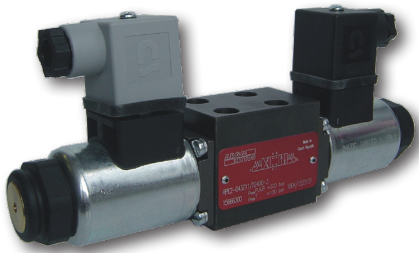


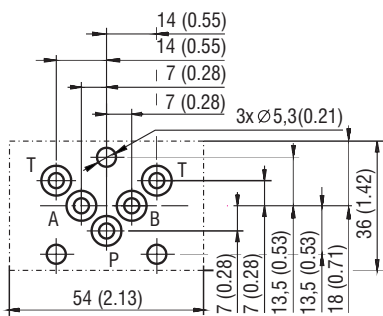
4/2 and 4/3 Directional Control Valve, Solenoid Operated

**RPE2-04**

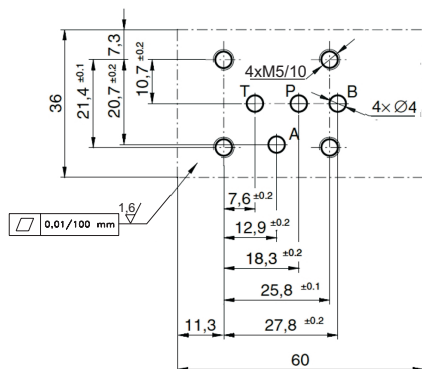
Size 04 (D02) •  $Q_{max}$  20 l/min (5 GPM) •  $p_{max}$  320 bar (4600 PSI)



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 for basic surface corrosion protection and as preparation for painting. Steel parts are zinc-coated for 240 h salt spray protection acc. to ISO 9227
- Enhanced surface protection for mobile sector available for the valve housing and steel parts (ISO 9227, 520 h salt spray)

Technical Data

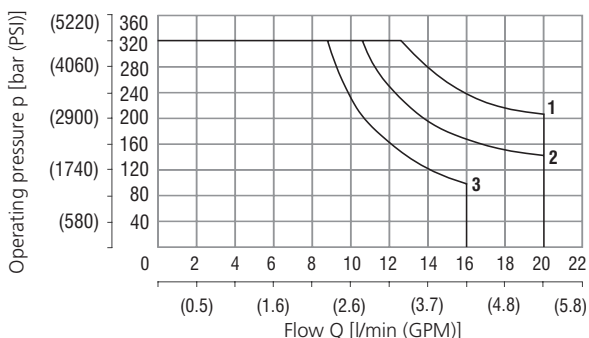
Valve size		04 (D02)	
Max. flow		20 (5.3)	
Max. operating pressure at port P, A, B	bar (PSI)	320 (4600)	
Max. operating pressure at port T	bar (PSI)	100 (1450)	
Fluid temperature range (NBR)	°C (°F)	-30 ... +80 (-22 ... +176)	
Fluid temperature range (FPM)	°C (°F)	-20 ... +80 (-4 ... +176)	
Ambient temperature 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	
	OFF	ms	
Weight	- valve with 1 solenoid	kg (lbs)	
	- valve with 2 solenoids	kg (lbs)	

	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

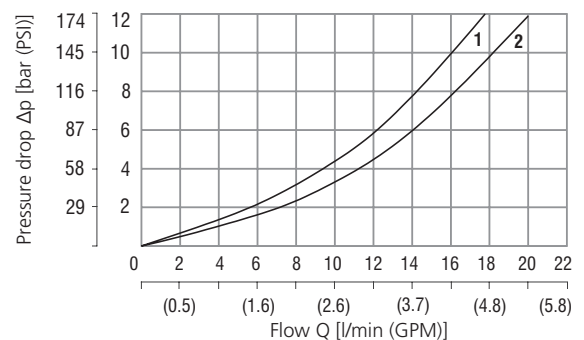
Operating limits for maximum hydraulic power at rated temperature and supply voltage equal to 90% nominal.



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**

<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 three positions	2 3	
<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 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	<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>Connector</b> EN 175301-803-A E1 with quenching diode

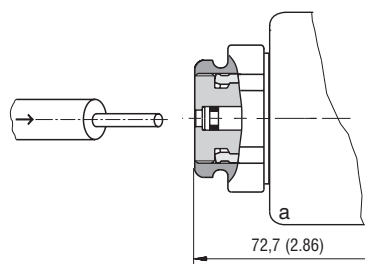
- For directional valves with two solenoids, one solenoid must be de-energized before the other solenoid can be charged.
- If the pressure exceeds 100 bar with spool types A51 or J75, port T should be connected directly to the tank.
- For other solenoid voltage supply options see datasheet C\_8007.
- The solenoid operated valves are delivered without connectors. For available connectors see datasheet K\_8008.
- The orifice to the P port can be ordered separately, see datasheet SP\_8010.
- Mounting bolts M5 x 35 DIN 912-10.9 or studs must be ordered separately. Tightening torque is 5+1 Nm (3.7+0.7 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



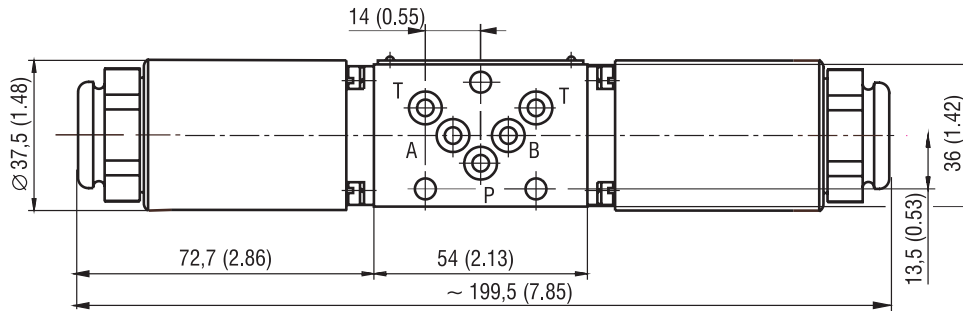
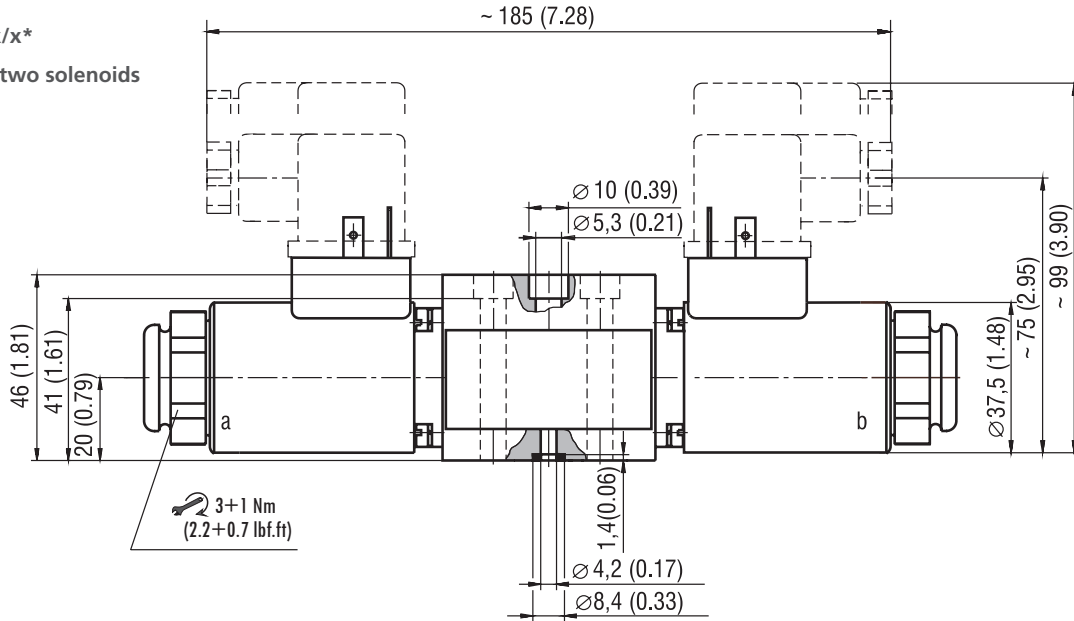
In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

Dimensions in millimeters (inches)

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

RPE2-043xx/x\*

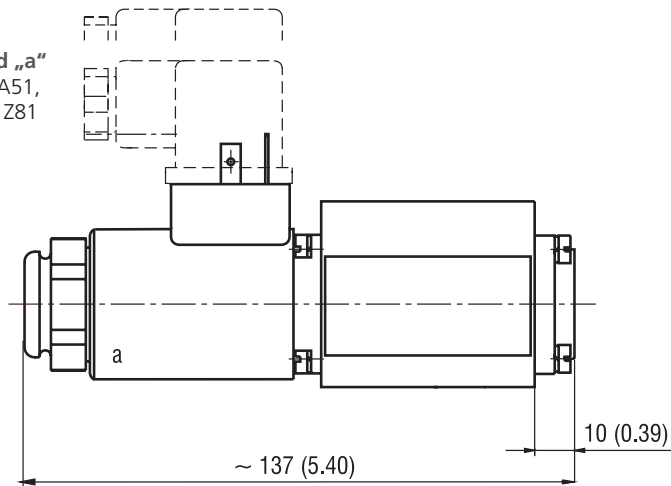
Valve with two solenoids



RPE2-042xx/x\*

Valve with one solenoid „a“

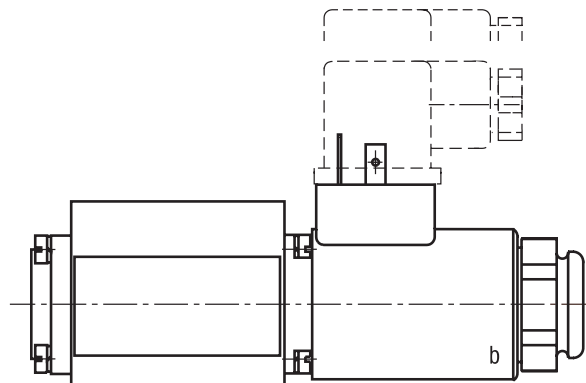
Spool symbols R11, R21, A51,  
P51, Y51, Z51, C51, Z71, Z81



RPE2-042xx/x\*

Valve with one solenoid „b“

Spool symbols X11, Z11, C11

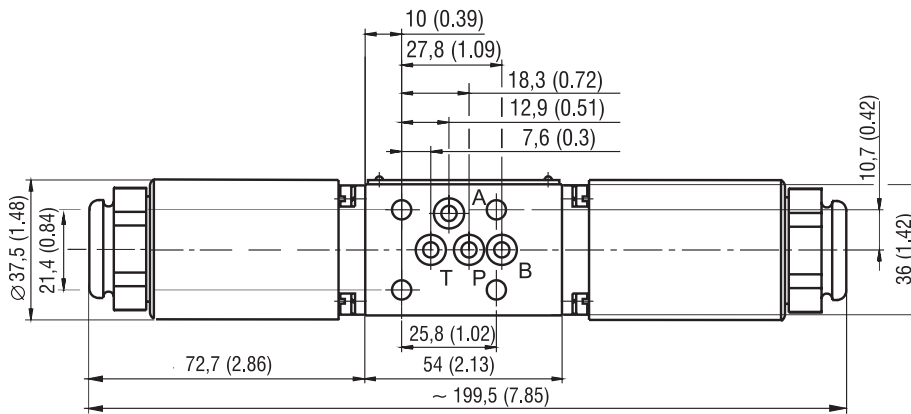
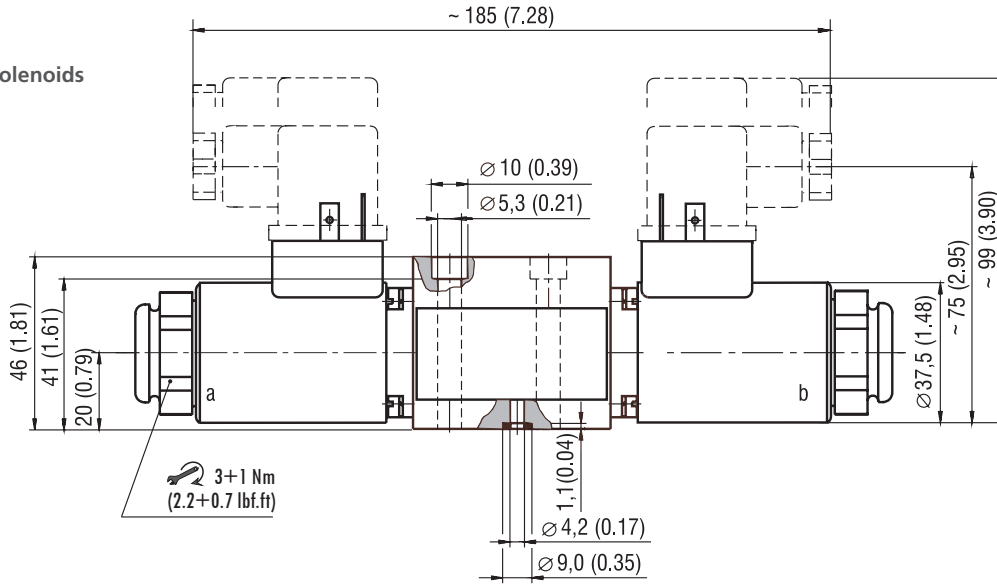


Dimensions in millimeters (inches)

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

RPE2-043xx/x\*

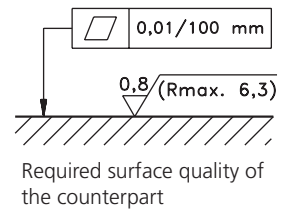
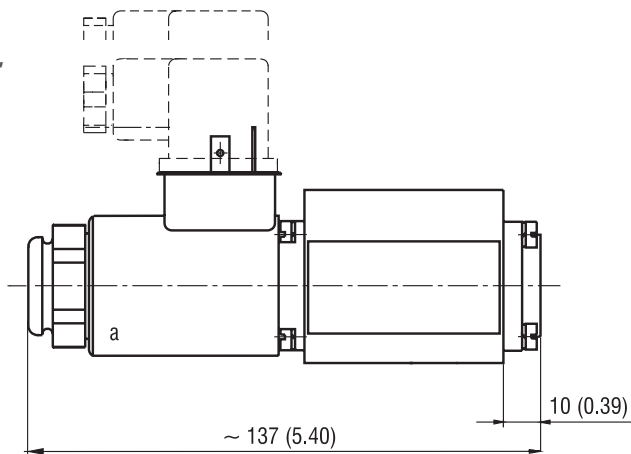
Valve with two solenoids



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

