

v-solenoidTM I-SAFE SERIES

Intrinsically Safe, Direct Mounting NAMUR solenoid valves for process valve actuators



Designed and Conceived in Canada

Veltri Controls

WORLD CLASS VALVE ACCESSORIESTM

v-solenoid II™

I-SAFE SERIES



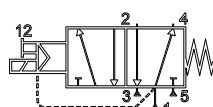
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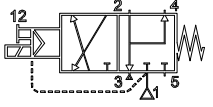
Features

- Intrinsically safe, CSA certified, FM and PTB approved for hazardous locations:
 - Ex II 2G EEx ia IIC T5
 - IEC Ex ia IIC T5
 - Class I; Group A,B,C and D
 - Class II; Group E,F and G
 - Class III; Division 1
- Robust, Reliable and Compact design provides bubble-tight shut-off and high cycle life.
- Corrosion resistant construction with standard manual override.
- Direct mounting conforms to Namur VDI/VDE 3845 standard.
- 5/2 and 3/2 function selectable via 180° rotation of single adapter plate.
- Exhaust feedback - provides spring chamber with instrument air preventing corrosion.
- Wide operating temperature range -4°F to +140°F [-20°C to +60°C]. Optional Low Temp to -40°F [-40°C]
- Also available: ATEX and Explosion proof.



Function

5/2  5/2 configuration for double-acting actuators. De-energized state, with supply to port 1, flow is directed to port 4 and port 2 is vented to atmosphere via port 3.

3/2  3/2 configuration for spring return actuators. De-energized state, supply port 1 is blocked and port 2 exhaust is fed back to port 4 with excess vented to atmosphere via port 3.

Media

- Compressed air, lubricated or non-lubricated
- Instrument air
- Nitrogen

Applications

- Control of quarter-turn and linear process valve actuators
- Control of diaphragm valves
- General automation

Veltri Controls WORLD CLASS VALVE ACCESSORIES

2365 DUNCASTER DRIVE., BURLINGTON, ONTARIO, CANADA L7P 3V9
 TEL: 905-510-8509, FAX: 905-319-3553, E-MAIL: sales@veltricontrols.com www.veltricontrols.com

v-solenoid IITM

I-SAFE SERIES

Specifications:

Temp (Standard): -4°F to +140°F [-20°C to +60°C]
 (Optional): Low Temp to -40°F [-40°C]

Flow: Cv=0.8

Pressure: 35 to 120 psig [2.5 to 8 bar]

Ports: 1/4" NPT and NAMUR flange

Response: opening (on) 20ms
 closing (off) 40ms

Media: Compressed air-lubricated or unlubricated, Instrument air, Nitrogen.

Construction:

Valve body: Reinforced polyamide (PA)
 Sealing material: Proprietary elastomer
 Ports: MS zinc plated (stainless optional)

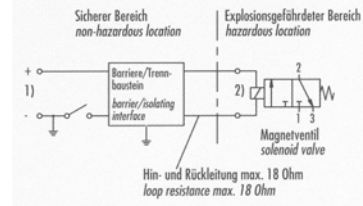
Options:

- 1/8" NPT Speed controls
- 1/8" NPT Exhaust mufflers
- Mounting Base
- Imperial mounting fasteners

STANDARD DELIVERY INCLUDES:
 M5 FASTENERS (PLATED) & O-RINGS FOR NAMUR MOUNT.

NOTE: FOR ALL I-SAFE SERIES VALVES, DELIVERY INCLUDES INTRINSICALLY SAFE COIL, LOW POWER PILOT AND CONNECTOR.

Electrical:



Barrier 1)

Voltage range 21.6 to 28VDC
 Peak Values 28VDC, 115mA, 1.6W

Coil 2)

Voltage (Nom) 24VDC
 Current >37mA
 Impedance 275 Ohm +8%
 T_{amb} (Max) 50°C

Duty cycle: 100% continuous service

Insulation class: F

Connection: DIN EN 175301-803-A / ISO 4400

Protection class: IP65 / NEMA TYPES 1,2,3, 3S,4 & 4X

Approvals: CSA, FM, PTB

Hazardous Locations:

- **Ex** II 2G EEx ia IIC T6 approved
- IEC Ex ia IIC T6 approved
- FM IS /I, II, III / ABCDEFG approved
- Coils are approved according to EN 50 020 resp. DIN VDE 0170/0171, part 5 by the PTB.

Ordering Table A: V-Solenoid II Valve - Intrinsically safe (IS) includes coils and connectors

PART NO.	VALVE
VS2IS-14NZP	V-SOLENOID II IS VALVE W/ 1/4" NPT INLET, STD HARDWARE,
VS2IS-14NZP-LT	V-SOLENOID II IS VALVE W/ 1/4" NPT INLET, STD HARDWARE, LOW TEMP

Ordering Table C: Valve Options

PART NO.	OPTION
SC18	SPEED CONTROL, 1/8" NPT
EM18	EXHAUST MUFFLER, 1/8" NPT
MB14	MOUNTING BASE, 1/4" NPT
F1032	#10-32 FASTENERS
F1024	#10-24 FASTENERS

EXAMPLE 1: V-SOLENOID II **IS** VALVE W/ 1/4" NPT INLET, STD HARDWARE
 = **VS2IS-14NZP**

EXAMPLE 2: V-SOLENOID II **IS** VALVE W/ 1/4" NPT INLET, STD HARDWARE, **LOW TEMP**
 = **VS2IS-14NZP-LT**

Veltri Controls WORLD CLASS VALVE ACCESSORIES

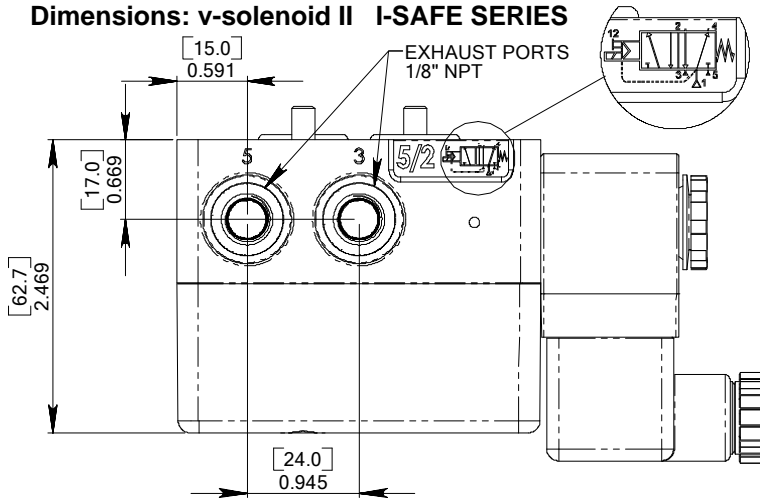
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v-solenoid II™

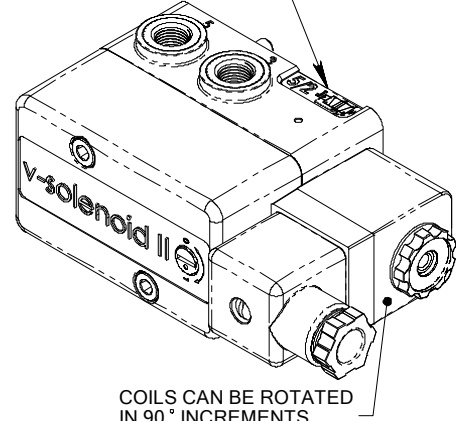
I-SAFE SERIES

For Explosion Proof, ATEX or Standard options, please contact **Veltri Controls** or visit our website at www.veltricontrols.com for specific literature relating to these options.

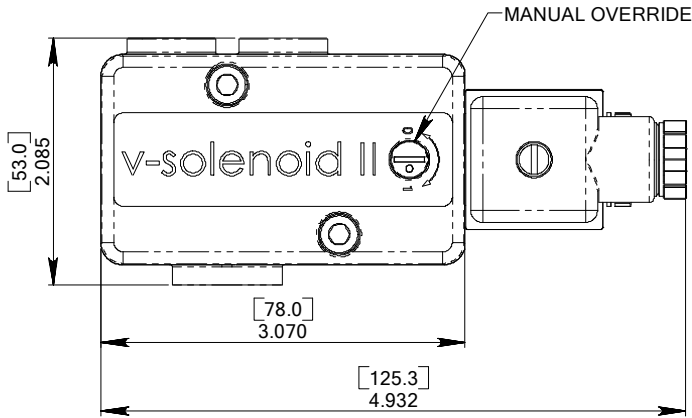
Dimensions: v-solenoid II I-SAFE SERIES



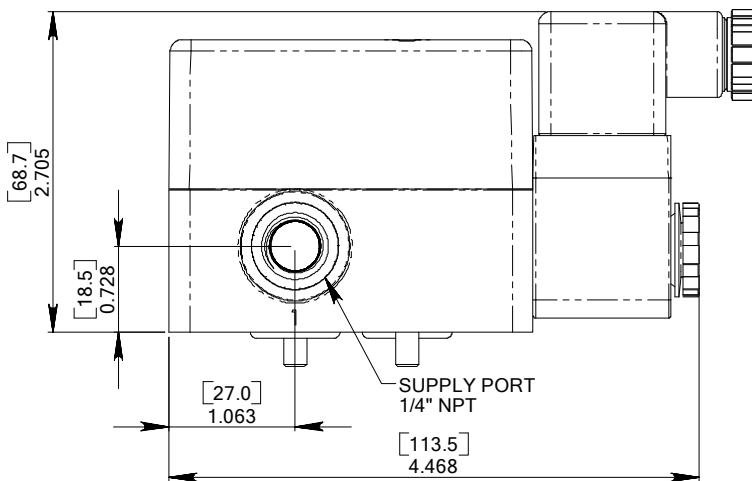
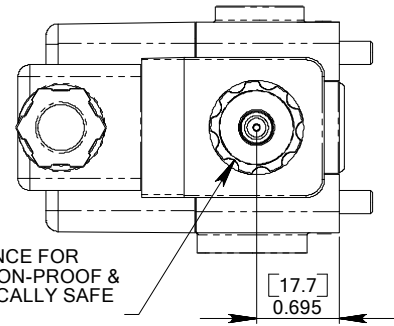
FUNCTION WINDOW SHOWS 5/2 OR 3/2 SELECTION W/ SCHEMATIC



COILS CAN BE ROTATED IN 90° INCREMENTS



CLEARANCE FOR EXPLOSION-PROOF & INTRINSICALLY SAFE COILS

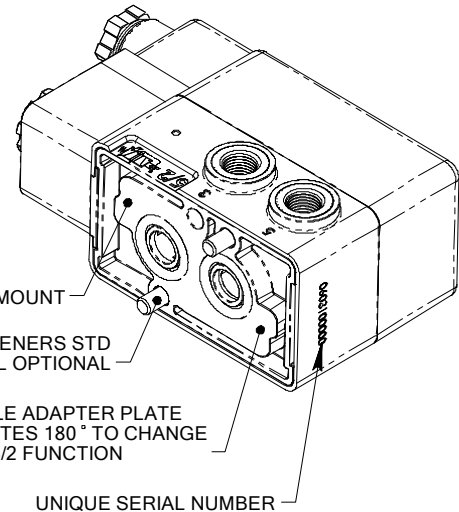


NAMUR MOUNT

M5 FASTENERS STD IMPERIAL OPTIONAL

SINGLE ADAPTER PLATE ROTATES 180° TO CHANGE 5/2 - 3/2 FUNCTION

UNIQUE SERIAL NUMBER



As it is our policy to promote continual improvement, we reserve the right to make changes to our products at any time without notice. US and International Patents Pending.

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