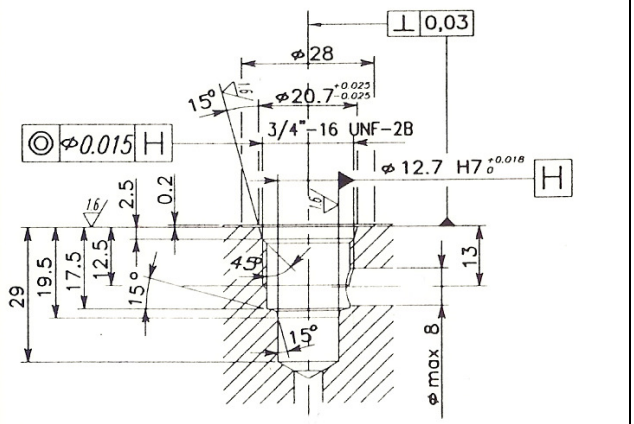
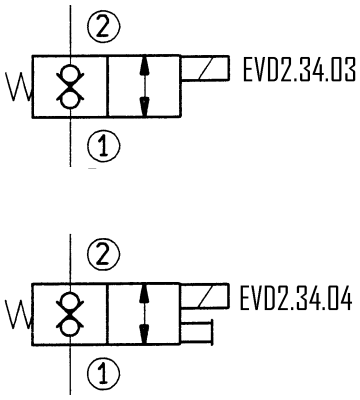
SCREW-IN, 2 WAY SOLENOID OPERATED POPPET VALVES CAVITY 3/4" 16 UNF Ø 12,7 mm, NORMALLY CLOSED, BI-DIRECTIONAL CONTROL TYPE EVD2.34.

A



B

❷ SYMBOLS



❶ HOW TO READ THE MODEL CODE FOR VALVES EVD2.34.

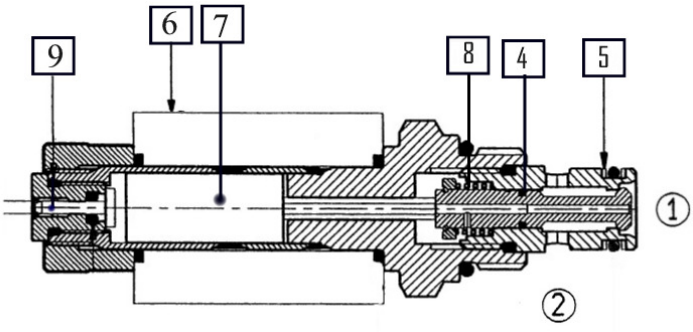
EV D2. 34. (04). (012C). * . **

① ② ③ ④ ⑤ ⑥ ⑦

①	EV	:	screw-in directional solenoid valve
②	D2	:	valve with Ø 13 mm solenoid core (see ❻), 2 way, 2 position, poppet type, normally closed, bi-directional control (see ❷)
③	34	:	cavity 3/4 " 16 UNF with Ø 12,7 mm - see A ❾
④	(04)	:	valves variants (see ❷❺)
		01 :	filter
		02 :	filter and manual override
		03 :	--
		04 :	manual override
⑤	(012C)	:	electric voltage and solenoid coils (see ❼❿)
		0000 :	no coil
		012C :	coil for V12DC
		024C :	coil for V24DC
		220R :	coil for V220-230 RAC
⑥	*	:	options for coil connection (see ❼)
		- :	standard connection ISO4400/DIN 43650/A
		/C :	flying leads; /K: Kostal; /A: AMP Junior
⑦	**	:	options for ISO4400/DIN 43650/A connectors (see ❽)
		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

❸ DESCRIPTION

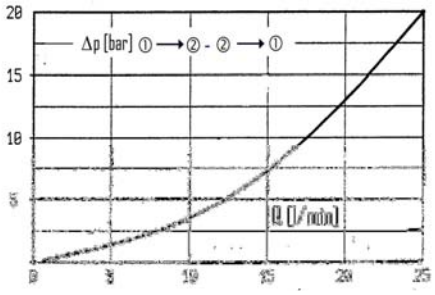
The poppet 4 is balanced by pressure and it is kept normally closed against its seat 5 by spring 8.
When the solenoid 6 is energized, the mobile armature 7 moves against spring 8 the poppet 4, thus permitting flow between ② and ①.
The manual override 9 is of the pin type and, when pushed, it permits the valve's operation in case of electric failure.



❹ TECHNICAL DATA

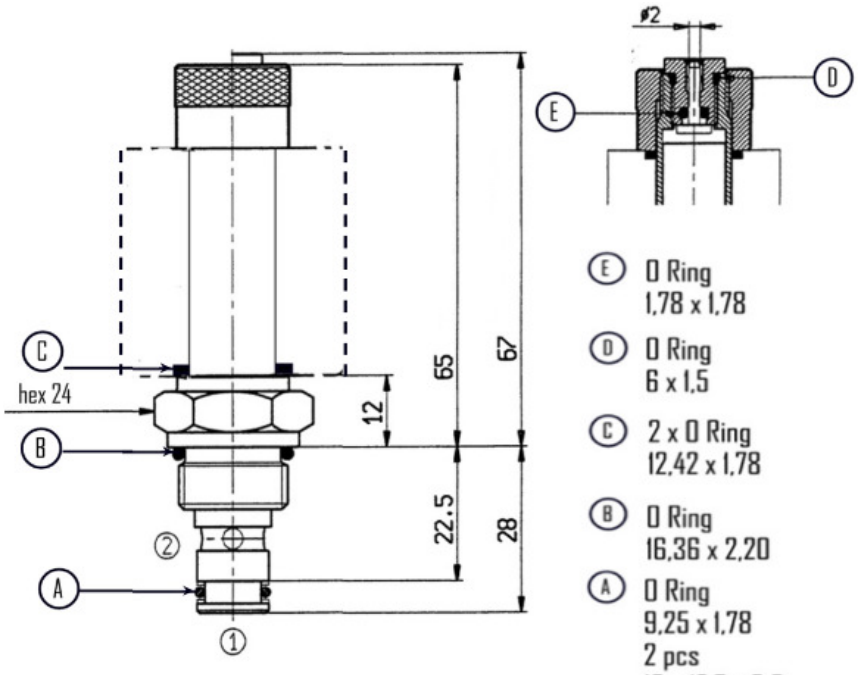
Nominal flow rate	16 l/min
Maximum rec.flow rate	25 l/min
Max pressure	21 Mpa (210 bar)
Dimensions	see ❻
Installation	see ❾
Electric features	see ❼
Duty cycle	ED 100%
Mass (without coil)	0,120 kg.

PRESSURE DROPS



Viscosity 42 cSt at 50°C.

❻ INSTALLATION DIMENSIONS.



All dimensions are mm.

❺ VARIANTS

01 and 02 : filter (0,25 mm) on way ② prevents from dirt and better diffuses the flow around the poppet.
02 and 04 : manual override is of pin type. Push the pin to shift the poppet and open (flow between ② to ①); release the pin to reinstall the condition of normally closed poppet (no flow between ② and ①).

❼ ELECTRIC FEATURES.

Those solenoid valves are normally equipped by coils type C36, which are energized from DC or AC supply (see ❿).
Coils type C36-***C are DC energized directly from a V***DC supply.
Coils type C36-***R are RAC (Rectified Alternate Current) energized from a V***AC supply, by a full wave bridge rectifier incorporated in the connector.
Coils type C36 are normally provided for use of ISO 4400/DIN43650/A connectors. For coils with different connection to the power supply, see table C30/36.

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 – see table KA-ES.

❾ INSTALLATION

EV*.34 valves are to be installed in cavity 3/4" 16 UNF with Ø 12,7 mm (see A and ❻).
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.

❿ COILS TYPE C36 (Ø 13 mm)

Coils DIN	Voltage DC	Nominal current [A]	Resistance 20°C [Ω]	Nominal power [W]	Isulation class
C36-012C	V 12 DC	1,9	6,3	22,8	H
C36-024C	V 24 DC	0,95	25,6	22,5	
C36-024R	V 24 RAC	1,05	20,2	23	
C36-048C	V 48 DC	0,47	102	22,6	
C36-110R	V 110-115 RAC	0,23	420	22,9	
C36-220R	V 220-230 RAC	0,11	1720	22,3