

PROPORTIONAL VALVE

flapper mechanism, fluid isolation 1/8 or pad mounting body

flow

power

NC



Series 068

FEATURES

- · Proportional valve for use with neutral or aggressive liquids and gases in industrial processes and in analytical and medical systems.
- · RoHS compliant.
- · Variable flow, proportional to the coil current.
- Valves do not require a minimum operating pressure.
- Hermetic separation of control mechanism and fluid:
 - Prevents particulate contamination caused by friction of moving parts, assuring maximum purity of fluid.
 - Ensures reliable operation in applications with highly aggressive fluids.
- · Reduced heat transfer between control mechanism and fluid.
- Good self-draining capability and easy-to-flush internal cavity.
- Low internal volume.
- Specific flappermechanism: no pump effect, no stick effect.
- Electrical spade-plug connection (cable-ends: contact us).

GENERAL

Differential pressure 0 to 4,5 bar (suitable for vacuum applications)

Maximum viscosity 20 cSt (mm²/s) Response time < 20 ms

Internal volume < 0,48 ml (couplings not included)

fluids (*)	temperature range (TS)	seal materials (*)	
liquids or gases		FFPM (perfluoroelastomer)	
(filtered 50 µm)	+5°C to + 50°C	FPM (fluoroelastomer)	
(intered 50 µm)		EPDM (ethylene-propylene)	

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified.

Body PEEK

Diaphragm FFPM or FPM or EPDM **Seals** FFPM or FPM or EPDM

OTHER MATERIALS

Internal parts Stainless steel

ELECTRICAL CHARACTERISTICS

Coil insulation class

Connector Spade plug (cable Ø 6-10 mm) ISO 4400 / EN175301-803

Form A (Type 02), distance between contacts 18 mm, cable ends: contact us.

Electrical safety IEC 335

Electrical enclosure protection IP65 (EN 60529)

Standard voltages DC (=): 12V, 24V -5% / +10% (other volrages: contact us)

Power 9W at 20°C

Duty cycle 100% at ambient temperature +5°C to +55°C

Regelbereich 0 - 375mA with 24V coil 0 - 750mA with 12V coil

pulse-width modulation (1000 Hz)

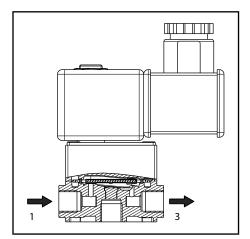
Flow regulation characteristic Hysteresis typ. 20%; Repeatability typ. 5%; Sensitivity typ. 1%

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		power coil	catalogue number		
				min.	max. Gases, liquids (*)	(W)	body PEEK		
	(mm)	(m³/h)	(l/min)		=	=	x: see ORDERING		
2/2 NC - Normally closed									
G 1/8	2	0,069	1,15	0	4,5	9	G068A317xxx10xx		
	3	0,123	2,05	0	2,0	9	G068A318xxx10xx		
pad mounting (1)	2	0,069	1,15	0	4,5	9	R068A317xxx10xx		
	3	0,123	2,05	0	2,0	9	R068A318xxx10xx		

(1) 4 hexagon socket screws M3 x 8 mm, stainless steel, ISO 4762 (supplied).

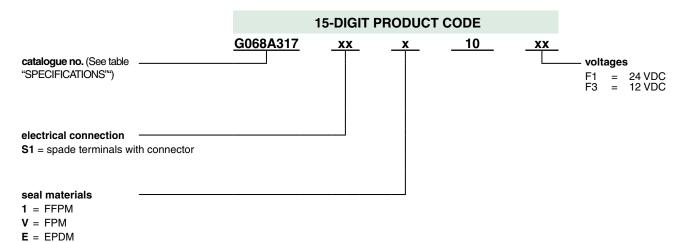




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ORDERING



Ordering example: R068A317S1E10F1 = orifice size 2 mm, pad-mounting body, spade terminals with connector, EPDM seals, 24 VDC

OPTIONS

- · Other subbases, contact us
- Digital control module Control^D for DIN EN 50022 rail mounting (see page 143)
 - Used as a current regulator in open loop applications
 - Used with an external sensor for closed-loop applications
- Electronic proportional control unit (see page 145)
 - catalogue number: X90850164500100 (setpoint 0 10V) / X90850164500200 (setpoint 4 20mA)
- Other voltages and coils with flying leads on request.
- Plug with visual indication and peak voltage suppression or with cable (see "Solenoids, Coils & Accessories" section in the
 catalogue "Fluid Automation, Solenoid and Pressure Operated Valves").

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation.
- · Pad-mounting solenoid valve supplied with seal.
- Pipe connections 1/8 have standard thread according to ISO 228/1.

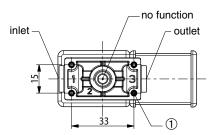


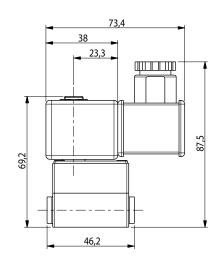
DIMENSIONS (mm), **WEIGHT** (kg)

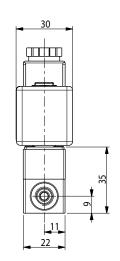


G 1/8

Weight: 0,189 kg





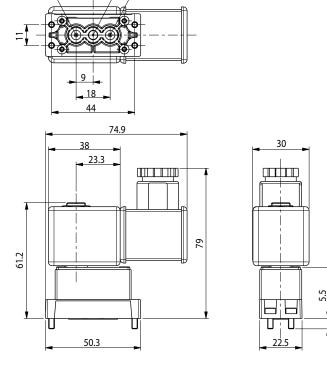


1 4 mounting holes, max. depth 7 mm, for self-tapping screw (type EJOT PT, K30)

Pad mounting body

Weight: 0,186 kg

inlet



no function

outlet

SUBBASE MOUNTING PATTERN

