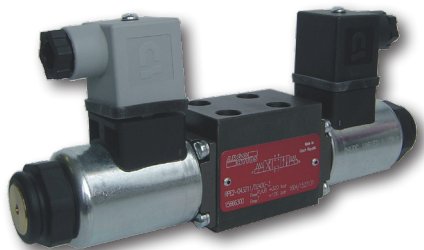


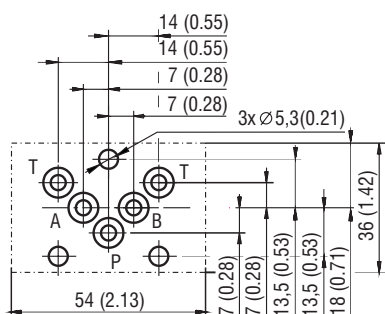
4/2 and 4/3 Directional Control Valve, Solenoid Operated

RPE2-04

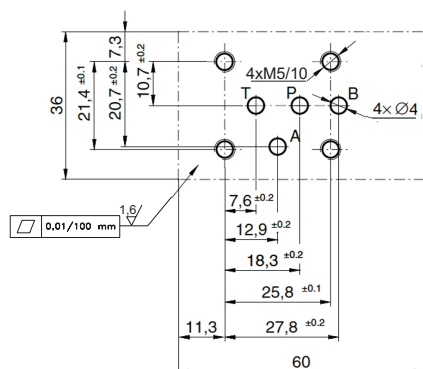
Size 04 (D02) • Q_{max} 20 l/min (5 GPM) • p_{max} 320 bar (4600 PSI)



2 - (former CETOP-RP 121H)



3 - ISO 4401-AA-02-4-A (DIN 24340-A4)



Technical Features

- Direct acting, directional control valve with subplate mounting surface acc. to (CETOP-RP 121H) and ISO 4401-AA-02-4-A (DIN 24340-A4)
- High transmitted hydraulic power up to 320 bar with optimized design to minimize the flow pressure drop
- Three chamber housing design for production cost saving
- The valve is available with interchangeable DC solenoids, also with AC power supply, using a built-in rectifier bridge
- Solenoid electrical terminal option acc. to EN 175301-803-A
- Wide range of interchangeable spools available
- The coil is fastened to the core tube with a retaining nut, and can be rotated by 360°, to suit the available space.
- In the standard version, the valve housing is phosphated and steel parts zinc-coated for 240 h salt spray protection acc. to ISO 9227
- Enhanced surface protection for mobile sector available (ISO 9227, 520 h salt spray)

Technical Data

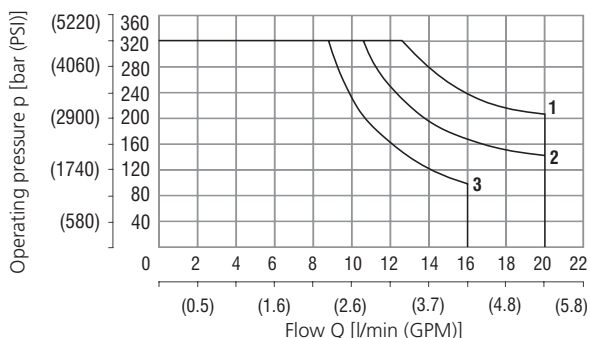
| Valve size | | 04 (D02) | |
|--|--|---------------------------------------|---|
| Max. flow | | 20 (5.3) | |
| Max. operating pressure at port P, A, B | | bar (PSI) 320 (4600) | |
| Max. operating pressure at port T | | bar (PSI) 100 (1450) | |
| Fluid temperature range (NBR) | | °C (°F) -30 ... +80 (-22 ... +176) | |
| Fluid temperature range (FPM) | | °C (°F) -20 ... +80 (-4 ... +176) | |
| Ambient temperature range | | °C (°F) -30 ... +50 (-22 ... +122) | |
| Supply voltage tolerance | | % | AC: ±10 DC: ±10 |
| Max. switching frequency | | 1/h | 15 000 |
| Switching time at $v=32 \text{ mm}^2/\text{s}$ (156 SUS) | | ON | ms 30 ... 50 |
| | | OFF | ms AC: 70 ... 100 DC: 30 ... 50 |
| Mass | | kg (lbs) | 1.1 (2.43) 1.5 (3.31) |
| | | | - valve with 1 solenoid - valve with 2 solenoids |

| | Datasheet | Type |
|-------------------------|-----------------|---|
| General information | GI_0060 | Products and operating conditions |
| Coil types / connectors | C_8007 / K_8008 | C19B* / K* |
| Mounting interface | SMT_0019 | 2 - (Former CETOP-RP 121H) / 3 - ISO 4401-AA-02-4-A (DIN 24340-A4) |
| Spare parts | SP_8010 | |

Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Operating limits

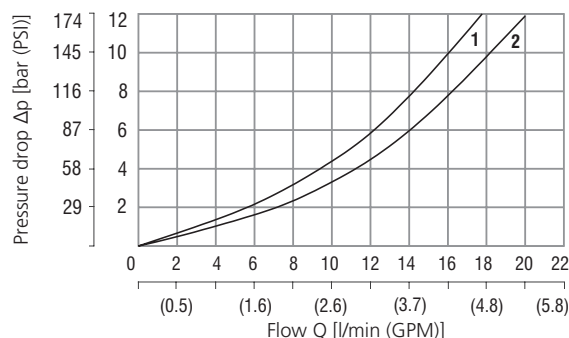
Operating limits for maximum hydraulic power at rated temperature and supply voltage equal to 90% nominal.



| Spool symbol | |
|--------------|--|
| 1 | R11, R21, X11, J75 |
| 2 | Z11, Z51, H11, P11, P51, Y11, Y51, B11 |
| 3 | C11, C51, L21, A51, Z71, Z81, J15 |

For operating limits under conditions and flow directions other than shown contact our technical support.

Pressure drop related to flow rate



| For all Functional Symbols | |
|----------------------------|---|
| P → T | 1 |
| P → A | 2 |
| P → B | 2 |
| A → T | 2 |
| B → T | 2 |

Ordering Code

| | | | |
|---|--|---|---|
| RPE2-04 [] [] / [] [] [] [] - [] [] | | | |
| 4/2 and 4/3 directional control valve, solenoid operated | | | |
| Valve size | | | |
| Number of valve positions | two positions three positions | 2 3 | |
| Spool symbols | see the table "Spool Symbols" | | |
| Rated supply voltage of solenoids (at the coil terminal) | 12 V DC / 2.45 A 24 V DC / 1.15 A 27 V DC / 0.89 A 115 V DC / 0.24 A / 50 (60) Hz 230 V AC / 0.12 A / 50 (60) Hz | 01200 02400 02700 11550 23050 | |
| | | | E1 E2 |
| | | | No designation |
| | | | Surface treatment housing phosphated, steel parts zinc-coated (ZnCr-3), ISO 9227 (240 h) zinc-coated (ZnCr-3), ISO 9227 (240 h) zinc-coated (ZnNi), ISO 9227 (520 h) |
| | | | Mounting surface 2 acc. to former CETOP-RP 121H 3 acc. to former ISO 4401-AA-02-4-A (DIN 24340-A4) |
| | | | Seals NBR |
| | | | Manual override standard |
| | | | Connector EN 175301-803-A E1 with quenching diode |

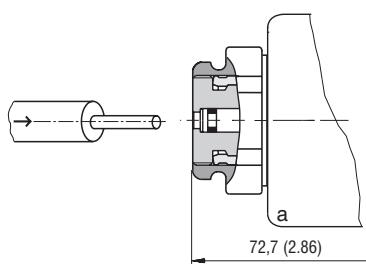
- For directional valves with two solenoids, one solenoid must be de-energized before the other solenoid can be charged.
- If the pressure exceeds 100 bar with spool types A51 or J75, port T should be connected directly to the tank.
- For other solenoid voltage supply options see data sheet C_8007.
- The solenoid operated valves are delivered without connectors. For available connectors see data sheet K_8008.
- The orifice to the P port can be ordered separately, see data sheet SP_8010.
- Mounting bolts M5 x 35 DIN 912-10.9 or studs must be ordered separately. Tightening torque is 5 Nm (3.7 lbf.ft).
- Besides the commonly used valve versions shown other special models are available. Contact our technical support for their identification, feasibility and operating limits.

Spool Symbols

| Type | Symbol | Interposition | Type | Symbol | Interposition | Type | Symbol | Interposition |
|------|--------|---------------|------|--------|---------------|------|--------|---------------|
| Z11 | | | R11 | | | C51 | | |
| C11 | | | A51 | | | R21 | | |
| H11 | | | P51 | | | X11 | | |
| P11 | | | Y51 | | | Z11 | | |
| Y11 | | | Z51 | | | C11 | | |
| L21 | | | Z71 | | | J15 | | |
| B11 | | | Z81 | | | J75 | | |

Manual Override in millimeters (inches)

No designation - standard



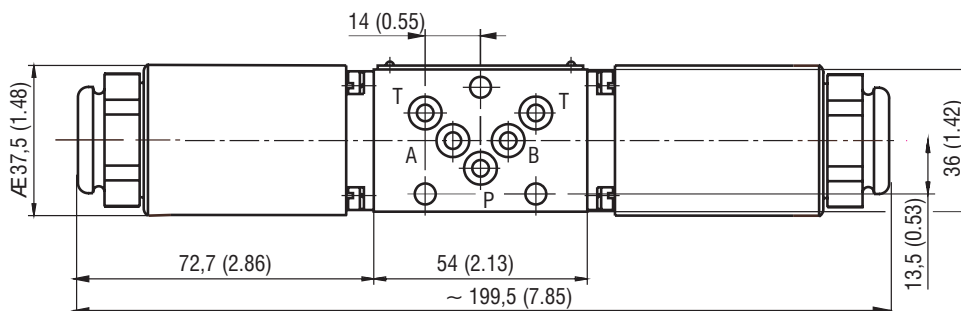
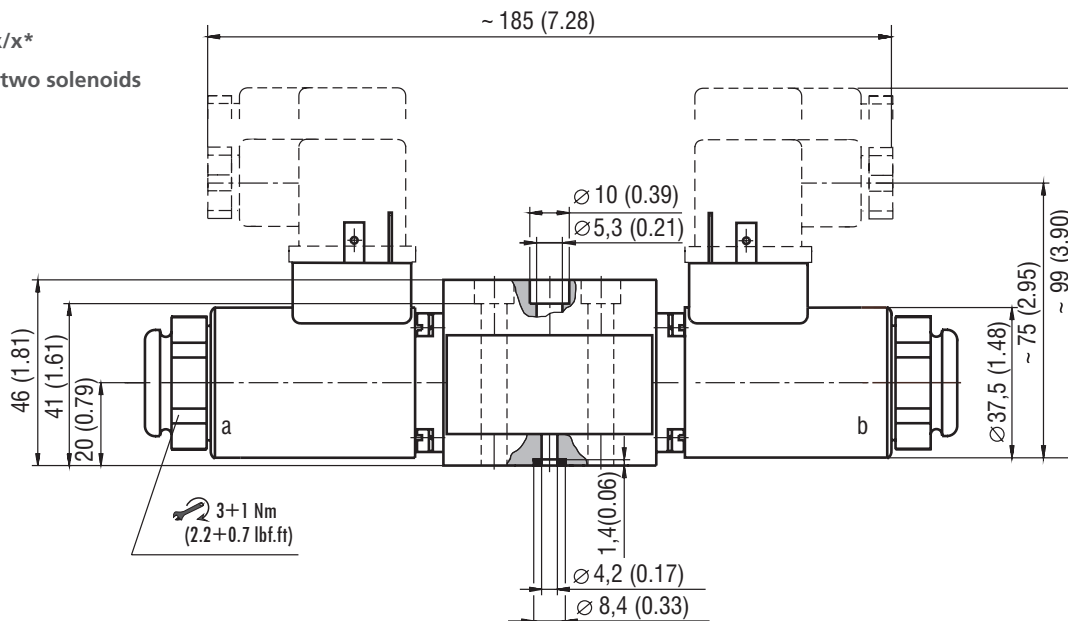
In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

Dimensions in millimeters (inches)

Installation dimensions 2 (former Norm CETOP-RP 121H)

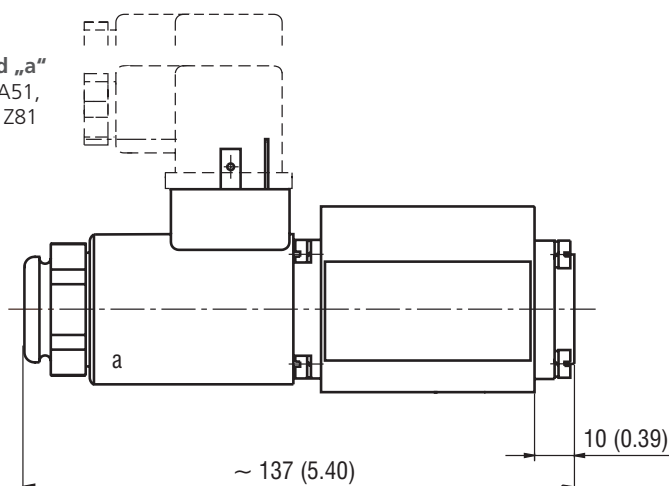
RPE2-043xx/x*

Valve with two solenoids



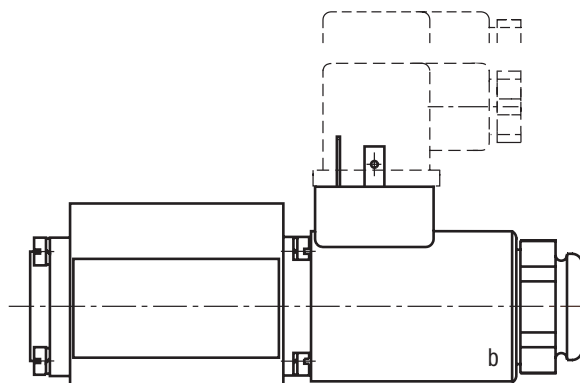
RPE2-042xx/x*

Valve with one solenoid „a“
Spool symbols R11, R21, A51,
P51, Y51, Z51, C51, Z71, Z81



RPE2-042xx/x*

Valve with one solenoid „b“
Spool symbols X11, Z11, C11

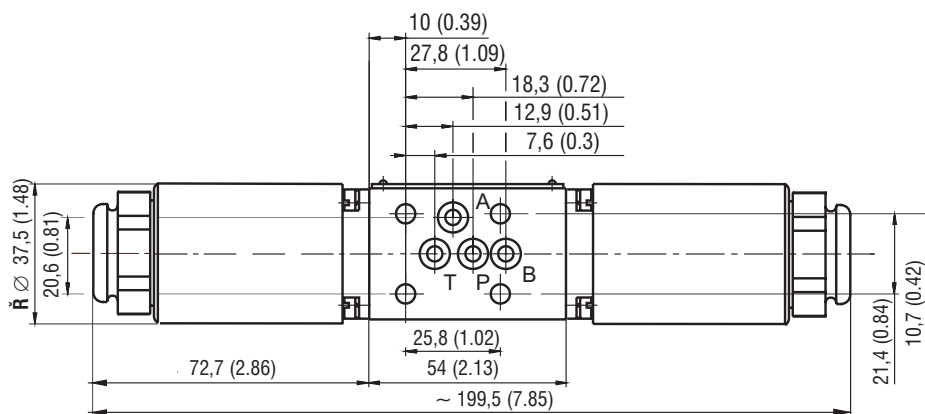
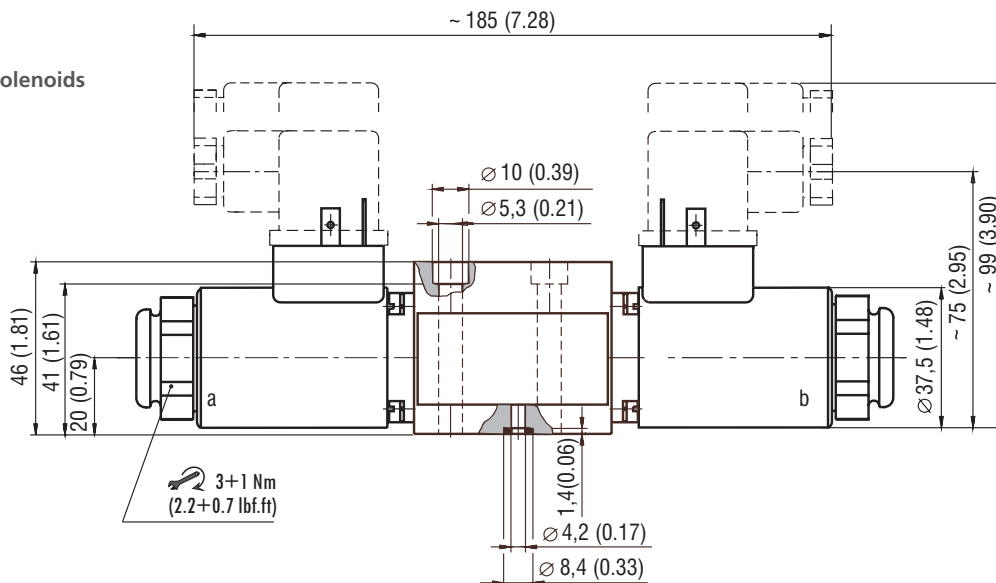


Dimensions in millimeters (inches)

Installation dimensions 3 (former Norm to DIN 24340-A4)

RPE2-043xx/x*

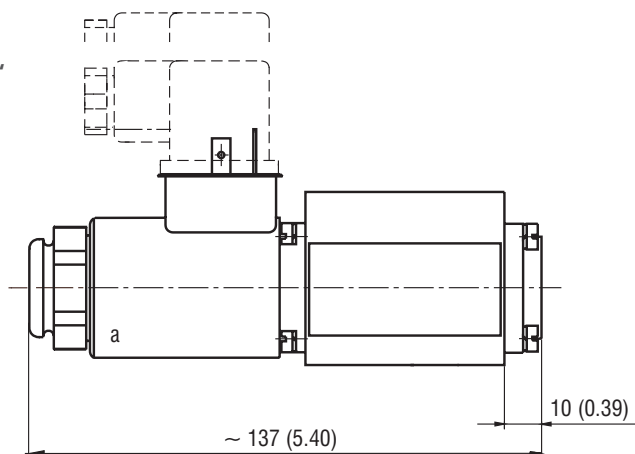
Valve with two solenoids



RPE2-042xx/x*

Valve with one solenoid „a“

Spool symbols R11, R21, A51,
P51, Y51, Z51, C51, Z71, Z81



RPE2-042xx/x*

Valve with one solenoid „b“

Spool symbols X11, Z11, C11

