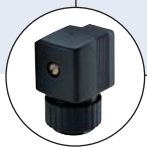




2/2 and 3/2-way Solenoid Valve for aggressive fluids

- Pivoted armature valve with manual override
- Direct-acting with hermetic isolation of fluid
- Different circuit functions
- Body in plastic and stainless steel
- Seal materials suitable for aggressive mediums

Type 0121 can be combined with...



Type 2508

Cable plug

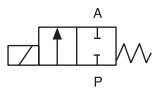


Type 1078

Timer unit

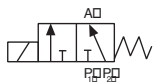
Type 0121 is a high quality, direct-acting 2/2 or 3/2 pivoted armature solenoid valve that can be used in a wide range of applications for opening, closing, dosing, mixing and distributing. The separation between the magnetic system and the medium chamber consists of an intermediate separating diaphragm system. The valve is particularly suitable for aggressive media

Circuit function A



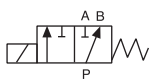
A 2/2-way valve NC

Circuit function E



3/2-way mixer valve

Circuit function F



3/2-way distributor valve

Technical data

| | |
|---------------------------------------|---|
| Orifice | DN2.0 to 8.0 |
| Body material | PTFE, (PP, PVDF on request) PVC (resistant acc. to DIN 8062, 8061) Stainless steel 1.4401 |
| Seal materials medium | FKM, FFKM, (EPDM on request) Oxydizing acids and substances, oils, salt solutions, waste gases, technical vacuum |
| FKM | The valve is particularly suitable for aggressive media, aromatic compound, ether, ester, ketone (please see Bürkert chemical resistance chart) |
| FFKM | |
| Medium temperature | |
| body + seal (Material combination) | |
| PVC + FKM | -10 to +50 °C |
| PTFE/St. st. + FKM | -10 to +90 °C |
| PTFE/St. st. + FFKM | -10 to +90 °C |
| Ambient temperature | max. +50 °C |
| Viscosity | max. 37 mm ² /s |
| Voltage tolerance | ±10% |
| Cycling rate | max. 100/min with AC max. 10/min with UC |
| Duty cycle | |
| Continuous operation | St. st. body 100% ED and with universal Current (UC) with PVC 10% ED (10 min) with PP, PTFE and PVDF body (40% ED, 10 min) |
| Intermittent operation | |
| Electrical connection | |
| with AC and DC | Cable plug for cable Ø 6 - 7 mm (supplied as standard) or cable connection |
| Protection class | IP 65 with cable or cable plug |
| Installation | As required, preferably with actuator upright |

Technical data, continued

| Power consumption | | | | | | Response times | | Weight | |
|-------------------|--------|-----------|--------|-------------|--------|----------------|--------|--------|-----------------|
| Inrush | | [VA] | | | | Open | Closed | PTFE | Stainless steel |
| AC [VA] | UC [W] | AC [VA/W] | UC [W] | DC cold [W] | DC [W] | [ms] | [ms] | [kg] | [kg] |
| 30 | 40 | 15/8 | 3 | 11-12 | 8 | 15-20 | 15-20 | 0.5 | 0.9 |

Response times [ms]:

Measured at valve outlet at 6 bar and +20°C.

Opening: Pressure build-up 0 - 90%

Closing: pressure relief 100 to 10%

Materials

8. Coil body: Epoxy

7. Isolating diaphragm: FKM, EPDM, FFKM

6. Seal: PTFE

3. Toggle pin: Hostaflon TF 1502

5. O-rings: FKM, EPDM

2. Seal: FFKM FKM

4. Seat: see table on the right

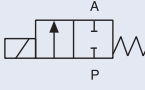
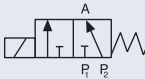
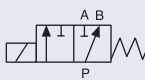
1. Valve body: see table below (PVDF, PP on request)

| Body material | Seat material |
|-----------------|---------------|
| Stainless steel | 1.4571 |
| PTFE | PTFE |
| PVC | PVC |

(Sectional drawing of version with PVC body and FKM seal)

Ordering chart for valves (other versions on request)

valves with plastic or stainless steel body, manual override and cable plug (UC with silicon cable, see footnote)

| Circuit function | Port connection | Orifice [mm] | Kv value water [m ³ /h] | Pressure range [bar] | Body material | Seal material | Voltage/frequency [V/Hz] | Item no. | |
|---|-----------------------------|--------------|------------------------------------|----------------------|---------------|---------------|--------------------------|----------|---------|
| A 2/2-way valve NC  | Stainless steel body | | | | | | | | |
| | G 1/4 | 4.0 | 0.3 | 0-2 | St. st. | FKM | 024/DC | 055 244 | |
| | | | | 0-4 | St. st. | FKM | 024/50 | 056 934 | |
| | | 6.0 | | 0.6 | 0-1 | St. st. | FKM | 042/50 | 052 817 |
| | | 8.0 | | | 0-2 | St. st. | FKM | 230/50 | 052 441 |
| | | 6.0 | | 0.6 | 0-1 | St. st. | FKM | 024/DC | 040 482 |
| | | 8.0 | | | 0-2 | St. st. | FKM | 024/50 | 057 086 |
| | 6.0 | | 0.6 | 110/50 | | | 110/50 | 067 659 | |
| | 8.0 | | | 230/50 | | | 230/50 | 054 595 | |
| | Plastic body PVC | | | | | | | | |
| | G 3/8 | 4.0 | 0.3 | 0 - 2 | PVC | FKM | 024/DC | 049 654 | |
| | | | | 0 - 4 | PVC | FKM | 024/50 | 048 940 | |
| | | | | 230/50 | | | 230/50 | 047 859 | |
| | | 6.0 | 0.6 | 0 - 1 | PVC | FKM | 024/DC | 048 749 | |
| 0 - 2 | | | | PVC | FKM | 024/50 | 049 348 | | |
| 110/50 | | | | | | 110/50 | 050 553 | | |
| 8.0 | | 1.0 | 0 - 1 | PVC | FKM | 024/UC | 048 697 | | |
| | | | | PVC | FKM | 024/50 | 052 800 | | |
| | | | | PVC | FKM | 230/50 | 052 302 | | |
| E 3/2-way mixer valve  | | | | | | | | | |
| Stainless steel body | | | | | | | | | |
| G 1/4 | | 4.0 | 0.3 | 0-2 | St. st. | FKM | 230/50 | 042 457 | |
| Plastic body PTFE | | | | | | | | | |
| G 3/8 | 4.0 | 0.3 | 0 - 2 | PTFE | FFKM | 024/UC | 130 933 | | |
| | | | | | | 230/50 | 130 934 | | |
| F 3/2-way distributor valve  | | | | | | | | | |
| Plastic body PVC | | | | | | | | | |
| G 3/8 | 6.0 | 0.6 | 0 - 1 | PVC | FKM | 024/DC | 049 533 | | |
| | | | 0 - 2 | PVC | FKM | 024/50 | 052 181 | | |
| | | | | | | 110/50 | 050 336 | | |
| | | | | | | 230/50 | 047 916 | | |

Note: UC with internal high-performance coil (60 W Inrush, 3 W hold) and moulded-in 1m silicon cable

i Further versions on request



Materials

Body material PP, PVDF.
Seal materials EPDM, various body and seal material combinations.



Circuit function

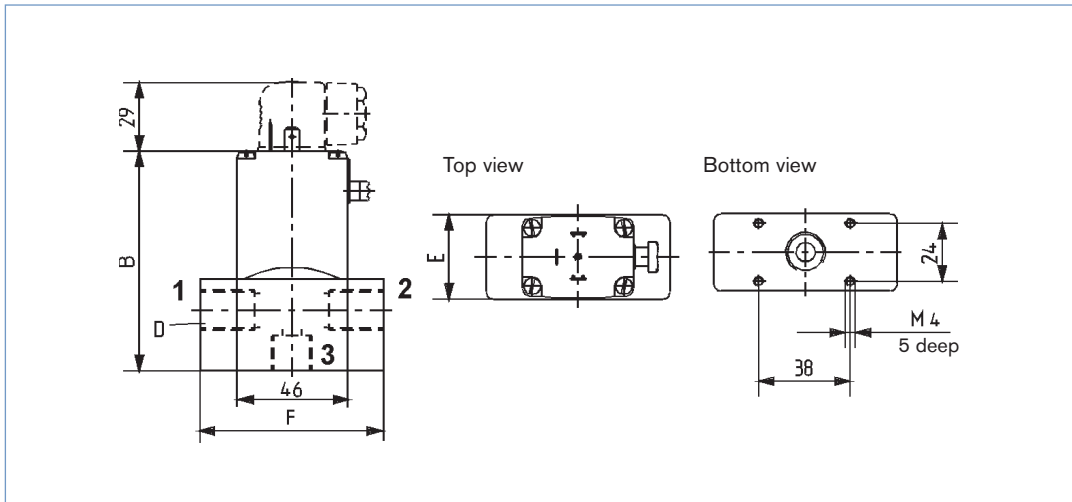
Other circuit functions, e.g. 2/2-way normally open.



Additional

ATEX Version (see Type 789).
Optical or electrical feedback unit.

Dimensions [mm]



| Body material | D | B | E | F |
|-----------------|-------|----|----|----|
| Stainless steel | G 1/4 | 89 | 32 | 76 |
| PVC | G 3/8 | 91 | 35 | 65 |

| Possible port configurations | | | |
|------------------------------|----|----|---|
| Circuit function | 1 | 2 | 3 |
| A | P | - | A |
| E | P1 | P2 | A |
| F | A | B | P |

To find your nearest Bürkert facility, click on the orange box →

www.burkert.com
In case of special application conditions,
please consult for advice.Subject to alterations
© Christian Bürkert GmbH & Co. KG

0901/4_EU-en_00891601