



3/2-way Solenoid Valve, direct-acting, NC or NO

- Electrical connection cable plug, Form A
- With or without manual override as standard
- Threaded port and sub-base versions
- Impulse version optional



Type 2508 Cable Plug



This direct-acting 3/2-way solenoid valve may be mounted singly or in flange version on a manifold. FKM high quality seal material can be used for a lot of different mediums. The valve is also suitable for technical vacuum.



Type 6014 Multiple manifold (e.g. 6-fold)



Type 2511 ASI cable plug

| Technical data | |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Body material | Brass or stainless steel, polyamide (sub-base) |
| Seal material | FKM (EPDM on request) |
| Medium | Neutral gases and fluids (e.g. compressed air, town gas, natural gas, water, hydraulic oil, petrol). Suitable for technical vacuum |
| Medium temperature Polyamide coil (FKM seal) | -10° to +100°C (PA coil) to 120°C Epoxy coil |
| Ambient temperature | -10 to +55°C |
| Viscosity | Max. 21 mm2/s |
| Port connection | G 1/8, G 1/4, sub-base |
| Operating voltage | 24 V DC, 24 V/50 Hz, 230 V/50 Hz (other voltages on request) |
| Voltage tolerance | ±10% |
| Duty cycle / single valve Assembly | 100% continuous rating Intermittent operation 60% (30 min) or with 5 W coil (on request) |
| Electrical connection According to | DIN EN 175301-803 Form A for Cable Plug,Type 2508 (see Ordering chart for accessories) |
| Installation | As required, preferably with actuator upright |
| Protection class | IP65 with Cable Plug |
| Coil insulation class | Polyamide class B (Epoxy class H on request) |
| Coil material | Polyamide (Epoxy on request) |
| Orifice | DN 1.5- 2.5 |

Circuit function C



Circuit function D



3/2-way valve NO, outlet 2 normally pressurized

3/2-way valve NC,

outlet 2 relieved

Circuit function T



3/2-way, universal valve



Technical data

Power consumption

Utilisation in another circuit function

| Orifice Power consumption | | | | | | |
|---------------------------|-------------------|-------------------|------------------|---------------------------|--|--|
| | Inrush AC [VA] | Hold AC ([VA] | hot coil) [W] | DC hot / cold coil [W] | | |
| 1.5-2.5 | 24 | 17 | 8 | 8/9 | | |

Response times

| Orifice | Response times AC and DC | | | | |
|---------|---------------------------|-------|--|--|--|
| [mm] | Opening [ms] Closing [ms] | | | | |
| 1.5 | 10-15 | 15-20 | | | |
| 2.0 | 10-15 | 15-20 | | | |
| 2.5 | 15-20 | 10-22 | | | |

Response times [ms]:

Measured at valve outlet at 6 bar and +20°C. Opening: Pressure build-up 0 - 90%, to

Closing: Pressure relief 100 to 10%

Connections

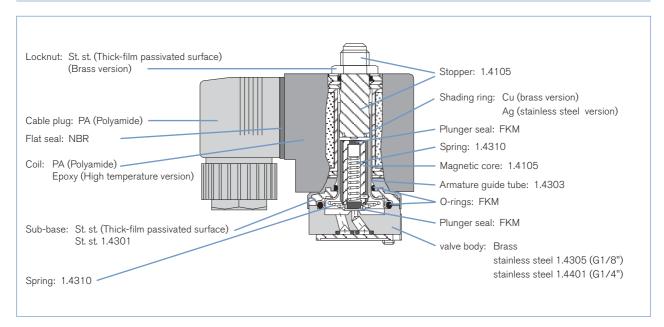
Valves with circuit functions (WW) C, D and T are fitted with different springs. If used in some other circuit function, the permissible operating pressure may change (see table below).

| | Version version | Max. operating pressure [bar] for valve application in circuit function | | | | | |
|-----|--------------------|-------------------------------------------------------------------------|-----|-----|-----|-----|--|
| DN | Circuit function | А | В | С | D | т | |
| 1.5 | С | 16 | 22 | 16 | 2 | 2 | |
| | D | 2 | 2.5 | 2 | 16 | 2 | |
| | Т | 10 | 16 | 10 | 6 | 6 | |
| 2.0 | С | 10 | 14 | 10 | 1 | 1 | |
| | D | 1 | 1.5 | 1 | 10 | 1 | |
| | Т | 6 | 10 | 6 | 4 | 4 | |
| 2.5 | С | 6 | 9 | 6 | 0.7 | 0.7 | |
| | D | 0.7 | 1 | 0.7 | 6 | 0.7 | |
| | Т | 3.5 | 6 | 3.5 | 2.5 | 2.5 | |

For the positions marked with *, ** or *** in the drawing, the connections are marked with the letters shown in the table above, depending on the circuit function. Unused connections in circuit functions A or B will be closed off with a blanking plug or cap nut.

| Circuit function | Connection Type | | | | | | |
|---------------------|-----------------|-----------|---|--|--|--|--|
| | * ** *** | | | | | | |
| А | Р | blank off | А | | | | |
| В | blank off | В | Р | | | | |
| С | Р | R | А | | | | |
| D | R | Р | В | | | | |
| Т | Р | R | A | | | | |

Materials





Ordering chart for valves (other versions on request)

| Valves with threaded p | oort | | | | | | | |
|-----------------------------------------------------|--------------|----------------------|------------------------------------------|---------------------------------------|-----------------------------|---------|----------------------------------|-------------------|
| Circuit function | Orifice [mm] | Port connection | Kv value water [m3/h] [∜] | Pressure range [bar] ²⁾ | Effective coil power [W] | on mail | . per voltage / fr 02/7 03 | equency 05/082 |
| Brass body | | | | | | | | |
| without manual override | | | | | | | | |
| C 3/2-way valve NC | 1.5 | G 1/8 | 0.07 | 0 - 16 | 8 | 125 329 | 125 331 | 125 332 |
| 2(A) | 2.0 | G 1/8 | 0.11 | 0 - 10 | 8 | 125 333 | 125 334 | 125 336 |
| | | G 1/4 | 0.11 | 0 - 10 | 8 | 125 348 | 126 138 | 126 140 |
| 1(P)3(R) | 2.5 | G [mm] 1/8 | 0.16 | 0 - 6 | 8 | 125 341 | 125 340 | 125 342 |
| | | G 1/4 | 0.16 | 0 - 6 | 8 | 126 142 | 126 143 | 126 145 |
| D 3/2 way valve, NO | 1.5 | G 1/8 | 0.07 | 0 - 16 | 8 | 126 195 | 126 196 | 125 355 |
| 2(B) | 2.0 | G 1/8 | 0.11 | 0 - 10 | 8 | 125 357 | 125 358 | 125 360 |
| | | G 1/4 | 0.11 | 0 - 10 | 8 | 126 198 | 126 199 | 126 201 |
| 1(P)3(R) | 2.5 | G 1/8 | 0.16 | 0 - 6 | 8 | 125 363 | 126 202 | 126 204 |
| | | G 1/4 | 0.16 | 0 - 6 | 8 | 126 205 | 126 206 | 126 208 |
| T 3/2-way Universal valve A(2) $1(P)(R)_3$ | 1.5 | G 1/8 | 0.07 | 0 - 7 | 8 | 126 150 | 126 151 | 126 153 |
| with manual override | | | | | | | | |
| C 3/2-way valve NC | 2.0 | G 1/8 | 0.11 | 0 - 10 | 8 | 125 337 | 125 338 | 125 339 |
| 2(A) 1(P)3(R) | | G 1/4 | 0.11 | 0 - 10 | 8 | 125 349 | 126 147 | 126 149 |
| D 3/2 way valve, NO | 2.0 | G 1/8 | 0.11 | 0 - 10 | 8 | 126 209 | 125 361 | 126 211 |
| 2(B) 1(P)3(R) | | G 1/4 | 0.11 | 0 - 10 | 8 | 126 212 | 126 213 | 126 215 |
| Stainless steel body | | | | | | | | |
| C 3/2-way valve NC | 1.5 | G 1/8 | 0.07 | 0 - 16 | 8 | 126 216 | 126 217 | 126 219 |
| | 2.0 | G 1/8 | 0.11 | 0 - 10 | 8 | 126 220 | 126 221 | 126 223 |
| 1(P)3(R) | 2.0 | G 1/4 | 0.11 | 0 - 10 | 8 | 126 224 | 126 225 | 126 227 |
| T 3/2-way, universal valve | 1.5 | G 1/8 | 0.07 | 0 - 7 | 8 | 126 228 | 126 229 | 126 231 |
| | | | | | | | | |

 $^{\rm 1)}$ Measured at +20 °C, 1 $bar^{\rm 2)}$ pressure difference $^{\rm 2)}$ Measured as overpressure to the atmospheric pressure

Please note that the cable plug has to be ordered separately, see accessories on page 6 and separate datasheet for Type 2508.



Ordering chart for valves (other versions on request)

Valves with sub-base body without cable plug

| | Ē | | I r] ²⁾ | r | Item no. per voltage / frequency | | | |
|-------------------------|----------------------|-------------------------------------------|--------------------------------------|--------------------------------|----------------------------------|---------|---------|--|
| Circuit function | Orifice [mm] | Kv value water [m3/h] ¹⁾ | Pressure range [bar] ² | Effective coil power [W] | 024/DC | 024/50 | 230/50 | |
| Brass body | | | | | | | | |
| without manual override | | | | | | | | |
| C 3/2-way valve NC | 1.5 | 0.07 | 0 - 16 | 8 | 126 154 | 126 155 | 125 366 | |
| | 2.0 | 0.11 | 0 - 10 | 8 | 125 367 | 125 368 | 125 370 | |
| D 3/2 way valve, NO | 2.0 | 0.11 | 0 - 10 | 8 | 126 161 | 126 162 | 125 383 | |
| with manual override | | | | | | | | |
| C 3/2-way valve NC | 1.5 | 0.07 | 0 - 10 | 5 | 126 403 | 126 404 | 126 406 | |
| 2(A) | 1.5 | 0.07 | 0 - 16 | 8 | 126 157 | 126 158 | 126 160 | |
| | 2.0 | 0.11 | 0 - 6 | 5 | 126 407 | 126 408 | 126 410 | |
| 1(P)3(R) | 2.0 | 0.11 | 0 - 10 | 8 | 125 371 | 125 372 | 125 374 | |
| Polyamide body material | | | | | | | | |
| without manual override | | | | | | | | |
| C 3/2-way valve NC | 1.5 | 0.07 | 0 - 10 | 5 | 126 390 | 126 391 | 126 393 | |
| with manual override | with manual override | | | | | | | |
| C 3/2-way valve NC | 1.5 | 0.07 | 0 - 10 | 5 | 126 396 | 126 397 | 126 399 | |

¹⁾ Measured at +20 °C, 1 bar ²⁾ pressure difference

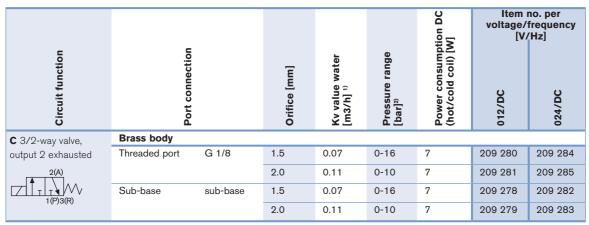
²⁾ Measured as overpressure to the atmospheric pressure

Please note that the cable plug has to be ordered separately, see accessories on page 6 and separate datasheet for Type 2508.



Ordering chart for valves, impulse version (other versions on request)

All valves with AC10-coil (32 mm), impulse Version, seal material FKM, thermic insulation class H (epoxy coil), medium temperature -10° up to +120°C, without manual override and Cable Plug



¹⁾ Measured at +20 °C, 1 bar²⁾ pressure difference

²⁾ Measured as overpressure to the atmospheric pressure

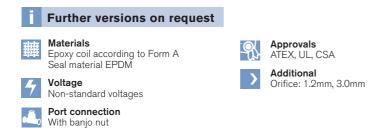
Please note that the cable plug has to be ordered separately, see accessories on page 6 and separate datasheet for Type 2508.

Activation of the impulse version with inverse polarity operation

| The polarity is labelled on the valve | Specifications | Terminal connections |
|---------------------------------------|-------------------------------|-----------------------------------------------------|
| - switch ON + | valve (P-seat) will be opened | (+) on terminal 2 and (-) on terminal 1 (see below) |
| + switch OFF - | valve (P-seat) will be closes | (+) on terminal 1 and (-) on terminal 2 (see below) |



Note: Only cable plug without circuitry should be used together with impulse version!





Ordering chart for accessory

Cable plug Type 2508 according to DIN EN 175301-803 Form A

| Circuitry | Voltage/ Frequency | Item no. | | | |
|------------------------------------------|-----------------------|------------|--|--|--|
| None (standard) | 0 - 250 V AC/DC | 008 376 | | | |
| with LED | 12 - 24 V AC/DC | 008 360 | | | |
| with LED and varistor | 12 - 24 V AC/DC | 008 367 | | | |
| with LED and varistor | 200- 240V | 008 369 | | | |
| with inverter 1) | 24V DC | on request | | | |
| further versions see datasheet Type 2508 | | | | | |



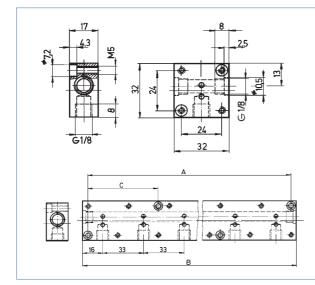
The delivery of a cable plug includes the flat seal and the fixing screw. For other cable plug versions acc. to DIN EN 175301-803 Form A (previously DIN 43650), see separate datasheet Type 2508. Click on the box "More info." and you will come to our website for this product where you can download the datasheet.

¹ The inverter plug includes an electronic which is specially adapted for an electrical control with 3 wires Input 3 wire technology, common "-" polarity, two split "+" polarity. Output suitable for impulse model for Type 6013/6014

Ordering chart for Manifolds

| Accessory parts | Features | | | | Item no. |
|--------------------|--------------------------------|------------------------------|------------------------------|---------------------|----------|
| Single manifold | in aluminium black anodized | | | | 005 020 |
| Multiple manifold | in aluminium | Hole spacing A [mm] | Total length B [mm] | Hole spacing C [mm] | |
| | 2 valves | 57 | 65 | - | 005 023 |
| | 3 valves | 90 | 98 | - | 005 286 |
| | 4 valves | 123 | 131 | - | 005 287 |
| | 5 valves | 156 | 164 | 57 | 005 035 |
| | 6 valves | 189 | 197 | 57 | 005 038 |
| | 8 valves | 255 | 263 | 90 | 005 386 |
| | 10 valves | 321 | 329 | 90 | 005 764 |
| Covering plate | N | with plugs and O-ring, for c | closing off unused valve pos | itions | 005 630 |

Manifolds in Brass or stainless steel on request



Manifold mounting

With manifold mounting, please comply with the permissible duty cycle (5 W models with 100% continuous rating or 8 W model with 60% duty cycle). The pressure port for the manifold is designated with P (R), and the outlet port with A (B). Only connect together ports with the same designation.

2/2-way valves of Type 6013 can be operated together on a manifold with 3/2-way valves of Type 6014, circuit function C (not D or TI) if the operating pressures agree according to the rating plates. The manifolds can also be expanded if the valve functions are taken into consideration.

Caution! Unused, open valve ports must be closed off with covering plates (see ordering chart above).



6014

Dimensions [mm]

