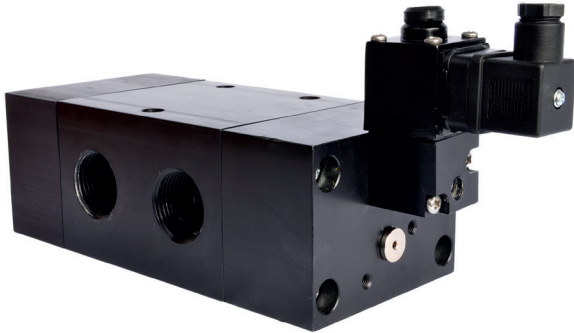


E83--0 Series, 1", 3/2 Function Solenoid Valve

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 – VSK1001

FEATURES

- Internal or external pilot air connection
- Interchangeable coils, including various hazardous area options
- Single coil spring return function or double coil stay put function
- Convenient fixing holes to enable bracket mounting

PRODUCT CODE: **E 8 3**

8 3

0

0

0

0

0

SEE BELOW FOR PRODUCT CODE DETAILS

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

OPERATOR

COIL

VOLTAGE

OPTIONS 2

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 Exia (BASEEFA) Stainless
- S** Steel Housing
- 0** No Coil Unit
- 9** Exm

Options 1

- C** Lever manual override
- D** Push button manual override
- 1** Tamperproof manual override
- 0** No option required

Standard Voltage

- B** 24v DC
- 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

Designator

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

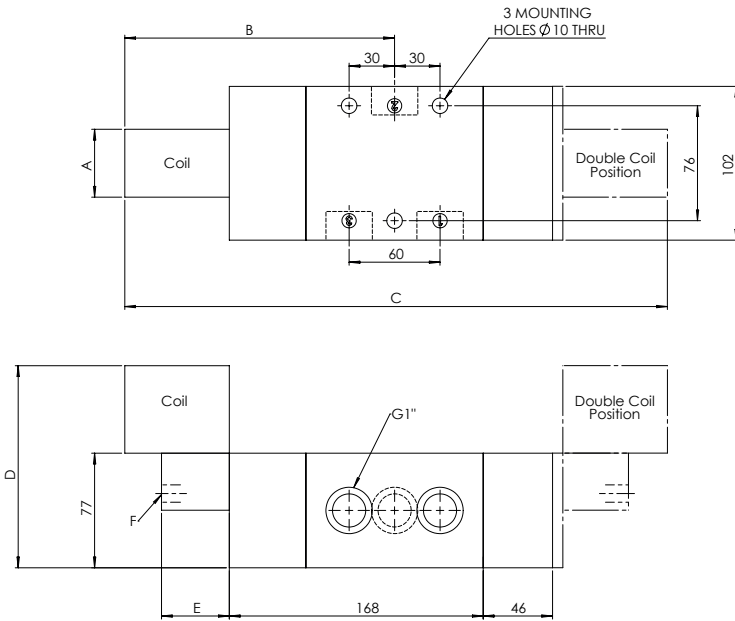
Options 2

- 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
- 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

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

DIMENSIONS (mm)



| COIL TYPE | A | B | C | D | E | F |
|---------------|----|-----|-----|-----|----|-------|
| Plug & Socket | 45 | 193 | 386 | 134 | 45 | G 1/4 |
| Terminal Box | 35 | 175 | 350 | 132 | 35 | G 1/8 |
| ExnA | 35 | 175 | 350 | 132 | 35 | G 1/8 |
| Exd | 52 | 195 | 390 | 152 | 35 | G 1/8 |
| Exia | 35 | 175 | 350 | 152 | 35 | G 1/8 |
| Exm | 35 | 182 | 364 | 132 | 35 | G 1/8 |

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 |
|---|-------------|
| Port Connection Size | 1" 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 | 10 |
| Flow Rate (at 6 bar with 1 bar pressure drop) | 10384 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**