

## E43--C Series, 1/2", 3/2 Function Solenoid Valve

CALL: +44 (0)1254 872277  
E-MAIL: sales@pneumatrol.com



### DESCRIPTION

3 port 2 position, pilot operated solenoid valve.

Valve is illustrated with a safe area plug & socket coil.

Body material available in

- Aluminium (standard)
- Stainless Steel
- Brass

Seal kit available – VSK501

### FEATURES

- Internal or external pilot air connection
- Interchangeable CNOMO interface coils, including various hazardous area options
- Single coil spring return function or double coil stay put function
- Convenient fixing holes to enable bracket mounting
- Pilot exhaust dust caps fitted as standard
- SIL2 on energising, SIL3 on de-energising when used in 3/2 mode

**PRODUCT CODE:** **E 4 3** **OPERATOR** **C** **OPTIONS 1** **COIL** **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 (BASEEFA)
- B** Terminal Box
- U** Exia (FM)
- D** Exd
- K** MC30 Plug & Socket
- N** ExnA
- P** Plug & Socket
- S** Exia (BASEEFA) Stainless Steel Housing
- 0** No Coil Unit
- 9** Exm

#### Options 1

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

#### Standard Voltage

- B** 24v DC
- H** 24v DC Low Power <sup>(1)</sup>
- 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

#### Designator

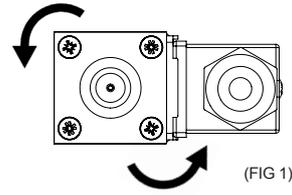
- A** ATEX
- C** IECEx <sup>(2)</sup>
- E** Exme 0.5W
- G** ATEX Exd IIB
- H** Exm
- J** Exme 2.4W
- R** GOST CU TR <sup>(3)</sup>
- X** NEPSI <sup>(4)</sup>

#### Options 2

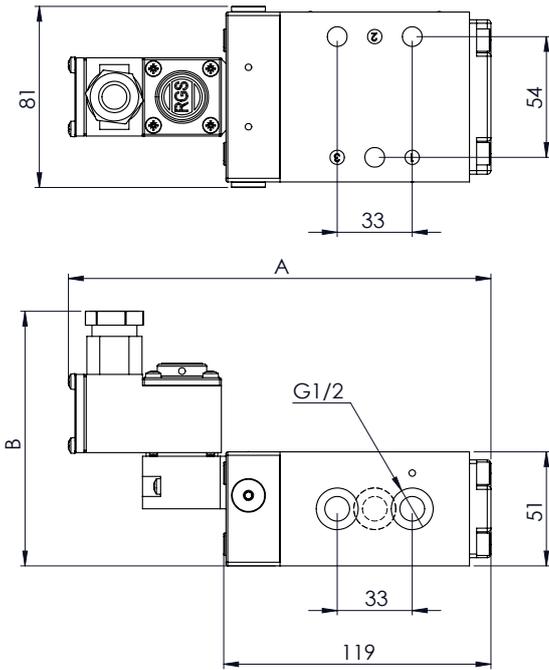
- B** Valve body brass
- C** Valve body brass and NPT ports
- D** Valve body brass, NPT ports and 1/2" NPT electrical connection
- E** 1/2" NPT electrical connection
- L** Low temperature duty -40°C
- M** NPT ports and 1/2" NPT electrical connection
- N** NPT ports
- P** Valve body stainless steel, NPT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

## COIL ORIENTATION

The coil itself can be rotated in 90° steps by releasing the four securing screws. (FIG 1) 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
Plug & Socket	190	105
MC30 Coil	182	100
Terminal Box	187	114
ExnA	187	114
Exd	203	126
Exia	155	120
Exm	155	96

## 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
Spring	Music Wire

## VALVE SPECIFICATIONS

### STANDARD

Inlet Port Connection Size	1/2" BSP
Working Pressure Internal Pilot Version	3 to 10 bar
Working Pressure External Pilot Version	3 to 10 bar
Minimum External Pilot Pressure	3 bar
Cv Factor	3.5
Flow Rate (at 6 bar with 1 bar pressure drop)	3534 l/min
Maximum Ambient Temperature	+80 °C
Minimum Working Temperature	-20 °C

## COIL DETAILS

Coil Type	Plug & Socket	Terminal Box	ExnA	Exd	Exm	Exia
Area Class	Safe	Safe	Zone 2	Zones 1 & 2	Zones 1 & 2	Zone 0, 1 & 2
Area Category	N/A	N/A	ExN II T4-T6	Exd IIC T3-T6	Exm IIC T5	Exia IIC T6
Ingress Protection	IP65	IP65	IP65	IP66	IP65	IP65
Cable Entry	PG.9	M20 x 1.5	M20 x 1.5	M20 x 1.5	Flying leads	M20 x 1.5
Ambient Temperature	-20 to +80 °C	-20 to +80 °C	-40 to +60 °C	-60 to +80 °C	-20 to +65 °C	-40 to +65 °C
Magnetic Wire Class	H	H	H	H	H	H

\* FURTHER SOLENOID OPTIONS AVAILABLE ON REQUEST