# 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



#### 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	Kv-Value	QNn-Value	Pressure Range <sup>2)</sup>			Weight
DN	Water	Air 1)	4 Watt		2 Watt	
			AC	DC	DC	
[mm]	[m³/h]	[I/min]	[bar]			[kg]
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  $\pm$  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)

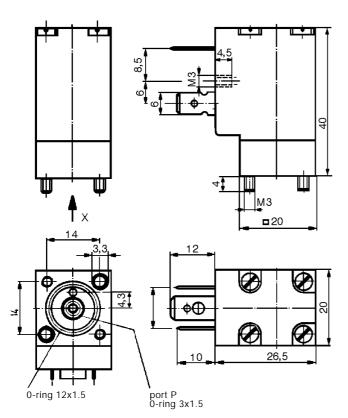
moulded-in cable on

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 pushfit 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

