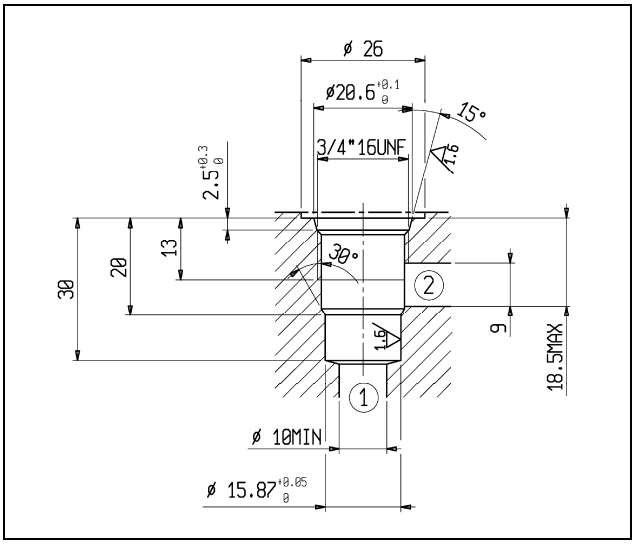
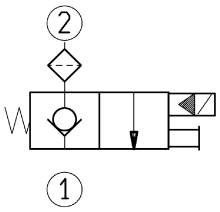
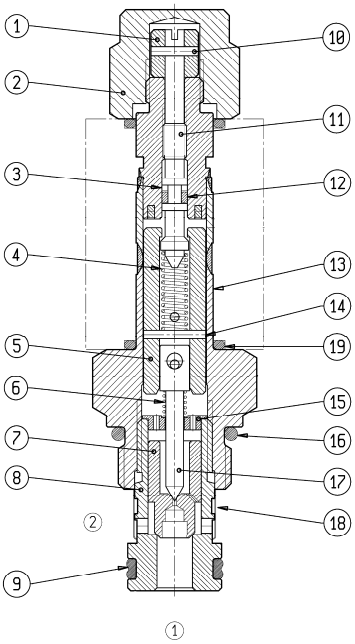
SCREW IN, 2-WAY SOLENOID OPERATED POPPET VALVES NORMALLY CLOSED, CAVITY 3/4" 16 UNF Ø 15,87 mm ONE DIRECTIONAL FLOW TYPE EVSC.34/2.02



❷ FUNCTIONAL SYMBOLS





❶ HOW TO READ THE MODEL CODE FOR VALVES EVSC.34/2.02

EVSC	**34**	**/**	**2.**	**02.**	**(0000).**	***.**	****.**	**P**
①	②		③	④	⑤	⑥	⑦	⑧

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

② **34** : cavity 3/4" 16 UNF

③ **2** : with Ø 15,87 mm (see ❺)

④ **02** : filter and manual override

⑤ **(0000)** : electric voltage and solenoid coil (see ❼)

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

⑥ * : options for coils connections

-	:	standard connection ISO 4400 / DIN 43650/A
C	:	flying leads
K	:	Kostal
A	:	AMP Junior

⑦ ** : options for ISO 4400 / DIN 43650/A connectors

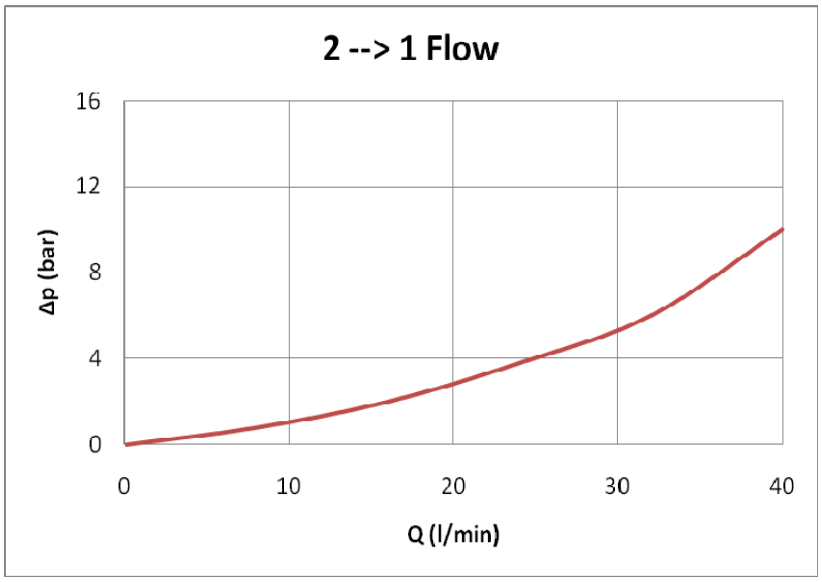
B9	:	standard connector, black PG9
D9	:	black connector, with diode, PG9
ES	:	"energy saving" connector with LED
R*	:	rectifier bridge
L*	:	LED
V*	:	LED + varistor

⑧ **P** : Water-proof cap on manual override

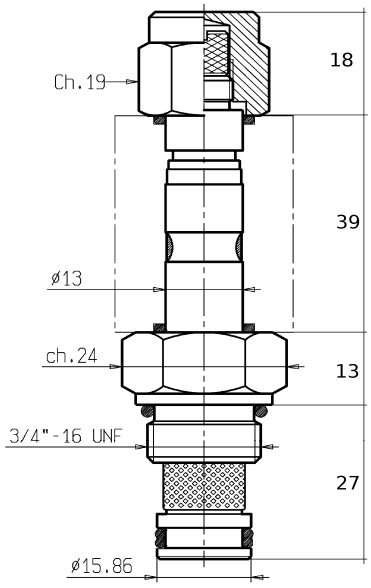
❸ DESCRIPTION

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 ② to ①.
The manual override **1** is of screw type and permits the valve operation in case of electric failure.
The filter **18** (0,25 mm) on way ② prevents from dirt and better diffuses the flow around the poppet.

❹ TYPICAL DIAGRAMS (measured at ν = 46 cSt and 40°C)



❺ INSTALLATION DIMENSIONS (all dimensions are mm)



❻ DATA AND OPERATING LIMITS

Max. nominal pressure	25 MPa (250 bar)
Nominal flow rate	32 l/min
Max. rec. flow rate	40 l/min

❼ ELECTRIC FEATURES

Those solenoid valves are normally equipped by coils type C30, which are energized from DC or AC supply (see).
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 (see).

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

❽ 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.

❾ INSTALLATION

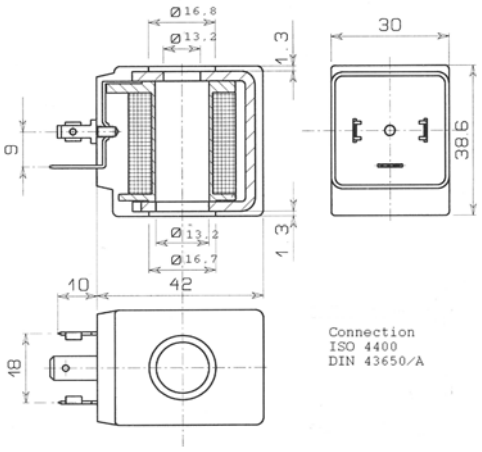
EVSC.34/2 valves are to installed in cavity 3/4" 16 UNF with Ø 15,87 mm.
Check the appropriate state and position of the seals supplied with the valve:

- Dual seal 12,7x1,8x3
- O-ring 16,36x2,20
- 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.

❿ COILS TYPE C30 (Ø 13 mm)

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	
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	F
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		
C30-110/50	110-115V 50 Hz	0,2	108		
C30-230/50	220-230V 50 Hz	0,1	438	35	F
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*