

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

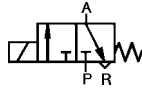
3/2-Way Miniature Solenoid Valve, Direct-acting

Type 300

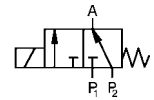
Technical Data

Circuit Function

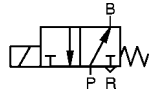
C 3/2-way valve, when de-energized, outlet A exhausted



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	QNm-Value Air ¹⁾	Pressure Range ²⁾ at Circuit Function		Weight	
			D, C [bar]	E [bar]	M 5 [kg]	G 1/8
[mm]	[m ³ /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

¹⁾ Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C., ²⁾ 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 mm²/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

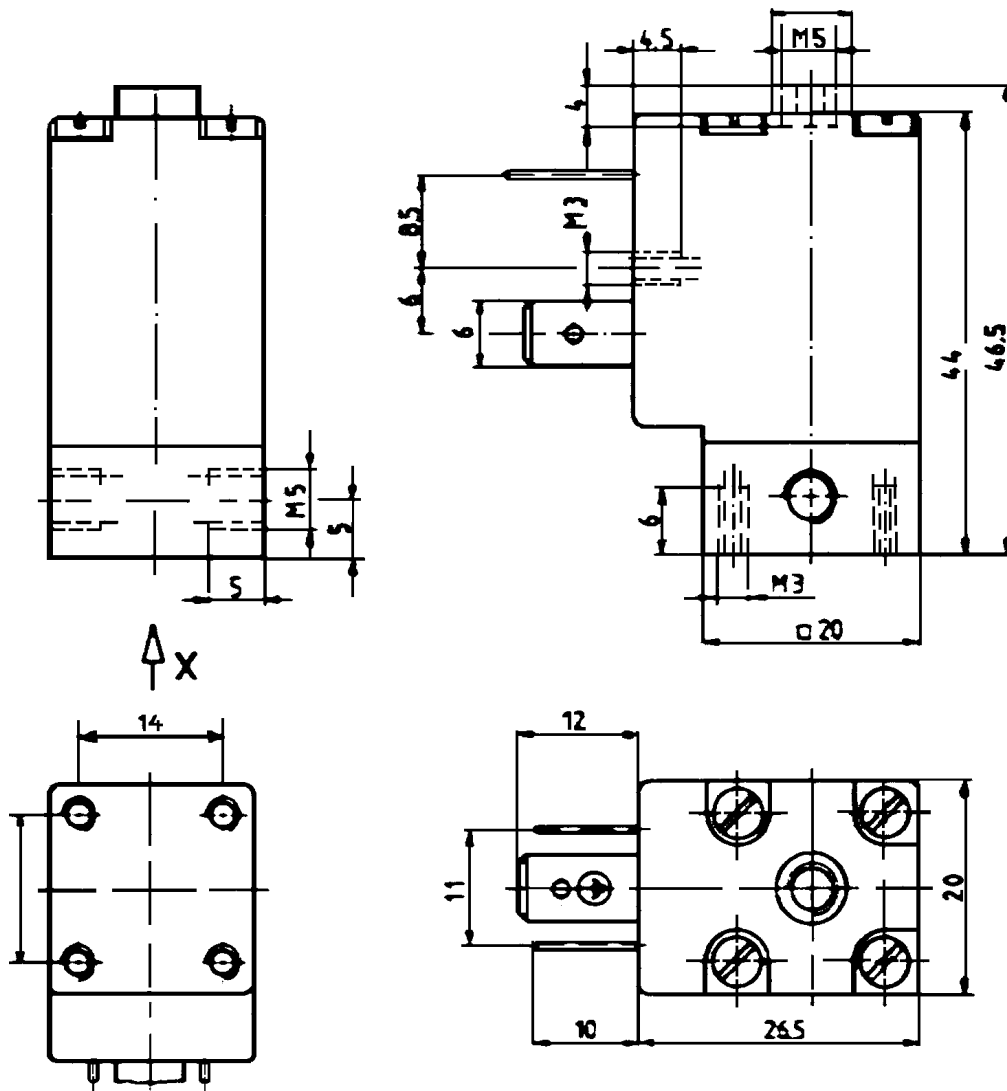
Electrical connection

- 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 ¹⁾ QNn [l/min]															
C	01,2	0,045	48	G 1/8	0-10	Brass	NBR	0,12	024/50	062 061 T ²⁾								
									024/50	051 867 V								
									024/=	053 176 S ²⁾								
									024/=	046 018 Y								
									110/50	079 864 E ²⁾								
									110/50	062 686 T								
									230/50	057 762 H ²⁾								
									230/50	058 065 B								
	240/50	079 073 G ²⁾																
	240/50	067 937 K																
	M 5				0-10	Brass	NBR	0,10	024/50	053 072 V ²⁾								
									024/50	045 335 Z								
									024/=	052 566 Y ²⁾								
									024/=	046 981 K								
									110/50	079 865 F ²⁾								
									110/50	024 376 V								
230/50									053 071 U ²⁾									
230/50									045 752 B									
240/50	053 172 W ²⁾																	
240/50	019 026 M																	
	01,6	0,060	65	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	0,10	024/50	044 341 E
																	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											
	D	01,2	0,045	48	G 1/8	0-10	Brass	NBR									0,12	024/50
									024/=	043 861 X ²⁾								
									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															

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

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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 ¹⁾ Qn [l/min]									
D	0,12	0,045	48	M 5	0-10	Brass	NBR	0,10	230/50	054 613 Z		
									024/=B ³⁾	019 878 G		
	01,6	0,060	65	G 1/8	0- 6	Brass	NBR	0,12	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											
240/50	066 619 B											
E	01,6	0,060	65	G 1/8	0- 3	Stainless	FPM	0,12	012/=	056 585 Q		

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

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