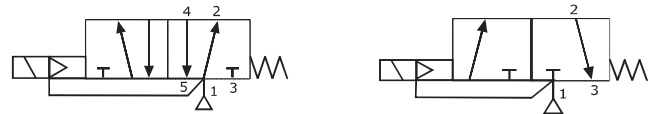


Type C15 Series Solenoid Valve



DESCRIPTION

Solenoid valve designed for direct mounting onto 1/4 turn pneumatically operated valve actuators meeting 'NAMUR' standard fixing dimensions.

Hazardous area approved pilot operators (ExnA, Ex e mb, Exd and Exia) are available with various international approvals – ATEX, IECEx, FM, GOST CU TR (Russia) and NEPSI (China).

- Body material available in
- Aluminium (standard)
 - Stainless Steel
 - Brass

Seal kit available – VSKC15P

FEATURES

- Interchangeable CNOMO interface coil units, including various hazardous area options
- Integrated Exhaust to Spring (ETS) feature in 3/2 position
- Top face air connection
- 1/4" BSP mains air connection and 1/8" BSP exhaust ports, also available in NPT ports
- Single coil spring return function or double coil stay put function
- Pilot exhaust dust caps fitted as standard
- The valve is fitted with a change-over plate that allows the valve to be converted from 3/2 to 5/2 function quickly and easily for spring return and double acting actuators
- SIL2 on energising, SIL3 on de-energising when used in 3/2 mode

PRODUCT CODE: **C 1 5** **OPERATOR** **P** **COIL** **OPTIONS 1** **0** **VOLTAGE** **DESIGNATOR** **OPTIONS 2**

SEE BELOW FOR
PRODUCT CODE
DETAILS

Any of the below options that are not required enter '0' in relevant box.

Operator

- 1 8** Spring return, internal pilot air feed
- 8 0** Spring return, external pilot air connection
- 1 9** Double solenoid, internal pilot air feed
- 9 0** Double solenoid, external pilot air connection

Coil

- A** Exia
- B** Terminal Box
- D** Exd
- H** Plug & Socket Exia
- K** MC30 Plug & Socket
- L** MC30 Plug & Socket with LED
- P** Plug & Socket
- S** Exia Stainless Steel Housing
- T** Inline Terminal Box
- Y** ExnA Plug & Socket
- 0** No Coil Unit
- 4** Stainless Steel Housing
- 5** ExnA Stainless Steel Housing
- 8** Ex e mb Stainless Steel Housing

Options 1

- C** Lever manual override
- D** Push button manual override
- S** Screw driver override
- 0** No option required

Standard Voltage

- A** 24v DC
- B** 24v DC (10mA) ⁽⁵⁾
- H** 24v DC Low Power ⁽¹⁾
- R** 24v AC (50/60 Hz)
- T** 110v AC (50/60 Hz)
- N** 220v AC (50/60 Hz)
- U** 240v AC (50/60 Hz)

* A comprehensive range of non-standard voltages available on request

Note:

- (1) "H" option not available with Exia solenoids
- (2) IECEx only available with Exia and Exd Solenoids
- (3) GOST CU TR only available with Exd solenoids
- (4) NEPSI only available with Exia and Exd solenoids
- (5) "A" option only available with Exia solenoids

Designator

- A** ATEX
- C** IECEx ⁽²⁾
- F** FM/CSA
- G** ATEX Exd IIB
- J** ATEX Ex e mb
- R** GOST CU TR ⁽³⁾
- X** NEPSI ⁽⁴⁾

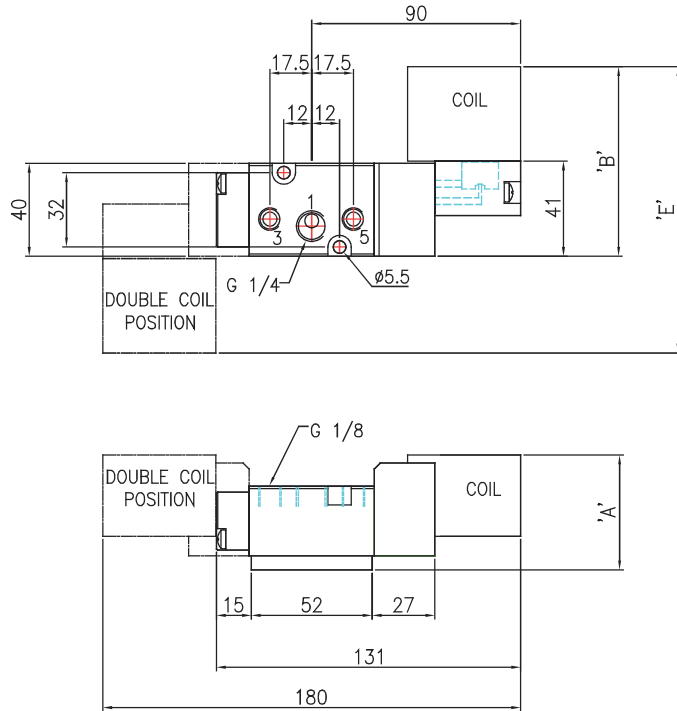
Options 2

- B** Valve body brass
- C** Valve body brass and NPT ports
- D** Valve body brass, NPT ports and 1/2" NPT electrical connection
- E** 1/2" NPT electrical connection
- F** Valve body stainless steel and 1/2" NPT electrical connection
- L** Low temperature duty -40°C
- M** NPT ports and 1/2" NPT electrical connection
- N** NPT ports
- P** Valve body stainless steel, NPT ports and 1/2" NPT electrical connection
- R** Valve body stainless steel and NPT ports
- S** Valve body stainless steel

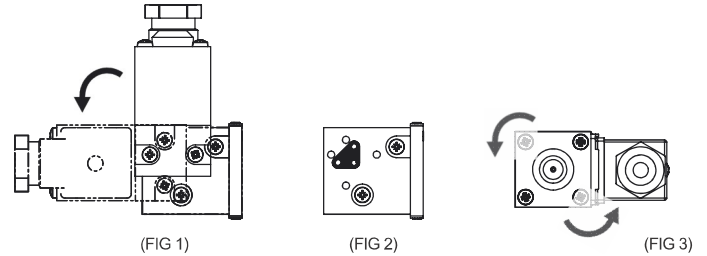
* A comprehensive range of non-standard options available on request

COIL ORIENTATION

The solenoid pilot can be mounted in two possible positions by rotating the solenoid base through 90° (FIG 1). This is achieved by releasing the two M4 pozi-drive screws which secure the solenoid pilot to the valve body. When changing the solenoid pilot position care should be taken to ensure the triangular gasket seal is in place. (FIG 2)



The coil itself can be rotated in 90° steps by releasing the four securing screws. (FIG 3) When rotating the coil care should be taken to ensure the core assembly (core, spring, seal and washer) remains intact and aligned correctly. This is easily achieved by only lifting the coil the small amount required to clear the screws enabling the coil to be rotated.



DIMENSIONS (mm)

COIL TYPE	A	B	E
MC30 Plug & Socket	48	93	146
Plug & Socket	50	97	154
Standard Terminal Box	50	102	164
SS Terminal Box	58	112	184
ExnA SS Terminal Box	58	112	184
ExnA Plug & Socket	50	97	154
Exd SS Terminal Box	58	112	184
Ex e mb SS Terminal Box	58	112	184
Exia SS Terminal Box	58	118	196
Exia Std. Terminal Box	50	109	178
Exia Plug & Socket	50	104	168

MATERIAL SPECIFICATIONS

	STANDARD
Body and End Caps	Black Anodised Aluminium (Dural)
Spool	Hard Anodised Aluminium PTFE Impregnated
Jet	Brass
Spacers	Glass Filled Acetal
Seals	Nitrile (Alternative Seals Available)
Spring	Music Wire
Mounting Screws	Stainless Steel
Change Over Plate	Nylon 66 30% Glass Filled
Gasket	Nitrile

VALVE SPECIFICATIONS

	STANDARD
Inlet Port Connection Size	1/4" BSP
Exhaust Port Connection Size	1/8" BSP
Working Pressure	3 to 10 bar
Cv Factor	0.7
Flow Rate (at 6 bar with 1 bar pressure drop)	675 l/min
Maximum Ambient Temperature	+80 °C
Minimum Working Temperature	-20 °C

COIL DETAILS

Coil Type	Plug & Socket	Terminal Box	ExnA	Exd	Ex e mb	Exia
Area Class	Safe	Safe	Zone 2	Zones 1 & 2	Zones 1 & 2	Zone 0, 1 & 2
Area Category	N/A	N/A	ExnA II T4-T6	Exd IIC T3-T6	Ex e mb IIC T4	Exia IIC T6
Ingress Protection	IP65	IP65	IP65	IP66	IP66	IP65
Cable Entry	PG.9	M20 x 1.5	PG.9	M20 x 1.5	M20 x 1.5	M20 x 1.5
Ambient Temperature	-20 to +80 °C	-20 to +80 °C	-20 to +60 °C	-20 to +80 °C	-20 to +65 °C	-20 to +65 °C
Magnetic Wire Class	H	H	H	H	H	H

*** FURTHER SOLENOID OPTIONS AVAILABLE ON REQUEST**