



# 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).

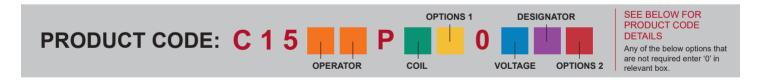
Body material available in

- · 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 changeover 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
- SIL 2 Capable (Deenergise to trip @ HFT=0) SIL 3 Capable (Deenergise to trip @ HFT=1) when used in 3/2 mode



#### **Standard Operator** Coil **Options 1 Voltage Designator Options 2** Spring return, internal Exia Lever manual override 24v DC A ATEX / IECEx (2) B Valve body brass pilot air feed 24v DC Low Power (1) Terminal Box B ATEX / IECEx (10mA Push button manual override C Valve body brass and NPT ports Spring return, external pilot air connection 24v AC (50/60 Hz) Screw driver override FM / CSA Valve body brass, NPT ports and 1/2" NPT electrical connection Double solenoid, internal Plug & Socket Exia 110v AC (50/60 Hz) ATEX Exd IIB No option required pilot air feed 1/2" NPT electrical connection 220v AC (50/60 Hz) J ATEX Ex e mb MC30 Plug & Socket \* Not SIL approved with Double solenoid, external Low temperature duty -40°C MC30 Plug & Socket with LED pilot air connection 240v AC (50/60 Hz) R GOST CUTR (3) NPT ports and 1/2" NPT electrical connection \* A comprehensive NEPSI (4) Plug & Socket range of non-standard voltages available on request Exia Stainless Steel Housing NPT ports ExnA Plug & Socket Valve body stainless steel, NPT ports and 1/2" NPT electrical connection Stainless Steel Housing Valve body stainless steel and NPT ports (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 ExnA Stainless Steel Housing Valve body stainless steel (4) NEPSI only available with Exia and Exd solenoids Ex e mb Stainless Steel Housing \* A comprehensive range of non-standard options available on request

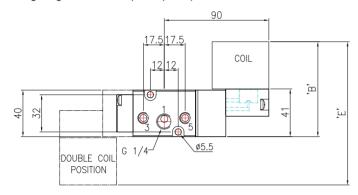


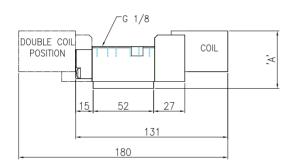




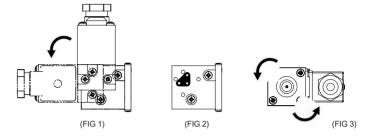
# **COIL ORIENTATION**

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	Α	В	E
Moulded Plug & Socket	50	85	130
Heavy Duty Mazak Plug & Socket	50	85	130
Standard Terminal Box	50	93	146
SS Terminal Box	58	110	180
ExnA SS Terminal Box	58	110	180
Exd SS Terminal Box	58	110	180
Piezo Operator	48	94	148
Exia SS Terminal Box	58	117	194
Exia Std. Terminal Box	50	100	160
Exia Plug & Socket	50	88	136

# **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 I/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	Ex nA 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	M20 x 1.5 or 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	Н	Н	Н	Н	Н	Н

### \* FURTHER SOLENOID OPTIONS AVAILABLE ON REQUEST

Official Stockist: