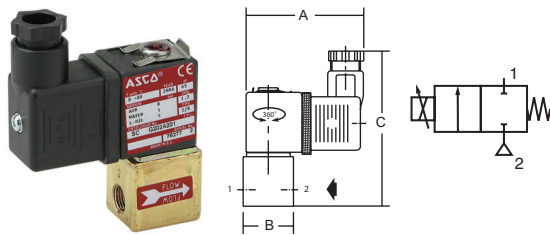


Proportional control valve



Art. No. 101639

Type No. PV 2011



Exemplary illustration

For electronic flow control.

For all applications where the flow rate of a liquid or gas has to be controlled.
The valve features a special magnet armature and is characterised by low friction and a high dynamic response.

If the valve is combined with a plug amplifier:

The maximum / minimum current and frequency can be adjusted by means of integrated potentiometers.

A current ramp can also be connected and adjusted with a potentiometer.

This facilitates a slow change in the flow rate, even if the setpoint changes suddenly.

If the setpoint is $< 200 \text{ mV}$ ($< 0.4 / 4.4 \text{ mA}$), the piloting current is completely switched off, causing the valve to be de-energised (tightly closed function).

We recommend combining these proportional valves with a plug amplifier.

Benefits:

- Compact and economical
- Integrated temperature compensation
- Precise control
- Optimised flow with no water hammer
- Ramp function assures a smooth response to step changes in the input signal
- Disconnect function

Technical data

Housing	brass
Ambient temperature	0 to 40 °C
Internal parts	stainless steel
Piloting	via plug amplifier 0 to 10 V, 0 to 20 mA, 4 to 20 mA
Thread	G 1/8
B	25 mm

Commercial data

Customs tariff number	84818079
Country of origin	DE
eCl@ss 5.1.4	27292301
eCl@ss 9.0	27292301
UNSPSC_Code_v190501	40141603
UNSPSC_CodeDesc_v190501	Pneumatic valves

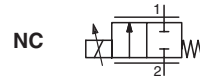
Material informations

REACH SVHC1 substance name	lead
CAS no. SVHC 1	7439-92-1
RoHS materials notice	RoHS compliant
REACH Info	contains SVHC substance



PROPORTIONAL SOLENOID VALVE

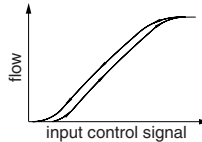
POSIFLOW
direct operated
1/8



2/2
Series
202

FEATURES

- Variable flow, proportional to the control signal
- Valves do not require a minimum operating pressure
- Valves can be mounted in any position
- The solenoid valves satisfy all relevant EU directives



GENERAL

Differential pressure See «SPECIFICATIONS» [1 bar = 100 kPa]
Maximum viscosity 50 cSt (mm²/s)

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, water, oil	0°C to +50°C	FPM (fluoroelastomer)

MATERIALS IN CONTACT WITH FLUID

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

	Brass body	Stainless steel body
Body	Brass	AISI 303
Core tube	Stainless steel	Stainless steel
Core and plugnut	Stainless steel	Stainless steel
Springs	Stainless steel	Stainless steel
Riderring	PTFE	PTFE
Seat	Brass	Stainless steel
Seals	FPM	FPM
Disc	FPM	FPM
Breaker piece	Stainless steel	Stainless steel

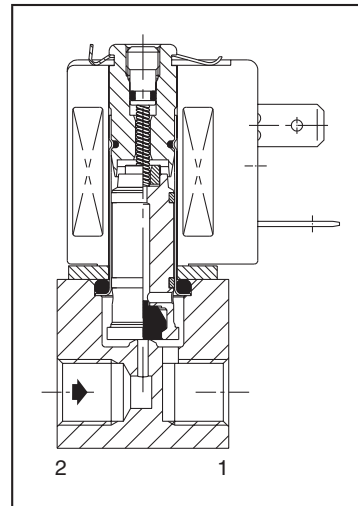
ELECTRICAL CHARACTERISTICS

Coil insulation class F
Connector Spade plug (cable Ø 6-8 mm)
Connector specification DIN 43650, 11 mm, industry standard B
Electrical safety IEC 335
Electrical enclosure protection Moulded IP65 (EN 60529)
Standard voltages DC (=) : 24V (Other voltages on request)

prefix option	operating current (mA)	power ratings			operator ambient temperature range (TS) ⁽²⁾ (°C)	replacement coil =	type ⁽¹⁾
		inrush ~ (VA)	holding ~ (VA)	hot/cold = (W)			
SC	100 - 450	-	-	8,6 / 6,3	0 to +40	24 V DC	01

Voltage regulation 0 - 24 V DC
24 V DC pulse width modulated (400 Hz)

Flow regulation characteristics⁽²⁾ Hysteresis < 5%; Repeatability < 1%; Sensitivity < 1%



SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv	operating pressure differential (bar) max. (PS)					power coil (W)	catalogue number		options			
			min.	vacuum	air (*)	water (*)	oil (*)		brass	stainless steel	EPDM	PTFE		
G	(mm)	(m ³ /h) (l/min)	=	=	=	=	=	=	=	=				
NC - Normally closed														
1/8	1,2	0,05	0,7	0	1	8	5	5	6,3	SCG202A201V	SCG202A205V	E	T	-
	1,6	0,07	1,1	0	1	6	4	4	6,3	SCG202A202V	SCG202A206V	E	T	-
	2,4	0,13	2,2	0	1	4	3	3	6,3	SCG202A203V	SCG202A207V	E	T	-
	3,2	0,18	2,9	0	1	2,5	2,5	2,5	6,3	SCG202A204V	SCG202A208V	E	T	-

⁽¹⁾ Refer to the dimensional drawings on the following page.
⁽²⁾ Percentage of max. value with 24 V DC, P.W.M. 400 Hz, supply at constant differential pressure.

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Proportional Valves - 9

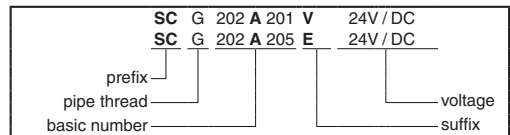
OPTIONS


- Valves can also be supplied with NBR (nitrile), EPDM (ethylene propylene) and PTFE seals and discs
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU, on request
- Electrical enclosures according to "NEMA" standards are available
- Mounting brackets
- Electronic proportional control unit [catalogue number: **E908A003** (www.asco.com) / **X90850164500100-0200** (www.asco.com)]
Features:
 - analog input control signals: 0 - 10 V DC, 0 - 20 mA or 4 - 20 mA
 - coil current (= flow rate) adjustable to required control signals
 - switch-off function at less than 2% of the maximum control function
 - adjustable ramp control
 - adjustable frequency
 - output current independent of coil resistance and supply voltage variations
 - housed in: a box with spade plug connector according to ISO 4400 / IP65
- Other pipe connections are available on request

INSTALLATION

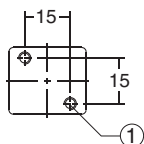
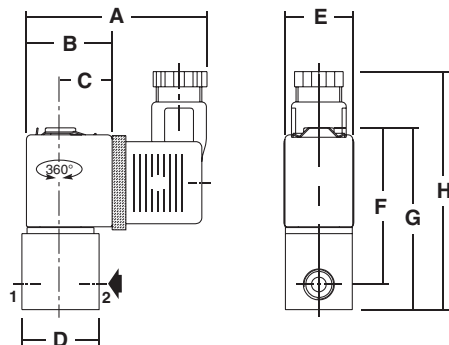
- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valves have 2 mounting holes in body
- Threaded pipe connection is standard: G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

ORDERING EXAMPLES:



DIMENSIONS (mm), WEIGHT (kg) 

TYPE 01
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / DIN 43650
IP65



type	prefix option	A	B	C	D	E	F	G	H	X	weight ⁽¹⁾
01	SC	59	28	17	25	22	52	60	78	-	0,2

⁽¹⁾ including coil and connector.

All leaflets are available on: www.asco.com

10 - Proportional Valves

Accessories

	Art. No.	Type No.
Chopper amplifier (for mounting in control cabinet), 24 V DC, for proportional control valve »posiflow«, Temp. range -10°C to 60°C	101651	PV 2930