

SOLENOID OPERATED



General Description

A range of direct acting 3/2 universal hazardous area solenoid valves for the oil, gas and petrochemical industries.

- Lightweight
- Manual override, reset and latch versions
- EExd IIC T6
- 316 Stainless Steel throughout
- ATEX, UL
- Universal operation

Operating Medium

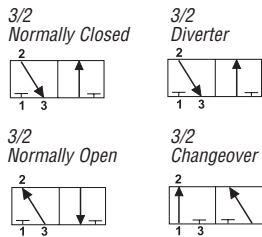
Gases

Filtered lubricated or non-lubricated air, inert gas, sweet (natural) gases. Sour gas option available. (*details on application*)

Liquids

Low pressure hydraulic, mineral oil or water.

Functional Symbols



Technical Data

Ports

- 1/4", 3/8", 1/2" NPT (BSP option available)

Orifice

- 8.8mm (0.35")

Cv (Kv)

- 0.86 (12.25)

Working pressure (gases and liquids)

- Maximum body pressure 20 bar (290 psi)
- Maximum operating pressure differential 10 bar (145 psi)

Working temperature

Ambient temperature

- -50°C to +40°C (-58°F to +104°F)

Construction Materials

- Stainless Steel AISI 316 S11 to NACE MR-01-75 Body
- 316 Stainless Steel Spindle
- 316 Stainless Steel Springs
- Nitrile (Buna N) Seals options: Fluoroelastomer and EPDM

Solenoid Specifications

- Flameproof EExd IIC T6 to ATEX standard

Degree of Protection

- IP67



Housing

- 316 Stainless Steel

Cable Entry

- M20 x 1.5

Coil Voltages

- DC - 12v, 24v, 110v
- AC - (50/60 Hz) 24v, 110v, 120v, 220v

Voltage Tolerance

- +10% to -15%

Power Consumption

- DC - 6 Watts
- AC units fitted with DC rectifier

Coil Insulation

- Class H

Duty Cycle

- 100% Continuously Rated

Earth Connections

- Internal and External

1900 Direct Acting Valves

1/4", 3/8", 1/2", 3/2 NPT (BSP)

1900 SERIES

1900 DIRECT ACTING VALVES

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MODEL CODES

3/2 Valves

1 **325M23** 2 **SD** 3 **D** 4 5

Valve Size
 2 = 1/4"
 3 = 3/8"
 4 = 1/2"

Valve Type
 - = Standard
 M = with manual override
 U = with manual latch
 X = with manual reset

Port type
 1 = BSP
 2 = NPT

Solenoid Type
 K = EExd IIC T6

Voltage Codes
 C = 12v DC
 D = 24v DC
 G = 110v DC
 J = 24v 50/60Hz AC
 M = 110v 50/60Hz AC
 N = 120v 50/60Hz AC
 S = 220v 50/60Hz AC

Preferred Models

Model No	Description	Mass kg (lbs)	Symbol
2325M23-SD2DK +	1/4" NPT 3/2 Direct acting solenoid operated, spring return	2.00 (4.41)	
2325M23MSD2DK +	1/4" NPT 3/2 Direct acting solenoid operated, spring return with manual override	2.10 (4.63)	
2325M23USD2DK +	1/4" NPT 3/2 Direct acting solenoid operated, spring return with manual latch	2.10 (4.63)	
2325M23XSD2DK +	1/4" NPT 3/2 Direct acting solenoid operated, spring return with manual reset	2.10 (4.63)	
3325M23-SD2DK +	3/8" NPT 3/2 Direct acting solenoid operated, spring return	2.10 (4.63)	
3325M23MSD2DK +	3/8" NPT 3/2 Direct acting solenoid operated, spring return with manual override,	2.20 (4.85)	
3325M23USD2DK +	3/8" NPT 3/2 Direct acting solenoid operated, spring return with manual latch	2.20 (4.85)	
3325M23XSD2DK +	3/8" NPT 3/2 Direct acting solenoid operated, spring return with manual reset	2.20 (4.85)	
4325M23-SD2DK +	1/2" NPT 3/2 Direct acting solenoid operated, spring return	2.10 (4.63)	
4325M23MSD2DK +	1/2" NPT 3/2 Direct acting solenoid operated, spring return with manual override	2.20 (4.85)	
4325M23USD2DK +	1/2" NPT 3/2 Direct acting solenoid operated, spring return with manual latch	2.20 (4.85)	
4325M23XSD2DK +	1/2" NPT 3/2 Direct acting solenoid operated, spring return with manual reset	2.20 (4.85)	

+ Specify solenoid voltage

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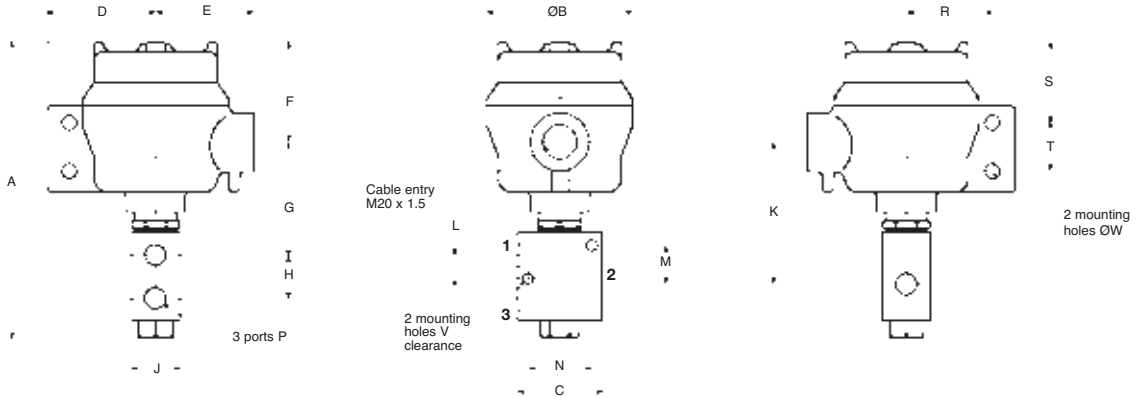
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INSTALLATION DIMENSIONS mm (inches)

3/2 Direct Solenoid Operated, Spring Return

2325M23-SD2DK +
3325M23-SD2DK +
4325M23-SD2DK +



Coil housing can be rotated 360° to facilitate wiring.

Model No	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	V	W
2325M23-SD2K+	150 (5.90)	78 (3.07)	45 (1.77)	58 (2.28)	52 (2.05)	54 (2.13)	52 (2.05)	23 (0.91)	25.4 (1.00)	66 (2.60)	12 (0.47)	20 (0.79)	34 (1.34)	1/4" (1.34)	46 (1.81)	42 (1.65)	26 (1.02)	M4 (0.33)	8.5 (0.33)
3325M23-SD2K+	164 (6.46)	78 (3.07)	65 (2.56)	58 (2.28)	52 (2.05)	54 (2.13)	52 (2.05)	34 (1.34)	32 (1.26)	71 (2.80)	17 (0.67)	24 (0.94)	42 (1.65)	3/8" (1.65)	46 (1.81)	42 (1.65)	26 (1.02)	M4 (0.33)	8.5 (0.33)
4325M23-SD2K+	164 (6.46)	78 (3.07)	65 (2.56)	58 (2.28)	52 (2.05)	54 (2.13)	52 (2.05)	34 (1.34)	32 (1.26)	71 (2.80)	17 (0.67)	24 (0.94)	42 (1.65)	1/2" (1.65)	46 (1.81)	42 (1.65)	26 (1.02)	M4 (0.33)	8.5 (0.33)

3/2 Direct Solenoid Operated, Spring Return with Manual Override.

2325M23MSD2DK +
3325M23MSD2DK +
4325M23MSD2DK +

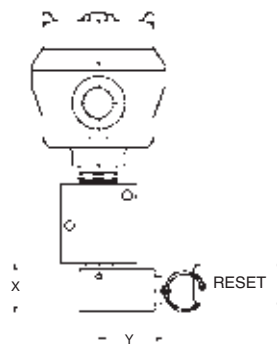


Model No	X
2325M23MSD2K+	54 (2.13)
3325M23MSD2K+	54 (2.13)
4325M23MSD2K+	54 (2.13)

All other dimensions as above

3/2 Direct Solenoid Operated, Spring Return with Manual Latch.

2325M23USD2DK +
3325M23USD2DK +
4325M23USD2DK +

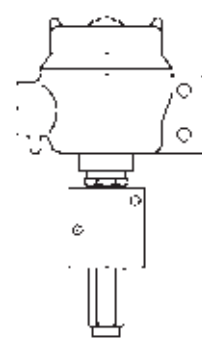


Model No	X	Y
2325M23USD2K+	30 (1.18)	40 (1.57)
3325M23USD2K+	30 (1.18)	40 (1.57)
4325M23USD2K+	30 (1.18)	40 (1.57)

All other dimensions as above

3/2 Direct Solenoid Operated, Spring Return with Manual Reset.

2325M23XSD2DK +
3325M23XSD2DK +
4325M23XSD2DK +



Model No	X
2325M23XSD2K+	54 (2.13)
3325M23XSD2K+	54 (2.13)
4325M23XSD2K+	54 (2.13)

All other dimensions as above

1900 DIRECT ACTING VALVES