

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

EVSC-34-02
32 l/min 25 MPa (250 bar)

1 DESCRIPTION

The valve is 2 way NC poppet type and full optional. It is complete with filter, manual override screw type, protection cover for the manual override. With his design, it is possible to use the valve with standard coils suitable for AC and DC current without the need of special connectors with integrated rectifiers.



2 ORDERING CODE

(1)	(2)	(3)	(4)	(5)	(6)	(7)
EVSC	-	34	-	02	-	-

(1) EVSC : screw in directional solenoid valve with Ø 13 mm solenoid core (see 5),
2 way, 2 position, poppet type, normally closed, one direction flow

(2) 34 : cavity 3/4" 16 UNF (Ø 12,7 mm)

(3) 02 : filter and manual override of screw type

(4) Electric voltage and solenoid coil (see 8)

0000: no coil
012C: coil for V 12 DC
024C: coil for V 24 DC
220R: coil for V 220-230 RAC
230/50: coil for V 230/50 AC

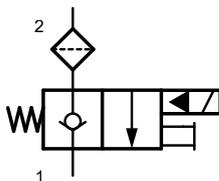
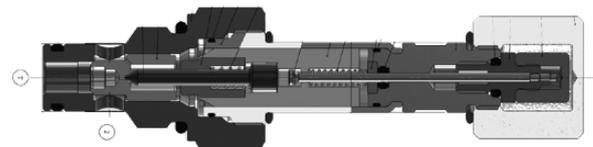
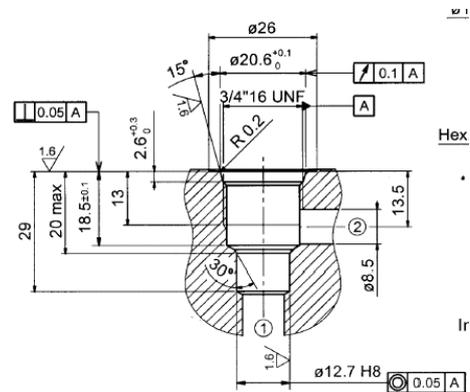
(5) Options for coils connections

no designation: standard connection ISO 4400 / DIN 43650/A
C: flying leads
A: AMP Junior

(6) Options for ISO 4400 / DIN 43650/A connectors

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

(7) Protective cap on manual override: P

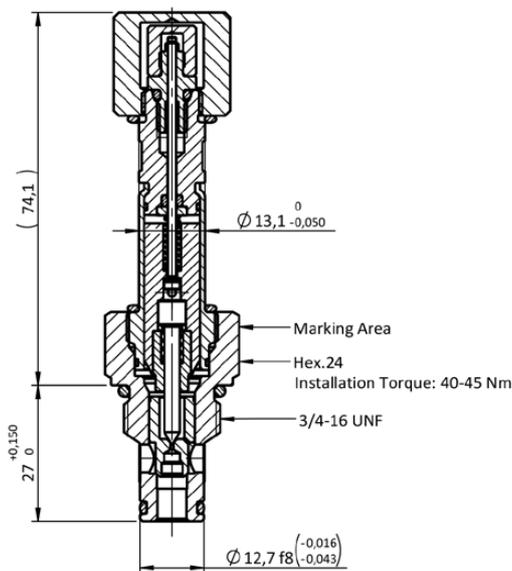


The poppet 7 is pilot operated and it is kept normally closed against its seat 8. When the solenoid is energized, the mobile armature 5 and the pilot pin 17 are shifted and the poppet, unbalanced by pressure, opens permitting flow from 1 to 2. The manual override 1 is of screw type and permits the valve operation in case of electric failure. The filter 18 (0,25 mm) prevents from dirt and better diffuses the flow around the poppet. The cap 2 protects from shocks the manual override and, if locked, may prevent undue tampering of the valve.

3 TECHNICAL DATA

Max. nominal pressure	25 MPa (250 bar)	Electric Characteristics: Those solenoid valves are normally equipped by coils type C30, which are energized from DC or AC supply. 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. Solenoids valves type EVSC.34 can also be AC energized, directly from a V***AC supply, by using appropriate C30-***/50 or C30-***/60 coils. 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
Nominal flow rate	32 l/min	
Max. rec. flow rate	40 l/min	

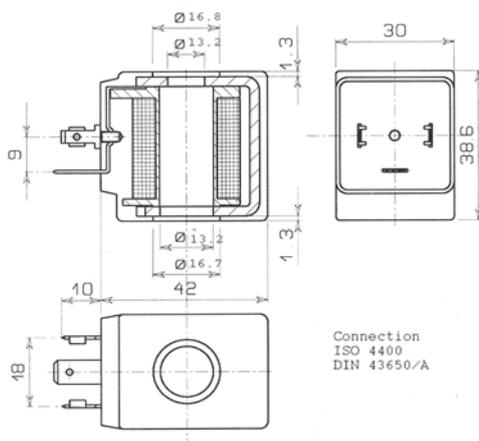
4 INSTALLATION DIMENSIONS (mm)



EVSC.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 supplied with the valve :

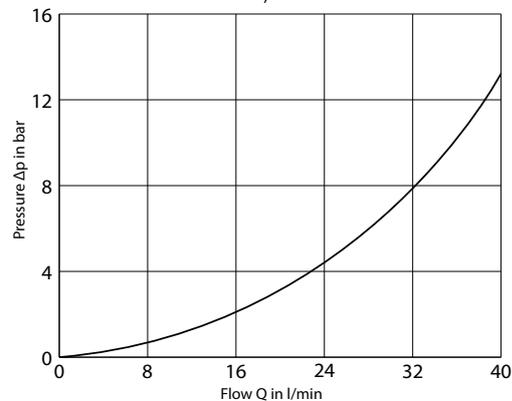
- O-Ring 9,25 x 1,78 with parbak 9,91 x 1,35
- O-Ring 16,36 x 2,20
- 2 x O-Ring 12,42 x 1,78

Screw the valve in the cavity and lock it with a torque of about 45 Nm applied on the 24mm hexagon.



5 TYPICAL DIAGRAMS

(measured at $\nu = 46$ cSt and 40°C)



6 CONNECTORS

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

$$1 = V12 - V24 \quad 2 = V115 \quad 3 = V230$$

The "energy saving" connectors (option ES) save current consumption to less than 50% of the nominal and strongly reduce warming up of the coils.

7 COILS TYPE C30 (Ø 13mm)

Coils	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	
C30-048R	V 48 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	
	AC	(*)		(VA) (*)	
C30-024/50	24V 50 Hz	0,9	5,3	35	F
C30-110/50	110-115V 50 Hz	0,2	108		
C30-230/50	220-230V 50 Hz	0,1	438		
C30-110/60	110-115V 60 Hz	0,3	92		
C30-220/60	220-230V 60 Hz	0,15	375		

(*) Caution : with AC operation, the inrush current can be up to 3-4 times the nominal holding value