

2/2-Way, Direct-acting, G1/8 - M5



Advantages/Benefits

- ▶ Normally closed
- ▶ Body materials: brass, stainless steel
- ▶ Short response time
- ▶ Compact design

Design/Function

Type 200 is a direct-acting plunger-type solenoid valve normally closed by spring action (circuit function A).

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

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

Applications

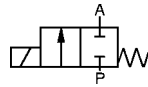
- Neutral gases and liquids
- Pneumatic control
- Vacuum
- Shut-off, dosing, filling, ventilating
- Small-scale instrument, laboratory and measurement technology
- Gas control, welding technology



## Technical Data

### Circuit Function

A 2/2-way valve,  
normally closed



### Body Materials

Brass body and seat  
Stainless steel  
Valve internals 1.4105, 1.4571

### Specifications

Orifice DN	Kv-Value Water	Q <sub>Nn</sub> -Value Air <sup>1)</sup>	Pressure Range <sup>2)</sup>		Weight
			4 Watt AC	DC	
[mm]	[m <sup>3</sup> /h]	[l/min]	[bar]	[bar]	[kg]
1,2	0,045	48	0-21	0-12	0,12
1,6	0,06	65	0-12	0- 6	0,10
2,0	0,11	120	0- 8	0- 4,5	0,12
2,4	0,13	140	0- 6	0- 3	0,09

<sup>1)</sup> Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C. <sup>2)</sup> Also suitable for vacuum.

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

### Operating Data (Valve)

#### Seal Materials/Fluids Handled/Temp. Range

NBR Neutral fluids, e.g. compressed air, town gas,  
water, hydraulic oils -10 to +90 °C

FPM hot air, oxygen, per-solutions, hot oils,  
oils with additives -10 to +100 °C

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

Max. ambient temperature. +55 °C

Max. viscosity approx. 21 mm<sup>2</sup>/s

Response times opening 5 - 18 ms  
closing approx. 8 ms

Times measured at outlet A from switching on until  
pressure rise to 90 % / pressure drops to 10 % at a max.  
working pressure of 6 bar.

Port connection G 1/8, M5

### Operating Data (Actuator)

Operating voltages AC 24, 230, 240/50 Hz  
DC 12, 24 V/=

Voltage tolerance ± 10%

Power consumption AC 9 VA (inrush),  
6 VA/4 W (hold)  
DC 4 W  
2 Watt-version  
6 VA (inrush),  
5 VA/2 W (hold)

Duty cycle 100 % continuously rated

Cycling rate approx. 1000 c.p.m.

Rating with plug Type 1051 or  
cable IP 65

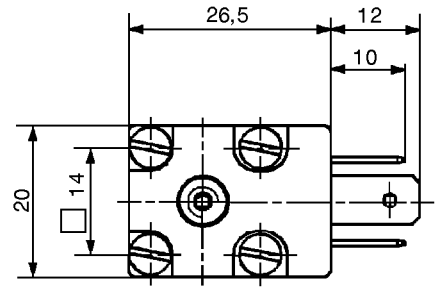
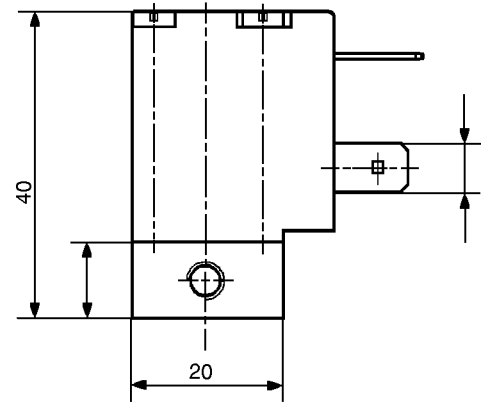
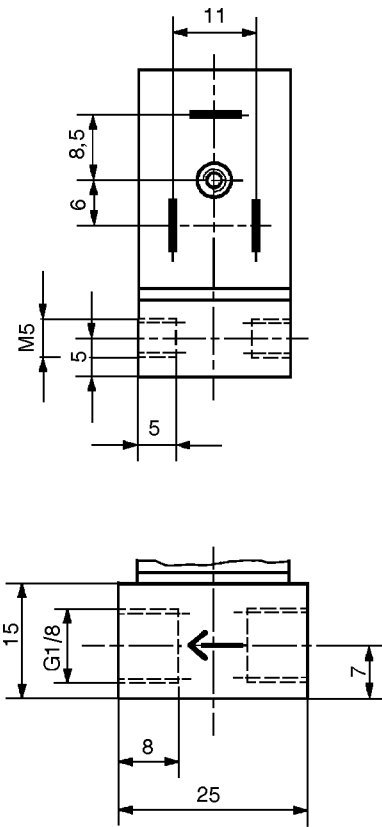
### Installation / Accessories

Installation as required, but preferably  
with solenoid system upright

Electrical connection

- cable connection without cable plug (supplied as standard)
- moulded-in cable on request
- 2 or 3 moulded-in flying leads on request

Dimensions in mm



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Ordering Chart (Other Versions on Request)

Circuit Function	Orifice DN [mm]	Flow Rate		Port Connection [mm]	Pressure Range [bar]	Body Material	Seal Material	Weight [kg]	Voltage/Frequency [V/Hz]	Order-No.	
		Water Kv-Value [m³/h]	Air <sup>1)</sup> QNn [l/min]								
A	01,2	0,045	48	G 1/8	0-12	Brass	NBR	0,12	012/=	056 533 K	
					0-12	Brass	NBR	0,12	024/=	047 108 H	
					0-21	Brass	NBR	0,12	024/50	044 362 B	
					0-21	Brass	NBR	0,12	110/50	052 844 X	
					0-21	Brass	NBR	0,12	230/50	046 605 A	
					0-10	Brass	NBR	0,12	230/50 <sup>2)</sup>	019 411 L	
					0-21	Brass	NBR	0,12	240/50	045 694 S	
					0-21	Stainless	NBR	0,12	024/50	049 497 Z	
					0-12	Stainless	NBR	0,12	024/=	051 827 M	
					0-21	Stainless	NBR	0,12	230/50	041 246 C	
					M 5	0-12	Brass	NBR	0,10	012/=	054 900 E
					0-21	Brass	NBR	0,10	024/50	048 222 B	
	0-12	Brass	NBR	0,10	024/=	044 246 F					
	0-21	Brass	NBR	0,10	110/50	024 350 F					
	0-21	Brass	NBR	0,10	230/50	047 533 J					
	0-21	Brass	NBR	0,10	240/50	051 790 C					
	G 1/8	0-12	Brass	FPM	0,12	012/=	053 702 A				
	0-21	Brass	FPM	0,12	024/50	045 162 U					
	0-12	Brass	FPM	0,12	024/=	054 121 L					
	0-21	Brass	FPM	0,12	110/50	078 165 G					
	0-21	Brass	FPM	0,12	230/50	062 617 V					
	0-12	Stainless	FPM	0,12	012/=	023 294 K					
	0-21	Stainless	FPM	0,12	024/50	065 838 W					
	0-12	Stainless	FPM	0,12	024/=	050 035 Z					
0-21	Stainless	FPM	0,12	110/50	065 149 B						
0-21	Stainless	FPM	0,12	230/50	047 093 M						
0-21	Stainless	FPM	0,12	240/50	018 973 W						
M 5	0-12	Brass	FPM	0,10	012/=	054 159 A					
0-12	Brass	FPM	0,10	024/=	055 778 P						
0-21	Brass	FPM	0,10	230/50	066 893 P						
01,6	0,06	65	G 1/8	0-12	Brass	NBR	0,12	024/50	047 011 J		
				0- 6	Brass	NBR	0,12	024/=	048 022 W		
				0- 6	Brass	NBR	0,12	024/=	057 445 U <sup>3)</sup>		
				0-12	Brass	NBR	0,12	110/50	050 484 Z		
				0-12	Brass	NBR	0,12	230/50	044 203 D		
				0-12	Brass	NBR	0,12	240/50	051 791 Z		
				0-12	Stainless	NBR	0,12	024/50	026 964 M		
				0- 6	Stainless	NBR	0,12	024/=	053 546 V		
				0-12	Stainless	NBR	0,12	230/50	047 007 X		
				0-12	Stainless	NBR	0,12	240/50	047 310 E		

<sup>1)</sup> Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20°C, <sup>2)</sup> 2 W power consumption, <sup>3)</sup> analysis version

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		Water Kv-Value [m³/h]	Air <sup>1)</sup> QNn [l/min]								
A	01,6	0,06	65	M 5	0-12	Brass	NBR	0,10	024/50	046 004 T	
					0- 6	Brass	NBR	0,10	024/=	047 455 U	
					0-12	Brass	NBR	0,10	110/50	051 343 F	
					0-12	Brass	NBR	0,10	230/50	044 202 C	
					0-12	Brass	NBR	0,10	240/50	019 285 W	
				G 1/8	0- 6	Stainless	FPM	0,12	012/=	049 026 T	
					0-12	Stainless	FPM	0,12	024/50	065 239 D	
					0- 6	Stainless	FPM	0,12	024/=	042 050 G	
					0-12	Stainless	FPM	0,12	110/50	066 462 W	
					0-12	Stainless	FPM	0,12	230/50	054 140 B	
					0-12	Stainless	FPM	0,12	240/50	066 464 Y	
	G 1/8	0-12	Brass	FPM	0,12	024/50	022 296 L				
		0- 6	Brass	FPM	0,12	024/=	056 694 V				
		0-12	Brass	FPM	0,12	230/50	057 295 W				
	M 5	0- 6	Brass	FPM	0,10	012/=	046 445 Z				
		0-12	Brass	FPM	0,10	024/50	058 122 Z				
		0- 6	Brass	FPM	0,10	024/=	054 017 P				
		0-12	Brass	FPM	0,10	230/50	053 348 N				
		02,0	0,11	120	G 1/8	0- 8	Brass	NBR	0,12	024/50	045 111 R
						0- 4,5	Brass	NBR	0,12	024/=	048 342 K
	0- 8					Brass	NBR	0,12	110/50	018 470 A	
	0- 8					Brass	NBR	0,12	230/50	041 707 B	
	0- 8					Brass	NBR	0,12	240/50	049 449 Q	
	0- 8				Stainless	NBR	0,12	024/50	069 042 F		
	0- 4,5				Stainless	NBR	0,12	024/=	053 202 D		
	0- 8				Stainless	NBR	0,12	230/50	044 567 Z		
	0- 8				Brass	FPM	0,12	024/50	065 592 Q		
	0- 4,5				Brass	FPM	0,12	024/=	020 646 C		
	0- 8				Brass	FPM	0,12	230/50	022 638 S		
	0- 8				Stainless	FPM	0,12	024/50	089 048 A		
	0- 4,5				Stainless	FPM	0,12	024/=	054 290 A		
	0- 4,5				Stainless	FPM	0,12	024/=	065 372 A <sup>3)</sup>		
	0- 8				Stainless	FPM	0,12	230/50	066 375 E		
	0- 8	Stainless	FPM	0,12	230/50	044 496 K <sup>4)</sup>					
	02,4	0,13	140	G 1/8	0- 3	Stainless	EPDM	0,12	024/=	065 559 E	
					0- 6	Stainless	EPDM	0,12	240/50	050 537 V	
				0- 6	Brass	NBR	0,12	024/50	044 013 R		
				0- 3	Brass	NBR	0,12	024/=	045 423 J		
				0- 6	Brass	NBR	0,12	110/50	043 749 N		
				0- 6	Brass	NBR	0,12	230/50	044 669 P		
				0- 6	Brass	NBR	0,12	240/50	054 871 U		

<sup>1)</sup> Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20°C, <sup>2)</sup> 2 W power consumption, <sup>3)</sup> analysis version

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		Water Kv-Value [m <sup>3</sup> /h]	Air <sup>1)</sup> Qn [l/min]							
A	02,4	0,13	140	G1/8	0- 6	Stainless	NBR	0,12	024/50	062 346 D
					0- 3	Stainless	NBR	0,12	024/=	048 825 Y
					0- 6	Stainless	NBR	0,12	230/50	062 748 Q
					0- 6	Brass	FPM	0,12	024/50	021 225 K
					0- 3	Brass	FPM	0,12	024/=	050 223 A
					0- 6	Brass	FPM	0,12	110/50	021 783 K
					0- 6	Brass	FPM	0,12	20/50	053 116 N
					0- 6	Stainless	FPM	0,12	024/50	025 955 K
					0- 3	Stainless	FPM	0,12	024/=	040 670 U
					0- 3	Stainless	FPM	0,12	024/=	043 660 R <sup>3)</sup>
					0- 6	Stainless	FPM	0,12	110/50	066 485 N
					0- 6	Stainless	FPM	0,12	230/50	068 568 J
					0- 6	Stainless	FPM	0,12	240/50	066 513 R

<sup>1)</sup> Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20°C, <sup>2)</sup> 2 W power consumption,  
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