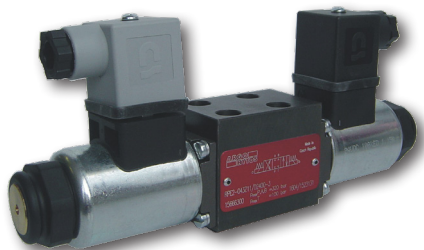


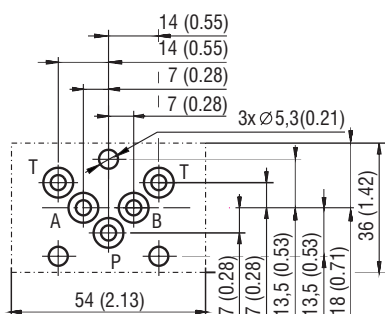
4/2 and 4/3 Directional Control Valve, Solenoid Operated

RPE2-04

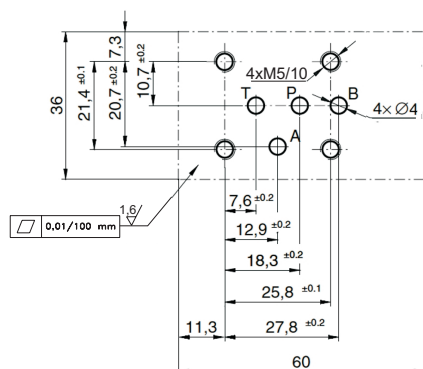
Size 04 (D02) • Q_{max} 20 l/min (5 GPM) • p_{max} 320 bar (4600 PSI)



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

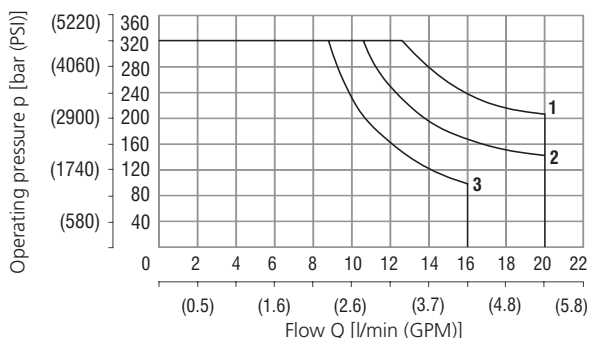
Valve size		04 (D02)	
Max. flow		20 (5.3)	
Max. operating pressure at port P, A, B	bar (PSI)	320 (4600)	
Max. operating pressure at port T	bar (PSI)	100 (1450)	
Fluid temperature range (NBR)	°C (°F)	-30 ... +80 (-22 ... +176)	
Fluid temperature range (FPM)	°C (°F)	-20 ... +80 (-4 ... +176)	
Ambient temperature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

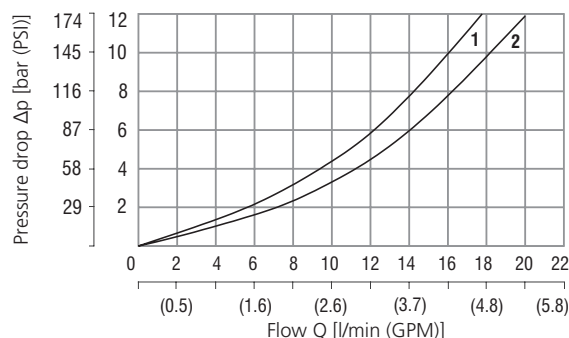
Operating limits for maximum hydraulic power at rated temperature and supply voltage equal to 90% nominal.



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

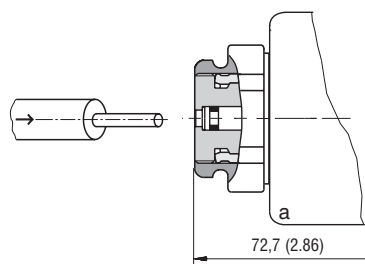
- For directional valves with two solenoids, one solenoid must be de-energized before the other solenoid can be charged.
- If the pressure exceeds 100 bar with spool types A51 or J75, port T should be connected directly to the tank.
- For other solenoid voltage supply options see data sheet C_8007.
- 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+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



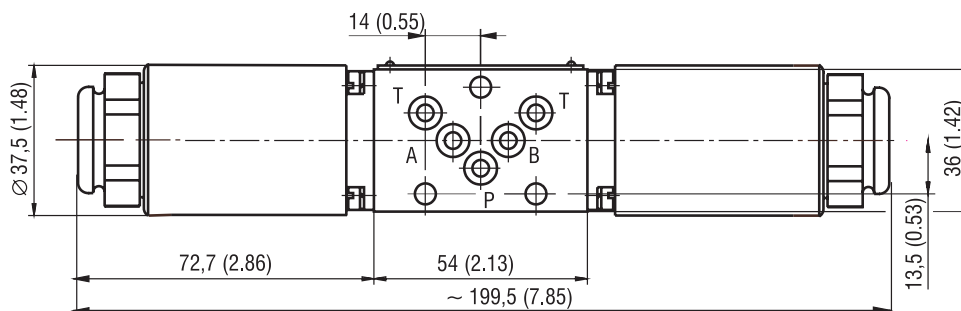
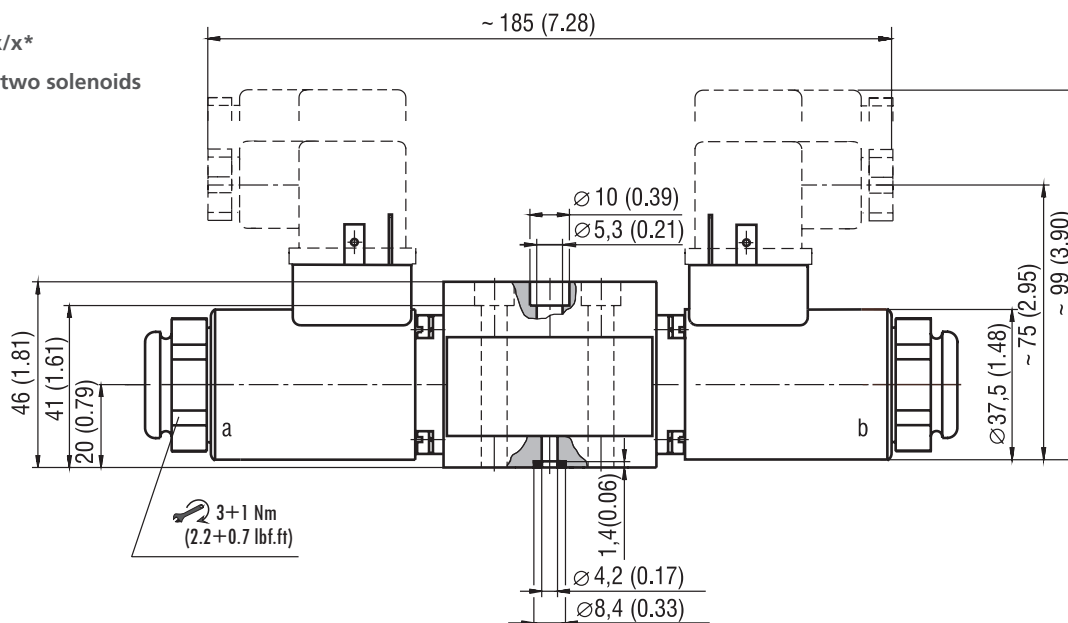
In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

Dimensions in millimeters (inches)

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

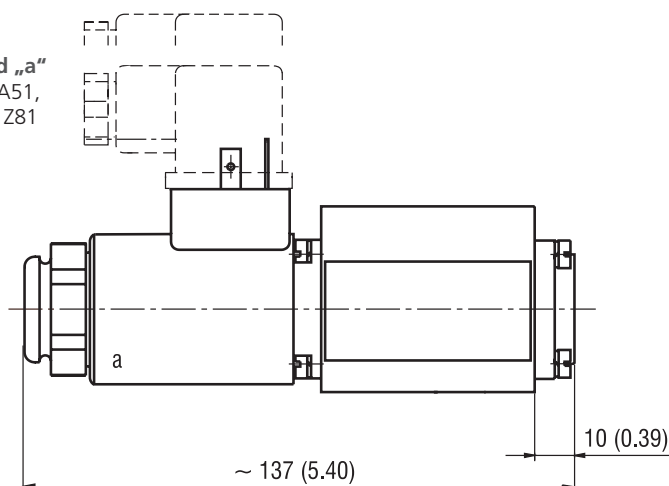
RPE2-043xx/x*

Valve with two solenoids



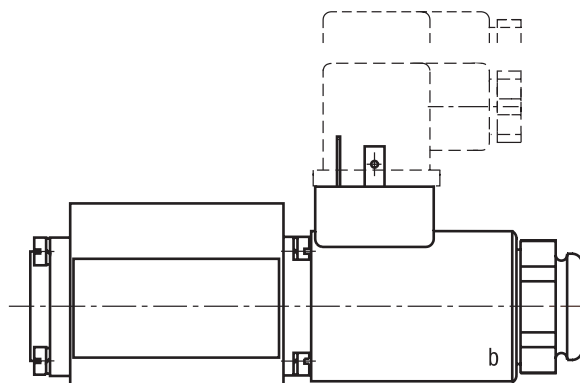
RPE2-042xx/x*

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



RPE2-042xx/x*

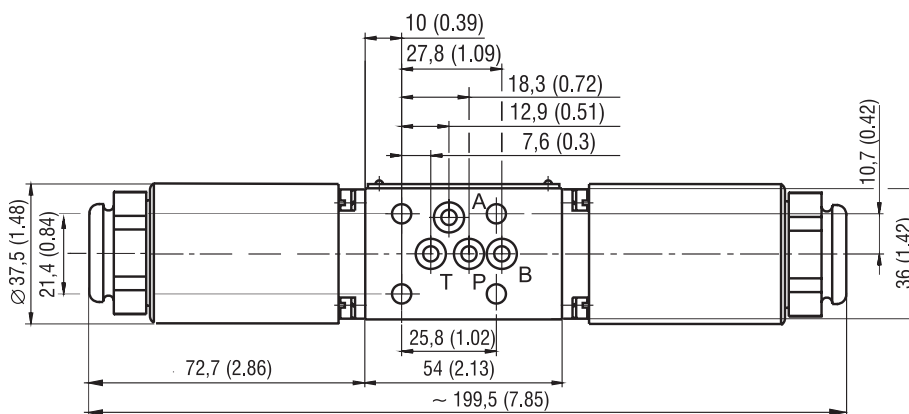
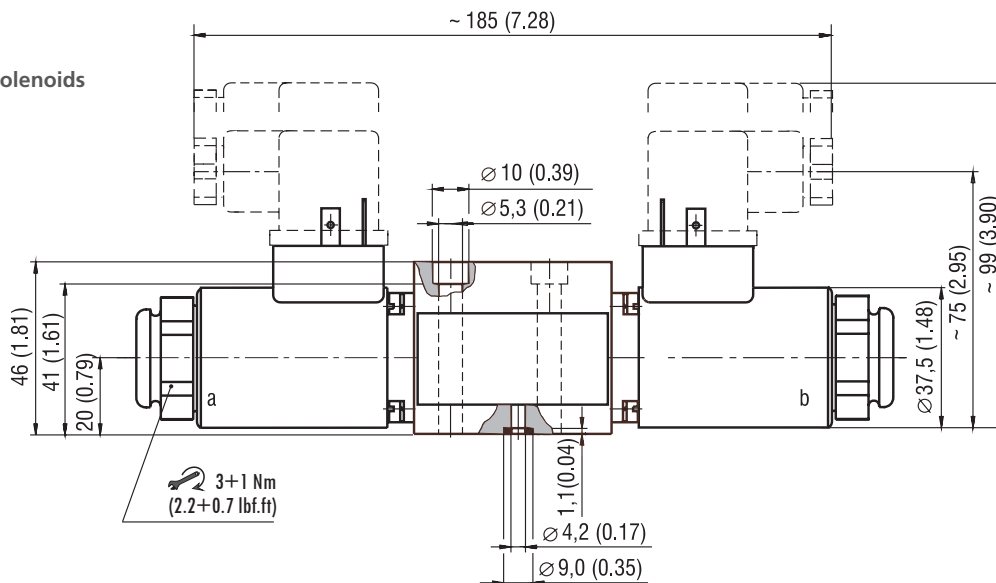
Valve with one solenoid „b”
Spool symbols X11, Z11, C11



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

RPE2-043xx/x*

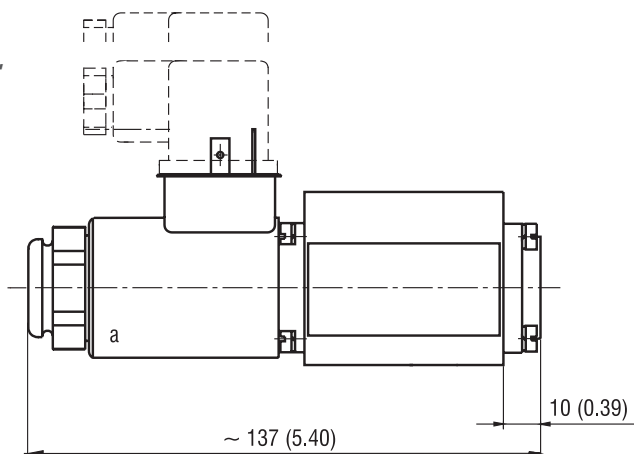
Valve with two solenoids



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

