

E25 Series, 1/4", 5/2 or 5/3 Function Solenoid Valve



DESCRIPTION

- Pilot operated solenoid valve.
- Hazardous area approved pilot operators
 - ExnA, Ex e mb, Exd & Exia
- Various international approvals
 - ATEX, IECEx, FM/CSA & UKCA
- Body material available in
 - Aluminium (standard), Stainless steel & Brass
- Seal kit available - VSK200

Valve Assembly illustrated with an Exia coil for reference only.

FEATURES

- External or internal pilot air connection.
- 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
- Interchangeable CNOMO interface coil units, including hazardous area options
- SIL 2 capable (De-energise to trip @ HFT=0), SIL 3 Capable (De-energise to trip @ HFT=1) (5/2 Solenoid Function only)
- Our manual override options are **NOT** currently covered by SIL Certification

PRODUCT CODE: E25



**SEE BELOW
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
- 1 4** 5/3 All ports sealed mid position, internal pilot air feed
- 4 0** 5/3 All ports sealed mid position, external pilot air feed
- 1 5** 5/3 Inlet sealed open exhaust mid position, internal pilot air feed
- 5 0** 5/3 Inlet sealed open exhaust mid position, external pilot air feed

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

Designator

- 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

Voltage

- A** ATEX / IECEx / CCCEX*(2)
- B** ATEX / IECEx / CCCEX (10mA)*(2)
- F** FM / CSA
- J** ATEX Ex e mb

Option 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

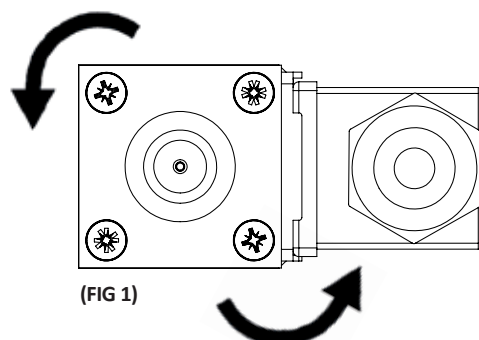
* A comprehensive range of non-standard options available on request

Note:

- (1) "H" option not available with Exia solenoids
- (2) IECEx & CCCEX only available with Exia and Ex db solenoids
- (3) FM only available in Exia

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.



MATERIAL SPECIFICATIONS

STANDARD

Body and End Caps	Black Anodised Aluminium (Dural)
Spool	Hard Anodised Aluminium PTFE Impregnated
Spacers	Glass Filled Acetal
Seals	Nitrile (Alternative Seals Available)
Spring	Music Wire

VALVE SPECIFICATIONS

STANDARD

Port Connection Size	1/4 " 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	1.2
Flow Rate (at 6 bar with 1 bar pressure drop)	1246 l/min
Maximum Ambient Temperature	+80°C
Minimum Working Temperature	-20°C

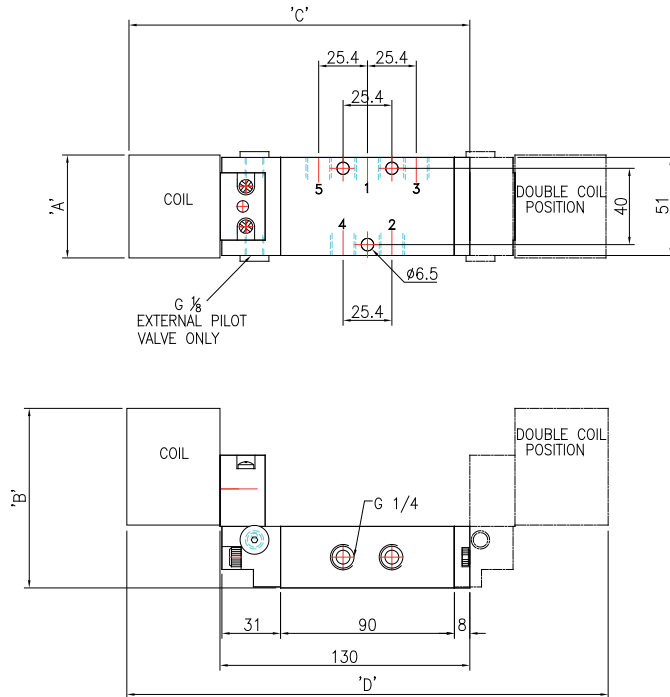
COIL DETAILS

Coil Type	Plug & Socket	Terminal Box	ExnA	Exd	Ex e mb	Exia
Area Class	Safe	Safe	Zone 2	Zone 1	Zone 1	Zone 1
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°C to +80°C	-20°C to + 80°C	-20°C to + 80°C	-20°C to +80°C	-20°C to +80°C	-20°C to +80°C
Magnetic Wire Class	H	H	H	H	H	H

Further solenoid options available on request

DIMENSIONS

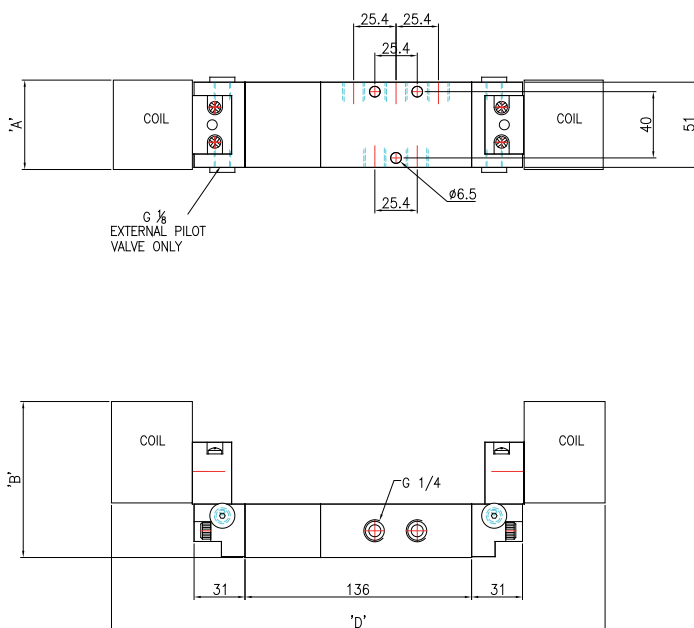
5/2 Position



COIL TYPE

COIL TYPE	A	B	C	D
MC30 Plug & Socket	36	102	174	241
Heavy Duty Mazak Plug & Socket	36	113	174	241
Standard Terminal Box	36	100	182	257
SS Terminal Box	52	120	199	291
ExnA Plug & Socket	36	126	177	247
Exd SS Terminal Box	52	120	199	291
Ex e mb Terminal Box	52	120	199	291
Piezo Operator	32	73	183	259
Exia SS Terminal Box	52	120	206	305
Exia Std. Terminal Box	36	100	189	271
Exia Plug & Socket	36	126	177	247

5/3 Position



COIL TYPE

COIL TYPE	A	B	D
MC30 Plug & Socket	36	102	287
Heavy Duty Mazak Plug & Socket	36	113	287
Standard Terminal Box	36	100	303
SS Terminal Box	52	120	337
ExnA Plug & Socket	36	126	293
Exd SS Terminal Box	52	120	337
ExnA SS Terminal Box	52	120	337
Ex e mb SS Terminal Box	52	120	337
Piezo Operator	32	73	305
Exia SS Terminal Box	52	120	351
Exia Std. Terminal Box	36	100	317
Exia Plug & Socket	36	126	293

Specifications subject to change without prior notice.