

SCREW IN, 2-WAY SOLENOID OPERATED POPPET VALVES NORMALLY OPEN, BI DIRECTIONAL FLOW CAVITY 3/4" 16 UNF Ø 12,7 mm

EVO2-34-*

40 l/min 25 MPa (250 bar)

1 DESCRIPTION

The valve is a pilot operated 2 way NO poppet type. It is available in different configurations. It is possible to use the valve with standard coils suitable DC or RAC (rectified alternat current) for AC supply.

A special dual seal ring on the nose permits an efficient and reliable sealing system.



2 ORDERING CODE

| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|-----|-----|------|-----|-----|-----|-----|
| EV | O2 | - 34 | - | - | - | - |

(1) EV : screw-in directional solenoid valve

(2) O2 : valve with Ø 13 mm solenoid core (see 4), 2 way, 2 position, poppet type, normally open, two direction flow

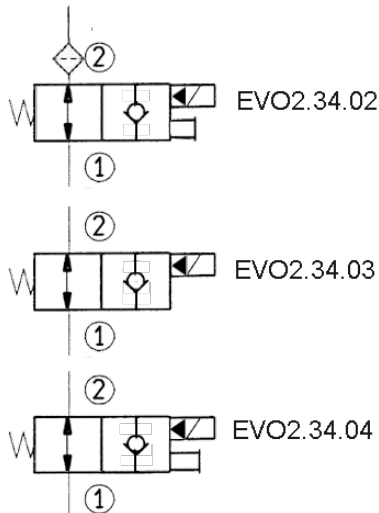
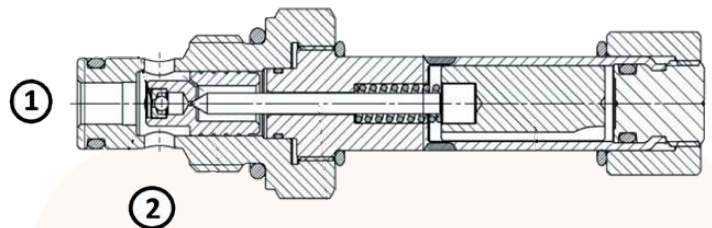
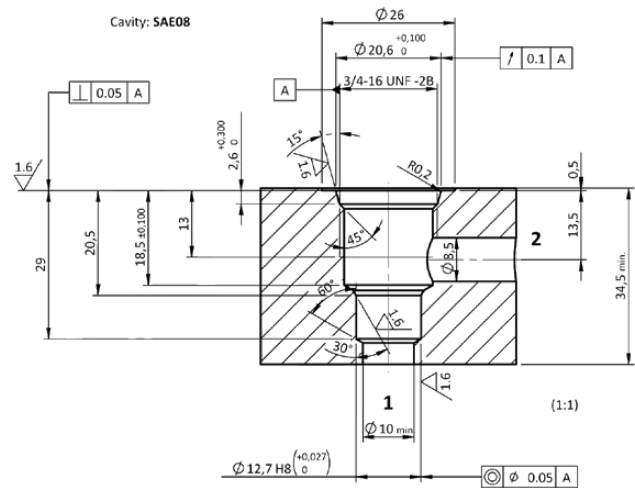
(3) 34 : cavity 3/4 " 16 UNF with Ø 12,7 mm - see A

(4) Valves variants (see 8)
 02 : filter and manual override
 03 : without manual override
 04 : manual override

(5) Electric voltage and solenoid coils (see 3, see 6)
 0000 : no coil
 012C : coil for V12DC
 024C : coil for V24DC
 220R : coil for V220-230 RAC

(6) Options for coil connection (see 3)
 no designation : standard connection ISO4400/DIN 43650/A
 C : flying leads
 A : AMP Junior

(7) Options for ISO4400/DIN 43650/A connectors (see 7)
 B9 : standard connector, black PG9
 D9 : black connector, with diode, PG9
 ES : "energy saving" connector with LED
 R* : rectifier bridge; L*:LED; V*:LED+varistor

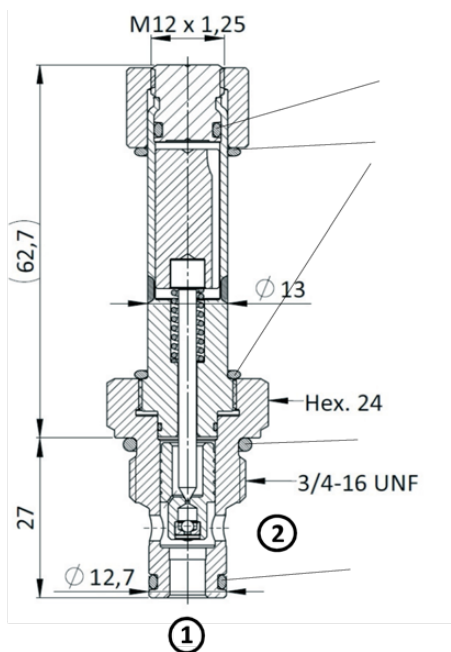


The poppet 4 is pilot operated and it is kept, balanced by pressure, normally open permitting flow from 2 to 1. When the solenoid 6 is energized, the mobile armature 7 and the pilot pin 8 move against the spring and the poppet, closes against its seat 5. The manual override 9, by pushing, permits the valve operation.

3 TECHNICAL DATA

| | | |
|----------------------------|------------------|--|
| Max. nominal pressure | 32 MPa (320 bar) | Electric Characteristics: Those solenoid valves are normally equipped by coils type C30, which are energized from DC or AC supply (see 6). Coils type C30-***C are DC energized directly from a V***DC supply. Coils type C30-***R are RAC (Rectified Alternate Current) energized from a V***AC supply, by a full wave bridge rectifier incorporated in the connector. Coils type C30 are normally provided for use of ISO 4400/DIN 43650/A connectors. For coils with different connection to the power supply, see table C30/36. |
| Nominal flow rate | 32 l/min | |
| Max. rec. flow rate | 40 l/min | |
| Dimension and installation | see 4 | |
| Duty cycle | ED100% | |
| Mass (without coil) | 0,120kg | |

4 INSTALLATION DIMENSIONS (mm)



EV*.34 valves are to be installed in cavity 3/4" 16 UNF with Ø 12,7 mm. Check the appropriate state and position of the seals and , screw the valve in the cavity and lock it with a torque of about 45 Nm applied on the 24 mm hexagon.

7 CONNECTORS

Standard coils are compatible with KA-132 connectors (see table) ; for some functions (R* = bridge rectifier, L* = LED, etc.) the voltage has to be specified :

1 = V12 V24 2 = V115 3 = V230

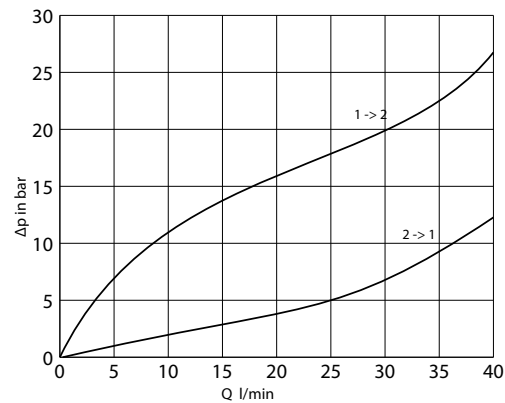
The "energy saving" connectors – option ES – save current consumption to less than 50% of the nominal and strongly reduce warming up of the coils – see table KA-ES.

8 VARIANTS

01 and 02 : filter (0,25 mm) on way prevents from dirt and better diffuses the flow around the poppet. 02 and 04 : manual override is of pushing type. Push to pilot the poppet closed (no flow from to); pull to reinstall the condition of normally open poppet (flow from to).

5 PRESSURE DROPS

Viscosity 42 cSt at 50°C.



6 COILS TYPE C30 (Ø 13mm-18w)

| Coils ISO/DIN | voltage DC/RAC | nominal current (A) | resistance 20° C (Ω) | nominal power (W) | insulation class |
|---------------|----------------|---------------------|----------------------|-------------------|------------------|
| C30-012C | V 12 DC | 1,55 | 7,7 | 18,6 | F |
| C30-024C | V 24 DC | 0,8 | 31 | 19 | |
| C30-024R | V 24 RAC | 0,85 | 27 | 18,3 | |
| C30-048C | V 48 DC | 0,4 | 116 | 19 | |
| C30-48R | V48 RAC | 0,4 | 106 | 17,3 | |
| C30-110R | V 110-115 RAC | 0,16 | 600 | 16 | |
| C30-220R | V 220-230 RAC | 0,08 | 2500 | 16 | |

