

2/2-WAY SOLENOID VALVE

TYPE 50



O_2 oxygene applications



DESCRIPTION

Valve type 50 is a compact 2/2-way pilot operated solenoid valve with an orifice of 10 mm for general applications with gases and liquids.

CONSTRUCTION

| | |
|------------------|--------------------------------|
| Body material | brass |
| Internal parts | brass and stainless steel |
| Sealing material | NBR, EPDM, FPM |
| Voltages | 24 V DC, 24 V 50Hz, 230 V 50Hz |
| Connections | G3/8 - G1/2 |

ON REQUEST

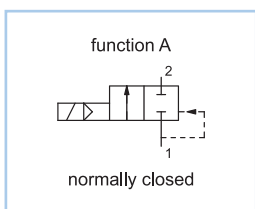
Valve for oxygene applications
 Non-standard coil voltages
 Higher ambient temperature range
 Non-standard equipment

SWITCHING PRESSURE

| Ports | Normally closed in bar |
|--------------|------------------------|
| G3/8 (DN 10) | 0,02 - 12 |
| G1/2 (DN 10) | 0,02 - 12 |

See details on the website

VARIANTS



DETAILED INFORMATION

| General | |
|----------------------|--|
| type of construction | 2/2-way poppet valve, normally closed NC, coil 360° rotatable |
| operation | electrically |
| ports | G3/8 - G1/2 |
| ambient temperature | -20°C to +50°C, higher acceptable ambient temperature range on request |
| fluid temperature | dependent on sealing material and coil |
| viscosity | max. 21 mm ² /s (cst) |
| material | body: brass plunger tube at 50A...-AC2: brass, at type 50A...-AE1: stainless steel internal parts: stainless steel sealing: see type selection |
| mounting | 2 threads M4 on the bottom side |
| installation | in any position, preferable vertically fixed solenoid coil |
| unit of supply | without connector |

| Electrical | |
|---------------------------------|--|
| voltage | DC voltage or AC voltage |
| standard voltages | 24 V DC, 24 V 50Hz, 230 V 50Hz |
| non-standard voltage on request | 6 V - 200 V DC, 12 V - 240 V 50Hz or 60Hz |
| acceptable voltage tolerance | ±10% |
| power consumption | see specifications at solenoid coils |
| coil temperature classification | temperature class F (155°C), winding class H (180°C) |
| duty cycle | 100%, continuous operation |
| protection class | IP65 according DIN EN 60529 (DIN 40050) with correctly mounted connector |

| Pneumatic – Hydraulic | |
|-----------------------------------|---|
| fluid | all liquids and gases, non-aggressive to the used material |
| max. valve body pressure | PN 25 |
| response time | depending on operating pressure and fluid |
| non-standard equipment on request | coil type with cable, bright nickel-plated or chemical nickel-plated, coils for temperature class H (180°C) |

CONFIGURATION & PRESSURE RANGE

| Coil power consumption at 20°C | | | |
|--------------------------------|----------------------------|---------------------------|------------------|
| coil type | inrush power 50Hz in VA | rated power 50Hz in VA | power DC in W |
| C2DA | 13 | 10 | 6,5 |
| C3AA | 17 | 13 | 6,3 |
| E1AA | 32 | 14 | 12 |
| E2AA | 42 | 19 | 17 |
| E3AE | 70 | 32 | 27 |

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TYPE 50



O_2 oxygene applications

NORMALLY CLOSED VALVES

| Type 50A, normally closed | | | | | | |
|---------------------------|----------------|-------|--------------------------------------|----|-----------|----------|
| type (order-no.) | NW DN in mm | ports | maximum differential pressure in bar | | | |
| | | | coil C2DA | | coil C3AA | |
| | | | 50Hz | DC | 50Hz | DC |
| 50A-3.-A... | 10 | G3/8 | 0,02 - 9 | - | 0,02 - 10 | 0,02 - 1 |
| 50A-4.-A... | 10 | G1/2 | 0,02 - 9 | - | 0,02 - 10 | 0,02 - 1 |

ORDER CODE

| Type 50A, normally closed | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|------|-------|--|
| order code | 50 | A | - | 3 | B | - | A | E1AA | 02400 | |
| Code decoding | | | | | | | | | | |
| type | type 50, pilot operated, body: brass, plunger tube: stainless steel | | | | | | | | | |
| function | A = normally closed | | | | | | | | | |
| ports | 3 = G3/8, 4 = G1/2 | | | | | | | | | |
| seal material | B = NBR (Perbunan), E = EPDM, V = FPM | | | | | | | | | |
| short circuit ring | A = copper short circuit ring, X = without short circuit ring | | | | | | | | | |
| coil type | see specifications of the particular coil | | | | | | | | | |
| supply voltage | always 5-digits, see code for standard voltage | | | | | | | | | |

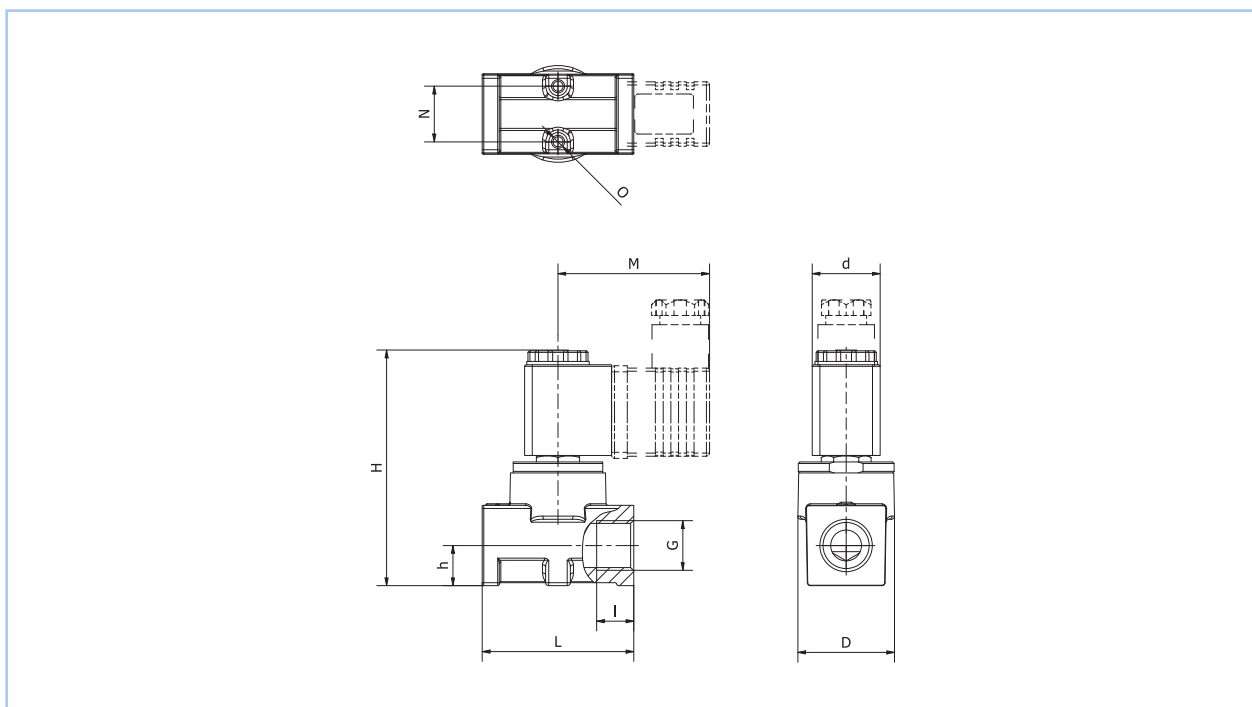
CONFIGURATION & PRESSURE RANGE

| Sealing material | Code | Fluid temperature | Applicable for |
|------------------|------|-------------------|--|
| NBR (Perbunan) | B | -10°C to 80°C | neutral gases and liquids |
| EPDM | E | -10°C to 130°C | hot water, steam, not for oil and grease |
| FPM | V | -10°C to 130°C | oil, petrol, oxygen |

Type 50A, normally closed

| maximum differential pressure in bar | | | | | | | kv-value in m ³ /h |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|------|----------------------------------|
| coil E1AA | | coil E2AA | | coil E3AE | | | |
| 50Hz | DC | 50Hz | DC | 50Hz | DC | | |
| 0,02 - 12 | 0,02 - 10 | 0,02 - 12 | 0,02 - 12 | 0,02 - 12 | 0,02 - 12 | 1,70 | |
| 0,02 - 12 | 0,02 - 10 | 0,02 - 12 | 0,02 - 12 | 0,02 - 12 | 0,02 - 12 | 1,70 | |

DIMENSIONS



Dimension table for type 50 in mm, approx. weight in g

| type | G | d | D | h | H | I | L | M | N | O | approx. weight in g |
|--------------|------|----|----|----|----|----|----|----|----|----|------------------------|
| 50A-3.-AC2DA | G3/8 | 22 | 33 | 13 | 77 | 12 | 49 | 50 | 18 | M4 | 280 |
| 50A-3.-AE1AA | G3/8 | 30 | 33 | 13 | 94 | 12 | 49 | 52 | 18 | M4 | 410 |
| 50A-4.-AC2DA | G1/2 | 22 | 33 | 13 | 77 | 12 | 49 | 50 | 18 | M4 | 270 |
| 50A-4.-AE1AA | G1/2 | 30 | 33 | 13 | 94 | 12 | 49 | 52 | 18 | M4 | 400 |