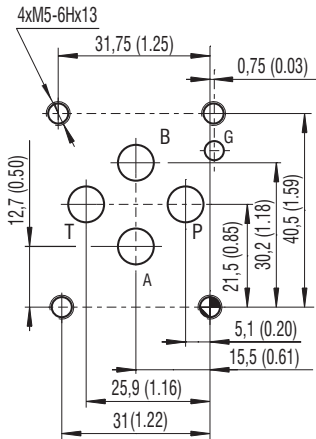


**Technical Features**

- › Direct acting directional control valve with subplate mounting interface acc. to ISO 4401, DIN 24340 (CETOP 03)
- › Compact design with reduced solenoid dimensions
- › Three chamber housing design for production cost saving
- › The valve is available with DC solenoids and wide range of electrical terminals
- › Wide range of interchangeable spools and manual overrides available
- › 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)

**ISO 4401-03-02-0-05**



Ports P, A, B, T - max Ø7.5 mm (0.29 in)

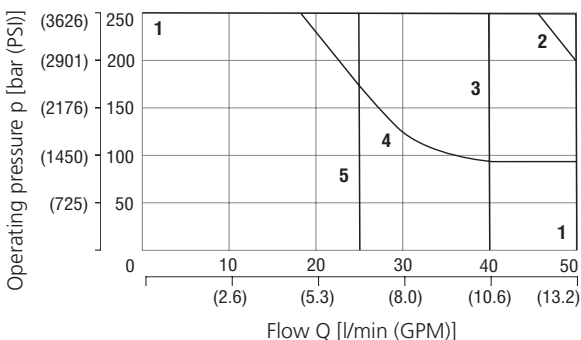
**Technical Data**

Valve size	06 (D03)		
Max. flow	l/min (GPM)	50 (13.2)	
Max. operating pressure at ports P, A, B	bar (PSI)	250 (3630)	
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	%	DC: ±10	
Max. switching frequency	1/h	10 000	
Switching time at v=32 mm <sup>2</sup> /s (156 SUS)	ON	ms	DC: 30 ... 50
	OFF	ms	DC: 30 ... 50
Weight	- valve with 1 solenoid	kg (lbs)	1.3 (2.9)
	- valve with 2 solenoids		1.6 (3.5)
		Datasheet	Type
General information		GI_0060	Products and operating conditions
Coil types / connectors		C_8007 / K_8008	C19B*/K*
Mounting interface / tolerances		SMT_0019	Size 06
Spare parts		SP_8010	
Subplates		SP_0002	DP*-06

**Characteristics** measured at v = 32 mm<sup>2</sup>/s (156 SUS)

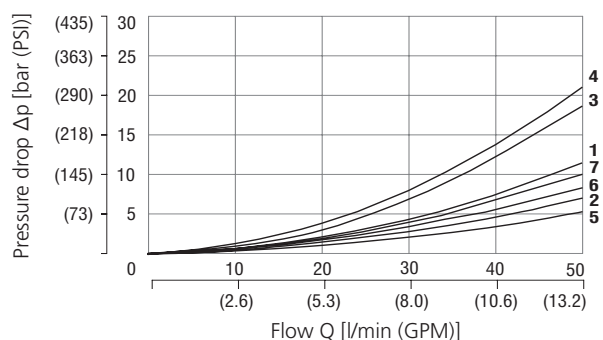
**Operating limits**

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



Spool symbol	
1	H11, H51, R11, X11
2	Z11, Z51
3	Y11, Y51
4	C11, C51
5	L21

**Pressure drop related to flow rate**



	P-A	P-B	A-T	B-T	P-T		P-A	P-B	A-T	B-T	P-T
Z11	1	1	1	1		X11	3	2	2	3	
C11	4	4	4	4	7	Z51		1	1		
H11	5	5	5	5		C51	4			4	7
Y11	6	6	5	5		H51		5	5		
L21	5	6	5	6	4	Y51		6	5		
R11	2	3	3	2							

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

**Ordering Code**
**RPEL1-06**   /     - 
**4/2 and 4/3 directional control valve, solenoid operated, Lightline**
**Valve size**
**Number of valve positions**

 two positions 2  
 three positions 3
**Spool symbols**

see the table "Spool Symbols"

**Rated supply voltage of solenoids (at the coil terminal)**

12 V DC / 2.45 A	<b>01200</b>
14 V DC / 1.70 A	<b>01400</b>
24 V DC / 1.15 A	<b>02400</b>
27 V DC / 0.89 A	<b>02700</b>
48 V DC / 0.55 A	<b>04800</b>

**Surface treatment**  
**No designation** housing phosphated, steel parts  
 zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**A** zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**B** zinc-coated (ZnNi), ISO 9227 (520 h)

**Seals**  
**No designation** NBR  
**V** FPM (Viton)

**Manual override**  
**No designation** standard  
**M2** rubber boot protected

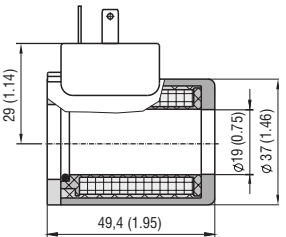
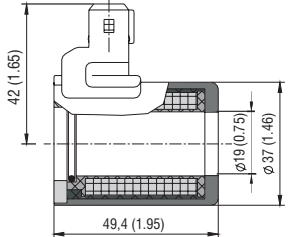
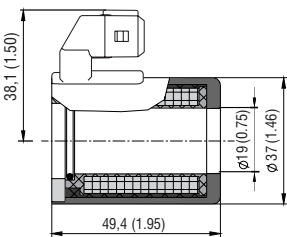
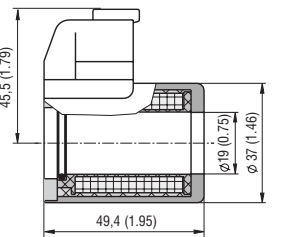
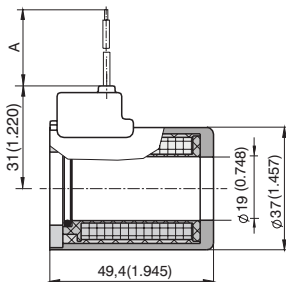
**Connector**  
**E1** EN 175301-803-A  
**E2** E1 with quenching diode  
**E3** AMP Junior Timer - radial direction  
**E4** E3 with quenching diode  
**E3A** AMP Junior Timer - axial direction (2 pins; male)  
**E4A** E3A with quenching diode  
**E8** loose conductors (two insulated wires)  
**E9** E8 with quenching diode  
**E12A** Deutsch DT04-2P - axial direction (2 pins; male)  
**E13A** E12A with quenching diode

- For directional valves with two solenoids, one solenoid must be de-energized before the other solenoid can be charged.
- For AC voltage supply use coils with connector type E5.
- 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 45 DIN 912-10.9 or studs must be ordered separately. Tightening torque is 8.9 Nm (6.56 ft-lbf).
- 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**

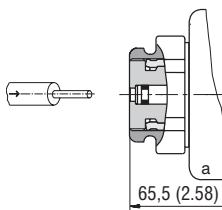
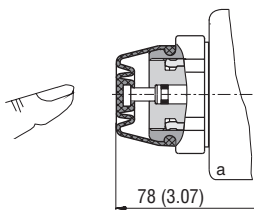
Type	Symbol	Interposition	Type	Symbol	Interposition
Z11			Z51		
C11			H51		
H11			Z11		
Y11			X11		
L21			C11		
R11			H11		
Y51			Y11		
C51					

**Solenoid Coil** in millimeters (inches)

<p>E1 - EN 175301-803-A E2 - E1 with quenching diode</p> <p>Protection degree IP65</p>	<p>E3 - AMP Junior Timer - radial direction E4 - E3 with quenching diode</p> <p>Protection degree IP67</p>	<p>E3A - AMP Junior Timer - axial direction E4A - E3A with quenching diode</p> <p>Protection degree IP67</p>	<p>E12A - Deutsch DT04-2P - axial direction E13A - E12A with quenching diode</p> <p>Protection degree IP67 / IP69K</p>
			
<p>E8 - Loose conductors (two insulated wires) E9 - (E8 with quenching diode)</p> <p>Protection degree IP65</p>			
 <p><b>Note:</b> A = Standard 300 mm (11.81 in), other lengths on demand</p>			

The indicated IP protection level is only achieved if the connector is properly mounted.

**Manual Override** in millimeters (inches)

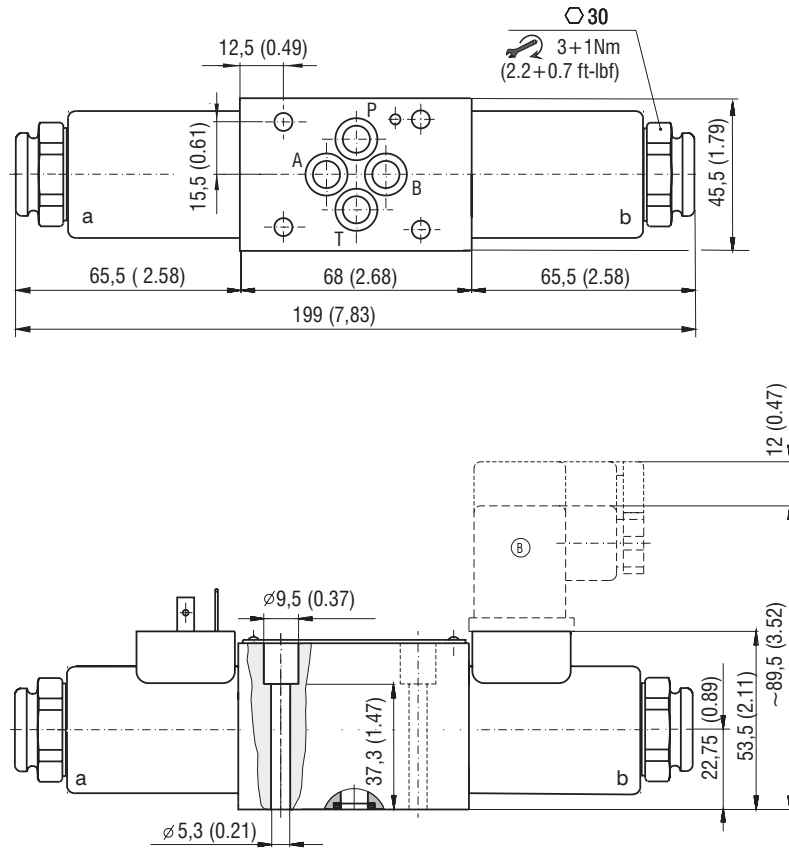
<p>No designation - standard</p>	<p>Designation M2 - rubber boot protected</p>
	

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.

Valve Dimension in millimeters (inches)

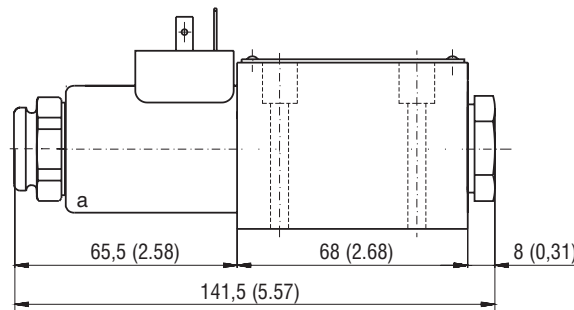
**RPEL1-063x/xE1\***

Valve with two solenoids  
Spool symbols  
Z11, C11, H11, Y11, L21



**RPEL1-062x/xE1\***

Valve with one solenoid „a“  
Spool symbols  
R11, Y51, C51, Z51, H51



**RPEL1-062x/xE1\***

Valve with one solenoid „b“  
Spool symbols  
Z11, X11, C11, H11, Y11

