

G 1/8, M5



### Advantages/Benefits

- ▶ Body materials: brass, stainless steel
- ▶ Short response times
- ▶ Compact design
- ▶ When de-energized, outlet port exhausted or pressurized, mixer valve

### Design/Function

Type 300 is available in a variety of different circuit functions, to suit the respective application.

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

The flow path through the valve is dependent upon the chosen circuit function. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

### Applications

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

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*Easy* Fluid Control Systems

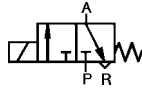
# 3/2-Way Miniature Solenoid Valve, Direct-acting

# Type 300

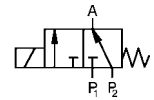
## Technical Data

### Circuit Function

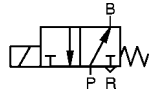
**C** 3/2-way valve, when de-energized, outlet A exhausted



**E** Mixer valve, when de-energized pressure port P2 open, P1 closed



**D** 3/2-way valve, when de-energized, outlet B pressurized



### Body Material

Body and seat of brass  
Stainless steel 1.4305

### Specifications

Orifice DN	Kv-Value Water	QNN-Value Air <sup>1)</sup>	Pressure Range <sup>2)</sup> at Circuit Function		Weight	
			D, C [bar]	E [bar]	M 5 [kg]	G 1/8
[mm]	[m <sup>3</sup> /h]	[l/min]				
1,2	0,045	48	0-10		0,10	0,12
1,6	0,060	65	0- 6	0-3	0,10	0,12

<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 oil, oils and fat without additives -10 to +90 °C

**EPDM** Oils and fat-free fluids, e.g. hot water alkaline washing and bleaching lyes -40 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 21 mm<sup>2</sup>/s

Response times opening 12 ms  
closing 8 ms

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

Port connection M5, G 1/8

### Operating Data (Actuator)

Operating voltages 24, 110, 240 V/50 Hz  
12, 24 V/=  
24 V battery voltage

Voltage tolerance ±10 %

Power consumption AC 9 VA (inrush)  
6 VA/ 4 W (hold)  
DC 4 W

Duty cycle 100% continuously rated,  
for multiple assembly  
reduced duty cycle or use  
2W version on request

Cycling rate up to 1000 c.p.m

Rating with cable plug and cable  
IP65

### Installation / Accessories

Installation as required, but preferably  
with solenoid system upright

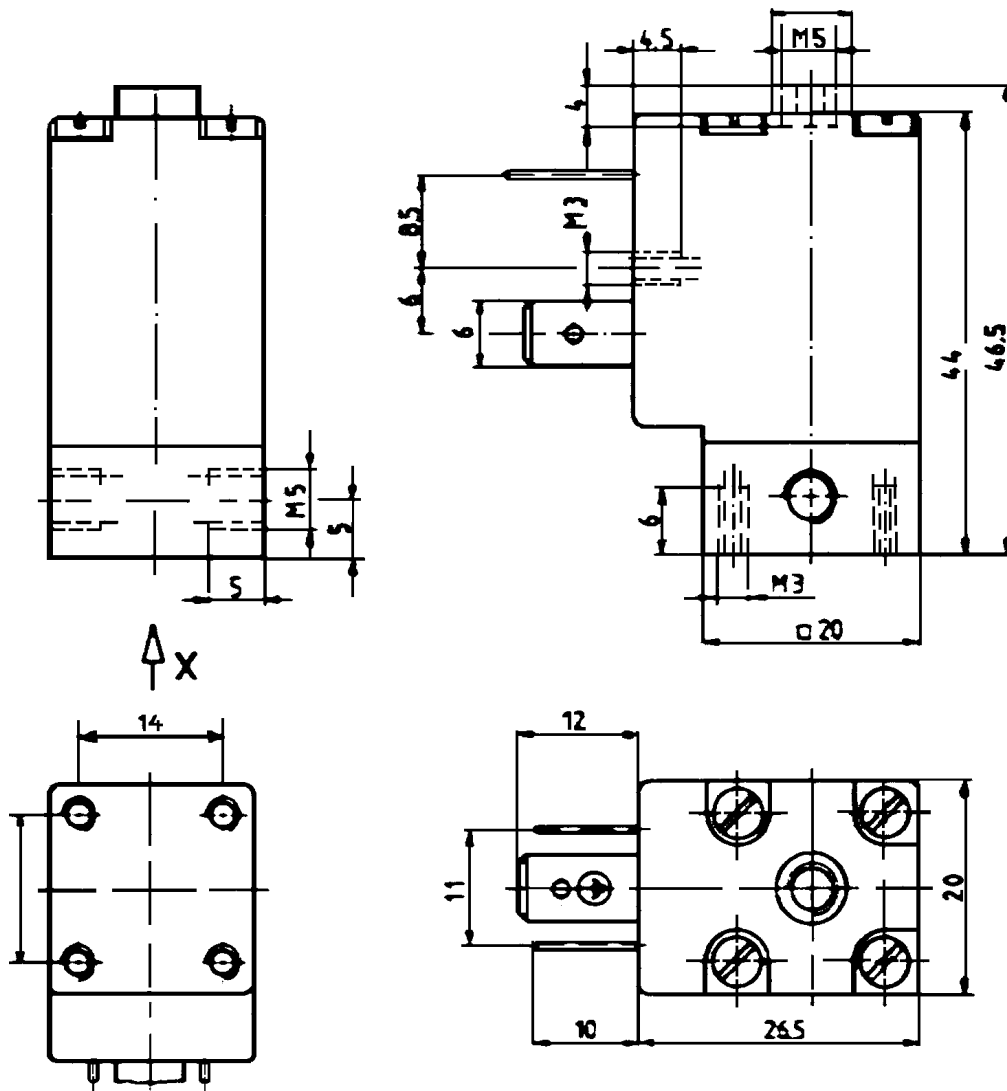
Electrical connection

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

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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]											
C	01,2	0,045	48	G 1/8	0-10	Brass	NBR	0,12	024/50	062 061 T <sup>2)</sup>				
									024/50	051 867 V				
									024/=	053 176 S <sup>2)</sup>				
									024/=	046 018 Y				
									110/50	079 864 E <sup>2)</sup>				
									110/50	062 686 T				
									230/50	057 762 H <sup>2)</sup>				
	230/50	058 065 B												
	240/50	079 073 G <sup>2)</sup>												
	240/50	067 937 K												
	M 5	0-10	Brass	NBR	0,10	024/50	053 072 V <sup>2)</sup>							
						024/50	045 335 Z							
						024/=	052 566 Y <sup>2)</sup>							
						024/=	046 981 K							
110/50						079 865 F <sup>2)</sup>								
110/50						024 376 V								
230/50						053 071 U <sup>2)</sup>								
230/50	045 752 B													
240/50	053 172 W <sup>2)</sup>													
240/50	019 026 M													
D	01,2	0,045	48	G 1/8	0- 6	Brass	NBR	0,12	012/=	050 922 X				
									024/50	046 954 X				
									024/=	058 509 N				
									110/50	058 876 D				
									230/50	046 178 D				
									240/50	061 922 N				
									0,060	65	M 5	0- 6	Brass	NBR
	024/=	042 570 E												
	110/50	024 377 W												
	230/50	047 599 V												
	240/50	066 308 L												
	G 1/8	0- 6	Stainless	FPM	0,12	024/=	044 086 K							
	M 5	0- 6	Brass	FPM	0,10	024/=	046 483 Q							
	01,2	0,045	48	G 1/8	0-10	Brass	NBR	0,12	024/50	046 975 U				
024/=									043 861 X <sup>2)</sup>					
024/=									045 435 N					
110/50									051 590 U					
230/50									058 193 Z					
240/50									067 936 J					
M 5									0-10	Brass	NBR	0,10	024/50	048 457 F
024/=	047 763 G													
110/50	066 566 W													
240/50	066 584 R													

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

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## Type 300

### 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> Qn [l/min]												
D	0,12	0,045	48	M 5	0-10	Brass	NBR	0,10	230/50	054 613 Z					
									024/=B <sup>3)</sup>	019 878 G					
	01,6	0,060	65	G 1/8	0- 6	Brass	EPDM	0,10	024/50	067 073 U					
									024/=	053 130 Y					
									110/50	018 819 U					
									230/50	045 595 P					
									240/50	055 284 Z					
									M 5	0- 6	Brass	NBR	0,10	024/50	053 068 H
														024/=	048 175 C
														110/50	066 586 K
230/50	064 160 H														
E	01,6	0,060	65	G 1/8	0- 3	Stainless	FPM	0,12	012/=	056 585 Q					
									240/50	066 619 B					

<sup>1)</sup> Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C, <sup>3)</sup> =B battery voltage

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