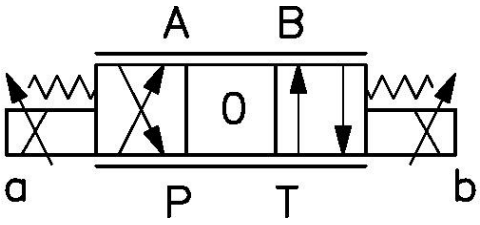
EVRD-05 Series

Technical specification

Application:	Directional valve with proportional control
Size:	ND 10 – ISO 4401-05 (CETOP 05)
Flow rate:	max 90 l/min
Pressure:	max 320 bar on P, A and B ports max 210 bar on T port
Hysteresis (with PWM 100 Hz):	< 6% of max flow rate
Repeatability:	< ± 1.5% of max flow rate
Ambient temperature range:	-20 to 50°C
Fluid temperature range:	-20 to 80°C
Fluid viscosity range:	10 to 400 cSt
Recommended viscosity:	25 cSt
Fluid contamination degree:	according to ISO 4406:1999 class 20/18/15
Weight:	max 5,9 Kg

Hydraulic symbol:



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Order information

Valve assembly part number

	Valve						Coil type			Accessories	
	Type		Size	Spool type	Flow	Solenoid position	Electrical Connection	Power supply		Seal	Option
	EVRD		05	Table 1	Table 2	Table 3	Table 4	Table 5		Table 6	Table 7
Example	EVRD	-	05	C	60		C1	D24	-	B	00

Tables

Table 1

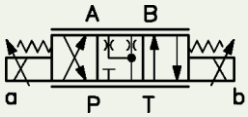
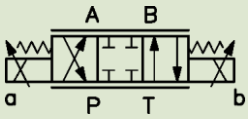
Code	Spool type
A	
C	

Table 2

Code	Nominal flow [lpm]
30	30
60	60

Table 3

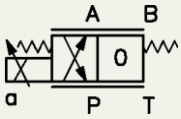
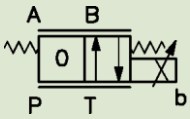
Code	Solenoid position (single solenoid only)
SA	
SB	

Table 4

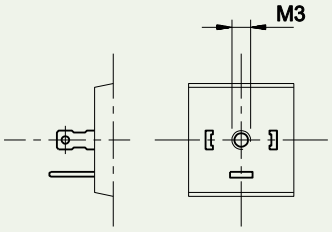
Code	Connector
C1	 DIN 43650 (IP65)

Table 5

Code	Nominal voltage [V] ±5%	Maximum current [A]
D12	12 VDC	2.6
D24	24 VDC	1.6

Table 6

Code	Material
B	Buna
V	Viton

Table 7

Code	Type
00	Standard

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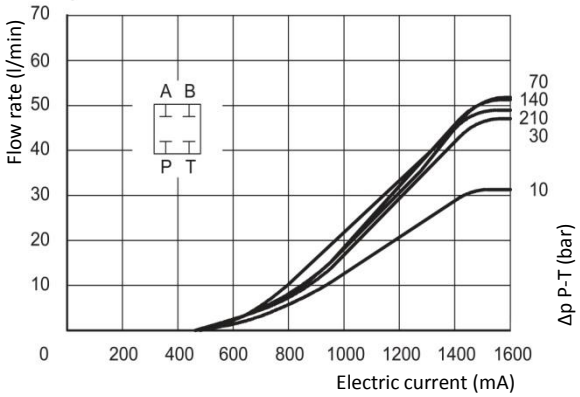
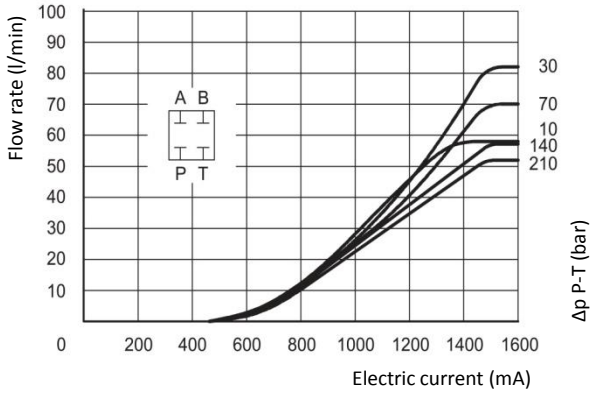
Characteristics

Measured with viscosity of 36 cSt at 50°C with valves connected to relative electronic control units.
Typical constant flow rate control curves at Δp according to current supply to solenoid (D24 version, max. current 860 mA) for the different spool types measured between P and T port.

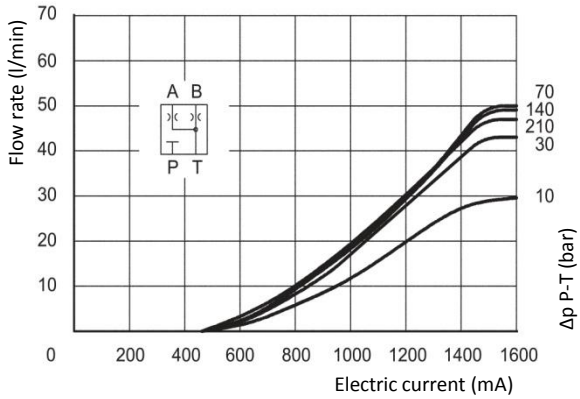
Spool C30



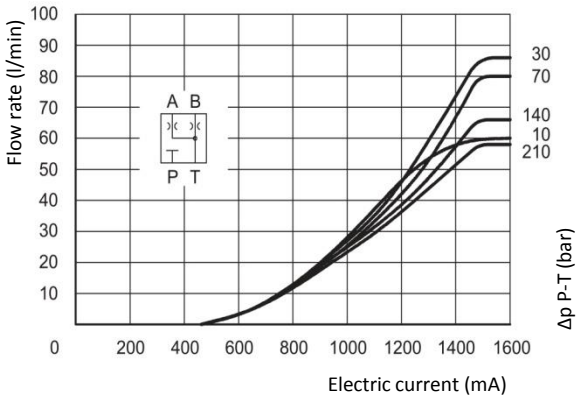
Spool C60



Spool A30



Spool A60



Response time

ENERGIZING	DE-ENERGIZING
0 to 100%	100% to 0
50 ms	40 ms

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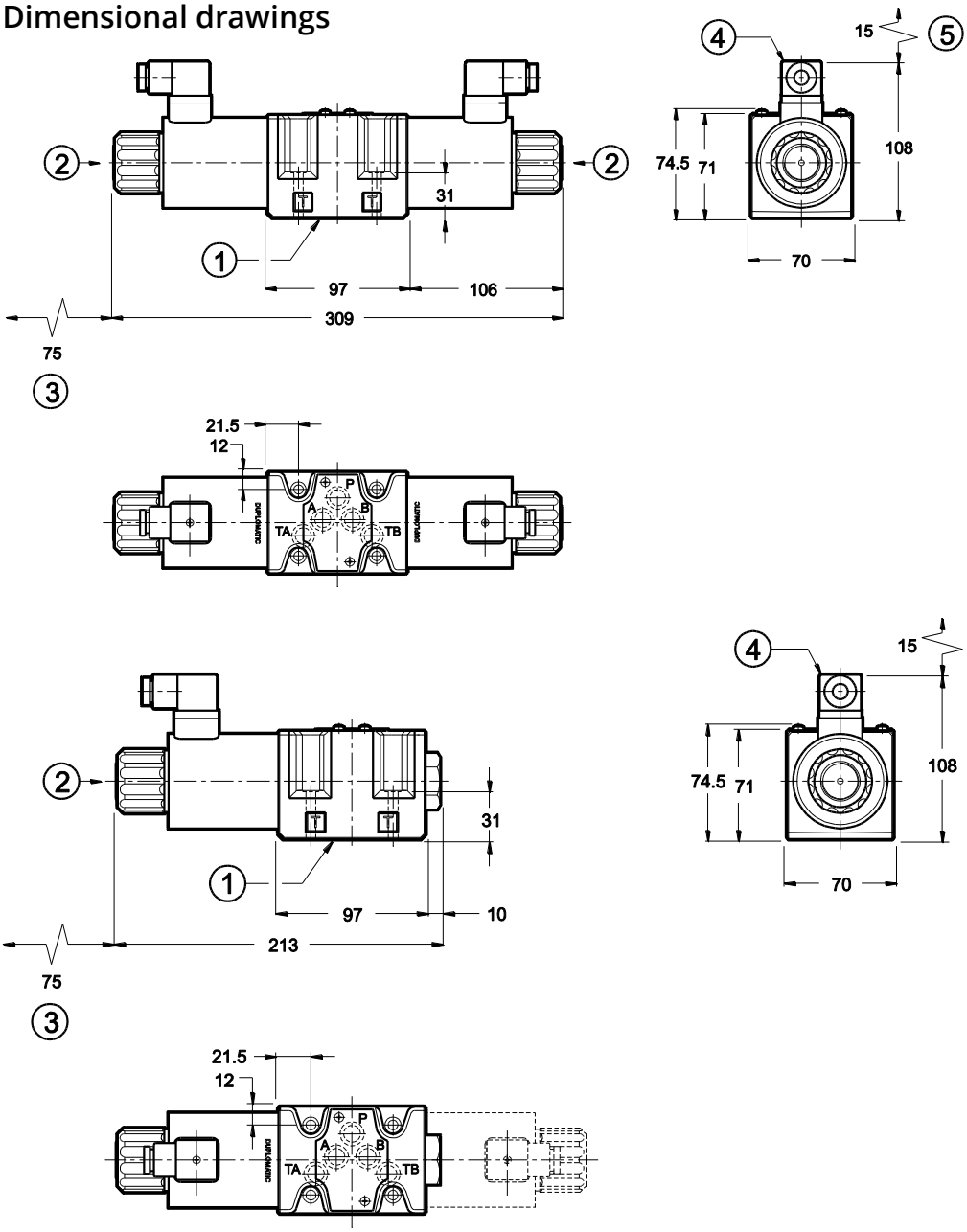
Dimensional drawings



Point	Description
1	Mounting surface with sealing Oring N.5 type 2050 (12.42 x1.78mm) – 90 Shore
2	Standard manual override included in the solenoid tube
3	Coil (360° revolving)
4	Coil removal space
5	DIN 43650 connector - to be ordered separately (see cat. 49000)
6	Connector removal space
7	Looking ring: tightening torque 6 Nm (DC version), 5 Nm (AC version)

Notes	
FASTENINGS BOLTS	N.4 fastening bolts SHC M5x30, tightening torque 5 Nm
HYDRAULIC FLUIDS	Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4 For these fluids, use NBR seal, for fluids HFDR type (phosphate esters) use FPM seals

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