

SCREW IN, 2-WAY SOLENOID OPERATED SPOOL TYPE DIRECTIONAL VALVES CAVITY 3/4" 16 UNF-SAE 08/2

EV*2*-34-*

20 l/min 25 MPa (250 bar)

1 DESCRIPTION

Directional control valve 2 way 2 position spool type. Is possible to have this valve in two different version, light line and high performance.

Light line version is available with plastic coils and metallic coils.

High performance version is available only with metallic coils.

The dual seals rings assure an efficient and reliable tightness of the valve.



2 ORDERING CODE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
EV		2		-	34	-	-	-

(1) EV: solenoid operated valve

(2) valve type

L: Light line

H: High performance

(3) two way valve

(4) Spool type

C: normally closed

O: normally open

(5) 34: cavity 3/4" UNF (SAE 08/2)

(6) Valves variants (see [6])

03: without manual override

04: manual override push type (standard)

05: manual override screw type

(7) Electric voltage and solenoid coils (see [3], see [8])

0000: no coil

012C: coil for V12DC

024C: coil for V24DC

220R: coil for V220-230 RAC

(8) Option for coils connection (see [8])

no designation: standard connection ISO 4400 / DIN 43650/A

/C: flying leads;

/D: Deutsch;

/A: AMP Junior

(9) options for ISO 4400 / DIN 43650/A connectors (see [7])

B9: standard connector, black PG9

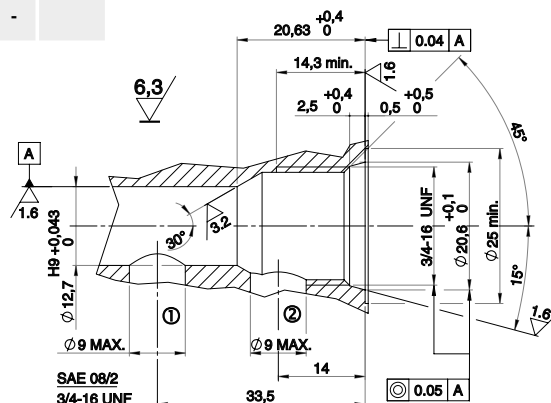
D9: black connector, with diode, PG9

ES: "energy saving" connector with LED

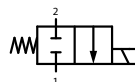
R*: rectifier bridge;

L*:LED;

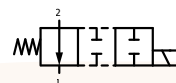
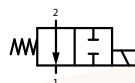
V*:LED+varistor



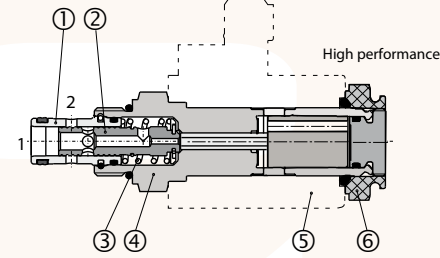
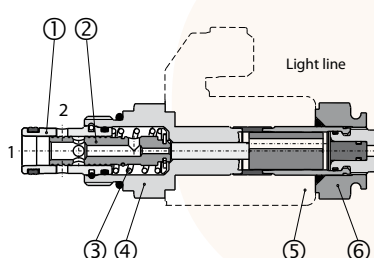
C



O



Screw-in 2/2 solenoid valves type EV2*.34 are composed by a valve sleeve 1, a control spool 2, a return spring 3, and an actuating assembly 4 that comprises the magnetic parts and the screwing section. An energizing electric solenoid coil 5 is fastened to the assembly by means of a retaining nut 6. When solenoid coils is energized, a magnetic mobile armature shifts and by means of a rod installed inside assembly, moves the control spool which makes hydraulic connections between 1,2 ports.



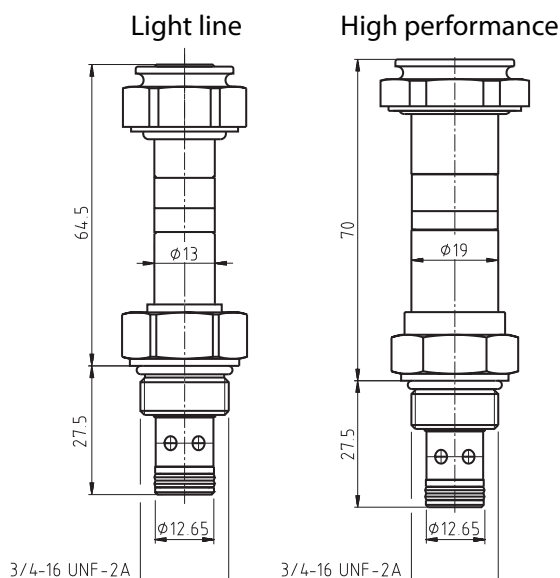
3 TECHNICAL DATA

	Light line	High line
Max. nominal pressure	25 MPa (250 bar)	
Nominal flow rate	16 l/min	20 l/min
Max. rec. flow rate	20 l/min	
Dimension and installation	(see 4)	
Duty cycle	ED100%	
Massb (without coil)	0,20 kg	

Electric Characteristics:

Those solenoid valves are normally equipped by coils type C36, which are energized from DC or AC supply. 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/DIN 43650/A connectors. For coils with different connection to the power supply, see table C30/36.

4 INSTALLATION DIMENSIONS (mm)



SEALS:

BODY:

1 pcs Dualseal-PU
10,3x12,7x3,1
1 pcs O-ring-NBR
17,0x1,8

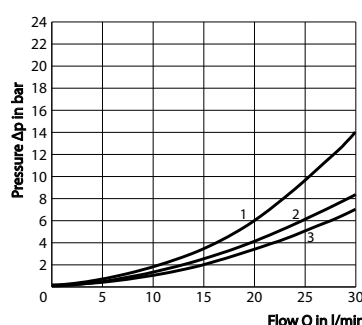
SOLENOID AND RETAINING NUT:

1 pcs O-ring-NBR
12,3x2,4
1 pcs O-ring-Viton
20x2,5

EV2*.34 valves are to be installed in cavity 3/4" 16 UNF. Check the appropriate state and position of the seals, screw the valve in the cavity and lock it with a torque of about 45 Nm applied on the 24 mm hexagon.

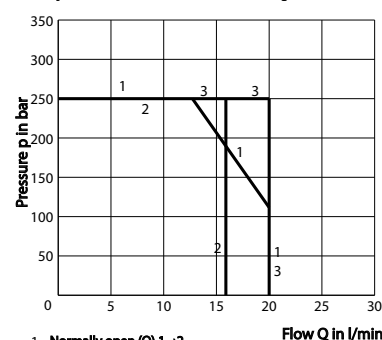
5 TYPICAL DIAGRAMS

Light line and High performance valve



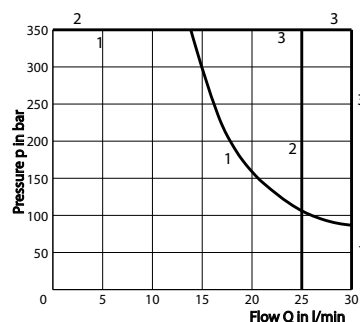
- 1 Normally closed (C) 1→2
- 2 Normally open (O) 1→2
- 3 Normally open (O) 2→1

Hydraulic limits of use Light line valve



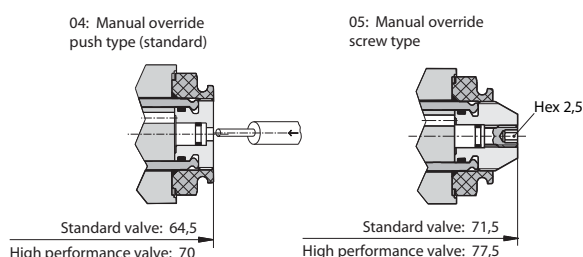
- 1 Normally open (O) 1→2
- 2 Normally closed (C) 2→1
- 3 Normally open (O) 2→1

Hydraulic limits of use High performance valve



- 1 Normally open (O) 1→2
- 2 Normally closed (C) 2→1

6 VARIANTS OF MANUAL OVERRIDE



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 :

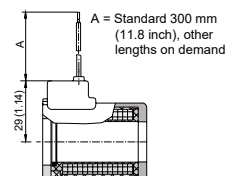
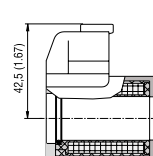
1 = V12 V24 2 = V115 3 = V230

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

AMP JUNIOR

A technical drawing of a bolt and nut assembly. The bolt is shown in a perspective view, with a hexagonal head and a threaded shank. The nut is shown in a perspective view, with a hexagonal head and a threaded shank. The bolt is inserted into the nut, and the threads are visible on both parts.

DEUTSCH



SEZIONE A-A

30 30

0.5 13 3/4-16 UNF

Ø24 G3/8

Ø24 G3/8

0.5 13 13 0.5

(Ø14.95)

N°2 Ø6.5

60⁰_{-0.5}

10 40 10

13 34⁰_{-0.5} 13

32

17.5 17.5

35⁰_{-0.5}

LAB-34-2/38