3/2 Directional control valves
Actuation: electromagnetic
Directly controlled poppet valves
Port size: G 1/4, 1/4 NPT or
Connection hole pattern NAMUR

TÜV-approval based on IEC 61 508, DIN V 19 251
Approvals: DIN EN 161/3394 DVGW, group Rm and EN 13611 Valves for safety systems to SIL 4 or AK 7

Solenoid valve also suitable for low power consumption in non hazardous areas without barrier

Solenoid: Category II2GD, Type of Protection EEx ia IIC T5/T6, IP66, T95°C, Suitable for zones 1, 2 (gases) and 21, 22 (dusts)

Working from 0 bar up

High operational reliability even after long periods of inoperation

Suitable for control and instrument-quality air

Also suitable for open-air installation with appropriate solenoid variant

NAMUR FLANGE:
With integrated exhaust air recirculation



TÜV

Ordering information
See page 2

Technical data

Medium:
For neutral, not flammable, gaseous and liquid fluids*
*With contaminated fluids, upstream installation of a dirt trap is recommended.

Operation:
Electromagnetic, directly-controlled

Flow direction:
Optional

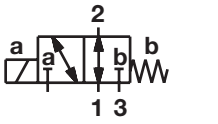
Mounting position:
Any, but preferably with solenoid vertical

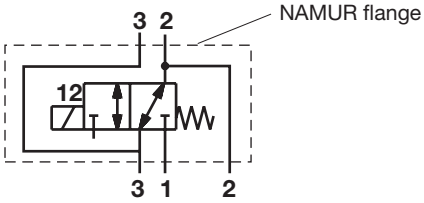
Connection:
G 1/4, 1/4 NPT

Operating pressure:
0 to 10 bar

Ambient temperature:
-25* to +60°C
*Please consult our technical service for use below +2°C.
If installed in the open protect all connections against the penetration of moisture!

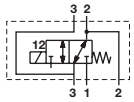
Materials:
Housing: Brass, hard-anodised aluminium
Seals: NBR (Perbunan)
Internal parts: Stainless steel, brass
Solenoid housing: Aluminium, anodized





General information

Switching function: Pressure connection 1, 2 or 3

Symbol	Type	Port size	Operating *1) pressure (bar)	kv-value (C_v(US) ▼ k_v x 1,2)	Material Housing	Seal	Weight without solenoid (kg)	Dimensions No.
	2401088.2003	G 1/4	0 ... 10	0.340	Brass	NBR	0.65	1
	2401087.2003	1/4 NPT	0 ... 10	0.340	Brass	NBR	0.65	1
	2401086.2003	G 1/4	0 ... 10	0.340	St. st.	NBR	0.65	1
	2401012.2003	1/4 NPT	0 ... 10	0.340	St. st.	NBR	0.65	1
	2401091.2003	G 1/4 NAMUR	0 ... 10	0.340	Aluminium *2)	NBR	0.55	2
	2401090.2003	1/4 NPT NAMUR	0 ... 10	0.340	Aluminium *2)	NBR	0.55	2
	2401009.2003	G 1/4 NAMUR *3)	0 ... 10	0.340	Aluminium *2)	NBR	0.55	3

*1) With gaseous and liquid fluids up to 40 mm^2/s
*2) Hard-anodised
*3) P port in flange interface
Note: At an ambient temperature of -20°C, higher leakage values may be experienced for short periods.

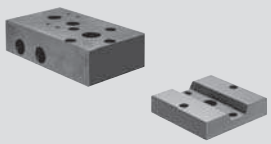
Solenoid parameters for use in intrinsically safe circuits

	Switch-on voltage (V)	max. allowed current Ii	Holding current	Holding voltage	Pick-up delay typical (s)	Categorie, type of protection	Temperature Ambient/Fluid °C	Type
	22...28 V	110 mA	min 40 mA	5 V	0,3 - 5	II2G EEx ia IIC T6 II2G EEx ia IIC T5 II2D IP66 T95°C	-40...+55 -40...+70 -40...+70	2003

Solenoid parameters for use in non harardous locations

	Switch-on voltage (V)	max. current (limited)	Holding current	Power consumption (switching and holding)	Pick-up delay typical (s)	IP Code	Temperature Ambient/Fluid °C	Type
	22...26,4 V	75 mA	min 40 mA	1,8 W at 24V	0,3 - 2 s	IP 66	-40...+80	2003

Accessories

Flange plate	Yoke	Silencer
		
0612790 (NAMUR single connection plate)	0540593	C/S2, 1/4 NPT
0612791 (NAMUR-rip use in combination with 0612790, Alu)		M/S2, G 1/4

Ordering information

3/2 directional control valve, connection G 1/4,
housing brass, with protection class
EEx ia IIC T6
Type: 2401088.2003