






2/2 or 3/2-way rocker solenoid valve with separating diaphragm

- For the highest chemical resistance requirements
- Compact design with 16 mm width and a flow coefficient of up to 0.058
- Proven reliability since 1993
- Flexible design for customised solutions
- High back-pressure tightness, excellent cleanability and 100 % duty cycle



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

Can be combined with

	Type 1054 Device plug	▶
	Type 2505 10 mm socket for Bürkert small solenoid valves	▶
	Type TVU003 Fittings for UNF connections with PTFE hose for analysis valves with UNF 1/4-28 connection	▶

Type description

Bürkert's unique Type 0127 solenoid valve is pre-destined for use in laboratory, medical and analytical technology as the pioneer of small media-separated valves. It continues to set the pace today with its rocker technology, which activates the separating diaphragms between actuator and fluid. It guarantees precise switching of tiny volumes of even aggressive media at the lowest temperature input, thanks to the coil. It is also very easy to flush and is characterised by its minimal internal volume and freedom from almost all dead space. The valves can be stacked on manifolds and can be wired with central wiring on request. Special versions with minimum dead space are available on request.

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1. General technical data

1.1. General data

Product properties	
Dimensions	Further information can be found in chapter "6. Dimensions" on page 8.
Material	
Seal	FFKM, FKM, EPDM
Fluidic housing	PEEK, PPS (PVDF on request)
Internal volume ¹⁾	Sub-base: from 44 µl Tube connection: from 35 µl G 1/8": from 100 µl UNF 1/4"- 28: from 25 µl < 10 µl available on request Further information can be found in chapter "1.4. Internal volume" on page 5
Orifice	DN 0.8...DN 1.6
Circuit function	A, B and T Further information can be found in chapter "3. Circuit functions" on page 6.
Typical product service life ²⁾	10 mio. switching cycles (according to laboratory endurance test with FKM and EPDM)
Performance data	
Switching time ³⁾	Open: approx. 25 ms (pressure build-up 0...10 %) Closing: approx. 25 ms (pressure reduction 100...90 %)
Electrical data	
Operating voltage	12/24 V DC, 24 V UC (other voltages on request)
Duty cycle	100 % continuous operation Manifold mounting: If medium or ambient temperatures are above + 40 °C: intermittent operation 40 % (minimum 10 min)
Nominal power	3.4 W (Versions with internal power reduction possible)
Voltage tolerance	± 10 %
Medium data	
Operating medium	Resistant to neutral and aggressive liquids and gases (see chapter "5.1. Bürkert resistApp" on page 7)
Medium temperature	Max. - 10 °C...+ 55 °C Further information can be found in chapter "1.3. Medium temperature" on page 4.
Viscosity	Max. 21 mm ² /s
Process/Port connection & communication	
Electrical connection ⁴⁾	Cable plug Type 1054 ▶ Two FEP-leads 0.2 mm ² (AWG24), length 500 mm Rectangular cable plug Type 2505 ▶
Port connection	Bürkert sub-base (16 × 27 mm) Tube connection G 1/8" UNF 1/4"- 28
Approvals and conformities	
Degree of protection	IP65 with flying leads and cable plug Type 1054 ▶ IP30 with rectangular cable plug Type 2505 ▶
Foods and beverages/Hygiene	FDA (on request only with seal material EPDM) Further information can be found in chapter "4.4. Foods and beverages/Hygiene" on page 6.
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	Max. + 55 °C

1.) The internal volume may vary depending on the body, see "1.4. Internal volume" on page 5 for further information.

2.) The life expectancy depends on medium, temperature, pressure, seal material, individual application conditions.

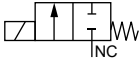
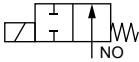
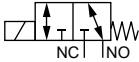
3.) Measurement at + 20 °C, 2 bar at the valve outlet according to DIN ISO 12238:2001

4.) Other electric connectors and other cable lengths are available on request.

1.2. Medium pressure

Note:

- Deviating pressure ranges are possible on request.
- For low dead volume versions, the back pressure is limited to a maximum of 1 bar.

Circuit functions	Orifice	Port connection	Max. differential pressure ¹⁾
	[mm]		[bar]
CF A 2/2-way solenoid valve Direct-acting Normally closed 	0.8	Sub-base	0...6
	1.2	UNF 1/4"- 28 Sub-base	0...5
	1.6	UNF 1/4"- 28	0...2
		Sub-base G 1/8" Tube connection	Vac...2
CF B 2/2-way solenoid valve Direct-acting Normally open 	0.8	Sub-base	0...6
	1.2	UNF 1/4"- 28 Sub-base	0...5
	1.6	UNF 1/4"- 28	0...2
		Sub-base G 1/8" Tube connection	Vac...2
CFT 3/2-way solenoid valve Direct-acting Flow direction optional Universal 	0.8	Sub-base	0...6
	1.2	UNF 1/4"- 28 Sub-base	0...5
	1.6	UNF 1/4"- 28	0...2
		Sub-base G 1/8" Tube connection	Vac...2

1.) Pressure data: overpressure to atmospheric pressure

1.3. Medium temperature

Note:

The permissible medium temperature depends on the seal material and the orifice.

Description	Orifice	Seal material	Temperature range
Medium temperature	DN 0.8	FFKM	+ 5 °C...+ 50 °C
	DN 0.8	FKM	0 °C...+ 50 °C
	DN 0.8	EPDM	- 5 °C...+ 50 °C
	DN 1.2 and DN 1.6	FFKM	+ 10 °C...+ 50 °C
	DN 1.2 and DN 1.6	FKM	+ 5 °C...+ 50 °C
	DN 1.2 and DN 1.6	EPDM	0 °C...+ 50 °C
Medium temperature with limitation on switching time and life expectancy	DN 0.8	FFKM	0 °C...+ 50 °C
	DN 0.8	FKM	- 5 °C...+ 55 °C
	DN 0.8	EPDM	- 10 °C...+ 50 °C
	DN 1.2 and DN 1.6	FFKM	+ 5 °C...+ 50 °C
	DN 1.2 and DN 1.6 ¹⁾	FKM	0 °C...+ 55 °C
	DN 1.2 and DN 1.6	EPDM	- 5 °C...+ 50 °C

1.) The orifice sizes are available up to - 15 °C on request.

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1.4. Internal volume

Note:

The internal volume is depending on fluidic housing.

Body	2-way (low dead volume)		2-way		3-way	
	Fluid chamber	Total	Fluid chamber	Total	Fluid chamber	Total
Sub-base	44 µl	54 µl	97 µl	106 µl	90 µl	106 µl
G 1/8"	-	-	94 µl	207 µl	88 µl	228 µl
UNF 1/4"- 28	25 µl	69 µl	55 µl	79 µl	54 µl	95 µl
Tube connection	35 µl	105 µl	67 µl	135 µl	73 µl	178 µl

2. Product versions

Flying leads device with sub-base	Rectangular plug with sub-base	Rectangular plug with tube connection
		
Rectangular plug with threaded body G 1/8"	Rectangular plug with threaded body UNF 1/4"- 28	

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3. Circuit functions

Symbol	Description
	Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed
	Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open
	Circuit function T (CF T) 3/2-way solenoid valve Direct-acting Flow direction optional Universal

4. Approvals and conformities

4.1. 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.

4.2. Conformity

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

4.3. 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.

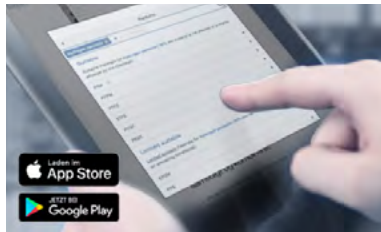
4.4. Foods and beverages/Hygiene

Conformity	Description
FDA	FDA – Code of Federal Regulations (valid for the variable code PL03) 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.

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5. Materials

5.1. Bürkert resistApp

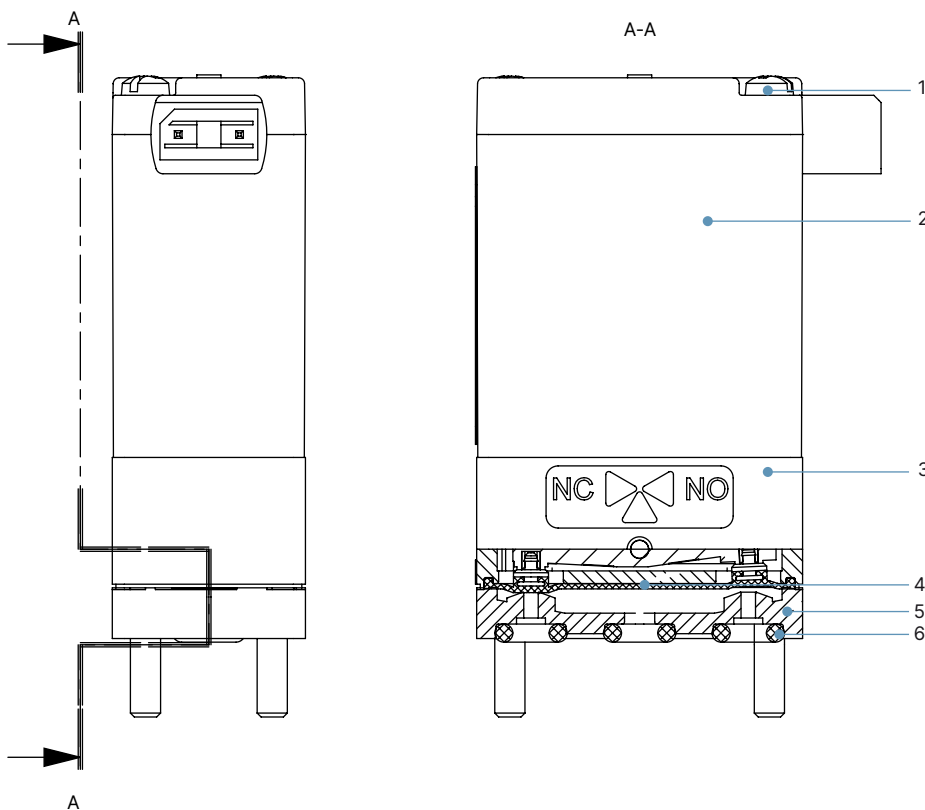


Bürkert resistApp – Chemical resistance chart

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](#)

5.2. Material specifications



No.	Element	Material
1	Rounded head screw M2.5 (from end to end)	Stainless steel
2	Coil	Epoxy
3	Actuator housing	PPS
4	Diaphragm ¹⁾	FFKM, FKM, EPDM
5	Fluid housing ¹⁾	PEEK, PPS, (PVDF on request)
6	Flange seal ¹⁾	FFKM, FKM, EPDM

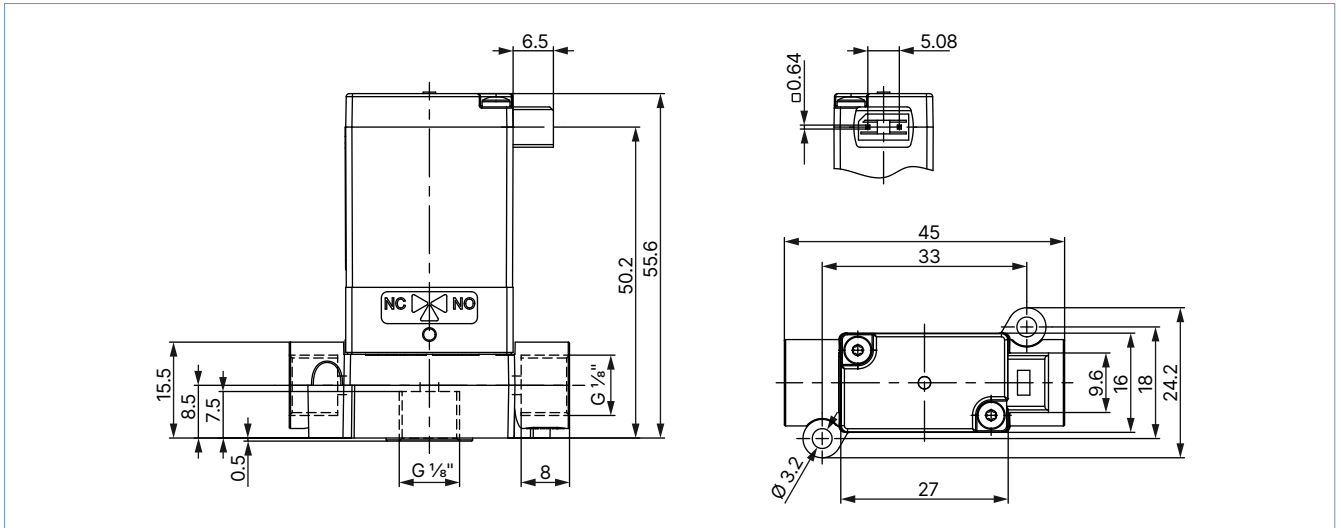
1.) in contact with medium

6. Dimensions

6.1. Threaded port version PEEK G 1/8" with rectangular plug Type 2505

Note:

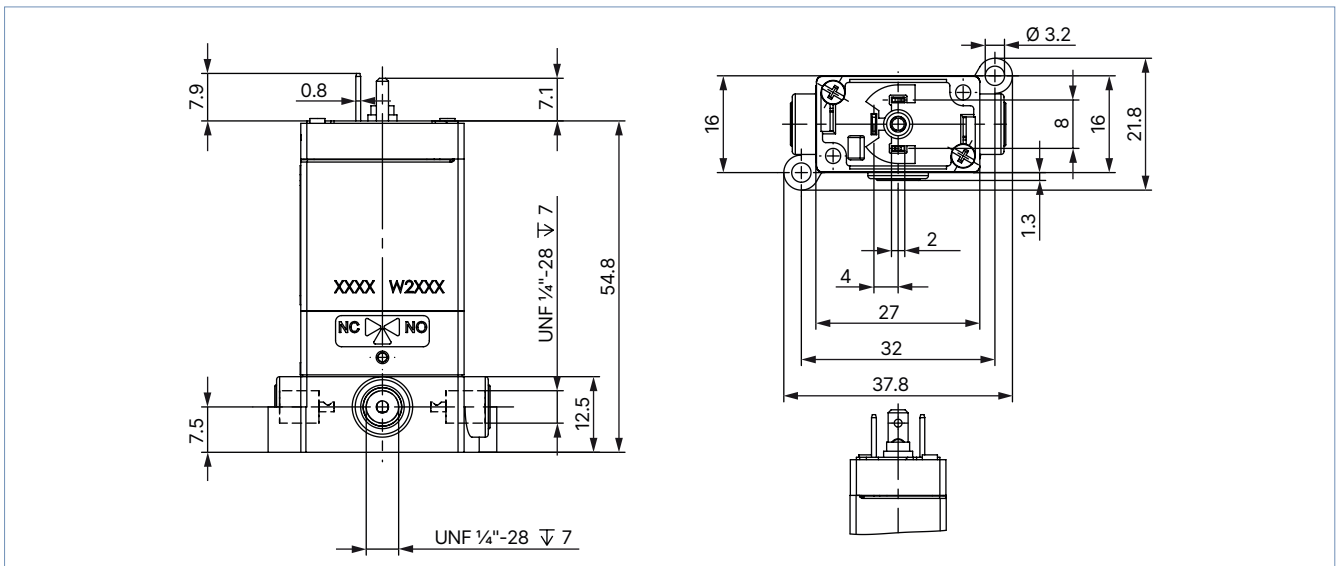
- Dimensions in mm
- Other versions are available on request.



6.2. Threaded port version UNF 1/4" - 28 with cable plug Type 1054

Note:

- Dimensions in mm
- Other versions are available on request.

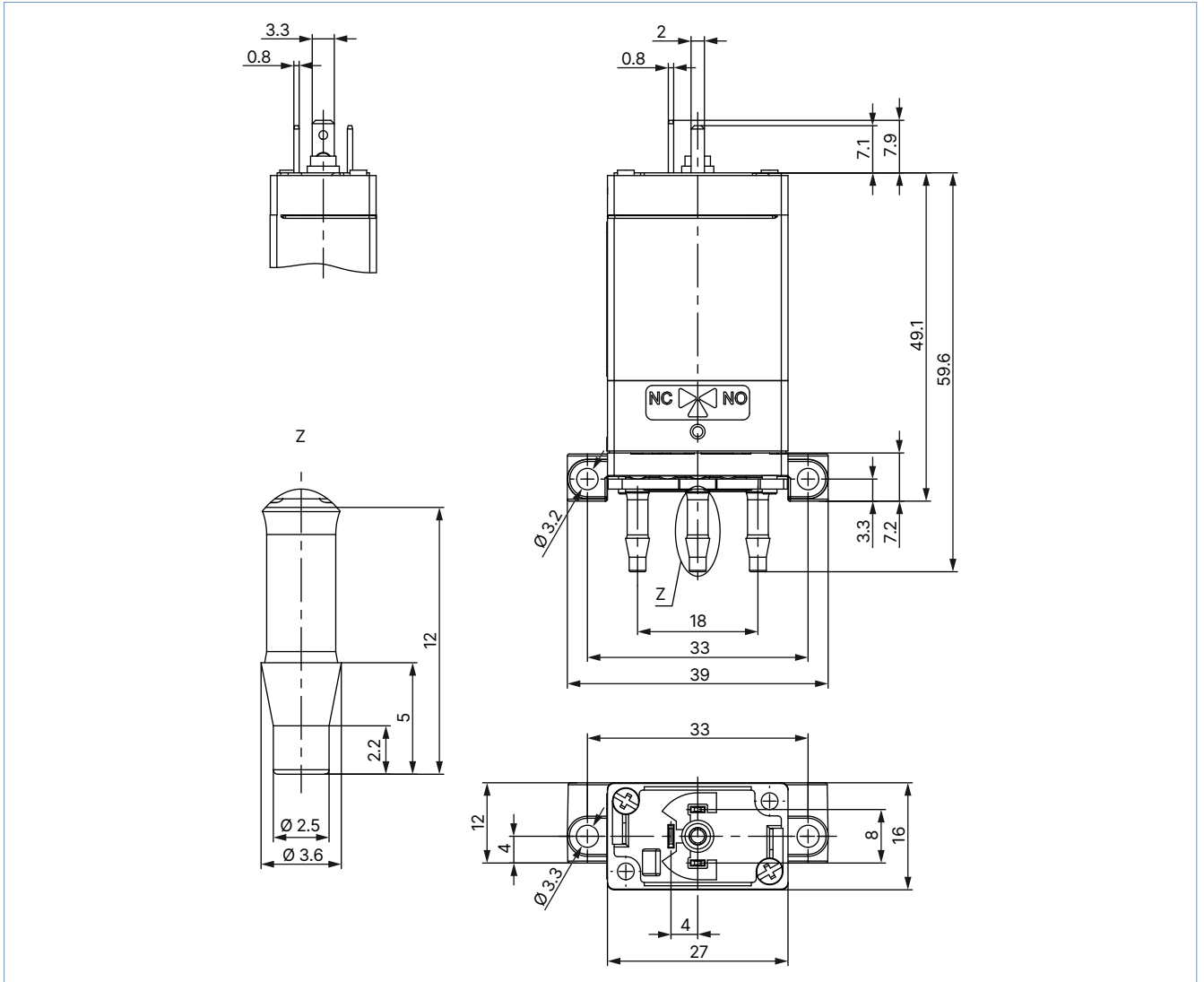


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6.3. Tube connector version with cable plug Type 1054

Note:

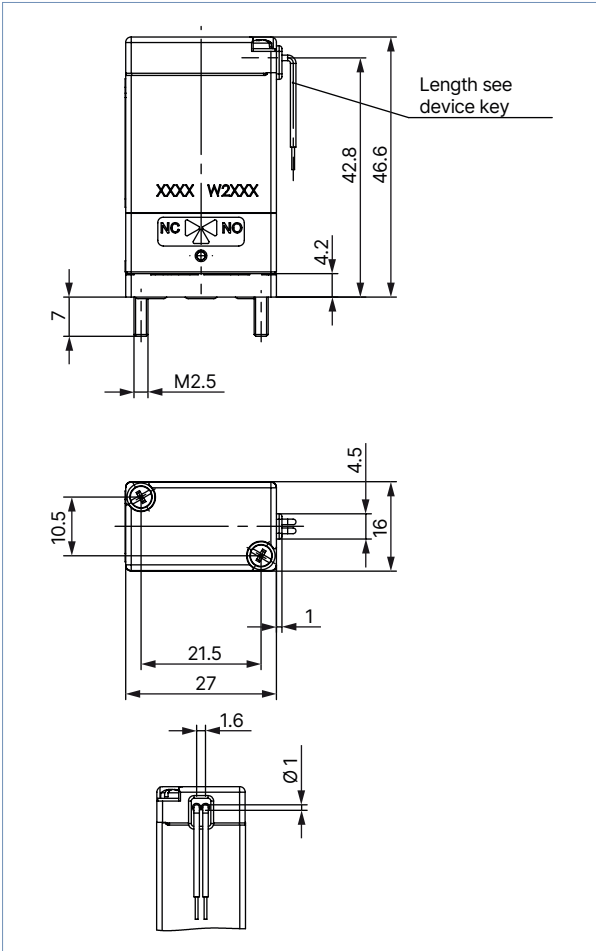
- Dimensions in mm
- Other versions are available on request.



6.4. Sub-base version with flying leads

Note:

- Dimensions in mm
- Other screw length are available on request.
- Self-tapping screws are available on request.



Classification of fluid connections

Circuit function A (CF A)

2/2-way solenoid valve
Direct-acting
Normally closed

Circuit function B (CF B)

2/2-way solenoid valve
Direct-acting
Normally open

Circuit function T (CF T)

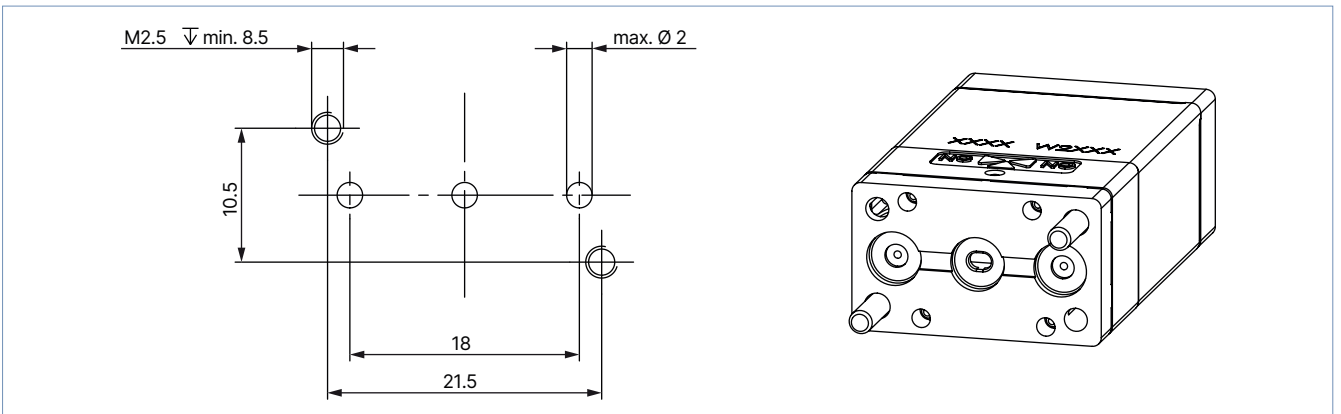
3/2-way solenoid valve
Direct-acting
Flow direction optional
Universal

See chapter "3. Circuit functions" on page 6

6.5. Bürkert sub-base interface, 3-way standard

Note:

Dimensions in mm

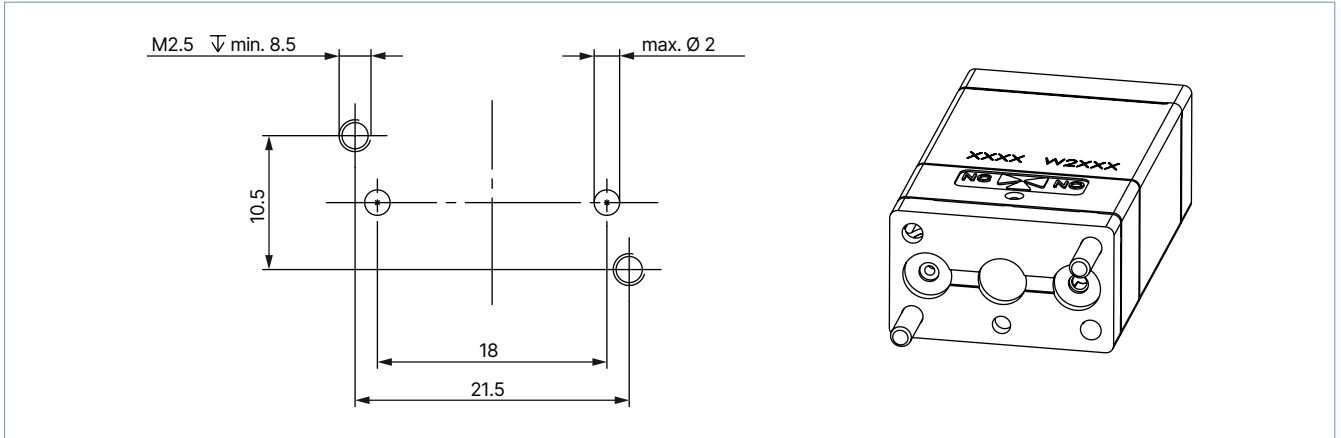


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Bürkert sub-base interface, 2-way standard

Note:

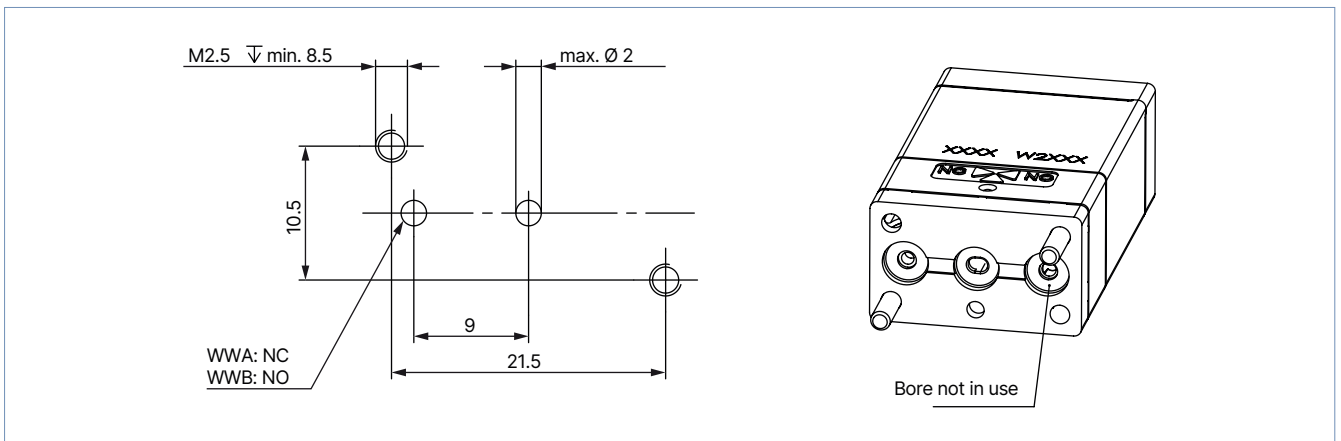
Dimensions in mm



Bürkert sub-base interface, 2-way (low dead volume)

Note:

- Dimensions in mm
- Available on request



7. Ordering information

7.1. 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](#)

7.2. Bürkert product filter

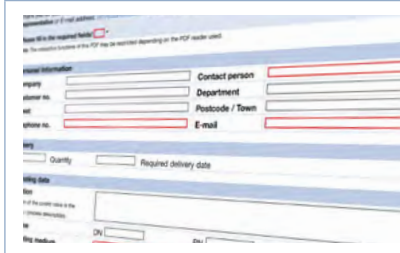


Bürkert product filter – Get quickly to the right product

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](#)

7.3. 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](#)

7.4. Ordering chart

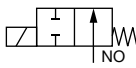

Standard valves

Note:

- Deviating pressure ranges are possible on request.
- 2-way versions with minimum dead space are available on request.
- 2 x fixing screws M2.5 for sub-base versions are included in the scope of delivery.
- Connectors for rectangular plugs and cable plugs are not included in the scope of delivery and must be ordered separately, see **"7.5. Ordering chart accessories"** on page 14.

Circuit function	Port connection	Orifice	Q _{Nh} value air	K _v value water	C _v value	Voltage/ Frequency	Pressure range	Body material	Seal material	Electrical connection	Article no.	
		[mm]	[l/min]	[m³/h]	[gpm]							[bar] ¹⁾
CFA 2/2-way solenoid valve Direct-acting Normally closed 	Sub-base	0.8	16	0.015	0.017	24/DC	0...6	PEEK	FFKM	Flying leads, 0.5 m	276699	
								PPS	FKM	Flying leads, 0.5 m	264327	
								PPS	EPDM	Rectangular plug	276701	
	Sub-base	1.2	32	0.03	0.035	24/DC	0...5	PEEK	FFKM	Flying leads, 0.5 m	276703	
										Rectangular plug	276710	
								PPS	FKM	Flying leads, 0.5 m	276718	
								PPS	EPDM	Cable plug	276728	
	UNF ¼"- 28	1.2	27	0.025	0.029	12/DC	0...5	PEEK	FFKM	Flying leads, 0.5 m	244706	
						24/DC					280858	
	Sub-base	1.6	49	0.045	0.052	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	242451	
									PPS	FKM	Rectangular plug	273398
								PPS	EPDM	Rectangular plug	276746	
Tube connector	1.6	49	0.045	0.052	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	20046222		
											Rectangular plug	20043727
G ⅛"	1.6	54	0.05	0.058	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	20051573		
											Rectangular plug	20043555
UNF ¼"- 28	1.6	33	0.03	0.035	24/DC	0...2	PEEK	FFKM	Flying leads, 0.5 m	463551		
											Rectangular plug	262460
											Cable plug	207675

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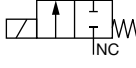
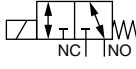
Circuit function	Port connection	Orifice	Q _{Nm} value air	K _v value water	C _v value	Voltage/Frequency	Pressure range	Body material	Seal material	Electrical connection	Article no.		
		[mm]	[l/min]	[m³/h]	[gpm]	[V/Hz]	[bar] ¹⁾						
CF B 2/2-way solenoid valve Direct-acting Normally open 	Sub-base	1.6	49	0.045	0.052	24/DC	Vac...2	PPS	EPDM	Rectangular plug	276747		
	Tube connector	1.6	49	0.045	0.052	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	20050306		
											Rectangular plug	20050309	
	G 1/8"	1.6	54	0.05	0.058	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	20041223		
										Rectangular plug	20043554		
CF T 3/2-way solenoid valve Direct-acting Flow direction optional Universal 	Sub-base	0.8	16	0.015	0.017	24/DC	0...6	PEEK	FFKM	Flying leads, 0.5 m	276748		
		PPS	FKM	Rectangular plug	276749								
		PPS	EPDM	Rectangular plug	276750								
	Sub-base	1.2	32	0.03	0.035	24/DC	0...5	PEEK	FFKM	Flying leads, 0.5 m	276753		
											Rectangular plug	276754	
		PPS	FKM	Flying leads, 0.5 m	276756								
								PPS	EPDM	Rectangular plug	276758		
	UNF 1/4"-28	1.2	27	0.025	0.029	12/DC	0...5	PEEK	FFKM	Flying leads, 0.5 m	244696		
										Rectangular plug	297064		
										Cable plug	269045		
	Sub-base	1.6	49	0.045	0.052	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	460264		
										PPS	FKM	Rectangular plug	271604
										PPS	EPDM	Rectangular plug	276759
	Tube connector	1.6	49	0.045	0.052	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	20038002		
G 1/8"	1.6	54	0.05	0.054	24/DC	Vac...2	PEEK	FFKM	Flying leads, 0.5 m	20041217			
UNF 1/4"-28	1.6	33	0.03	0.035	24/DC	0...2	PEEK	FFKM	Flying leads, 0.5 m	464968			
									Rectangular plug	262461			
									Cable plug	280172			

1.) Pressure data: overpressure to atmospheric pressure

Valves with power reduction

Note:

After approx. 500 ms, the nominal power is automatically reduced from 4 W to 1 W.

Circuit function	Port connection	Orifice	Q _{Nm} value air	K _v value water	C _v value	Voltage/Frequency	Pressure range	Body material	Seal material	Electrical connection	Article no.
		[mm]	[l/min]	[m³/h]	[gpm]	[V/Hz]	[bar] ¹⁾				
CF A 2/2-way solenoid valve Direct-acting Normally closed 	Sub-base	1.2	32	0.03	0.035	24/DC	0...5	PPS	FKM	Rectangular plug	357227
	UNF 1/4"-28	1.6	33	0.03	0.035	24/DC	0...2	PEEK	FFKM	Rectangular plug	357229
CF T 3/2-way solenoid valve Direct-acting Flow direction optional Universal 	Sub-base	1.2	32	0.03	0.035	24/DC	0...5	PPS	FKM	Rectangular plug	357230
	UNF 1/4"-28	1.6	33	0.03	0.035	24/DC	0...2	PEEK	FFKM	Rectangular plug	357233

1.) Pressure data: overpressure to atmospheric pressure

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7.5. Ordering chart accessories

Cable plug Type 1054

Accessories	Description	Article no.
	Cable plug without cable (Type 1054)	006699
	Cable plug with cable, cable length: 3 m (Type 1054)	413552

Rectangular cable plug Type 2505

Note:

For further versions see data sheet **Type 2505**

Accessories	Description	Article no.
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 3 m (Type 2505)	252572
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 5 m (Type 2505)	255194
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 0,3 m (Type 2505)	644068
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 0.6 m (Type 2505)	162144
	Cable plug 10 mm, 2-pin, rectangular plug, straight (Type 2505)	644067

Fittings and hoses

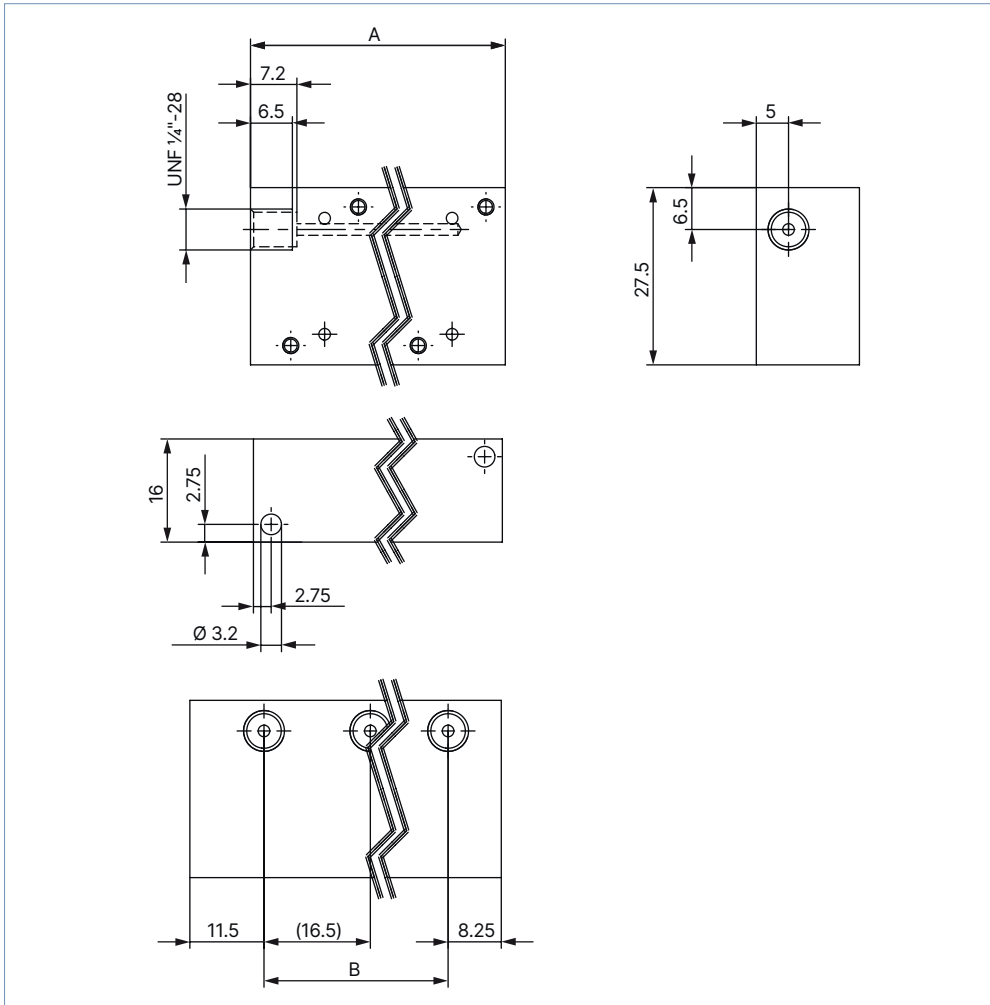
Accessories	Description	Article no.
	Fittings and hoses for UNF connections and hoses see type Type TVU003	see data sheet TVU003

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Multiple manifolds for Bürkert sub-base interface, 2-way

Note:

- Dimensions in mm
- Port connection UNF 1/4"-28
- Material PEEK
- Pay attention to screw protrusion.
- Other versions are available on request.

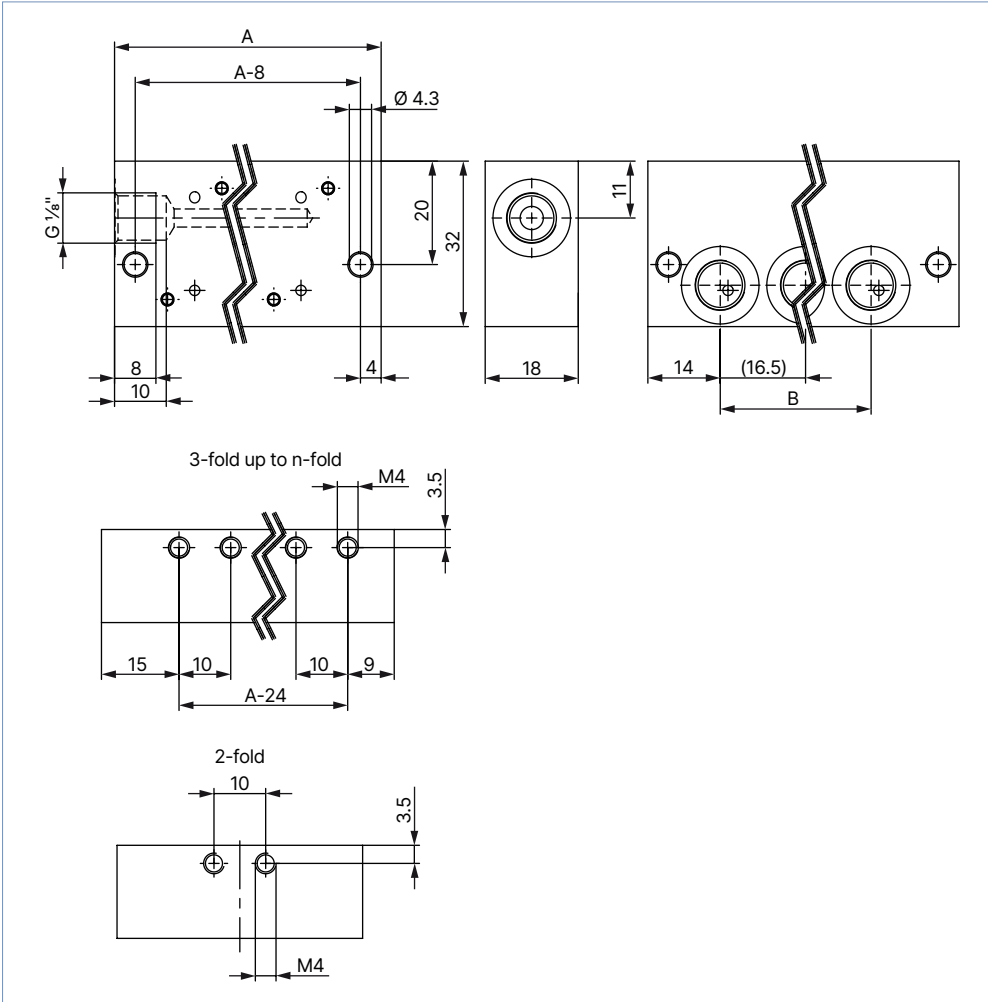


Manifold	A	B	n	Article no.
2-fold	36.25	16.5	2	651506
3-fold	52.75	33	3	651510
4-fold	69.25	49.5	4	651507
5-fold	85.75	66	5	651508
6-fold	102.25	82.5	6	651509
7-fold	118.75	99	7	651521
8-fold	135.25	115.5	8	651522

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Note:

- Dimensions in mm
- Port connection G 1/8"
- Material PPS
- Pay attention to screw protrusion.
- Other versions are available on request.



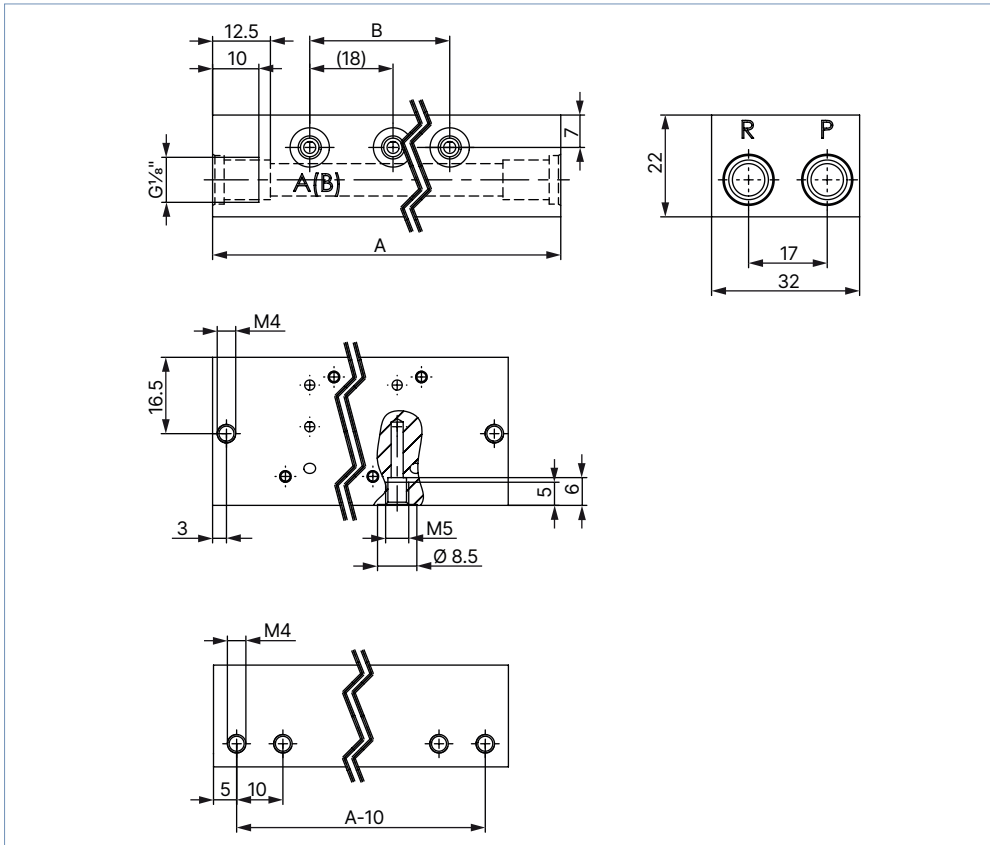
Manifold	A	B	n	Article no.
2-fold	47.5	16.5	2	675628
3-fold	64	33	3	675629
4-fold	80.5	49.5	4	675630
5-fold	97	66	5	675631
6-fold	113.5	82.5	6	675632
7-fold	130	99	7	675633
8-fold	146.5	115.5	8	675634
9-fold	163	132	9	675635
10-fold	179.5	148.5	10	675636

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Multiple manifolds for Bürkert sub-base interface, 3-way

Note:

- Dimensions in mm
- Port connection 1: G 1/8"
- Port connection 2: M5
- Material aluminium (black anodized)
- Pay attention to screw protrusion.
- Other versions are available on request.



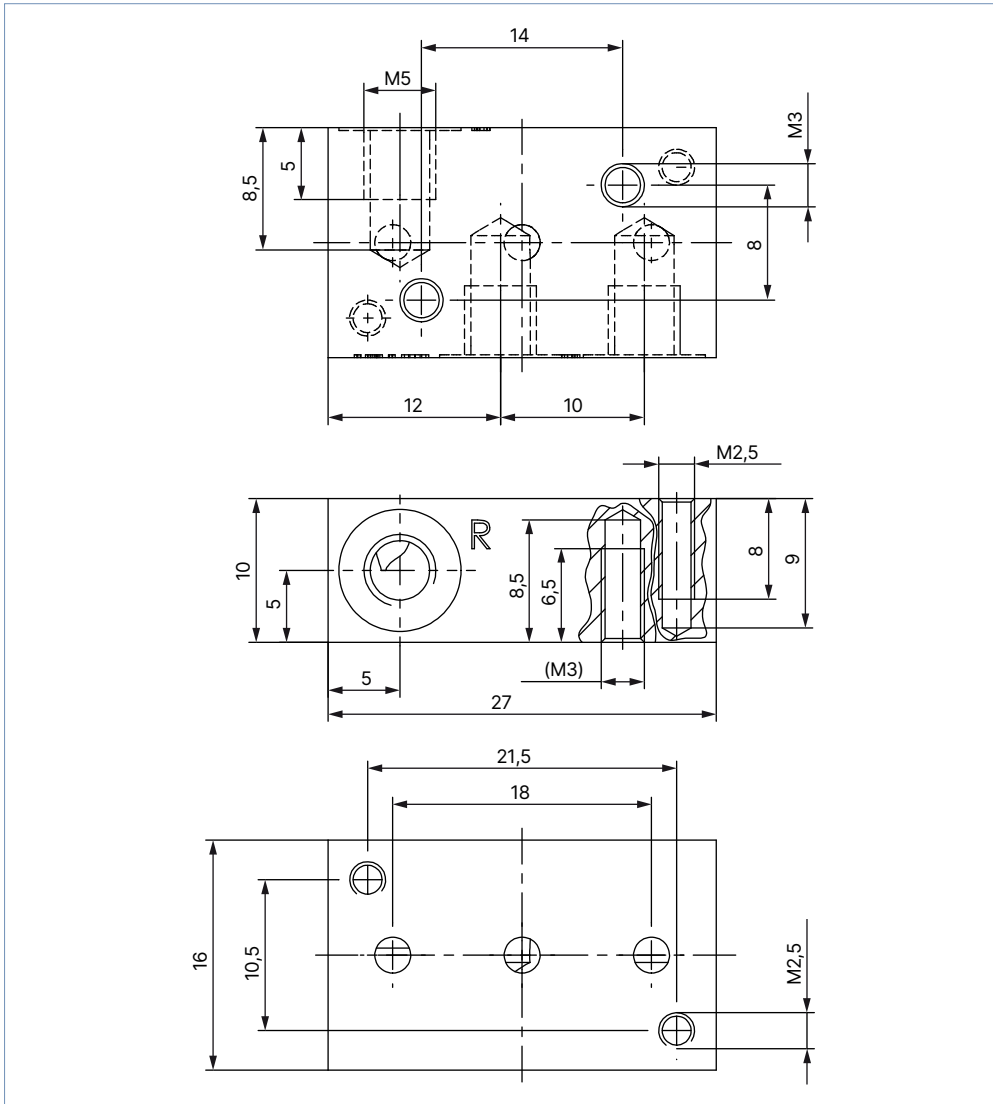
Manifold	A	B	n	Article no.
2-fold	63	18	2	658695
3-fold	81	36	3	658696
4-fold	99	54	4	658697
5-fold	117	72	5	658698
6-fold	135	90	6	658699
8-fold	171	126	8	658700
10-fold	207	162	10	658701
12-fold	243	198	12	658703

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Single manifolds for Bürkert sub-base interface, 3-way

Note:

- Dimensions in mm
- Port connection M5
- Material aluminium (black anodized)
- Pay attention to screw protrusion.
- Other versions are available on request.

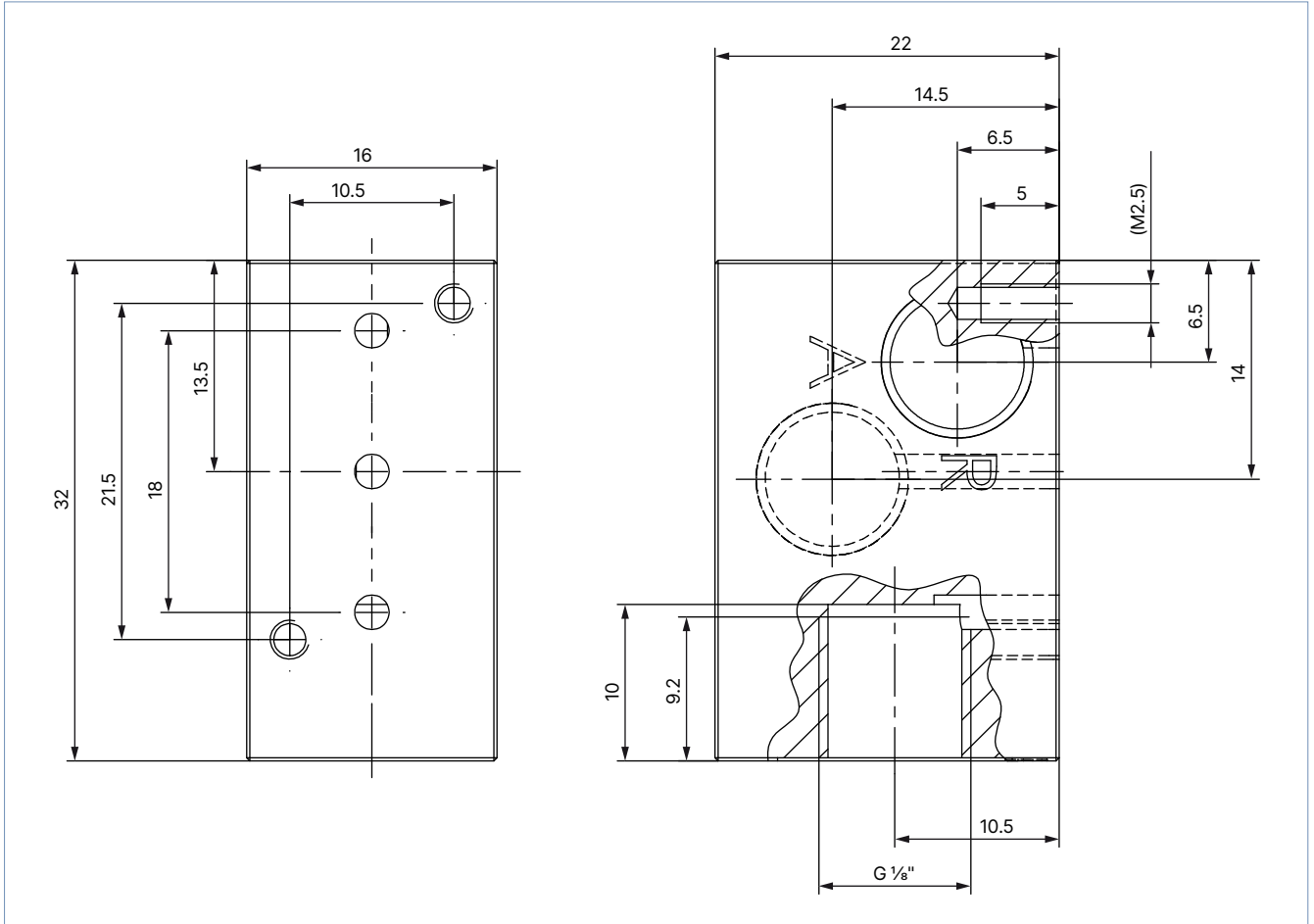


Manifold	Article no.
1-fold	623873

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Note:

- Dimensions in mm
- Port connection G 1/8"
- Material aluminium (black anodized)
- Pay attention to screw protrusion.
- Other versions are available on request.



Manifold	Article no.
1-fold	634917