

2/2- or 3/2-Way, G1/4



Advantages/Benefits

- ▶ Hermetic isolation of fluid from the actuator
- ▶ Insensitive to abrasive and slightly contaminated fluids
- ▶ Long service life, even in dry-run conditions
- ▶ Body materials: PP, PVDF
- ▶ Normally closed (2/2-way), Universal function (3/2-way)
- ▶ Lockable manual override standard
- ▶ Specific cleaning and testing available
- ▶ Options:
Ex-proof, impuls-, vacuum or low power versions

Design/Function

This direct-acting 2- or 3-way solenoid valve has a flipper as the switching element. The special design of this device isolates the actuator from the medium, which makes the flipper valve less sensitive to contaminated fluids than the plunger-type valve, and provides a long service life even under dry-run conditions. The valve is available with several circuit functions.

When the valve is energized the armature is pulled against a spring. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

Applications

- Aggressive gases and liquids
- Demineralized water
- Pure fluids
- Water- and gas analysis
- Medical technology
- Pharmaceutical industry
- Laboratory technology

bürkert
Easy Fluid Control Systems

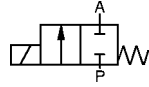
Flipper Solenoid Valve with Isolating Diaphragm for Analytical Applications

Type 124

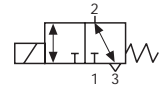
Technical Data

Circuit Function

A 2/2-way valve,
normally closed



T 3/2-way valve, direct acting,
universal function, any flow direction



Operating Data (Valve)

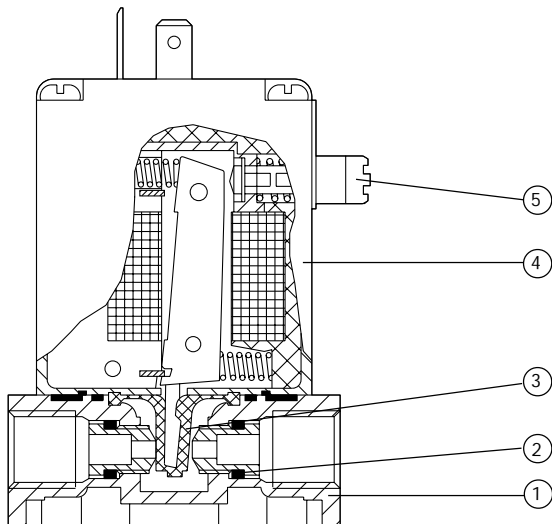
Pressure range max.	0 - 12 bar (see specifications)
Port connection	Threaded port G1/4
Orifice	DN 2.0 - 3.0 mm >DN 3.0 (on request) Sub-base (on request)
Body material	Polypropylene (PP) Polyvinylidenfluoride (PVDF)
Seal material	FPM, EPDM
Fluids	EPDM: Alkalis, acids up to a medium concentration, alkaline washing and bleaching lyes. FPM: Oxydizing acids, salt solutions, exhaust gas
Fluid temperature	-30 to +80 °C (EPDM) 0 to +80 °C (FPM)
Ambient temperature	max. +55 °C
Max. viscosity	approx. 37 mm ² /s
Response Times	

Circuit Function	Opening [ms]		Closing [ms]	
	AC	DC	AC	DC
A and T	approx. 8	10 - 17	approx. 15	15 - 20

Operating Data (Actuator)

Operating voltages	110, 230 V/50 Hz, 24 V/=
Voltage tolerance	±10 %
Power consumption	AC 30 VA (inrush) 15 VA / 8 W (hold) DC 8 W 5 W (on request)
Duty cycle	intermittent operation 40 % 30 min.
Cycling rate	approx 1000 c.p.m.
Protection class	IP65 with cable plug type 2508
Electrical connection	cable plug type 2508 (DIN 43650, form A) for 7 mm ø cable (supplied as standard)
Installation	as required

Materials

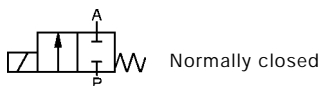


- | | | |
|---|----------------------|-------------------|
| 1 | Valve body: | PP, PVDF |
| 2 | O-Rings: | FPM (Viton), EPDM |
| 3 | Isolating diaphragm: | FPM (Viton), EPDM |
| 4 | Coil body: | Epoxy |
| 5 | Manual override: | PA |

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Specifications - Ordering Chart (Other Versions on Request)

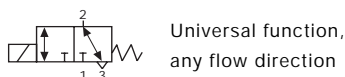


PP valve body

Port connection	Orifice [mm]	Kv-Value (water) [m³/h]	Q _{Nn} -Value (air) [l/min]	Pressure range [bar]	Seal material	Weight [kg]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	110/50	230/50
G 1/4	2.0	0.13	120	0-12	EPDM	0.4	136 304 T	136 305 U	136 306 V
G 1/4	2.0	0.13	120	0-12	FPM	0.4	136 301 Y	136 302 Z	136 303 S
G 1/4	3.0	0.25	250	0-10	EPDM	0.4	136 310 U	136 311 R	136 312 J
G 1/4	3.0	0.25	250	0-10	FPM	0.4	136 307 W	136 308 W	136 309 G

PVDF valve body

Port connection	Orifice [mm]	Kv-Value (water) [m³/h]	Q _{Nn} -Value (air) [l/min]	Pressure range [bar]	Seal material	Weight [kg]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	110/50	230/50
G 1/4	2.0	0.13	120	0-12	EPDM	0.4	136 329 T	136 330 Y	136 331 M
G 1/4	2.0	0.13	120	0-12	FPM	0.4	136 325 P	136 327 R	136 328 S
G 1/4	3.0	0.25	250	0-10	EPDM	0.4	136 335 R	136 336 J	136 337 K
G 1/4	3.0	0.25	250	0-10	FPM	0.4	136 332 N	136 333 P	136 334 Q



PP valve body

Port connection	Orifice [mm]	Kv-Value (water) [m³/h]	Q _{Nn} -Value (air) [l/min]	Pressure range [bar]	Seal material	Weight [kg]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	110/50	230/50
G 1/4	2.0	0.13	120	0-12	EPDM	0.4	136 316 N	136 317 P	136 318 Y
G 1/4	2.0	0.13	120	0-12	FPM	0.4	136 313 K	136 314 L	136 315 M
G 1/4	3.0	0.25	250	0- 8	EPDM	0.4	136 322 L	136 323 M	136 324 N
G 1/4	3.0	0.25	250	0- 8	FPM	0.4	136 319 Z	136 320 W	136 321 K

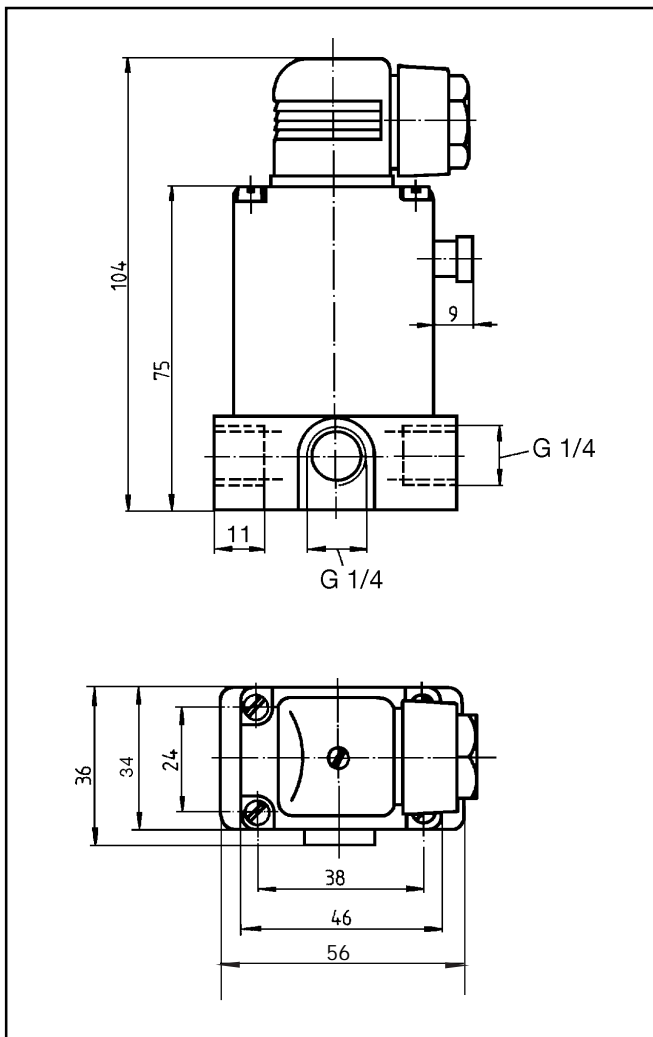
PVDF valve body

Port connection	Orifice [mm]	Kv-Value (water) [m³/h]	Q _{Nn} -Value (air) [l/min]	Pressure range [bar]	Seal material	Weight [kg]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	110/50	230/50
G 1/4	2.0	0.13	120	0-12	EPDM	0.4	136 341 X	136 342 Y	136 343 Z
G 1/4	2.0	0.13	120	0-12	FPM	0.4	136 338 U	136 339 V	136 340 A
G 1/4	3.0	0.25	250	0- 8	EPDM	0.4	136 348 E	136 349 F	136 350 C
G 1/4	3.0	0.25	250	0- 8	FPM	0.4	136 345 T	136 346 U	136 347 V

Options

- Diagnosis: Electrical feedback signaller
- Specific clean and testing
- Vacuum version
- Impulse coil
- DN 4 mm

Dimensions [mm]



Easy ON/OFF Control



-60%

