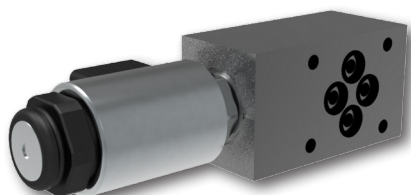


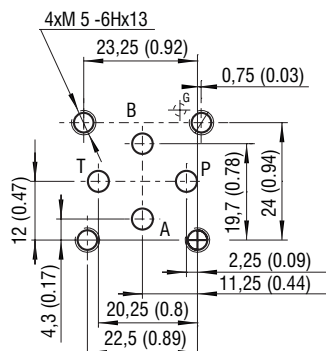
2/2 Solenoid Operated Poppet Valve, Pilot Operated, Modular

ROE3-062S2M

Size 04 (D02), 06 (D03) • Q_{max} 25 l/min (6.6 GPM) • p_{max} 250 bar (3600 PSI)

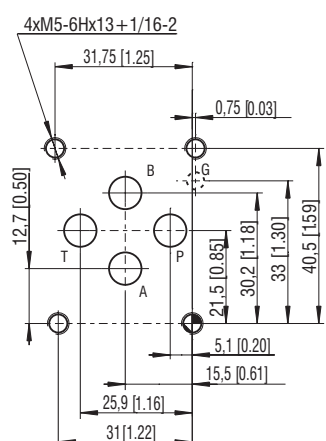


ISO 4401-02-01-0-05



Ports P, A, B, T max $\varnothing$ 4.5 mm (0.18 in)

ISO 4401-03-02-0-05



Ports P, A, B, T max $\varnothing$ 7.5 mm (0.29 in)

Technical Features

- Valve built-in a modular block with subplate interface acc. to ISO 4401, DIN 24340 (CETOP 02 and 03) or an in-line body
- All ports may be fully pressurized with maximum pressure 250 bar
- Valve closes leak-free in specified flow direction
- Precisely manufactured parts and hardened poppet
- Normally closed (NC) version
- Optional type of manual override
- Coils interchangeable across ROE / RPE3-04 product line
- 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)

Functional Description

Solenoid operated poppet valve, pilot operated, built-in a modular block size 04 or size 06, designed for creating hydraulic circuits by vertical grouping. The second variant is the valve in an in-line body. The one-directional valve is used for leak-free closing in specified flow direction (see Functional Symbols).

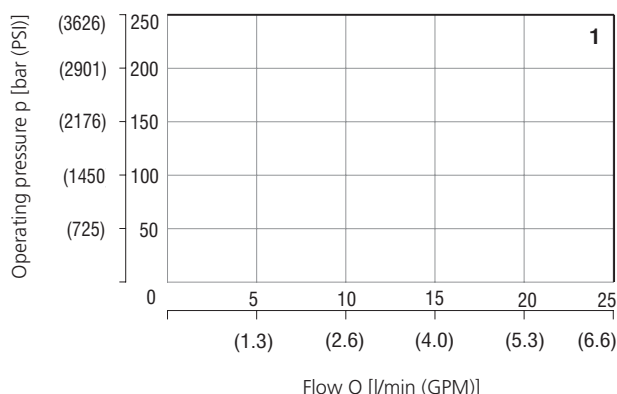
Technical Data

Valve size / Cartridge cavity		04 (02) / QG2	06 (03) / QG2
Max. flow	l/min (GPM)	25 (6.6)	25 (6.6)
Max. operating pressure	bar (PSI)	250 (3600)	
Max. internal leakage in the direction 2→1	cm ³ /min	≤ 0.25 at 250 bar (v=32 mm ² /s)	
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)	-20 ... +50 (-4 ... +122)	
Fluid viscosity range	mm ² s ⁻¹	10 ... 500	
Switching time, at v=32 mm ² /s (156 SUS)	ON	ms	DC 25 ... 35 AC 25 ... 35
	OFF	ms	DC 30 ... 50 AC 30 ... 110
Enclosure type acc. to EN 60529		IP65 / IP67 (see Dimensions, page 3)	
Weight	Modular	- valve with 1 solenoid	kg (lbs)
	In-line	- valve with 2 solenoids	kg (lbs)
		1.2 (2.5) 1.5 (3.2)	
		1.7 (3.6) 2.0 (4.3)	
		1.6 (3.5)	
General information		HA 0060	Products and operating conditions
Cavity details		HA 0019	Size 04, 06
Spare parts		HA 8010	

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

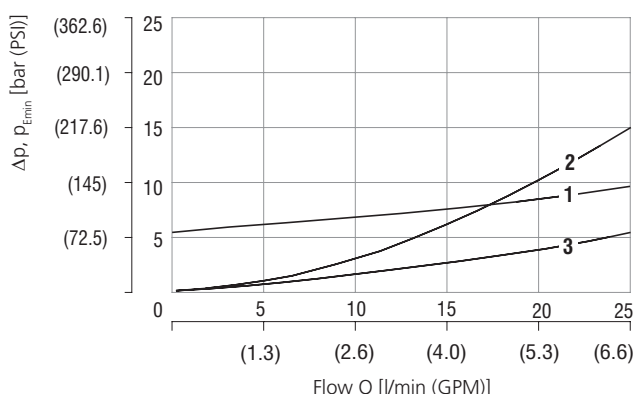
Operating limits

Operating limits for maximum hydraulic power at rated temperature and supplied with voltage equal to 90% of the nominal value.



Pressure drop related to flow rate

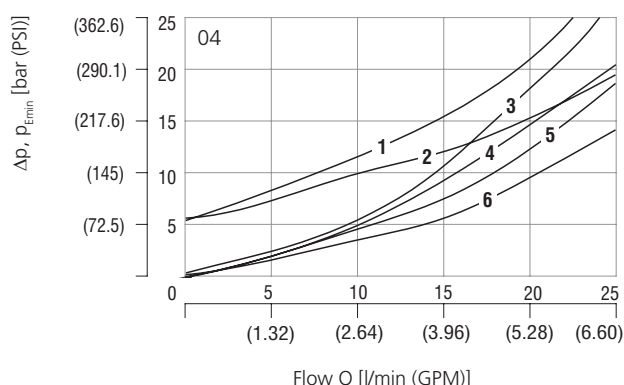
In-line body design R*



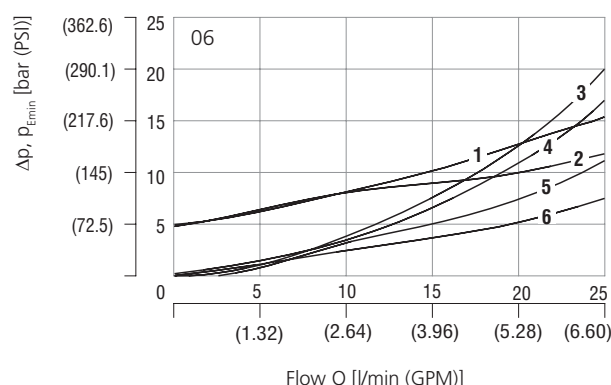
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Pressure drop related to flow rate

In-line body design M*



	Model	Direction	Solenoid
1	MD04	T-A	OFF
1	MX04	B-A	OFF
2	MA04	A1-A2	OFF
3	MD04	A-T	
4	MA04	A2-A1	
4	MD04	T-A	ON
5	MX04	B-A	ON
6	MA04	A1-A2	ON



	Model	Direction	Solenoid
1	MD06	T-A	OFF
2	MX06	B-A	OFF
2	MA06	A1-A2	OFF
3	MD06	A-T	
4	MA06	A2-A1	
4	MX06	A-B	
5	MD06	A-T	
6	MA06	A1-A2	ON
6	MX06	B-A	ON

Ordering Code

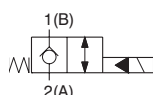
ROE3 - 062 S2 /

**2/2 Solenoid Operated
Poppet Valve, Pilot Operated,
Modular**

Valve size

Functional symbol

normally closed (NC)



Model

modular valve, connection A2-A1 **MA**
modular valve, connection B2-B1 **MB**
modular valve, connection A-B **MX**
modular valve, connection A-T **MD**
modular valve, connection B-T **ME**
modular valve, connection B2-B1, A2-A1 **MC**
modular valve, connection B-T, A-T **MF**
modular valve, connection P-T **MG**
*modular valve, connection P2-P1 **MP**
modular valve, connection B2-P2, B2-T2 **MJ**
in-line valve, 2 ports, thread G3/8" **R1**
in-line valve, 2 ports, thread G1/2" **R2**
in-line valve, 2 ports, thread 3/4-16, (SAE 8) **R3**
in-line valve, 2 ports, thread 7/8-14 (SAE 10) **R4**
in-line valve, 2 ports, thread G3/8", G1/4" **R7**
in-line valve, 2 ports, thread G3/8", M18x1,5 **R8**

*only available for size 06 (D03)

Modular plate size

ISO 4401-02-01-0-05, DIN 24340 (CETOP 02), size 04 **04**
ISO 4401-03-02-0-05, DIN 24340 (CETOP 03), size 06 **06**

No designation

Surface treatment
standard
A zinc-coated (ZnCr-3), ISO 9227 (240 h)
B zinc-coated (ZnNi), ISO 9227 (520 h)

No designation

Seals
NBR
V FPM (Viton)

No designation

Manual override
standard - without manual override
N5 with external hexagon A/F 14

E1

E2

E3

E4

E3A

E4A

E5

E8

E9

E12A

E13A

Connector

EN 175301-803-A

E1 with quenching diode

AMP Junior Timer - radial direction (2 pins; male)

E3 with quenching diode

AMP Junior Timer - axial direction (2 pins; male)

E3A with quenching diode

EN 175301-803-A with integrated rectifier

loose conductors (two insulated wires)

E8 with quenching diode

Deutsch DT04-2P - axial direction

E12A with quenching diode

The AC coils correspond to E5.

Rated supply voltage of solenoids (at the coil terminals)

01200

12 V DC / 2.41 A

01400

14 V DC / 1.66 A

02100

21 V DC / 1.31 A

02400

24 V DC / 1.15 A

02700

27 V DC / 0.89 A

20500

205 V DC / 0.12 A

02450

24 V AC / 1.44 A / 50 (60) Hz

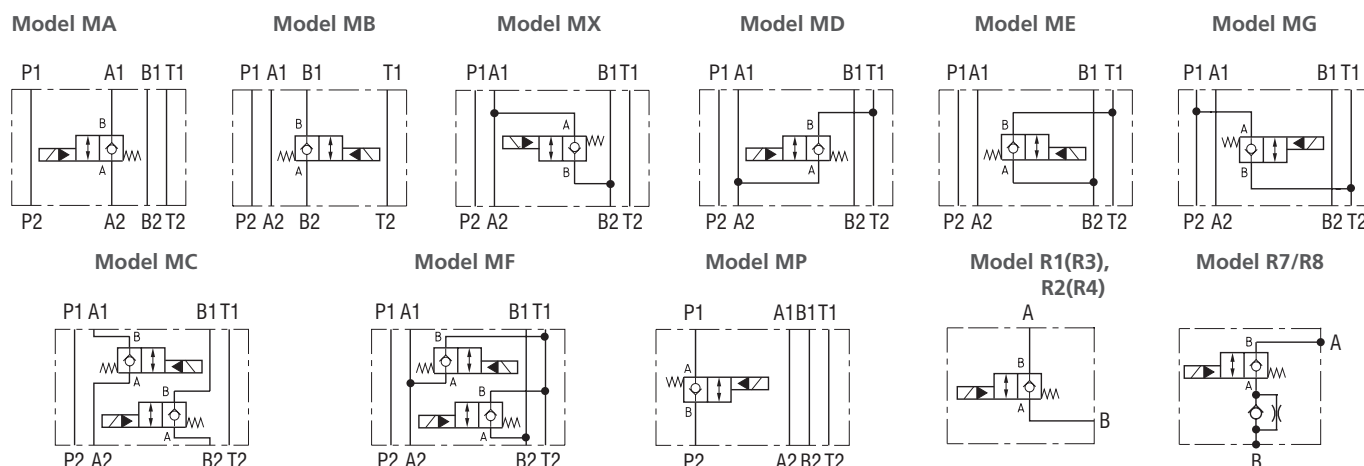
12060

120 V AC / 0.22 A / 50 (60) Hz

23050

230 V AC / 0.12 A / 50 (60) Hz

Functional Symbols



Ports designation

Valve side	P1, A1, B1, T1
Subplate or manifold side	P2, A2, B2, T2

Solenoid Coil in millimeters (inches)

E1 - EN 175301-803-A E2 - E1 with quenching diode Protection degree IP65	E3 - AMP Junior Timer - radial direction E4 - E3 with quenching diode Protection degree IP65 / IP67	E3A - AMP Junior Timer - axial direction E4A - E3A with quenching diode Protection degree IP65 / IP67	E5 - EN 175301-803-A and integrated rectifier Protection degree IP65
E8 - Loose conductors (two insulated cables) E9 - (E8 with quenching diode)	E12A - Deutsch DT04-2P E13A - E12A with quenching diode Protection degree IP67 / IP69K		

Note:
A = Standard 300 mm (11.81 in),
other sizes on demand

The indicated IP protection level is only reached with a properly mounted connector.

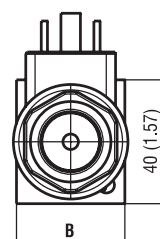
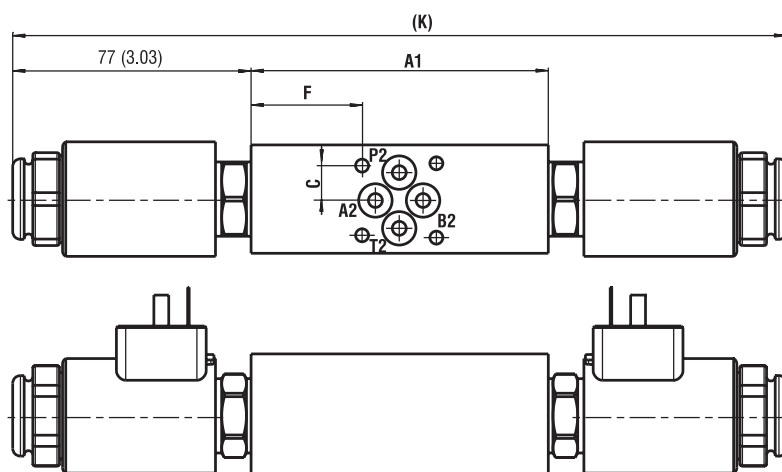
Manual Override in millimeters (inches)

No designation - standard - without manual override	Designation N5 - with external hexagon A/F 14

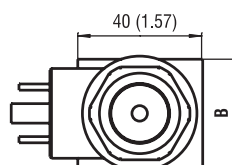
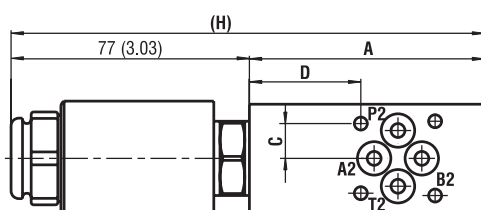
Dimensions in millimeters (inches)

Models MC, MF

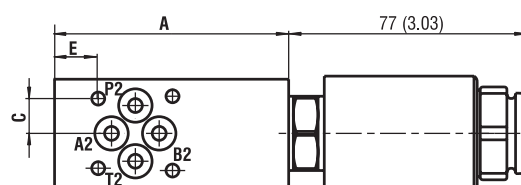
	Size 04	Size 06
A	76 (2.99)	80 (3.15)
A1	96 (3.78)	94 (3.70)
B	35 (1.38)	45 (1.77)
C	11,25 (0.44)	15,5 (0.61)
D	36 (1.42)	28 (1.10)
E	16 (0.63)	11,5 (0.45)
F	36 (1.42)	25,5 (1.00)
H	153 (6.02)	157 (6.18)
K	250 (9.84)	248 (9.76)



Models MA, MX, MD, MG, MP



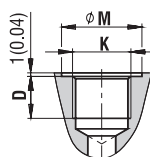
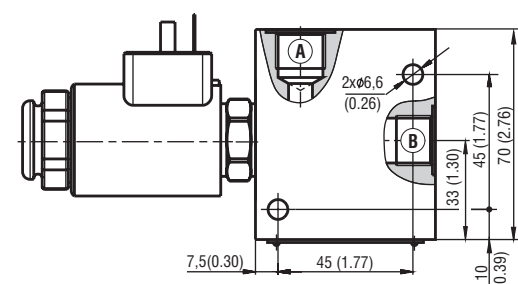
Models MB, ME



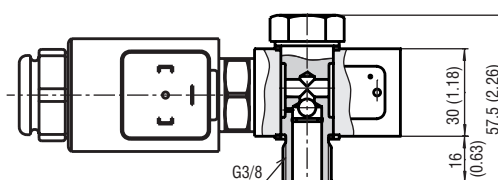
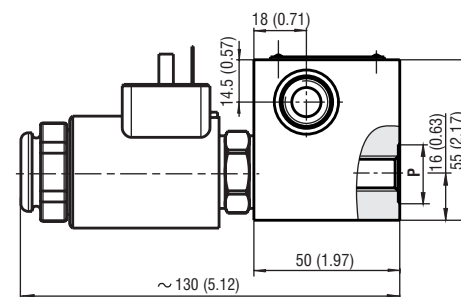
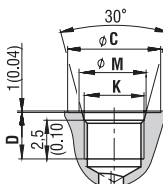
Models R1 (R2) Models R3 (R4)

Cavity A, B for models R1 (R2) DIN 3852

Models R7 / R8



for models R3 (R4) ISO 11926



25+3 Nm
(18.43+2.21 lbf.ft)

Model	K	M	C	D	E
R1	G3/8"	Ø23 (0.91)	-	12 (0.47)	15 (0.59)
R2	G1/2"	Ø28 (1.10)	-	14 (0.55)	16 (0.61)
R3	3/4-16UNF-2B (SAE 8)	Ø20.6 (0.81)	Ø30 (1.18)	14.3 (0.56)	16 (0.61)
R4	7/8-14UNF-2B (SAE 10)	Ø23.9 (0.94)	Ø34 (1.34)	16.7 (0.66)	18 (0.71)

Model	P
R7	G1/4"
R8	M18x1,5

