

2/2- or 3/2-Way, G 1/8, NPT 1/8, UNF 1/4-28



Advantages/Benefits

- ▶ Thermal decoupling between coil and fluid
- ▶ High back-pressure tightness
- ▶ Simplified manifold wiring available
- ▶ LED-display
- ▶ Body material: PVDF, ETFE
- ▶ Hermetic isolation of fluid from the actuator
- ▶ G 1/8, NPT 1/8, UNF 1/4-28, push-on tube connections, manifold mounting
- ▶ Normally closed or open, or 3-way universal functions
- ▶ 16 mm design

Design/Function

An isolating diaphragm between the actuator and body, operated via a rocker, separates the actuator from the fluid.

The design provides a valve with minimal internal volume, low dead volume which can be easily purged.

Special dead volume free design are available on request.

Heat transfer between the actuator and the fluid is minimised, as the coil is not directly in contact with the diaphragm. The coil is available with 24 V/UC rectifier electronics, protective circuit and LED.

The valves can be manifold mounted and a simplified common wiring system is available.

Applications

- Strong acids and bases, oxidizing solutions
- Disinfectants and solvents
- Analytical instruments
- Bio technology
- Medical technology

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Easy Fluid Control Systems

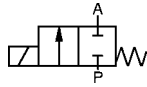
Miniature Rocker Solenoid Valve with Isolating Diaphragm, 16 mm

Type 127

Technical Data

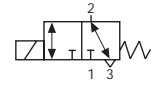
Circuit Function

A 2/2-way valve, direct-acting normally closed



Circuit Function

T 3/2-way valve, direct-acting, universal functions



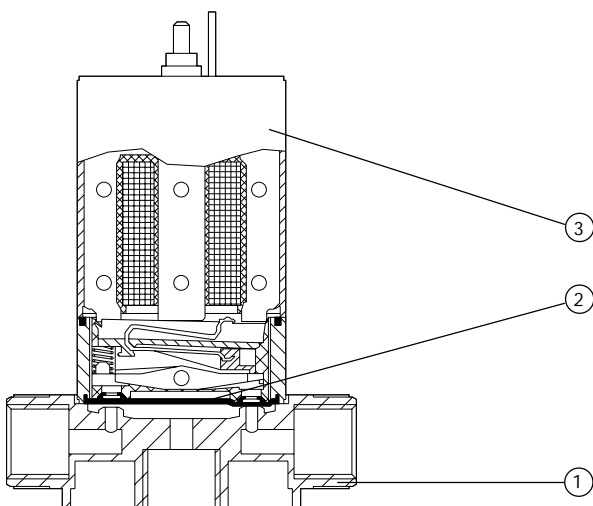
Operating Data (Valve)

Pressure range max.	0 - 2 bar (see specifications)
Port connection	G1/8, NPT 1/8, sub-base, tube connection for silicone or FPM-tube, internal diameter 1.6 up to 2mm, UNF 1/4-28
Orifice	DN 1.5 - 1.6 mm
Body material	Polyvinylidenfluoride (PVDF) Tefzel (ETFE)
Seal material	FFKM (FPM on request)
Fluids	FFKM: aromatics, ethers, esters, ketones.
Fluid temperature	0 to +40 °C (FFKM) 0 to +60 °C (FPM)
Ambient temperature	max. +55 °C
Response Times	approx. 25 mm ² /s
Internal volume	G1/8, NPT: 85 µl Flange: 68 µl UNF 1/4-28, tube connection: 2/2-way 30 µl 3/2-way 55 µl Special version on request < 5 µl

Operating Data (Actuator)

Operating voltages	24 V/UC (universal current) with rectifier and LED.
Voltage tolerance	±10 %
Power consumption	3.4 W
Duty cycle	100 % continuously rated, with manifold assembly and ambient/ fluid temperatures above +40°C, 40 % intermittent operation in 10 min.
Cycling rate	approx 300 c.p.m.
Protection class	IP65 with cable plug type 1054 or single leads, IP20 with cable olug 1057
Electrical connection	<ul style="list-style-type: none"> • cable plug type 1054 (supplied as standard) • cable plug type 1057 • 2 FEP-leads 0.2 mm², length 500 mm
Installation	as required, but preferably with solenoid system upright

Materials

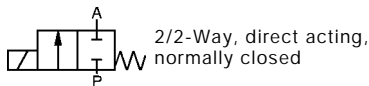


- | | |
|------------------------|------------------------------------|
| 1 Valve body: | PVDF, ETFE |
| 2 Isolating diaphragm: | FFKM (Simriz),
FPM (on request) |
| 3 Coil body: | PA (Polyamide) |

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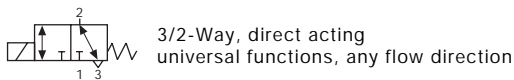
Ordering Chart (Other Versions on Request)



PVDF/ETFE valve body

Port connection	Orifice DN [mm]	Kv-Value (water) [m³/h]	Q _{Nn} (air) [l/min]	Pressure Range ¹⁾ [bar]	Back-pressure [bar]	Valve body material	Seal Material	Electrical Connection	Weight [kg]	ITEM - No.	
										Voltage / Frequency [V/Hz]	
										24/UC ¹⁾	
UNF 1/4-28	1.5	0.039	42	0 - 2.0	1.0	ETFE	FFKM	cable plug 1054	0.060	136 366 Y	
UNF 1/4-28	1.5	0.039	42	0 - 2.0	1.0	ETFE	FFKM	2 leads 500 mm	0.060	136 367 Z	
Sub-base	1.6	0.039	42	0 - 2.0	2.0	PVDF	FFKM	cable plug 1054	0.053	136 351 Z	
Sub-base	1.6	0.039	42	0 - 2.0	2.0	PVDF	FFKM	2 leads 500 mm	0.053	136 352 S	
Tube	1.6	0.039	42	0 - 2.0	1.0	PVDF	FFKM	cable plug 1054	0.057	136 355 V	
Tube	1.6	0.039	42	0 - 2.0	1.0	PVDF	FFKM	2 leads 500 mm	0.057	136 356 W	
G 1/8	1.6	0.060	65	0 - 2.0	2.0	PVDF	FFKM	cable plug 1054	0.062	124 454 M	
G 1/8	1.6	0.060	65	0 - 2.0	2.0	PVDF	FFKM	2 leads 500 mm	0.062	136 359 H	
NPT 1/8	1.6	0.060	65	0 - 2.0	2.0	PVDF	FFKM	cable plug 1054	0.062	136 362 U	
NPT 1/8	1.6	0.060	65	0 - 2.0	2.0	PVDF	FFKM	2 leads 500 mm	0.062	136 363 V	

¹⁾ for universal current 24 VDC and 24 VAC



PVDF valve body

Port connection	Orifice DN [mm]	Kv-Value (water) [m³/h]	Q _{Nn} (air) [l/min]	Pressure Range ¹⁾ [bar]	Back-pressure [bar]	Valve body material	Seal Material	Electrical Connection	Weight [kg]	ITEM - No.	
										Voltage / Frequency [V/Hz]	
										24/UC ¹⁾	
UNF 1/4-28	1.5	0.025	27	0 - 2.0	1.0	ETFE	FFKM	cable plug 1054	0.060	079 901 C	
UNF 1/4-28	1.5	0.025	27	0 - 2.0	1.0	ETFE	FFKM	2 leads 500 mm	0.060	136 368 A	
Sub-base	1.6	0.032	34	0 - 2.0	2.0	PVDF	FFKM	cable plug 1054	0.053	136 353 T	
Sub-base	1.6	0.032	34	0 - 2.0	2.0	PVDF	FFKM	2 leads 500 mm	0.053	136 354 U	
Tube	1.6	0.025	27	0 - 2.0	1.0	PVDF	FFKM	cable plug 1054	0.057	136 357 X	
Tube	1.6	0.025	27	0 - 2.0	1.0	PVDF	FFKM	2 leads 500 mm	0.057	136 358 G	
G 1/8	1.6	0.047	51	0 - 2.0	2.0	PVDF	FFKM	cable plug 1054	0.062	136 360 E	
G 1/8	1.6	0.047	51	0 - 2.0	2.0	PVDF	FFKM	2 leads 500 mm	0.062	136 361 T	
NPT 1/8	1.6	0.047	51	0 - 2.0	2.0	PVDF	FFKM	cable plug 1054	0.062	136 364 W	
NPT 1/8	1.6	0.047	51	0 - 2.0	2.0	PVDF	FFKM	2 leads 500 mm	0.062	136 365 X	

¹⁾ for universal current 24 VDC and 24 VAC

Options

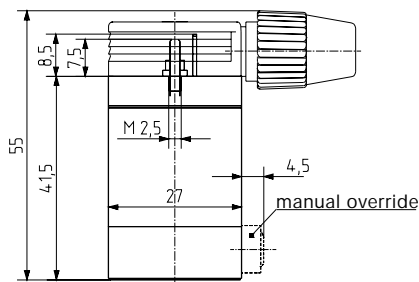
- Function normally open
- Dead volume free design
- Other voltages

Miniature Rocker Solenoid Valve with Isolating Diaphragm, 16 mm

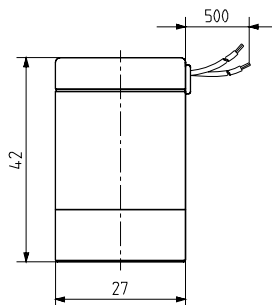
Type 127

Dimensions [mm]

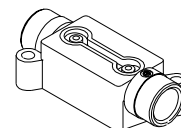
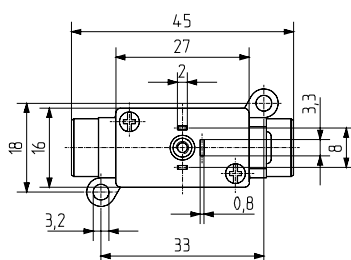
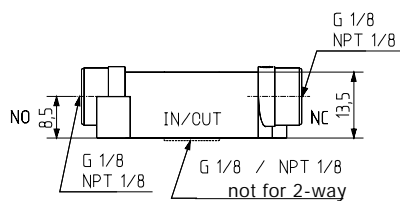
Coil with cable plug Type 1054



Coil with flying leads

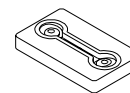
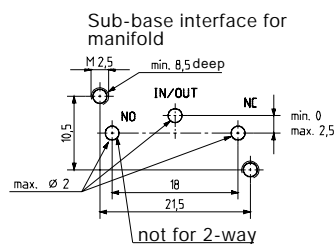
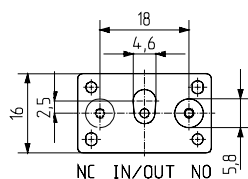
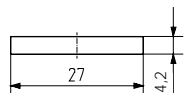


Body with threaded connection



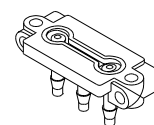
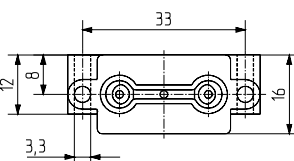
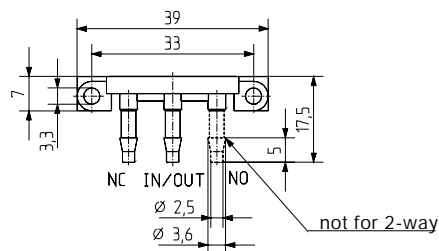
Body G1/8 NPT1/8

Sub-base body



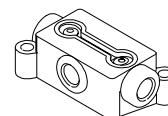
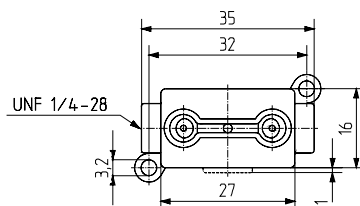
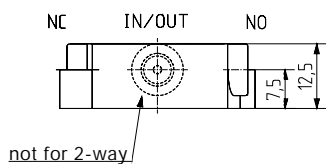
Sub-base body

Body with tube connection



Body with push-on tube connection

UNF Body 1/4 - 28 UNF



Body UNF 1/4 - 28

In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice.

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