pneumatrol
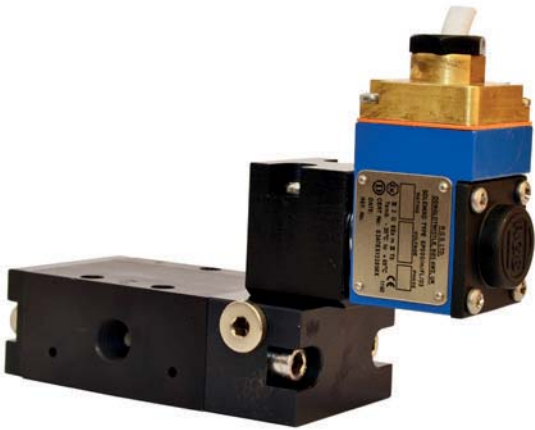
E23--C Series, 1/4", 3/2 Function Solenoid Valve

DESCRIPTION

3 port 2 position, pilot operated solenoid valve.

Valve is illustrated with an Exm coil.

Body material available in
• Aluminium (standard)
• Stainless Steel
• Brass

Seal kit available – VSK200

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
• SIL2 on energising, SIL3 on de-energising when used in 3/2 mode

PRODUCT CODE: E 2 3 [ ] [ ] C [ ] [ ] 0 [ ] [ ] [ ]

OPTIONS 1 — DESIGNATOR

OPERATOR — COIL — VOLTAGE — 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 [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

Coils with cURus approval for USA & CANADA markets are available on request with voltage : 24VDC, 120V 60Hz, 240V 60Hz.

pneumatrol

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 alined correctly. This is easily achieved by only lifting the coil the small amount required to clear the screws enabling the coil to be rotated.

(FIG 1)
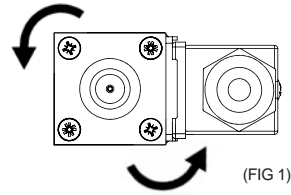
DIMENSIONS (mm)
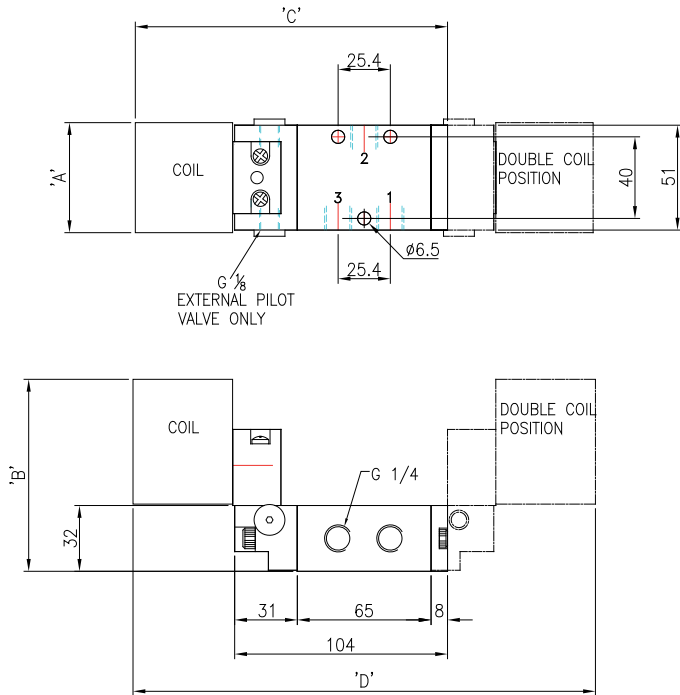
COIL TYPE	A	B	C	D
MC30 Plug & Socket	36	102	149	216
Heavy Duty Mazak Plug & Socket	36	113	149	216
Standard Terminal Box	36	100	157	232
SS Terminal Box	52	120	174	266
ExnA Terminal Box	36	100	157	232
Exd SS Terminal Box	52	120	174	266
Exm Flying Lead	36	107	145	208
Exme Terminal Box	36	100	157	232
Piezo Operator	32	73	158	234
Exia SS Terminal Box	52	120	181	280
Exia Std. Terminal Box	36	100	164	246
Exia Plug & Socket	36	126	152	222

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

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	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

REMOTE Mounted, E23--C Series, 1/4", 3/2 Function Solenoid Valve

Specifications subject to change without prior notice.