

## Direct-acting, Sub-base



## Advantages/Benefits

- ▶ Normally closed
- ▶ Body material: brass
- ▶ Short response times
- ▶ Compact design

## Design/Function

Type 201 is a normally-closed direct-acting plunger-type solenoid valve.

When energized, the solenoid armature is drawn in against a spring to open the valve. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

## Applications

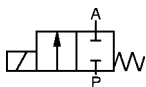
- Neutral gases and liquids
- Pneumatic control
- Vacuum
- Shut-off, dosing, filling and ventilating
- Small scale devices, laboratory and measuring technology
- Gas control, welding technology

**burkert**  
*Easy* Fluid Control Systems

## Technical Data

## Circuit Function

A 2/2-way valve,  
normally closed



## Body Material

Body and seat of brass  
Stainless steel  
Valve internals 1.4105, 1.4571

## Specifications

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

## Operating Data (Actuator)

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

Voltage tolerance ± 10%

Power consumption AC 9 VA (inrush),  
6 VA/4 W (hold)  
DC 4 W or 2 W depending  
on version

Duty cycle 100 % continuously rated,  
reduced for manifold  
mounting or use 2 W version

Cycling rate approx. 1000 c.p.m.

Classification with plug  
or cable IP 65

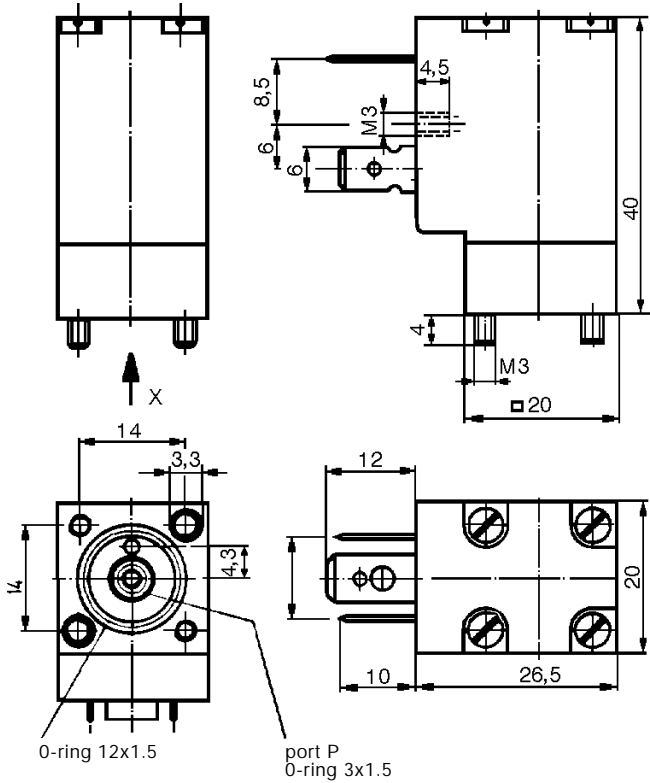
## Installation / Accessories

Installation as required, but preferably  
with solenoid system upright

Electrical connection

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

## Dimensions in mm



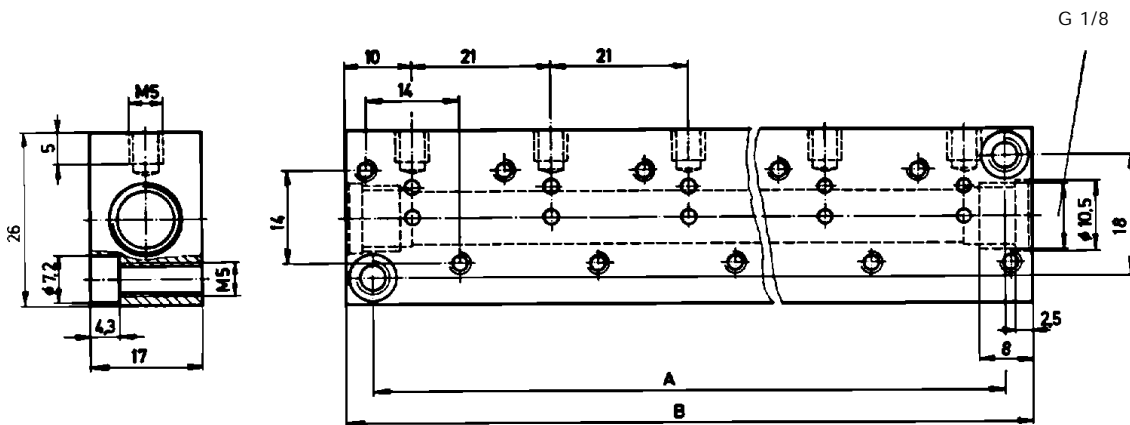
### Manifold Mounting

The manifolds for 1 to 6 valves have a common pressure inlet and individual outlet for each valve. Type 201 may also be mounted together with Type 301 valves (circuit function C, de-energized, outlet A exhausted) on the same manifold. The electrical connection can be either to the right or left of the manifold.

Manifolds may be coupled together using special push-fit O-ring connecting nipples for linking the pressure inlets P. Manifolds joined together in this way should be securely mounted.

	Hole Spacing A	Overall Length B	Order-No.
1valves	12	20	005 312 T
2valves	33	41	005 355 E
3valves	54	62	005 313 U
4valves	75	83	005 314 V
5valves	96	104	005 315 W
6valves	117	125	005 316 X
7valves	138	146	005 893 K
8valves	159	167	005 166 Z
9valves	180	188	005 241 C
10valves	201	209	005 819 Y
11valves	222	230	005 242 D
12valves	243	251	005 222 Z

Accessories	Order-No.
O-ring connector nipple	005 040 A
cable plug, 3-pole,	
IP 65 rating Type 1051	005 377 C



## Ordering Chart (Other Versions on Request)

Circuit Function	Orifice DN [mm]	Flow Rate		Port Connection	Pressure Range [bar]	Body Material	Seal Material	Weight [kg]	Voltage/ Frequency [V/Hz]	Order-No.	
		Water Kv-Value [m <sup>3</sup> /h]	Air <sup>1)</sup> Qn [l/min]								
A	1,2	0,045	48	Sub-base	0-12	Brass	NBR	0,09	012/=	050 850 K	
					0-21	Brass	NBR	0,09	024/50	051 473 S	
					0-12	Brass	NBR	0,09	024/=	048 746 Q	
					0-21	Brass	NBR	0,09	110/50	059 928 A	
					0-21	Brass	NBR	0,09	230/50	047 967 V	
					0-21	Brass	NBR	0,09	240/50	024 355 Y	
					0-12	Stainless	FPM	0,09	024/=	043 318 E <sup>3)</sup>	
		1,6	0,06	65	Sub-base	0-12	Brass	NBR	0,09	024/50	049 843 B
	0- 6					Brass	NBR	0,09	024/=	045 328 A	
	0-12					Brass	NBR	0,09	110/50	045 116 N	
	0-12					Brass	NBR	0,09	230/50	044 670 L	
	0-12					Brass	NBR	0,09	240/50	046 134 R	
	0- 6					Stainless	FPM	0,09	024/=	024 516 A <sup>3)</sup>	
		2,0	0,11	120	Sub-base	0- 8	Brass	NBR	0,09	024/50	050 033 X
	0- 4,5					Brass	NBR	0,09	024/=	057 943 X	
0- 0,8	Brass					NBR	0,09	024/=	021 669 G <sup>4)</sup>		
0- 8	Brass					NBR	0,09	110/50	066 519 X		
0- 8	Brass					NBR	0,09	230/50	043 465 S		
0- 8	Brass					NBR	0,09	240/50	066 532 L		
				0- 4,5	Stainless	FPM	0,09	024/=	020 927 N		
	2,4	0,13	140	Sub-base	0- 6	Brass	NBR	0,09	024/50	053 060 D	
					0- 3	Brass	NBR	0,09	024/=	049 145 F	
					0- 6	Brass	NBR	0,09	110/50	024 356 Z	
					0- 6	Brass	NBR	0,09	230/50	053 095 M	
					0- 6	Brass	NBR	0,09	240/50	024 375 U	

<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, <sup>3)</sup> for analysis, <sup>4)</sup> 2 W power consumption.