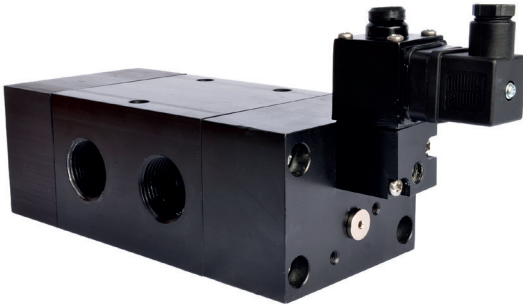


E83 Series, 1", 3/2 Function Solenoid Valve



DESCRIPTION

3 port 2 position, pilot operated solenoid valve.

Hazardous area approved pilot operators (ExnA, Exm, Exme, Exd and Exia) are available with various international approvals – ATEX, IECEx, CCCEx, FM, GOST CU TR (Russia)

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
- SIL 2 Capable (De-energise to trip @ HFT=0) SIL 3 Capable (De-energise to trip @ HFT=1)
- (Our manual override options are **NOT** currently covered by SIL Certification)

PRODUCT CODE:

E 8 3

C
OPERATOR

OPTIONS 1

0

0
COIL

DESIGNATOR

0

0
VOLTAGE

0
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 |
| X | 8 | External pilot operated valve, no solenoid |
| X | 9 | Double external pilot operated valve, no solenoid |

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 |
| Y | ExnA Plug & Socket |
| 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 |

* Not SIL approved with manual override options

Standard Voltage

- | | |
|---|----------------------|
| B | 24v DC |
| H | 24v DC Low Power (1) |
| R | 24v AC (50/60 Hz) |
| T | 110v AC (50/60 Hz) |
| U | 240v AC (50/60 Hz) |

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

1RWH □

- (1) "H" option not available with Exia solenoids
 (2) IECEx & CCCEx only available with Exia and Exd Solenoids
 (3) GOST CU TR only available with Exd solenoids

Designator

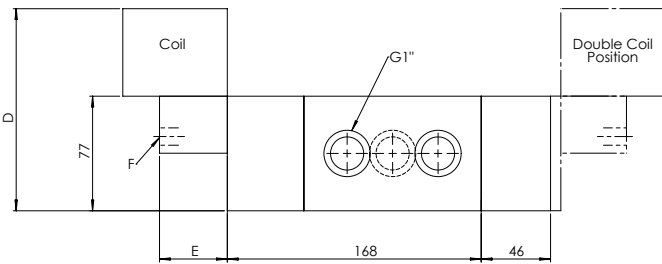
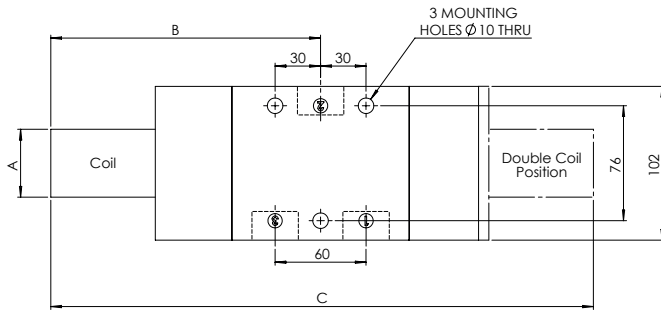
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Options 2

- | | |
|---|--|
| 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 |

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

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 SS	52	195	390	152	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	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	H	H	H	H	H	H

*** FURTHER SOLENOID OPTIONS AVAILABLE ON REQUEST**