



G 1/4



Advantages/Benefits

- ▶ EEx ed IIC T4
- ▶ Body material: brass

Design/Function

The Type 743 is a normally-closed direct-acting plunger-type solenoid valve (circuit function C). Also available normally-open by spring action (circuit function D). When energized, the solenoid armature is drawn against a spring. The flow path through the valve is dependent on the chosen circuit function.

Single-phase bridge and varistor are housed in a flameproof enclosure to protection classification "d". Coil and terminal box correspond to protection classification "e", i.e. increased safety.

The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

Applications

- Pilot valve for pneumatic cylinders and rotary actuators
- Handling systems in hazardous areas
- Separators
- Analytical devices
- Offshore-technology
- Petrochemical
- Dosing and mixing systems
- Vacuum

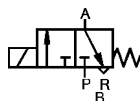
bürkert
Easy Fluid Control Systems



Technical Data

Circuit Function

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



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



Body Material

Brass
Valve internals 1.4105, 14303

PTB-No. Ex-88.B.1049

Specifications

Orifice DN	Kv-Value Water	QNm-Value Air	Pressure Range ¹⁾		Weight
			Fluid Gases	Liquids ²⁾	
[mm]	[m ³ /h]	[l/min]	[bar]	[bar]	[kg]
2	0,11	120	0-16	0-12	0,9
4	0,40	400	0- 3,5 ³⁾	0- 1	0,9

¹⁾ Also suitable for vacuum, ²⁾ For circuit function C only, ³⁾ Circuit function D: 5 bar

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, water, hydraulic oil, oils and fat without additives, town gas
-10 to +90 °C

For more detailed information please refer to resistance chart (Leaflet-No. 1896009).

Max. ambient temperature +40 °C

Max. viscosity approx. 21 mm²/s

Port connection G 1/4

Response times opening approx. 80 ms
closing approx. 80 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.

Operating Data (Actuator)

Operating voltages 24, 110, 220, 240 V/UC
(universal current)

A bridge rectifier has been incorporated in the solenoid system, which makes it suitable for both direct and alternating current operation for the same nominal voltage (universal current to DIN 40 700).

Voltage tolerance ±10 %

Power consumption 10 W (hold)

Rating IP 65

Installation / Accessories

Installation as required, but preferably with solenoid system upright

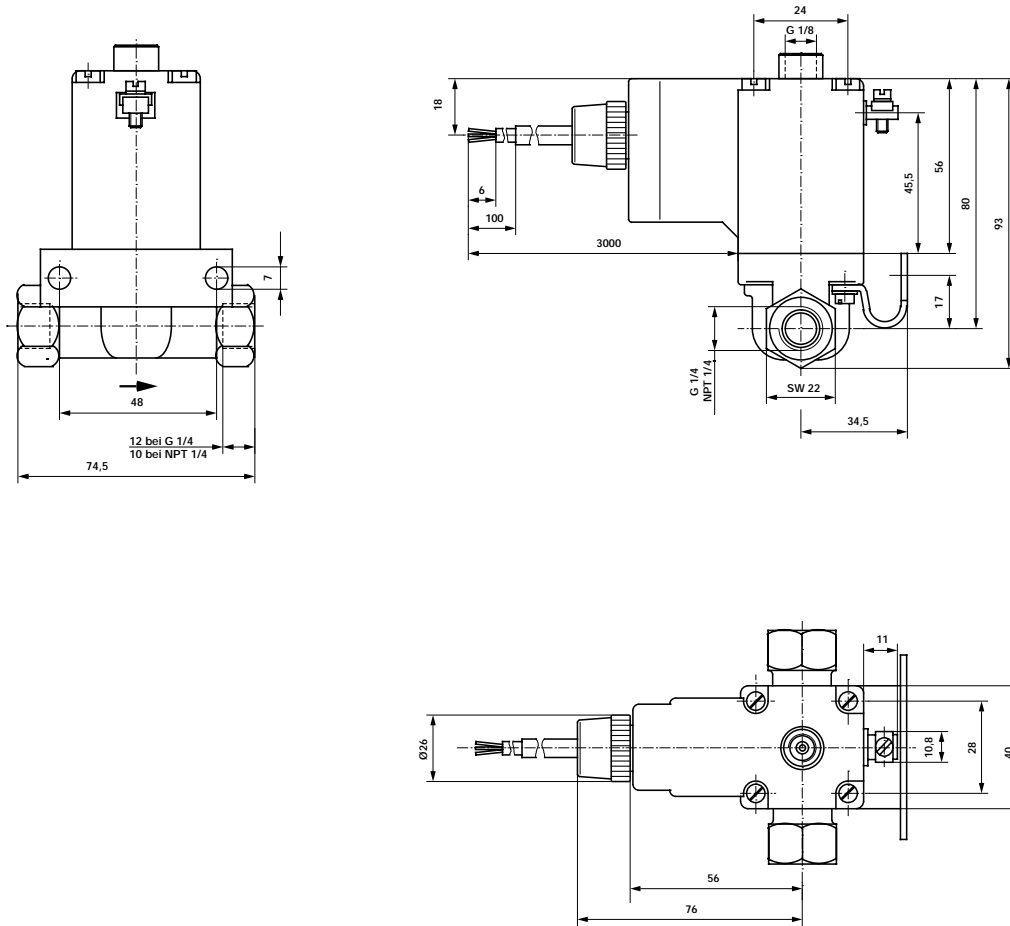
Electrical connection

- moulded-in cable H05RN-F3 G, 3 x 0,75 mm², length 3 m, with tension relieving cable gland
- junction box on request

Safety fuse A safety fuse with a medium response time and rated according to the nominal current should be incorporated in the circuit. The nominal current rating is printed on the actuator.



Dimensions in mm





Ordering Chart (Other Versions on Request)

Circuit Function	Orifice DN [mm]	Flow Rate		Port Connection (ISO 228)	Pressure Range Δ [bar]	Body Material	Seal Material	Weight [kg]	Voltage/ Frequency [V/Hz]	Order-No.
		Water Kv-Value [m ³ /h]	Air ¹⁾ QNn [l/min]							
C	2,0	0,11	100	G 1/4	0-16	Brass	NBR	0,9	024/UC	051 249 R
									110/UC	089 517 M
									220/UC	087 645 T
									240/UC	089 519 X
	4,0	0,40	400	G 1/4	0- 3,5	Brass	NBR	0,9	024/UC	089 532 L
									110/UC	089 533 M
									220/UC	089 616 M
									240/UC	089 535 P
D	2,0	0,11	100	G 1/4	0-16	Brass	NBR	0,9	024/UC	076 321 S
									110/UC	076 324 V
									220/UC	076 325 W
									240/UC	076 326 X
	4,0	0,40	400	G 1/4	0- 5	Brass	NBR	0,9	024/UC	076 327 Y
									110/UC	076 328 H
									220/UC	073 483 K
									240/UC	076 329 A

¹⁾ Also suitable for vacuum, Δ Lower pressure range for liquids (see specification chart on page 2).

Order-No. for Accessories

Safety Fuses	[mA]	Order-No.
24 V	1000	007 077 V
110 V	315	007 055 X
220/240 V	160	007 070 A