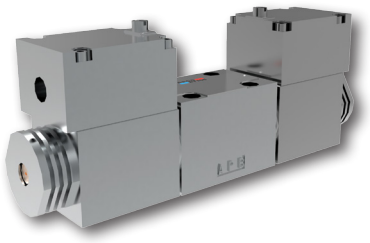
RPET3-06

Size 06 (D03) • Q_{max} 60 l/min (16 GPM) • p_{max} 350 bar (5100 PSI)



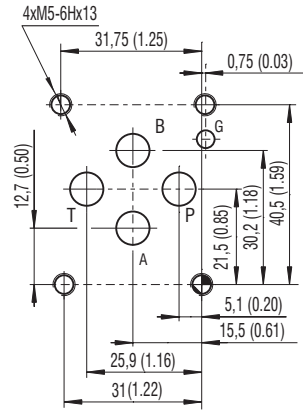
Technical Features

- Solenoid operated directional control valve, spool type, with subplate mounting surface acc. to ISO 4401, DIN 24340 (CETOP 03) standards
- Robust design of coil with high resistance to mechanical damage
- Encapsulation enclosure solenoid version (m)
- High transmitted hydraulic power
- Operating pressure up to 350 bar, pressure in T- channel up to 210 bar
- Low pressure drop achieved by design optimization
- Five chambers housing design with reduced hydraulic power dependence on fluid viscosity
- Wide range of interchangeable spools, optional type of manual override
- Easily interchangeable coil with adjustable connector position by rotating the coil
- In the standard version, the valve is zinc coated for 520 h protection in NSS acc. to ISO 9227

Functional description

Solenoid operated directional control valves in heavy-duty design have higher protection against mechanical damage, against dust, gas and moisture ingress into the coil. They are intended for operation in heavy working conditions.

ISO 4401-03-02-0-05



Ports P, A, B, T - max. ∅7.5 mm (0.29 in)

Technical Data

Valve size			06 (D03)
Max. flow		l/min (GPM)	60 (15.9)
Max. operating pressure at ports P, A, B		bar (PSI)	350 (5080)
Max. operating pressure at ports T		bar (PSI)	210 (3050)
Pressure drop		bar (PSI)	see Δp-Q characteristics
Fluid temperature range (NBR)		°C (°F)	-30 ... +80 (-22 ... +176)
Max. switching frequency		1/h	15 000
Switching time ON at ν=32 mm²/s (156 SUS)		ms	30 ... 50
Switching time OFF at ν=32 mm²/s (156 SUS)		ms	10 ... 50
Weight	valve with 1 solenoid	kg (lbs)	2.52 (5.56)
	valve with 2 solenoids		3.97 (8.75)
Technical Data - Heavy-duty Solenoid			
Voltage type			DC
Available voltages		V	24
Available nominal power		W	18
Supply voltage tolerance		%	DC: ±10
Duty cycle			100 % ED
Enclosure type of the Solenoid to EN 60529			IP 65
Ambient temperature range		°C (°F)	-30 ... +50 (-22 ... +122)

	Data Sheet	Type
General information	GI_0060	products and operating conditions
Mounting interface	SMT_0019	Size 06
Subplates	Subplates_0002	
Spare parts	SP_8010	

Solenoid Code	Ordering No.
ET22-46/02400B32-B	33426300

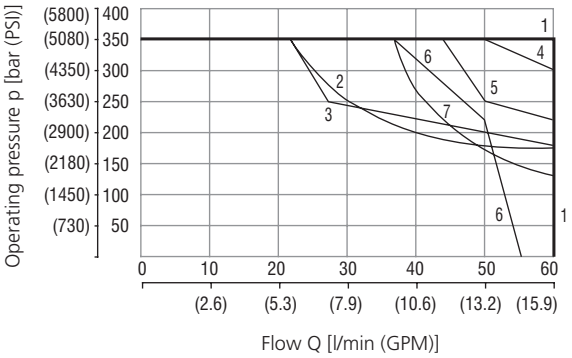
Danger – safety notice

- Always disconnect the coil from the power supply before any maintenance, assembly, disassembly or other work on it
- For directional valves with two solenoids, one solenoid must be without supply voltage charge before the other solenoid can be charged
- The temperature of the valve – coil surface can exceed 100 °C during the operation. There is a risk of burns
- Damaged or malfunctioning coils (inclusive cable) must be immediately disconnected from the power supply

Characteristics measured at ν = 32 mm²/s (156 SUS)

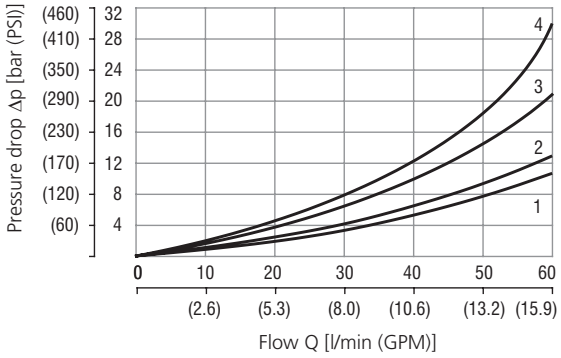
Operating limits (p-Q)

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



Z11, J15	1
C11	2
H11, X30, B71	3
R11	4
Y11, N11, V41	5
Y51	6
R30	7

Pressure drop related to flow rate (Δp-Q)



	P→A	P→B	A→T	B→T	P→T
Z11, J15, R11, R30, X30	1	1	2	2	
C11	3	3	3	4	2
H11	1	1	1	2	2
B71	1			1	
Y11	1	1	1	1	
Y51		2	2	2	
N11	1		2	2	
V41		1		2	

Ordering Code

RPET3-06 □ □ / □ □ □ □ - □

4/2 and 4/3 directional control valve, solenoid operated, heavy-duty design

Valve size

Number of spool positions
two positions **2**
three positions **3**

Spool symbols
see the table „Spool Symbols“

Rated supply voltage of solenoids
24 V DC / 0.75 A **02400**

Solenoid electric connection
ET1 connection box without cable gland

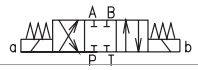
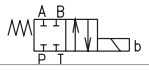
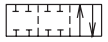
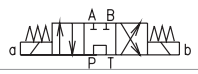
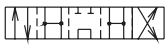
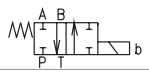
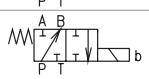
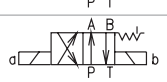
Manual override
No designation standard (operated by pin)
N1 metal cap nut covered
N9 without manual override

Seals
No designation NBR

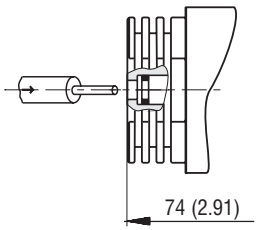
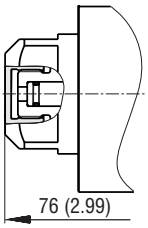
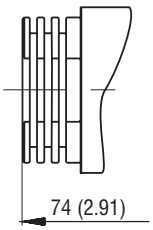
Surface treatment
B zinc-coated (Zn-Ni), ISO 9227 (520 h)

- The valves are delivered without cable glands.
- Mounting bolts M5x45 DIN 912-10.9 or studs must be ordered separately.
- Tightening torque is 8.9 Nm (6.56 lbf.ft).
- The orifice to the P-port can be ordered separately, see data sheet SP_8010.
- Besides the shown types, commonly used valve versions other special models are available. Contact our technical department for their identification, feasibility and operating limits.

Spool Symbols

Type	Symbol	Interposition	Type	Symbol	Interposition	Type	Symbol	Interposition
Z11			Y51			Z11		
C11			R30			B71		
H11			R11			N11		
Y11			X30			V41		
						J15		

Manual Override in millimeters (inches)

No designation - standard (operated by pin)	Designation N1 - metal cap nut covered	Designation N9 - without manual override
		

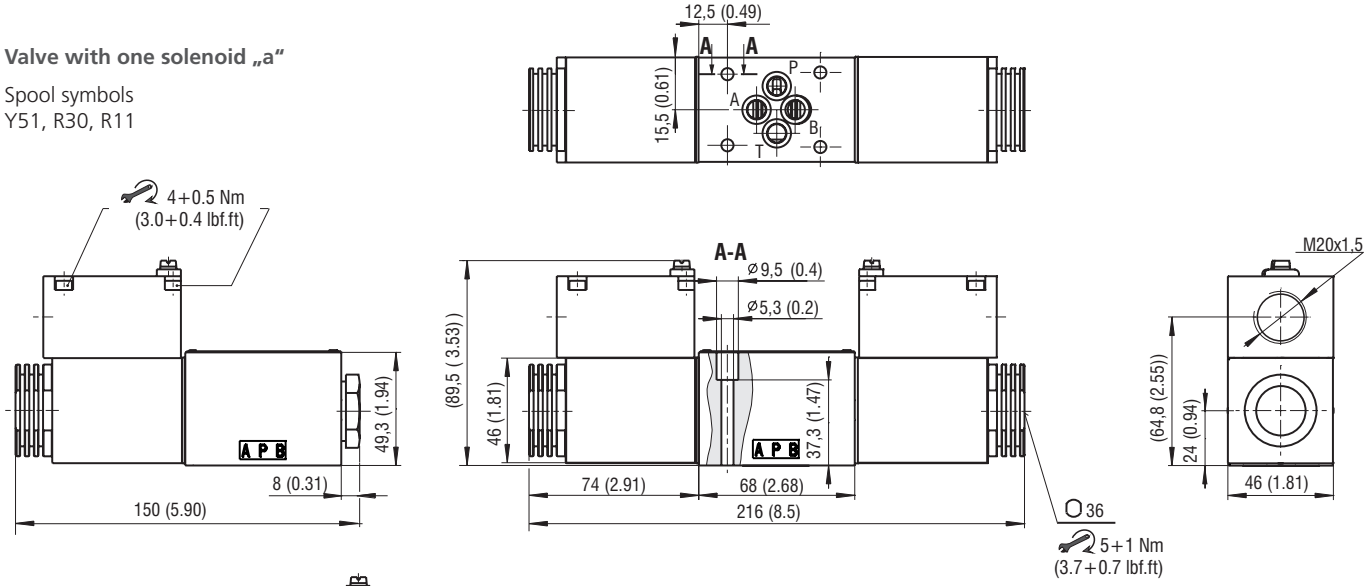
Installation

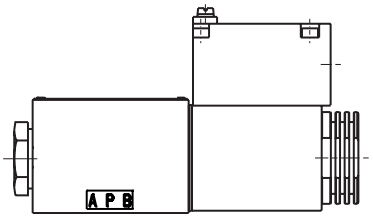
- Ambient operating temperature of the used connecting cable and cable gland shall be at least +105 °C (+221 °F). Use the cable shoe M3 – 0.75mm² for wire connecting.
- Fastening torque of screws in connecting plate is 0.4 Nm (0.30 lbf.ft). Fastening torque of screws for cover is 4 Nm (2.95 lbf.ft).
- The user shall to ensure free heat emission from the coil surface during operation. The coil must not be activated alone – without connecting to the valve.
- We recommend connecting of the coil to the ground via the purpose-built ground clamp on the coil casing.

RPET3-06**/*ET1-B, RPET3-06**/*ET1N9-B

Valve with one solenoid „a"

Spool symbols
Y51, R30, R11





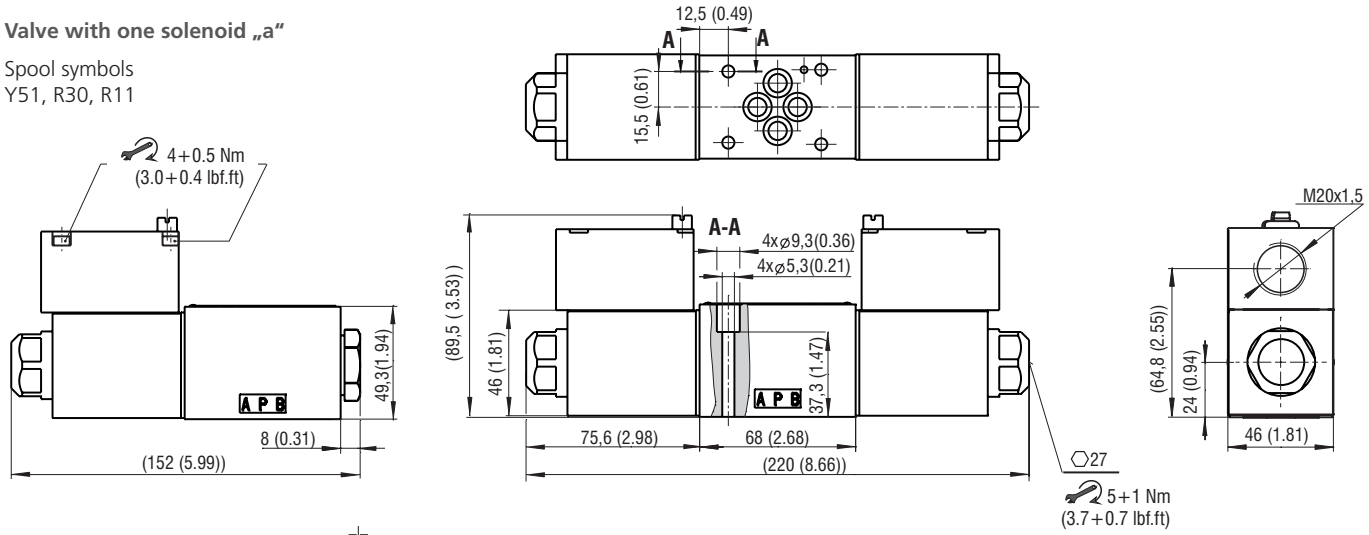
Valve with one solenoid „b"

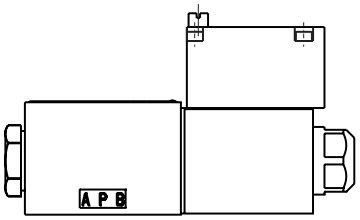
Spool symbols
X30, Z11, B71, N11, V41

RPET3-06**/*ET1N1-B

Valve with one solenoid „a"

Spool symbols
Y51, R30, R11





Valve with one solenoid „b"

Spool symbols
X30, Z11, B71, N11, V41

Mounting screws 8.9 Nm (7 lbf.ft)
M5x45 DIN 912-10.9