

# 2/2 or 3/2-way Miniature Rocker Solenoid Valve

- Ideal for manifold systems
- Robust isolating diaphragm
- Minimal internal volume
- Very low dead volume
- High back-pressure tightness
- Suitable for aggressive fluids
- NC, NO or universal circuit function
- Compact 16 mm design

Burkert, the world leader in innovative valve designs for the Medical and Analyzer Industry, first invented the Rocker Solenoid valve over 20 years ago. The Type 0127 leads the industry as one of the most reliable, proven and maintenance free miniature valves in the market today. An inert, robust separating diaphragm, minimal to zero dead volume, low internal volume, and high back pressure make it suitable for handling aggressive chemicals, small samples sizes and costly reagents. The fluid paths were designed to minimize carryover and can be easily inspected for service and maintenance. 2-way and 3-way manifold style valves combined with Burkert's expertise in Microfluidic systems and value added designs are ideally suited fro OEMs building Medical Instrumentation.

Cable plug

#### Circuit function A



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

#### Circuit function T



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

Open

Closing

Technical data	
Orifice	1/16" 1.6 mm
Body material	PVDF, ETFE, PEEK (on request)
Seal material, media	FFKM, FKM, Resistant to neutral and aggressive liquids and gases, see Burkert chemical resistance chart
<b>Media temperature</b> FFKM FKM	32°F to 122°F (0°C to +50°C) 32°F to 140°F (0°C to +60°C)
Ambient temperature	max. 131°F (+55°C)
Internal volumes with sub-base with G 1/8, NPT 1/8 with UNF 1/4" - 28 on request	Depending on body 68 μl 85 μl 30 μl < 10 μl
Operating voltage	12/24 V/DC; 24 V/UC (AC or DC) with LED
Power consumption	3.4 W
Voltage tolerance	±10%
<b>Duty cycle</b> Manifold mounting	100% continuous rating If media or ambient temperatures are above 104°F (+40°C): intermittent operation 40% (10 min)
Electrical connection	Cable plug Type 1054 (supplied as standard)     Two FEP-leads 0.2 mm², length 500 mm
Protection class	IP 54 with flying leads and single cable plug
Installation	As required, preferably with actuator upright
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Response times	According to ISO 12238:2001; Measured at valve outlet with air at 28 PSI and 68°F (+20°C)

approx. 25 ms (Pressure rise 0 to 10%)

approx. 25 ms (Pressure drop 100 to 90%)



#### **Materials**



# Ordering chart for valves (other versions on request)

#### PVDF/ETFE valve body, FFKM seal

Circuit function	Port connection	Orifice [mm]	C <sub>v</sub> value water	Pressure range [PSI]	Back pressure [PSI]	Valve body material	Electrical	Weight [oz]	Voltag	Item no. e/Frequency 24/UC <sup>1)</sup>	[V/Hz] 24/DC
Α	UNF 1/4-28	1.5mm	0.046	0 – 28	28.0	ETFE	cable plug 1054	2.11	upon request	455 329	455 402
A							2 leads 19 inches	2.11	455 298	455 330	455 378
1 I	Sub-base	1.6mm	0.046	0 – 28	28.0	PVDF	cable plug 1054	1.86	upon request	455 137	455 419
							2 leads 19 inches	1.86	455 136	455 138	455 396
·	Tube	1.6mm	0.046	0 – 28	28.0	PVDF	cable plug 1054	2.01	upon request	455 145	455 413
2/2-way valve							2 leads 19 inches	2.01	121 782	455 146	455 390
direct acting,	NPT 1/8	1.6mm	0.071	0 – 28	28.0	PVDF	cable plug 1054	2.18	455 155	455 157	455 408
NC							2 leads 19 inches	2.18	455 156	455 158	455 384
	G 1/8	1.6mm	0.071	0 – 28	28.0	PVDF	cable plug 1054	2.18	upon request	upon request	upon request
							2 leads 19 inches	2.18	upon request	457 515	upon request

<sup>•</sup> The rectifier, LED and varistor are integrated in the universal current versions (UC).

# PVDF/ETFE valve body, STM, FFKM seal

Circuit	Port	Port connection Orifice [mm]		Pressure range [PSI]	Valve body material	Electrical connection Weight [oz]	Item no. Voltage/Frequency [V/Hz]			
ij.	<b>S</b> 8	ōĒ	C <sub>v</sub> val	r <u>a</u>	S E	<b>⊞</b> 8	>	12/VDC	24/UC <sup>1)</sup>	24/DC
Т	UNF 1/4-28	1.5mm	0.029	0 – 28	ETFE	cable plug 1054	2.11	upon request	455 131	455 404
						2 leads 19 inches	2.11	454 691	455 132	455 380
3/2-way valve direct acting, universal functions, any flow direction	Sub-base	1.6mm	0.038	0 – 28	PVDF	cable plug 1054	1.86	upon request	455 167	455 421
						2 leads 19 inches	1.86	454 142	455 168	455 398
	Tube	1.6mm	0.038	0 – 28	PVDF	cable plug 1054	2.01	upon request	455 151	upon request
						2 leads 19 inches	2.01	455 150	455 152	120 685
	NPT 1/8	1.6mm	0.055	0 – 28	PVDF	cable plug 1054	2.18	455 161	455 163	455 410
						2 leads 19 inches	2.18	455 162	455 164	455 386
	G 1/8 1.6mm 0.0	0.055	0 - 28	PVDF	cable plug 1054	2.18	upon request	457 516	upon request	
						2 leads 19 inches	2.18	upon request	457 517	120 679

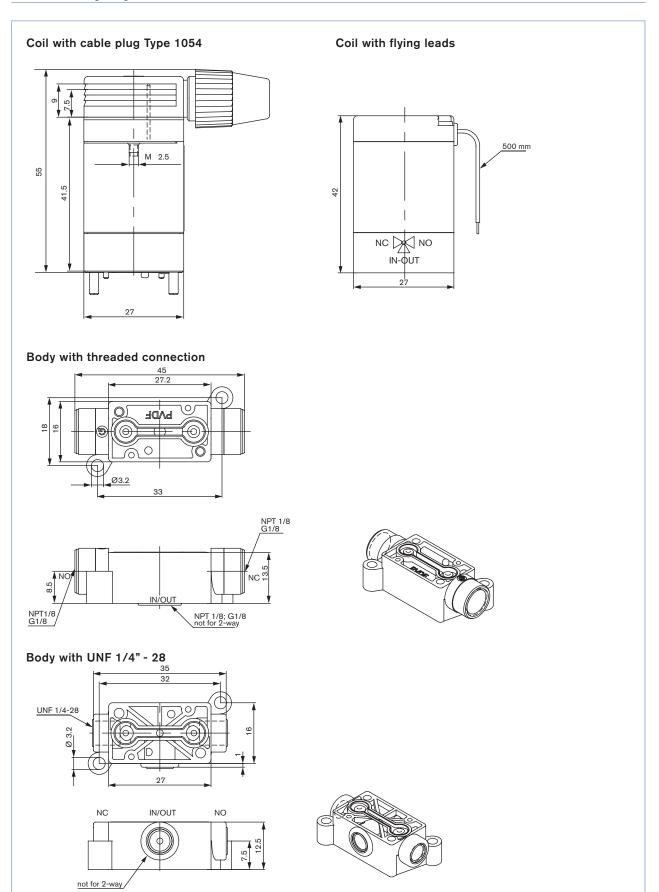
<sup>•</sup> The rectifier, LED and varistor are integrated in the universal current versions (UC).

#### **Options**

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

# burkert

# Dimensions [mm]





### Dimensions [mm]

