

G 1/4, Body material: Polyamide



Advantages/Benefits

- ▶ Direct control via PLC as an option
- ▶ Suitable for manifold mounting
- ▶ Manual override standard

Design/Function

Type 411 is a servo-assisted 3/2 valve with a poppet design and normally open or normally closed outlet ports. The poppet chamber is either pressurized or vented via a 3/2 way pilot valve. A minimum pressure differential of 1 bar is required to provide reliable switching.

The valves can be mounted on single channel manifolds (up to six valves) for convenience.

Applications

- Pneumatic control equipment
- Lubricated compressed air
- Control of single-acting cylinders and pneumatic actuators
- As a pilot valve for large, externally piloted valves, e.g. for breweries, swimming pools or water treatment
- Packaging machines
- Automation lines
- Handling systems

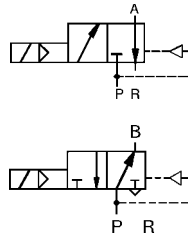
bürkert
Easy Fluid Control Systems

Technical Data

Circuit Function

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

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



Body Material

Body: Polyamide
with moulded-in metal threaded inserts

Specification

Orifice DN [mm]	QnN-Value Air ¹⁾ [l/min]	Pressure Range [bar]	Weight [kg]
6	900	1-10	0,30

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

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
-10 to +60 °C

Measured with 6 bar upstream pressure and 1 bar
pressure drop across the valve at +20 °C.

Max. ambient temperature +55 °C

Response times opening approx. 50 ms
closing approx. 30 ms

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

Port connection G 1/4

Operating Data (Actuator)

Operating voltages 24, 42, 110, 230,
240V/ 50Hz, 12, 24 V/=

Power consumption AC 3,5 VA/ 2W (hold)
DC 2 W

Voltage tolerance ±10 %

Rating with cable plug IP 65

Duty cycle 100% continuously rated

Cycling rate up to 600 c.p.m, depending
on operating pressure

Installation / Accessories

Installation as required

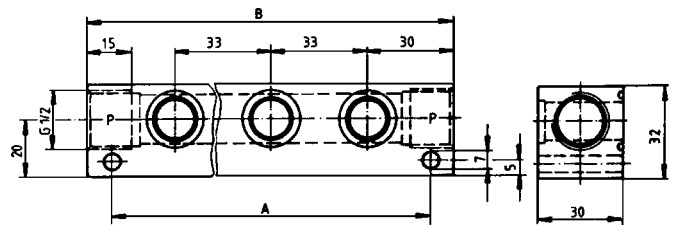
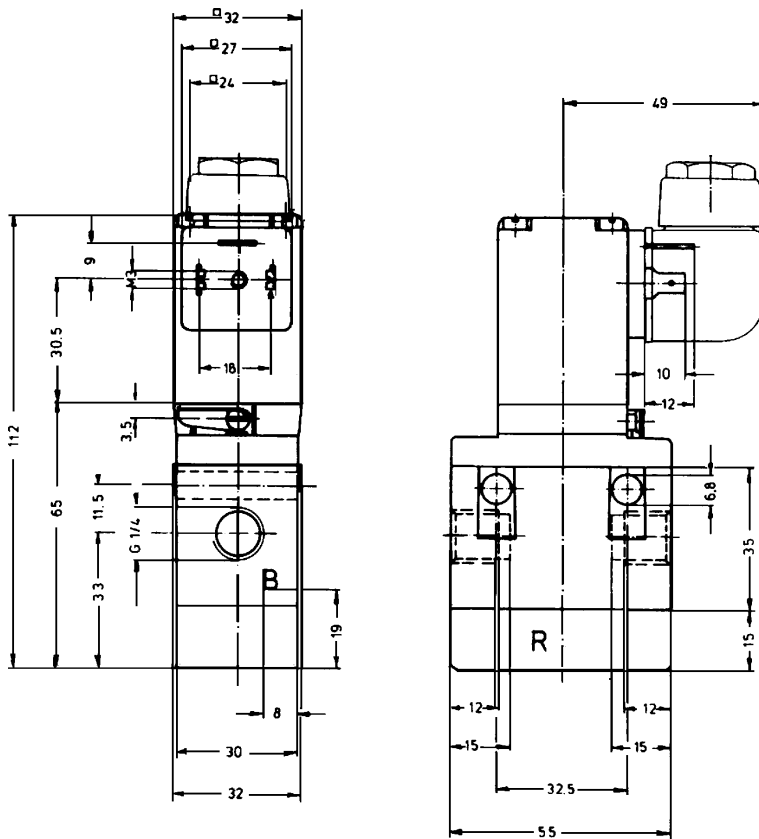
The exhaust port R with built-in sintered silencer is
located on the bottom of the body. It must not be
covered.

Electrical connection • cable plug for 7 mm ø
cable (supplied as
standard)

3/2-Way Solenoid Valve, Servo-assisted

Type 411

Dimensions in mm



Order-No. for Light-Alloy Manifold

Single channel (for common pressure port) including banjo bolts and seals.

	Hole Spacing		Order-No.
	A	B	
2 valves	77	93	005 811 Q
3 valves	110	126	005 717 Z
4 valves	143	159	005 843 Y
5 valves	176	192	005 776 C
6 valves	209	225	005 718 A



Ordering Chart (Other Versions on Request)

Circuit Function	Orifice DN [mm]	Flow Rate Air ¹⁾ Q/Nn [l/min]	Port Connection (ISO 228)	Pressure Range [bar]	Body Material	Seal Material	Weight [kg]	Voltage/ Frequency [V/Hz]	Order-No.
C	6,0	900	G 1/4	1-10	Polyamide	NBR	0,30	012/=	024 876 K ^{2) 3)}
								024/=	051 375 F ^{2) 3)}
								024/=	043 406 Y ²⁾
								110/50	046 371 E ²⁾
								230/50	043 155 T ²⁾
								012/=	042 250 M
								024/50	041 429 U
								024/=	044 699 E ³⁾
								024/=	041 428 T
								042/50	051 979 D ³⁾
								042/50	041 430 Z
								110/50	041 431 N
								230/50	048 544 E ³⁾
								230/50	045 076 Z
								240/50	043 059 E
D	06,0	900	G 1/4	1-10	Polyamide	NBR	0,30	024/50	041 434 R
								024/=	042 059 D
								042/50	041 712 X
								110/50	044 028 Y
								230/50	041 436 K
240/50	052 479 H								

¹⁾ Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C, ²⁾ Version with G 1/4 exhaust port (R) on the body bottom and G 1/8-connection on the coil, ³⁾ Without cable plug.