Solenoid Valve for neutral media and steam up to 180 °C

Type 355

3/2-Way, G 1/4



Design/Function

Type 355 is a direct-acting solenoid valve. The circuit functions A, B or F can be developed from the valve in circuit function C, by inter-changing the port connections.

When energized, the solenoid armature is drawn against a spring.

The flow path through the valve is dependent on the chosen circuit function.

The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

Advantages/Benefits

- Body material: brass
- Metal-sealed pressurized parts
- High sealing capacity, even with large temperature fluctuations

Applications

- Neutral gases and liquids
- High temperatures, such as hot water, steam, hot air, thermal oils
- Heating
- Sterilizing
- Impregnating



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Technical Data

Circuit Function

C 3/2-way valve, when deenergized, outlet A exhaused.

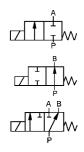
Body Material

Brass, seat 1.4305 Valve internals 1.4305, 14571

Specifications



- A 2/2-way valve, normally closed.
- B 2/2-way valve, normally open.
- F 3/2-way distributor valve, when de-energized, pressure port P connected to outlet B.



Orifice	Kv-Value	QNn-Value	Pressure Range ¹⁾		Weight		
DN	Water	Air	Seal Material				
			NBR, EPDM	PTFE			
[mm]	[m³/h]	[l/min]	[bar]	[kg]			
2	0,11	100	0-16	0-14	0,6		
3	0,20	200	0-10	0- 8	0,6		
4	0,40	400	0- 6	0- 5	0,6		
5	0,58	600	-	0- 2	0,6		
¹⁾ Also suitable for technical vacuum.							

All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Operating Data (Valve)

Seal Materials/Fluids Handled/Temp.- Range

- Neutral fluids, e.g. compressed air, water, NBR hydraulic oil, oils and fat without additives, town gas -10 to +90 °C
- EPDM Oils and fat-free fluids, e.g. hot water alkaline washing and bleaching lyes -40 to +130 °C
- PTFE As required, as long as body material is resistant -40 to +180 °C 4)

⁴⁾ higher temperatures on request.

For more detailed information please refer to resistance chart (Leaflet-No. 1896009).

Max. ambient temperature	55 °C
Max. viscosity	approx. 21 mm ² /s
Response times [ms] opening closing	AC DC 10-20 20-80 20-30 20-30

Operating Data (Actuator)

Operating voltages	24, 110, 230, 240 V/50 Hz 220 V/UC (universal current) 24 V/=				
Voltage tolerance	±10 %				
Duty cycle	100% continuously rated				
Power consumption	AC 35 up to 40 VA DC 12 W				
Rating	with IP 65 cable plug				

Installation / Accessories

Installation with	as required, but preferably solenoid system upright
Electrical connection	 cable plug for 6-7 mm ø cable (supplied as
standard)	cable (supplied as

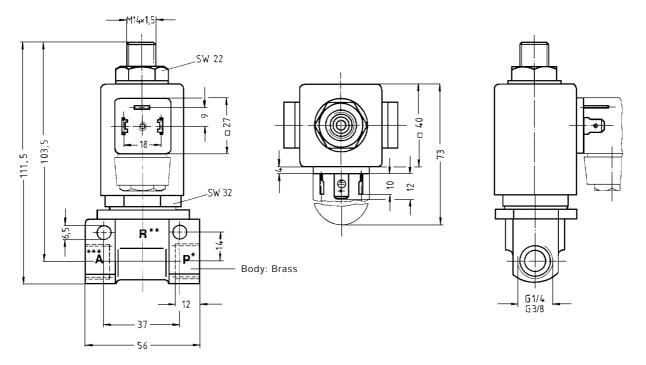
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Valve Used With Different Circuit Functions

The springs of each valve have been rated for a specific circuit function. If used for another circuit function, the recommended operating pressures will vary according to the following chart:

Valve Version		Max. operating pressure (bar) used in circuit function						
Orifice	Circuit						[
[mm]	Function	А	В	С	D	E	F	
2	С	16	25	16	2	2	25	
3	С	10	16	10	1	1	16	
4	С	6	10	6	0,5	0,5	10	
5	С	3	4	3	-	-	4	

Dimensions in mm



Port Connections

The adjacent chart shows the port connections for the chosen circuit function. Plug unused connections for circuit functions A and B using a G 1/4 (Order-No. 605 900 L) blanking plug.

Circuit Function	*	**	***
A	Р	-	A
В	-	В	Р
С	Р	R	A
D	R	Р	В
E	P1	P2	A
F	А	В	Р

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Ordering Chart (Other Versions on Request)

Circuit Function	Orifice	Flow Rate Water	Air	Port Connection	Pressure ¹⁾ Range	Body Material	Seal Material	Weight	Voltage/ Frequency	Order-No.
Function	DN	Kv-Value	Q/Nn	Connection	Range	Material	wateria		Frequency	
	[mm]	[m ³ /h]	[l/min]		[bar]			[kg]	[V/Hz]	
С	02,0	0,11	100	G 1/4	0-16	Brass	EPDM	0,6	230/50	066 007 S
C	02,0	0,11	100	0 1/4	0-10	DI033	NBR	0,0	024/50	026 069 X
							NBR		024/50	043 089 V
									110/50	043 007 V 044 119 Y
									230/50	068 078 J
					0-14	Brass	PTFE	0,6	024/50	049 998 F
					0 14	DIU33	1112	0,0	024/50	062 188 Y
									110/50	067 077 Y
									230/50	049 025 S
									240/50	086 485 B
	03,0	0,20	200	G 1/4	0-10	Brass	NBR	0,6	024/50	017 668 B
									024/=	068 557 F
									110/50	025 790 S
									230/50	061 174 Y
					0-8	Brass	PTFE	0,6	024/50	067 817 K
									024/=	052 665 B
									110/50	067 146 S
									230/50	054 885 K
									240/50	067 176 Y
	04,0	0,40	400	G 1/4	0-6	Brass	NBR	0,6	024/50	019 095 K
									024/=	061 104 T
									110/50	087 846 M
									230/50	061 019 Y
					0-5	Brass	PTFE	0,6	024/50	065 552 X
									024/=	052 078 A
									110/50	067 164 U
									230/50	058 403 C
									240/50	059 660 Z
	05,0	0,58	600	G 1/4	0-2	Brass	PTFE	0,6	220/UC	087 482 H
1) AL										

¹⁾ Also suitable for technical vacuum