# BCARTRIDGE VALVES C

SCREW IN, 2-WAY SOLENOID OPERATED POPPET VALVES NORMALLY CLOSED, BI-DIRECTIONAL CONTROL CAVITY 3/4" 16 UNF Ø 15,87 mm EVD2-34/2

25 I/min 21 MPa (210 bar)

# **1** DESCRIPTION

The valve is 2 way poppet type direct operated. It is available also with manual override. 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.

This valve has a special design with a 3/4" 16 UNF thread but with a 15,87 mm nose thus permits a lower pressure drop.



# 2 ORDERING CODE

(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)
EV	D2	-	34	/	2	-		-		-		-	

(1) EV : screw-in directional solenoid valve with Ø 13 mm solenoid core (see  $\blacksquare$  ), 2 way, 2 position

- (2) D2 : poppet type, normally closed, BI-directional-control
- (3) 34 : cavity 3/4 " 16 UNF
- (4) 2: with Ø 15,87 mm nose
- (5) 02: filter and manual override
- (6) 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
- (7) Options for coil connection

no designation: standard connection ISO4400/DIN 43650/A C: flying leads

- A: AMP Junior
- D: deutsch

(8) Options for ISO4400/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









The poppet 6 is balanced by pressure and it is kept normally closed against its seat 7 by spring 12. When the solenoid is energized, the mobile armature moves against spring 12 the poppet 6, thus permitting flow from 2 to 1 and from 1 to 2. The manual override is of the pin type and, when pushed, it permits the valve's operation in case of electric failure. The filter (0,25 mm) on way 2 prevents from dirt and better diffuses the flow around the poppet.





# 3 TECHNICAL DATA

Max. nominal pressure	21 MPa (210 bar)
Nominal flow rate	16 l/min
Max. rec. flow rate	25 l/min
Dimension and installation	See 4

#### 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 C36

### 4 INSTALLATION DIMENSIONS (mm)



EVD2.34/2 valves are to be 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 13 x 2

Screw the valve in the cavity and lock it with a torque of about 45 Nm applied on the 24mm 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 onsumption to less than 50% of the nominal and strongly reduce warming up of the coils.

## **5** PRESSURE DROPS

Measured at 46 cSt and 40°C.



## 6 COILS TYPE C36 (Ø 13mm)

Coils DIN	voltage DC	nominal current (A)	resistence 20° C ( <b></b> Ώ)	nominal power (W)	insulation class
C36-012C	V 12 DC	1,9	6,3	22,8	
C36-024C	V 24 DC	0,95	25,6	22,5	
C36-024R	V 24 RAC	1,05	20,2	23,0	
C36-048C	V 48 DC	0,47	102	22,6	н
C36-110R	V 110-115 RAC	0,23	420	22,9	
C36-220R	V 220-230 RAC	0,11	1720	22,3	

