

2/2-WAY SOLENOID VALVE

SERIES: SVP400



- **COMPACT DESIGN**
- **EXCELLENT FLOW RATE**
- **LONG SERVICE LIFE & RELIABLE SWITCHING**
- **UP TO 230 PSI (16 BAR) OPERATING PRESSURE**
- **DESIGNED TO INTERNATIONAL SAFETY REGULATIONS**
- **DIAPHRAGM VALVES AVAILABLE IN VARIOUS MATERIALS**
- **SERVO ASSISTED, PILOT OPERATED OR INDIRECT ACTING**

DESCRIPTION

Indumart Series SVP400 Solenoid Valves operate on the servo assistance principle, which requires a specified differential pressure for opening and closing. When energized, the solenoid opens the pilot seat. This relieves the pressure on the main closure device, which is raised into the open position by the increasing effective force on its underside. Closure of the pilot seat builds up a closing force on the main closure device via bleed orifices. While the differential pressure is maintained in the required domain, the valve remains securely closed.

With the introduction of captive spring clips, the solenoid can be readily fitted and replaced without any tools (**Click-on®**).

The technically impressive flow rates achieved with these compact diaphragm valves are attributed to a solenoid system that is unique and requires a minimum pressure differential of only 1.5 psi (0.1 bar) for its operation.

OPTIONAL FEATURES

- Viton (FPM) Seat Seal for fluids up to +110°C
- EPDM Seat Seal for hot water up to +110°C and pressure from 5 to 150 psi (0.3 to 10 bar)
- Manual Override
- Degreased Version
- EEx Solenoid
- Latching Coil

SPECIFICATIONS

Body	St. steel; Brass Chromium-plated Brass
Valve Type	Diaphragm
Seat Seal	NBR (Perbunan); see option
Internal Parts	Stainless steel, brass, PVDF
Actuation	Indirect
Switching Function	N.C. (standard); N.O. (option)
Connection	¼", ⅜", ½", ¾", 1", 1¼", 1½" & 2"
Pressure Range	1.5 to 230 psi for ¼" to 1" 1.5 to 150 psi for 1¼" to 2"† 1.5 to 230 psi for 1¼" to 2"‡
Viscosity	Up to 25 mm ² /s
Fluid Temperature	-10 to +90°C (option: 110°C)
Ambient Temperature	-10 to +50°C
Standard Voltage	24VDC, 24VAC, 42VAC, 110VAC, 230VAC
Power Consumption	DC AC
Type 4 Solenoid	8W 15 VA (inrush) 12VA (holding)
Type 5 Solenoid	18W 45 VA (inrush) 35VA (holding)
Voltage Over Range	±10%
Protection	IP65 with power lead socket
† with "Type 4" solenoid	‡ with "Type 5" solenoid

FLOW CHARACTERISTIC DATA

Connection	K _v (m ³ /h)	C _v (gpm)
¼"	1.9	2.2
⅜"	3.0	3.5
½"	3.8	4.4
¾"	6.1	7.1
1"	9.5	11.0
1¼"	23.0	26.6
1½"	25.0	28.9
2"	41.0	47.4

ORDERING

Model: SVP4 -

BODY, THREAD & ACTION

Brass Body; G Port; N.C. 1
 Brass Body; NPT Port; N.C. 2
 Brass Body; G Port; N.O. 3
 Brass Body; NPT Port; N.O. 4
 S.S. Body; G Port; N.C. (1/4" to 1" only) 5
 S.S. Body; NPT Port; N.C. (1/4" to 1" only) 6
 S.S. Body; G Port; N.O. (1/4" to 1" only) 7
 S.S. Body; NPT Port; N.O. (1/4" to 1" only) 8
 Chromium-plated Body; G Port; N.C. 9
 Chromium-plated Body; NPT Port; N.C. 0

VALVE SIZE

1/4"
 3/8"
 1/2"
 3/4"
 1"
 1 1/4"
 1 1/2"
 2"

1
 2
 3
 4
 5
 6
 7
 8

SOLENOID

Complete with Solenoid (standard)
 Valve Only - Without Solenoid

S
 X

SOLENOID SERIES

Type 4
 Type 5 (for 1/4" to 2" and max. pressure of 230 psi only)

4
 5

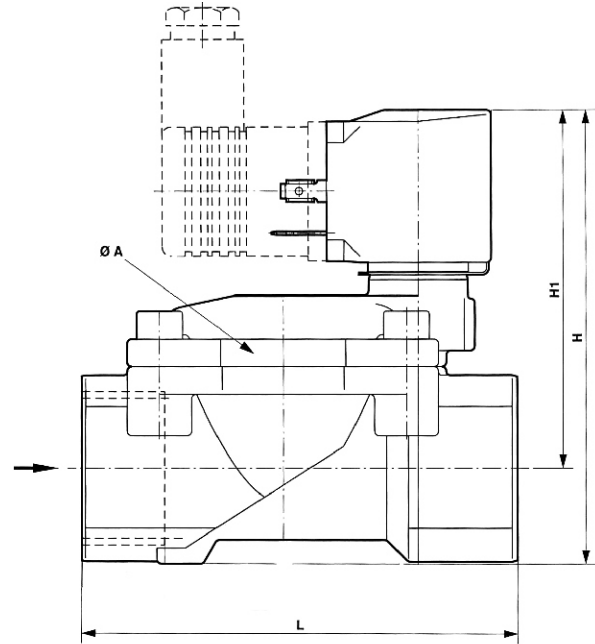
POWER REQUIREMENT

24 VDC
 24 VAC, 50 Hz
 42 VAC, 50 Hz
 110 VAC, 50 Hz
 230 VAC, 50 Hz
 120 VAC, 60 Hz
 220 VAC, 60 Hz

1
 2
 3
 4
 5
 6
 7

OPTIONS:

- Viton (FPM) Seat Seal for fluids up to +110°C
- EPDM Seat Seal for hot water up to +110°C
- Manual Override
- Degreased Version
- EEx Solenoid
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DIMENSIONS & WEIGHT

ØA = maximum depth

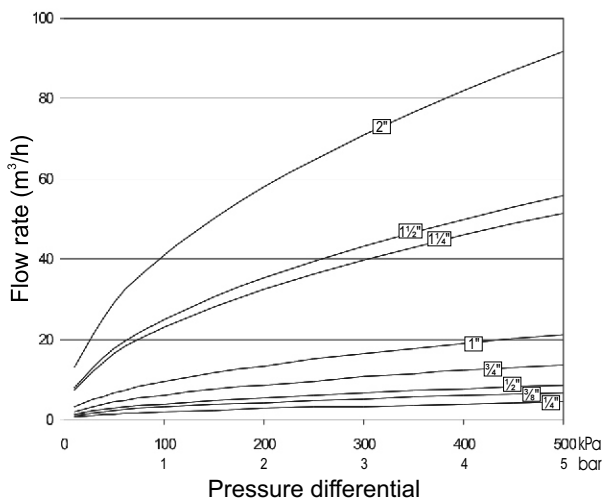
With "Type 4" Solenoid

Port Size	ØA (mm)	L (mm)	H (mm)	H1 (mm)	Weight (kg)
1/4"	44	60	78.5	67.0	0.47
3/8"	44	60	78.5	67.0	0.45
1/2"	44	67	81.0	67.0	0.50
3/4"	50	80	88.0	71.5	0.65
1"	62	95	97.5	77.0	0.95
1 1/4"	92	132	124.5	95.5	2.73
1 1/2"	92	132	124.5	95.5	2.53
2"	109	160	142.5	108.0	3.85

With "Type 5" Solenoid

Port Size	ØA (mm)	L (mm)	H (mm)	H1 (mm)	Weight (kg)
1 1/4"	92	132	142	113.0	3.00
1 1/2"	92	132	142	113.0	2.85
2"	109	160	160	125.5	4.13

WATER FLOW RATE VS. PRESSURE DIFFERENTIAL
 SVP400 SERIES SOLENOID VALVES - TEMP. 5°C to 30°C



The SVP400 Series diaphragm valves were developed and designed using the following harmonised standards:

EN 292 Machine Safety

EN983 Pneumatic Systems

EN60204-1 Electrical Equipment for Machinery