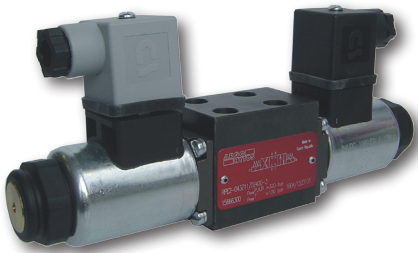


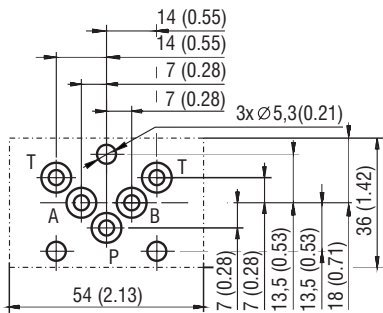
4/2 and 4/3 Directional Control Valve, Solenoid Operated

**RPE2-04**

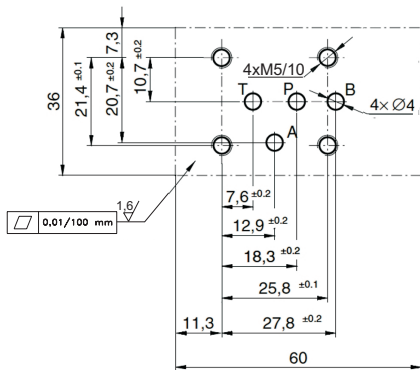
Size 04 (D02) •  $Q_{max}$  20 l/min (5 GPM) •  $p_{max}$  320 bar (4600 PSI)



**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**

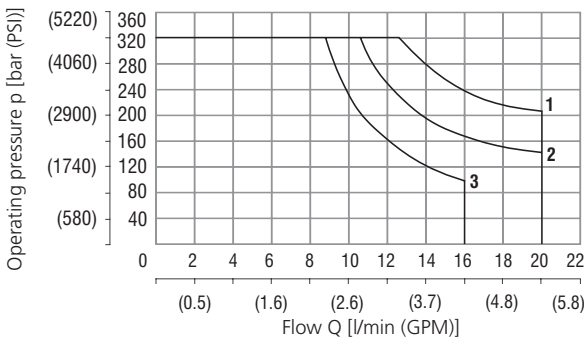
Valve size	04 (D02)	
Max. flow	20 (5.3)	
Max. operating pressure at port P, A, B	bar (PSI) 320 (4600)	
Max. operating pressure at port T	bar (PSI) 100 (1450)	
Fluid temperature range (NBR)	°C (°F) -30 ... +80 (-22 ... +176)	
Fluid temperature range (FPM)	°C (°F) -20 ... +80 (-4 ... +176)	
Ambient temperature 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	AC: 70 ... 100 DC: 30 ... 50
Mass	- valve with 1 solenoid	kg (lbs) 1.1 (2.43)
	- valve with 2 solenoids	1.5 (3.31)

	Datasheet	Type
General information	GI_0060	Products and operating conditions
Coil types / connectors	C_8007 / K_8008	C19B* / K*
Mounting interface / tolerances	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**

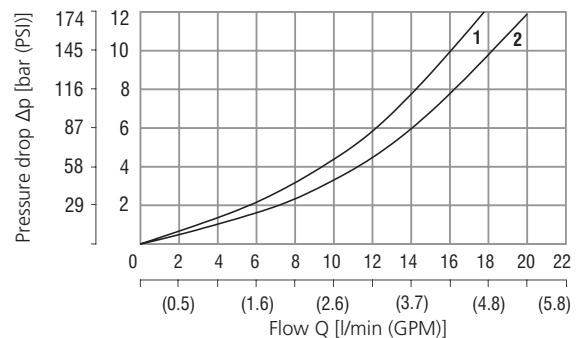
Operating limits for maximum hydraulic power at rated temperature and supply voltage equal to 90% nominal.



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

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

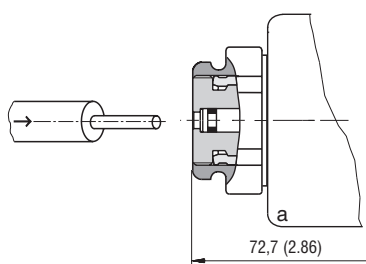
- For directional valves with two solenoids, one solenoid must be de-energized before the other solenoid can be charged.
- If the pressure exceeds 100 bar with spool types A51 or J75, port T should be connected directly to the tank.
- For other solenoid voltage supply options see data sheet C\_8007.
- 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 shown, commonly used valve versions 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



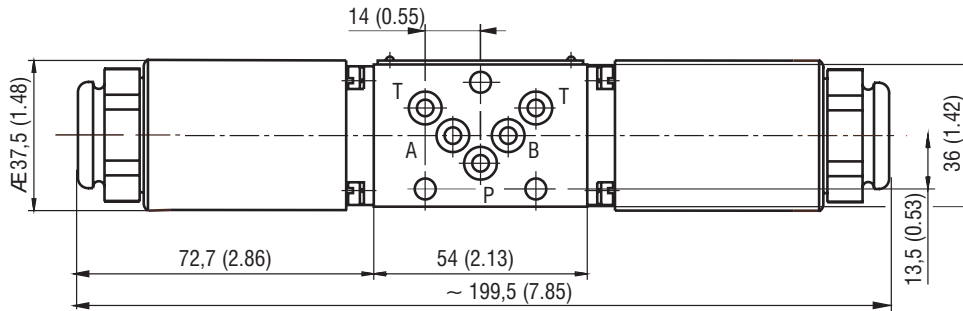
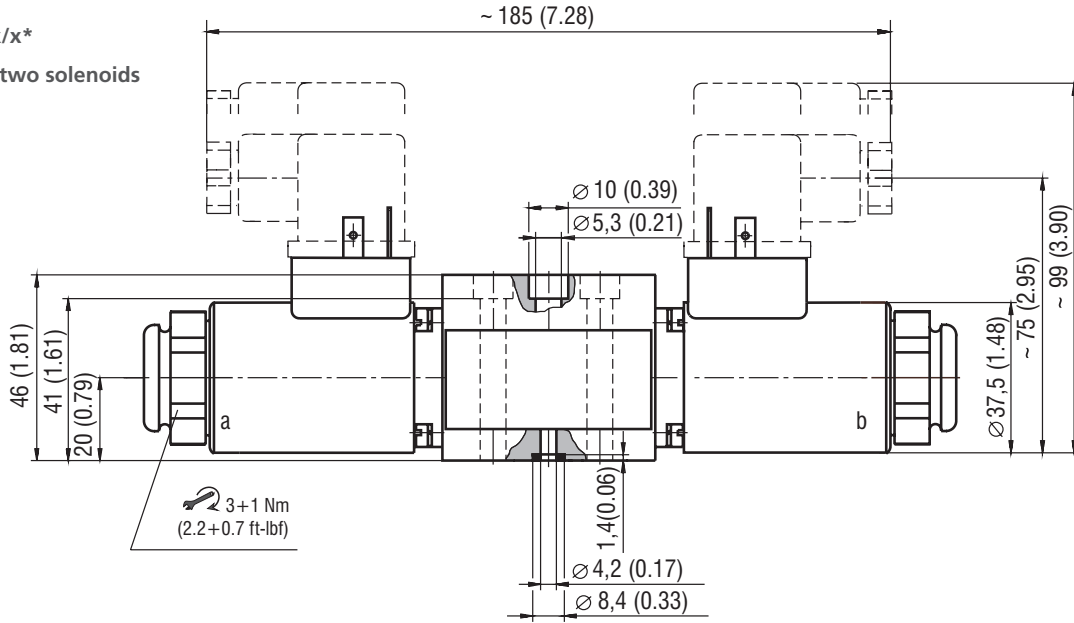
In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

**Dimensions** in millimeters (inches)

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

**RPE2-043xx/x\***

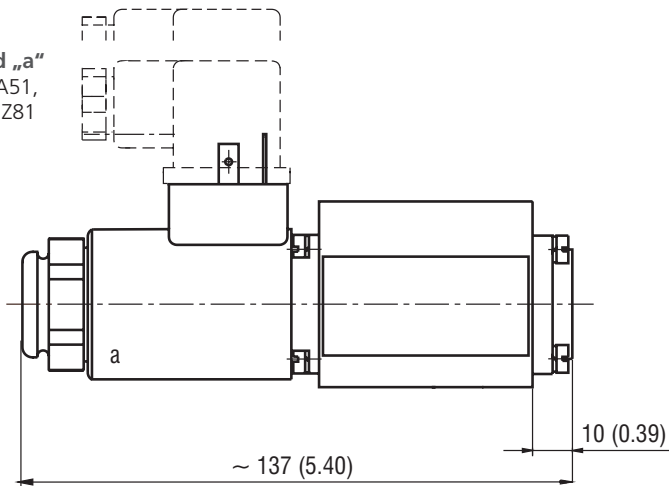
**Valve with two solenoids**



**RPE2-042xx/x\***

**Valve with one solenoid „a”**

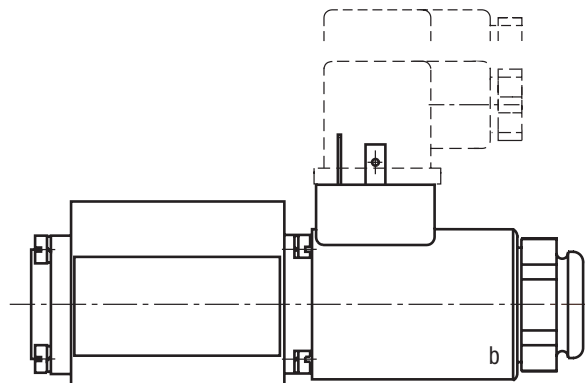
Spool symbols R11, R21, A51,  
P51, Y51, Z51, C51, Z71, Z81



**RPE2-042xx/x\***

**Valve with one solenoid „b”**

Spool symbols X11, Z11, C11

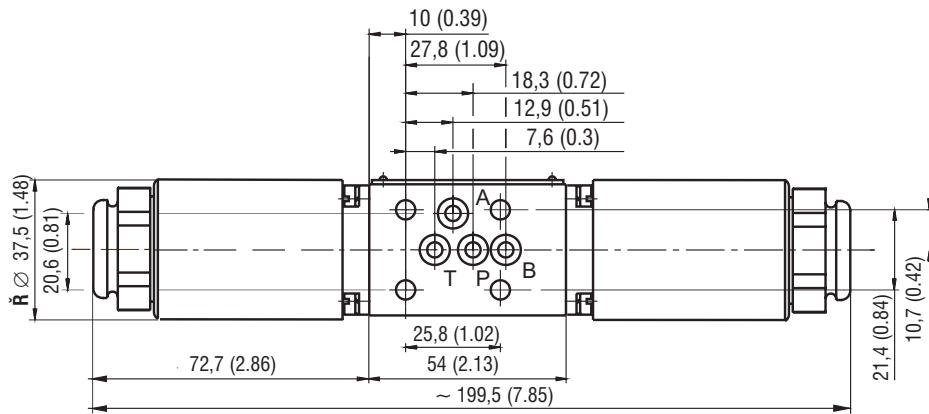
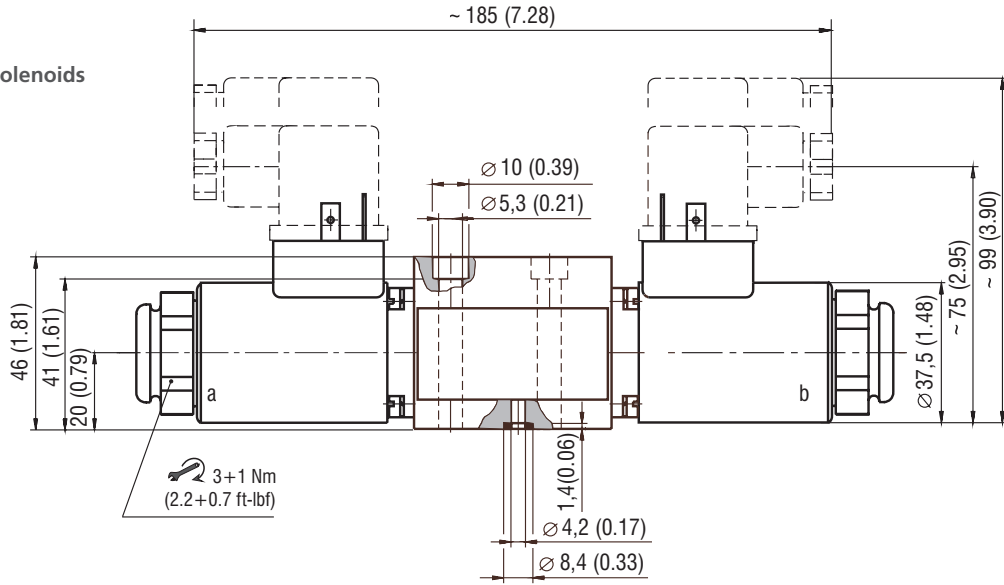


**Dimensions** in millimeters (inches)

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

**RPE2-043xx/x\***

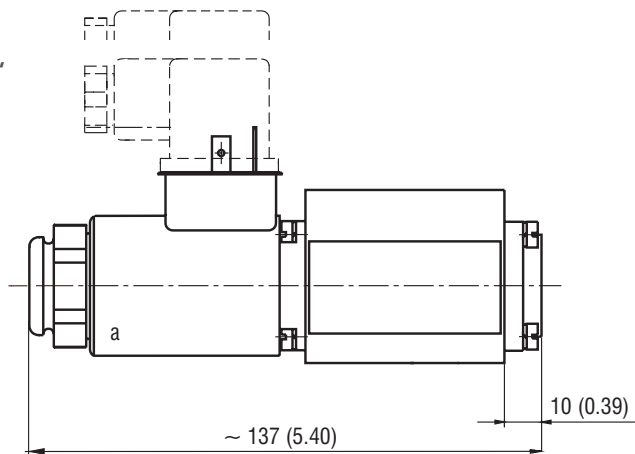
**Valve with two solenoids**



**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

