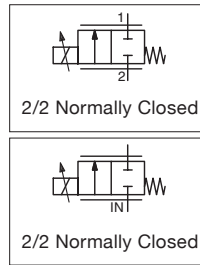


# POSIFLOW PROPORTIONAL VALVES



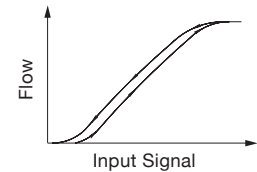
- Posiflow solenoid valves are designed to proportionally control the flow of air and inert gases by varying the electrical input signal to the coil
- Low hysteresis (< 5%), excellent repeatability (< 3%), and high sensitivity (< 2%) make these valves ideal for high precision flow control
- Compact frictionless architecture saves valuable space in analytical and medical instrumentation
- Valves do not require a minimum operating pressure, and are well-suited for vacuum operation
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
  - Respiratory Therapy
  - Blood Pressure Monitoring
  - Gas Chromatography
  - Anesthesia Delivery



Fluids*	Temperature Range	Seal Materials*
Air, Inert Gas, Water, Oil	-10 °C to 90 °C (14 °F to 194 °F)	FKM (fluoroelastomer)

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

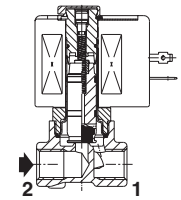
General Valve Information		
	Brass Body	Stainless Steel Body
Body	Brass	AISI 303 SS
Seals	FKM, EPDM, CR, PTFE	FKM, EPDM, CR, PTFE
Others	Stainless Steel, PTFE, Brass, FKM	Stainless Steel, PTFE, FKM
Max. Viscosity	21 cSt (mm <sup>2</sup> /s)	21 cSt (mm <sup>2</sup> /s)



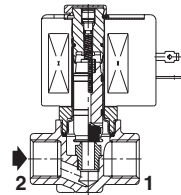
Electrical Characteristics	
Coil Insulation Class	F
Connector	Spade plug; cable Ø6-10mm (0.24 - 0.40in)
Connector Specification	ISO 4400/EN 175301-803, form A
Electrical Safety	IEC 335
Electrical Enclosure Protection	Molded IP65 (EN 60529)
Standard Voltages <sup>1</sup>	24 VDC
Voltage Regulation	0-24 VDC; Pulse-width Modulation (300Hz)
Flow Regulation Characteristics <sup>2</sup>	Hysteresis < 5%; Repeatability < 3%; Sensitivity < 2%

<sup>1</sup> Other voltages on request

<sup>2</sup> Percentage of max. value with 24 VDC, P.W.M. 300 Hz supply at constant ΔP



1/4 Brass Body



3/8 Brass Body

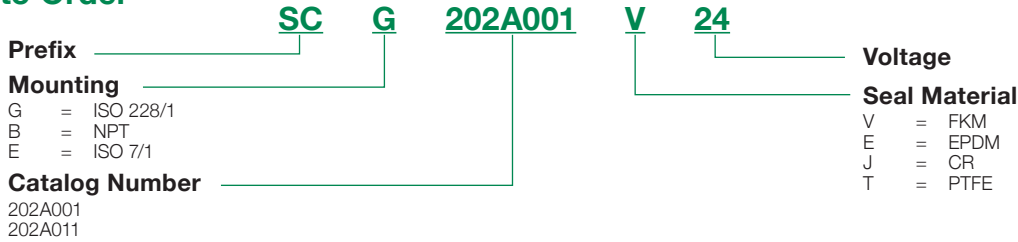
Operating Current	Power Ratings				Ambient Temperature Ranges <sup>3</sup>	Replacement Coil	Type <sup>4</sup>
	Inrush	Holding	Hot/Cold				
mA	VA	VA	W	W	°C (°F)	24 VDC	
100 to 500	-	-	-	11/8	-10 to 75 (14 to 167)	400429-040	01

<sup>3</sup> Damage may occur when liquids solidify above the specified minimum temperature

<sup>4</sup> Refer to the dimensional drawings on the following page

Specifications															
Connection	Orifice Size	Flow Coefficient		Pressure Differential bar (psi)			Power Coil	Catalog Number				Options			
				min.	max.			W	brass		stainless steel		EDPM	CR	PTFE
					vacuum	air. water. oil			air/inert gas	liquids	air/inert gas	liquids			
1/4	G	1.2 (0.047)	0.05	0.058	0	1 (14.5)	16 (232)	8	SCG202A001V	SCG202A051V	-	-	E	J	T
	NPT								-	-	SCB202A011V	SCB202A061V	E	J	T
	G	2.4 (0.094)	0.12	0.139	0	1 (14.5)	8 (116)	8	SCG202A002V	SCG202A052V	-	-	E	J	T
	NPT								-	-	SCB202A012V	SCB202A062V	E	J	T
	G	3.2 (0.126)	0.24	0.277	0	1 (14.5)	4 (58)	8	SCG202A003V	SCG202A053V	-	-	E	J	T
	NPT								-	-	SCB202A013V	SCB202A063V	E	J	T
	G	4.0 (0.157)	0.42	0.486	0	1 (14.5)	2.5 (36)	8	SCG202A004V	SCG202A054V	-	-	E	J	T
	NPT								-	-	SCB202A014V	SCB202A064V	E	J	T
G	5.6 (0.220)	0.72	0.832	0	1 (14.5)	1.4 (20)	8	SCG202A006V	SCG202A056V	-	-	E	J	T	
NPT								-	-	SCB202A016V	SCB202A066V	E	J	T	
G	7.1 (0.280)	0.90	1.04	0	1 (14.5)	1 (14.5)	8	SCG202A007V	SCG202A057V	-	-	E	J	T	
NPT								-	-	SCB202A017V	SCB202A067V	E	J	T	
3/8	Rp	3.2 (0.126)	0.24	0.277	0	1 (14.5)	4 (58)	8	SCE202A023V	SCE202A073V	-	-	E	J	T
	NPT								-	-	SCB202A033V	SCB202A083V	E	J	T
	Rp	4.0 (0.157)	0.42	0.486	0	1 (14.5)	2.5 (36)	8	SCE202A024V	SCE202A074V	-	-	E	J	T
	NPT								-	-	SCB202A034V	SCB202A084V	E	J	T
	Rp	5.6 (0.220)	0.72	0.832	0	1 (14.5)	1.4 (20)	8	SCE202A026V	SCE202A076V	-	-	E	J	T
	NPT								-	-	SCB202A036V	SCB202A086V	E	J	T
	Rp	7.1 (0.280)	0.90	1.04	0	1 (14.5)	1 (14.5)	8	SCE202A027V	SCE202A077V	-	-	E	J	T
	NPT								-	-	SCB202A037V	SCB202A087V	E	J	T

## How to Order



## Dimensions: mm (inches)

## Dimensional Drawings

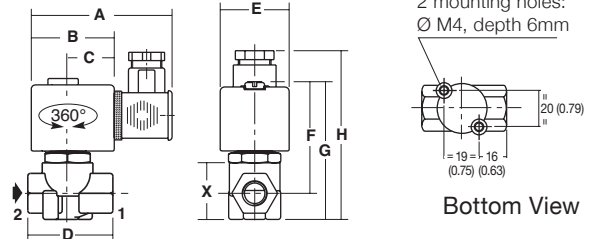
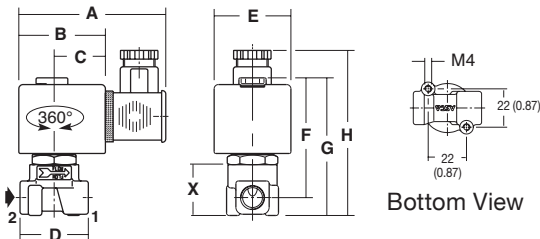
### Type 01

Prefix "SC" solenoid, epoxy molded  
IEC 335/ISO 4400  
IP65



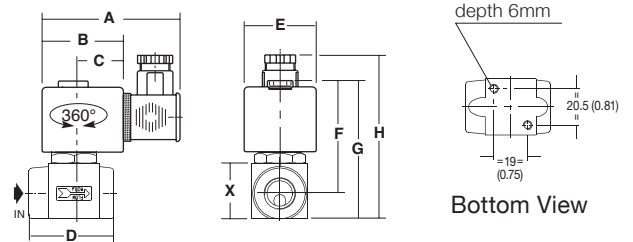
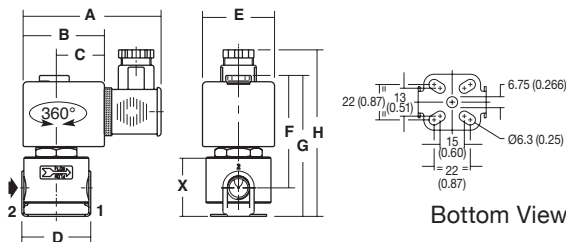
**SCG202A001V/002V/003V/004V/006V/007V**  
**SCB202A051V/052V/053V/054V/056V/057V**

**SCE202A023V/024V/026V/027V**  
**SCE202A073V/074V/076V/077V**



**SCG202A011V/012V/013V/014V/016V/017V**  
**SCB202A061V/062V/063V/064V/066V/067V**

**SCB202A033V/034V/036V/037V**  
**SCB202A083V/084V/086V/087V**



Type	Prefix Option	Catalog Number	A	B	C	D	E	F	G	H	X
01	SC	SCG202A001V/002V/003V/004V/006V/007V/ 051V/052V/053V/054V/056V/057V	85 (3.35)	50 (1.97)	30 (1.18)	40 (1.57)	45 (1.77)	68 (2.68)	79 (3.11)	95 (3.74)	30 (1.18)
		SCG202A011V/012V/013V/014V/016V/017V/ 061V/062V/063V/064V/066V/067V	80 (3.15)	50 (1.97)	30 (1.18)	42 (1.65)	45 (1.77)	60 (2.36)	79 (3.11)	95 (3.74)	37 (1.46)
		SCE202A023V/024V/026V/027V/073V/074V/076V/077V	80 (3.15)	50 (1.97)	30 (1.18)	48 (1.89)	45 (1.77)	68 (2.68)	82 (3.23)	97 (3.82)	32 (1.26)
		SCB202A033V/034V/036V/037V/083V/084V/086V/ 087V	80 (3.15)	50 (1.97)	30 (1.18)	51 (2.01)	45 (1.77)	68 (2.68)	81 (3.19)	97 (3.82)	31 (1.22)

<sup>1</sup> Including coil and connector

## Options

- Valves can also be supplied with NBR (nitrile), EPDM (ethylene-propylene), CR (chloroprene/neoprene) and PTFE seals and discs
- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE-10
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 94/9/EC, on request
- Electrical enclosures according to "NEMA" standards are available
- Mounting brackets
- Digital control unit (see page 124)
- Features:
  - Input control signals, analog: 0 – 10 VDC or 4 – 20 mA
  - Adjustable coil current
  - 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
- Brass and NPT 3/8 stainless steel solenoid valves have 2 mounting holes in body
- NPT 1/4 stainless steel valves are standard supplied with mounting brackets
- Threaded pipe connection is standard: E = Rp (ISO 7/1); G = G (ISO 228/1); B = NPT (ANSI 1.20.3)