

### 6.1. Power consumption

**Circuit function A**

Orifice [mm]	Port connection	C <sub>v</sub> value water [gal/min]	Weight [g]	Power consumption <sup>1.)</sup> [W]	Electrical power		Coil size	Switching times	
					Inrush AC [VA]	Hold AC [VA]		Opening [ms]	Closing [ms]
2.0	NPT 1/8	0.14	325	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
2.0	NPT 1/4	0.14	465	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
2.0	Flange	0.14	290	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
2.5	NPT 1/8	0.18	325	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
2.5	NPT 1/4	0.18	465	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
3.0	NPT 1/8	0.27	325	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
3.0	NPT 1/4	0.27	465	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
3.0	NPT 3/8	0.27	550	10 W AC or 10 W DC (11)	30	22	6 (40 mm)	20	30
4.0	NPT 1/4	0.35	465	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
4.0	NPT 3/8	0.35	550	10 W AC or 10 W DC (11)	30	22	6 (40 mm)	20	30
6.0	NPT 1/4	0.64	465	8 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
6.0	NPT 3/8	0.64	550	10 W AC or 10 W DC (11)	30	22	6 (40 mm)	20	30

1.) The values in brackets correspond to a coil temperature of +20 °C.

**Circuit function B**

Orifice [mm]	Port connection	C <sub>v</sub> value water [gal/min]	Weight [g]	Power consumption <sup>1.)</sup> [W]	Electrical power		Coil size	Switching times	
					Inrush AC [VA]	Hold AC [VA]		Opening [ms]	Closing [ms]
2.00	NPT 1/8	0.14	325	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
2.00	NPT 1/4	0.14	465	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
2.00	Flange	0.14	290	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
3.00	NPT 1/8	0.27	325	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
3.00	NPT 1/4	0.27	465	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
3.00	Flange	0.27	290	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
4.00	NPT 1/4	0.35	465	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30
6.00	NPT 1/4	0.64	465	7 W AC or 8 W DC (9)	24	17	5 (32 mm)	20	30

1.) The values in brackets correspond to a coil temperature of +20 °C.

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## 7. Product installation

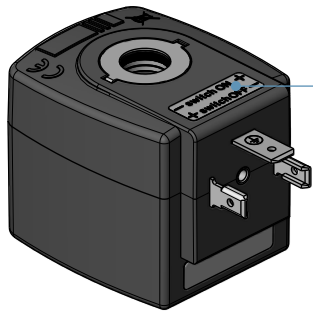
### 7.1. Installation notes

#### Control for impulse version with polarity reversal control

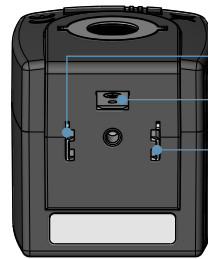
**Note:**

- Use cable plug without electrical wiring exclusively for impulse version.
- Pulse duration min. 50 ms

Polarity (is marked on the coil with a label)	Features	Terminal connections
- switch ON +	valve open	(+) on terminal 2 and (-) on terminal 1 (see below)
+ switch OFF -	valve closed	(+) on terminal 1 and (-) on terminal 2 (see below)



Polarity is marked on the coil with a label:  
 - switch ON +  
 + switch OFF -



1  
 Protective conductor port  
 2

## 8. Ordering information

### 8.1. 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](#)

### 8.2. Bürkert product filter

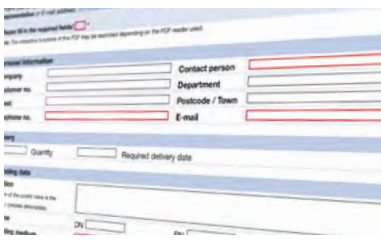


#### Bürkert product filter – Get quickly to the right product

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](#)

### 8.3. 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.

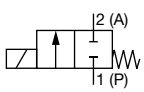
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8.4. Ordering chart

UL Recognized

Note:

Please note that the cable plug **Type 2518** ▶ is included. UL Listed and other versions are available on request. Further information can be found in chapter “Cable plug Type 2518, form A according to DIN EN 175301 - 803” on page 19.

Circuit function	Port connection	Orifice	C <sub>v</sub> value water <sup>1.)</sup>	Voltage/ Frequency	Coil power	Pressure range <sup>2.)</sup> (MAWP <sup>3.)</sup> )	Article no. Brass body FKM Seal	Article no. Stainless steel body FKM Seal
		[mm]	[gal/min]					
<b>With FKM seal, brass or stainless steel body (class B)</b>								
<b>CF A</b> 2/2-way solenoid valve Direct-acting Normally closed 	NPT 1/8	2.0	0.14	024/DC	8	0...174	o. r.	o. r.
				024/60		0...363	o. r.	o. r.
				120/60		0...363	o. r.	o. r.
				240/60		0...363	o. r.	o. r.
	NPT 1/4	0.14	024/DC	8	0...174	o. r.	o. r.	o. r.
			024/60		0...363	o. r.	o. r.	
			120/60		0...363	o. r.	o. r.	
			240/60		0...363	o. r.	o. r.	
	Flange (SFB)	0.14	024/DC	8	0...174	o. r.	–	–
			024/60		0...363	o. r.	–	
			120/60		0...363	o. r.	–	
			240/60		0...363	o. r.	–	
	NPT 3/8	2.5	0.18	024/DC	8	0...145	o. r.	–
				024/60		0...232	o. r.	–
				120/60		0...232	o. r.	–
				240/60		0...232	o. r.	–
	NPT 1/2	3.0	0.27	024/DC	8	0...87	o. r.	o. r.
				024/60		0...145	o. r.	o. r.
				120/60		0...145	o. r.	o. r.
				240/60		0...145	o. r.	o. r.
	NPT 3/4	0.27	024/DC	8	0...87	o. r.	o. r.	
			024/60		0...145	o. r.	o. r.	
			120/60		0...145	o. r.	o. r.	
			240/60		0...145	o. r.	o. r.	
	NPT 3/4	0.27	024/DC	10	0...116	o. r.	–	
			024/60		0...203	o. r.	–	
			120/60		0...203	o. r.	–	
			240/60		0...203	o. r.	–	
	NPT 1/2	4.0	0.35	024/DC	8	0...22	o. r.	o. r.
				024/60		0...58	o. r.	o. r.
				120/60		0...58	o. r.	o. r.
				240/60		0...58	o. r.	o. r.
NPT 3/4	0.35	024/DC	10	0...36	o. r.	–		
		024/60		0...87	o. r.	–		
		120/60		0...87	o. r.	–		
		240/60		0...87	o. r.	–		
NPT 1/2	6.0	0.64	024/DC	8	0...7	o. r.	o. r.	
			024/60		0...22	o. r.	o. r.	
			120/60		0...22	o. r.	o. r.	
			240/60		0...22	o. r.	o. r.	
NPT 3/4	0.64	024/DC	10	0...11	o. r.	–		
		024/60		0...36	o. r.	–		
		120/60		0...36	o. r.	–		
		240/60		0...36	o. r.	–		

o. r. = on request  
 – = not available  
 1.) Measurement at +68 °F, 14 psi<sup>2.)</sup> at the valve inlet and free outlet  
 2.) Pressure data: overpressure to atmospheric pressure  
 3.) Maximum allowable working pressure

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UL Listed

Note:

Please note that the cable plug **Type 2518** is included. UL Recognized and other versions are available on request. Further information can be found in chapter **“Cable plug Type 2518, form A according to DIN EN 175301 - 803” on page 19.**

Circuit function	Port connection	Orifice	C <sub>v</sub> value water <sup>1.)</sup>	Voltage/ Frequency	Coil power	Pressure range <sup>2.)</sup> (MAWP <sup>3.)</sup> )	Article no. Brass body FKM Seal	Article no. Stainless steel body FKM Seal
		[mm]	[gal/min]	[V/Hz]	[W]	[psi]		
<b>With FKM seal, brass or stainless steel body (class B)</b>								
<b>CF A</b> 2/2-way solenoid valve Direct-acting Normally closed  	NPT 1/8	2.0	0.14	024/DC	8	0...174	332772	332768
				024/60		0...363	o. r.	o. r.
				120/60		0...363	341755	332753
				240/60		0...363	o. r.	o. r.
	NPT 1/4	0.14	024/DC	8	0...174	332763	20013745	
			024/60		0...363	o. r.	o. r.	
			120/60		0...363	332754	o. r.	
			240/60		0...363	o. r.	o. r.	
	Flange (SFB)	0.14	024/DC	8	0...174	o. r.	-	
			024/60		0...363	o. r.	-	
			120/60		0...363	o. r.	-	
			240/60		0...363	o. r.	-	
	NPT 3/8	2.5	0.18	024/DC	8	0...145	332761	-
				024/60		0...232	o. r.	-
				120/60		0...232	341756	-
				240/60		0...232	o. r.	-
	NPT 1/2	3.0	0.27	024/DC	8	0...87	332775	341751
				024/60		0...145	332765	o. r.
				120/60		0...145	332762	332755
				240/60		0...145	o. r.	o. r.
	NPT 3/4	0.27	024/DC	8	0...87	332773	o. r.	
			024/60		0...145	332774	o. r.	
			120/60		0...145	332758	o. r.	
			240/60		0...145	o. r.	o. r.	
	NPT 1	0.27	024/DC	10	0...116	o. r.	-	
			024/60		0...203	o. r.	-	
			120/60		0...203	o. r.	-	
			240/60		0...203	o. r.	-	
	NPT 1 1/4	4.0	0.35	024/DC	8	0...22	332750	341753
				024/60		0...58	o. r.	o. r.
				120/60		0...58	332757	341757
				240/60		0...58	o. r.	o. r.
	NPT 1 1/2	0.35	024/DC	10	0...36	o. r.	-	
			024/60		0...87	o. r.	-	
			120/60		0...87	o. r.	-	
			240/60		0...87	o. r.	-	
NPT 2	6.0	0.64	024/DC	8	0...7	o. r.	o. r.	
			024/60		0...22	o. r.	o. r.	
			120/60		0...22	o. r.	o. r.	
			240/60		0...22	o. r.	o. r.	
NPT 2 1/2	0.64	024/DC	10	0...11	o. r.	-		
		024/60		0...36	o. r.	-		
		120/60		0...36	o. r.	-		
		240/60		0...36	o. r.	-		

o. r. = on request

- = not available

1.) Measurement at +68 °F, 14 psi<sup>2.)</sup> at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure

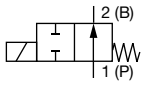
3.) Maximum allowable working pressure

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**UL Recognized Normally Open**

**Note:**

Please note that the cable plug **Type 2518** ▶ is included. UL Listed and other versions are available on request. Further information can be found in chapter **“Cable plug Type 2518, form A according to DIN EN 175301 - 803”** on page 19.

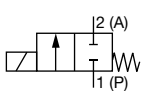
Circuit function	Port connection	Orifice	C <sub>v</sub> value water <sup>1.)</sup>	Voltage/ Frequency	Coil power	Pressure range <sup>2.)</sup> (MAWP <sup>3.)</sup> )	Article no.	
		[mm]	[gal/min]	[V/Hz]	[W]	[psi]	Brass body	Stainless steel body
<b>With FKM seal and brass body (class H)</b>								
<b>CF B</b> 2/2-way solenoid valve Direct-acting Normally open 	NPT 1/8	2.0	0.14	24/DC 120/60	8 7	0...232	o. r.	o. r.
	NPT 1/8	3.0	0.27	24/DC	8	0...116	o. r.	o. r.
				120/60	7			
	NPT 1/4	4.0	0.35	24/DC	8	0...58	o. r.	o. r.
				120/60	7			
	NPT 1/4	6.0	0.64	024/DC	8	0...29	o. r.	o. r.
				120/60	7			

- o. r. = on request
- 1.) Measurement at +68 °F, 14 psi<sup>2.)</sup> at the valve inlet and free outlet
- 2.) Pressure data: overpressure to atmospheric pressure
- 3.) Maximum allowable working pressure

**UL Recognized low temperature version (-40 °F)**

**Note:**

Please note that the cable plug **Type 2509** ▶ is included. UL Listed and other versions are available on request. Further information can be found in chapter **“Cable plug Type 2509, form A according to DIN EN 175301 - 803”** on page 19.

Circuit function	Port connection	Orifice	C <sub>v</sub> value water <sup>1.)</sup>	Voltage/ Frequency	Coil power	Pressure range <sup>2.)</sup> (MAWP <sup>3.)</sup> )	Article no.	
		[mm]	[gal/min]	[V/Hz]	[W]	[psi]	Brass body	Stainless steel body
<b>With FKM seal and brass body (class B)</b>								
<b>CF A</b> 2/2-way solenoid valve Direct-acting Normally closed 	NPT 1/8	2.0	0.12	24/DC 120/60	8	0...174 0...363	o. r.	o. r.
	NPT 1/8	2.5	0.16	24/DC	8	0...145 0...232	o. r.	o. r.
				120/60	7			
	NPT 1/4	3.0	0.23	24/DC	8	0...87 0...145	o. r.	o. r.
				120/60	7			
	NPT 1/4	4.0	0.30	24/DC	8	0...22 0...58	o. r.	o. r.
				120/60	7			

- o. r. = on request
- 1.) Measurement at +68 °F, 14 psi<sup>2.)</sup> at the valve inlet and free outlet
- 2.) Pressure data: overpressure to atmospheric pressure
- 3.) Maximum allowable working pressure

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8.5. Ordering chart coil to be UL Listed for hazardous locations, Class I, Division 2

Cable versions

Note:

- The maximum medium temperature must never exceed the permitted temperature class (T4: +275 °F, T5: +212 °F, T6: +185 °F) minus 5 K.
- With 3 m/9'10" cable as standard. Other lengths or version with junction box are available on request.

Circuit function	Port connection	Orifice	C <sub>v</sub> value water <sup>1.)</sup>	Voltage/Frequency	Coil power	Pressure range <sup>2.)</sup> (MAWP <sup>3.)</sup> )	Article no.	
		[mm]	[gal/min]	[V/Hz]	[W]	[psi]	Brass body	Stainless steel body
<b>Ex m T4 approved, with FKM seal and molded cable ( 3 m/9'10" ), single mounting only</b>								
<b>CF A</b> 2/2-way solenoid valve Direct-acting Normally closed 	Flange (SFB)	2.0	0.13	24/UC	7	0...87	o. r.	o. r.
				120/UC			o. r.	o. r.
	NPT 1/8		0.14	24/UC	9	0...145	o. r.	o. r.
		120/UC		o. r.			o. r.	
	NPT 1/4	0.14	24/UC	9	0...145	o. r.	o. r.	
			120/UC			o. r.	o. r.	
	NPT 1/8	2.5	0.18	24/UC	9	0...116	o. r.	o. r.
				120/UC			o. r.	o. r.
	NPT 1/8	3.0	0.27	24/UC	9	0...73	o. r.	o. r.
				120/UC			o. r.	o. r.
	NPT 1/4	0.27	24/UC	9	0...73	o. r.	o. r.	
			120/UC			o. r.	o. r.	
NPT 1/4	4.0	0.35	24/UC	9	0...17	o. r.	o. r.	
			120/UC			o. r.	o. r.	
NPT 1/4	6.0	0.64	24/UC	9	0...6	o. r.	o. r.	
			120/UC			o. r.	o. r.	

o. r. = on request

1.) Measurement at +68 °F, 14 psi<sup>2.)</sup> at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure

3.) Maximum allowable working pressure

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8.6. Ordering chart coil to be cFMus for hazardous locations, Class I, Division 1

Conduit versions

Circuit function	Port connection	Orifice	C <sub>v</sub> value water <sup>1.)</sup>	Voltage/ Frequency	Coil power	Pressure range <sup>2.)</sup> (MAWP <sup>3.)</sup> )	Article no.		
		[mm]	[gal/min]	[V/Hz]	[W]	[psi]	Brass body	Stainless steel body	
<b>cFMus approved coil, with FKM seal and molded cable (19.5 inch), single mounting only</b>									
<b>CF A</b> 2/2-way solenoid valve Direct-acting Normally closed 	Flange (SFB)	2.0	0.13	24/UC	7	0...87	o. r.	o. r.	
				120/UC			o. r.	o. r.	
	NPT 1/8	2.0	0.14	0.14	24/UC	9	0...145	o. r.	o. r.
					120/UC			o. r.	o. r.
	NPT 1/4	2.0	0.14	0.14	24/UC	9	0...145	o. r.	o. r.
					120/UC			o. r.	o. r.
	NPT 1/8	2.5	0.18	0.18	24/UC	9	0...116	o. r.	o. r.
					120/UC			o. r.	o. r.
	NPT 1/8	3.0	0.27	0.27	24/UC	9	0...73	o. r.	o. r.
					120/UC			o. r.	o. r.
	NPT 1/4	3.0	0.27	0.27	24/UC	9	0...73	o. r.	o. r.
					120/UC			o. r.	o. r.
NPT 1/4	4.0	0.35	0.35	24/UC	9	0...17	o. r.	o. r.	
				120/UC			o. r.	o. r.	
NPT 1/4	6.0	0.64	0.64	24/UC	9	0...6	o. r.	o. r.	
				120/UC			o. r.	o. r.	

o. r. = on request

1.) Measurement at +68 °F, 14 psi<sup>2.)</sup> at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure

3.) Maximum allowable working pressure

Further versions on request	
<b>Approval</b> <ul style="list-style-type: none"> <li>UL/UR/CSA</li> <li>UL Hazloc Div 2</li> <li>FM Hazloc Div 1</li> <li>European gas approval Class A, Group 2</li> </ul>	<b>Pressure</b> Variants with increased coil power for higher medium pressure <b>Process connection</b> Threaded port G, Rc, manifold
<b>Material</b> Seal material FKM, EPDM, NBR, PTFE	<b>Voltage</b> Further voltages on request

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### 8.7. Ordering chart accessories

#### Single manifold

**Note:**

Refer to chapter “5.2. Single manifold” on page 10 for more order information.

#### Multiple manifold


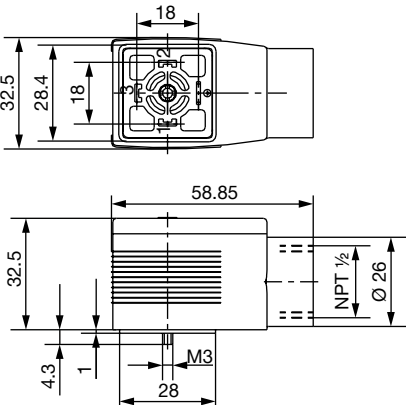
**Note:**

Refer to chapter “5.3. Multiple manifold” on page 10 for more order information.

#### Cable plug Type 2509, form A according to DIN EN 175301 - 803

**Note:**


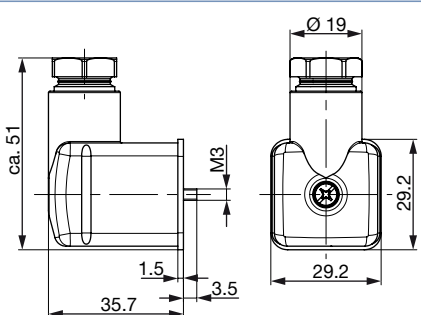
- Dimensions in mm
- The cable plug meets the requirements for UL hazloc Div. 2
- Without circuitry (Standard)
- Refer to data sheet **Type 2509** ▶ for more information about the cable plug.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry	0...250 V AC/DC	137943

#### 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, e.g. steam version (NA07)	0...250 V AC/DC	361687

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