

SERIES ALS

Limit Switch Boxes

Features

The VSI Series ALS valve limit switch box family is your robust simple to setup solution for digital feedback on quarter turn valves with pneumatic or manual operators. Featuring a die cast aluminum housing with stainless fasteners, this family is corrosion resistant and suitable for most environments.



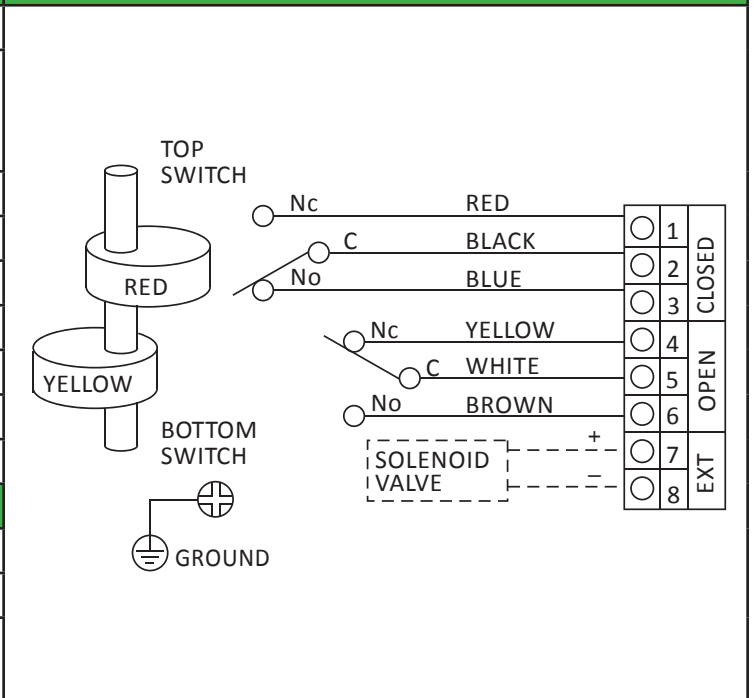
- **Quick Set Cams:** Trip point of switches in both direction can be adjusted simply by pushing down or up the cam and rotating it to the new position. Cams are spring-loaded and splined to ensure repeatability of switch setting. They are fully adjustable through 360° in 4° increments.
- **Corrosion Resistant Materials:** All exposed components are manufactured from either stainless steel, engineered plastics, or polyester powder coated aluminum for use in all environments
- **Captive Screws:** All cover screws are captive to permit calibration without the potential loss of hardware.
- **High Visibility Indicators:** Available in either high contrast OPEN/CLOSE, three way “T” or “L” port, or without indicator, there are options for every valve type.
- **Terminal Strip:** Numbered and pre-wired for easy hookup. Spare terminals are provided to allow the wiring of solenoid valves without the need for additional junction boxes. Wiring diagram is permanently attached within the cover of each ALS.
- **Internal Ground Screw:** Grounding screw for ease of wiring.

MODEL NUMBER	DESCRIPTION
ALS-100	Designed for general duty applications, this o-ring sealed switchbox features large visual indicator and easy to adjust mechanical limit switches as standard.

IMAGE	DIMENSIONS

SPECIFICATIONS AND TECHNICAL DATA	STANDARD WIRING DIAGRAM
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Enclosure	Die-cast aluminum
Coating	Dichromate conversion with polyester powder coating
Sealing	Buna-N O-ring
Environment Rating	NEMA 4/4X, IP67
Fasteners	Stainless Steel
Shaft	Stainless Steel
Conduit Entries	Two 1/2" NPT
Terminal Strip Contacts	8
Ambient Temperature	-10°F to 125°F
STANDARD SENSOR	
Sensor Model	M2
Manufacturer	Omron
Electrical Rating	15A 125-250VAC 0.6A 250VDC

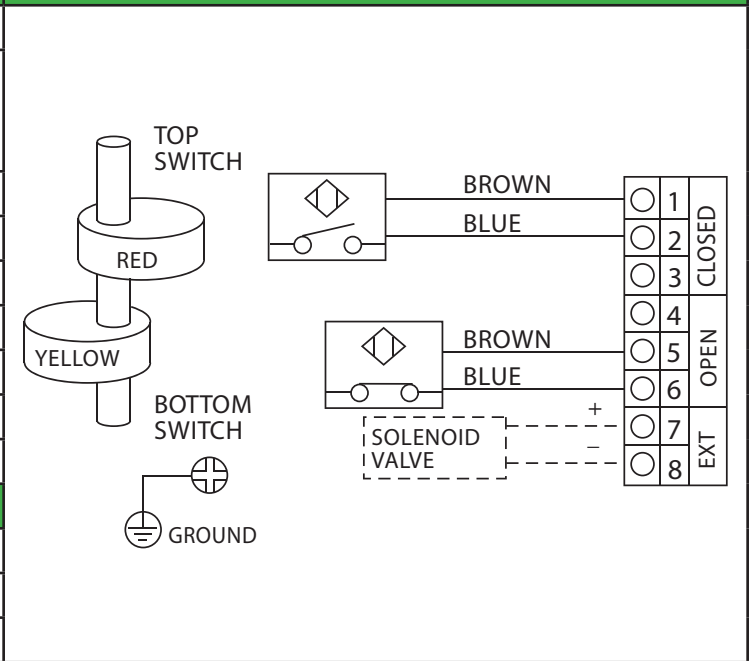


MODEL NUMBER	DESCRIPTION
ALS-200	Featuring inductive Pepperl+Fuchs sensors the ALS-200 is designed for intrinsically safe SIL2 applications that require a durable easy to adjust limit switch box.

IMAGE	DIMENSIONS

SPECIFICATIONS AND TECHNICAL DATA	STANDARD WIRING DIAGRAM
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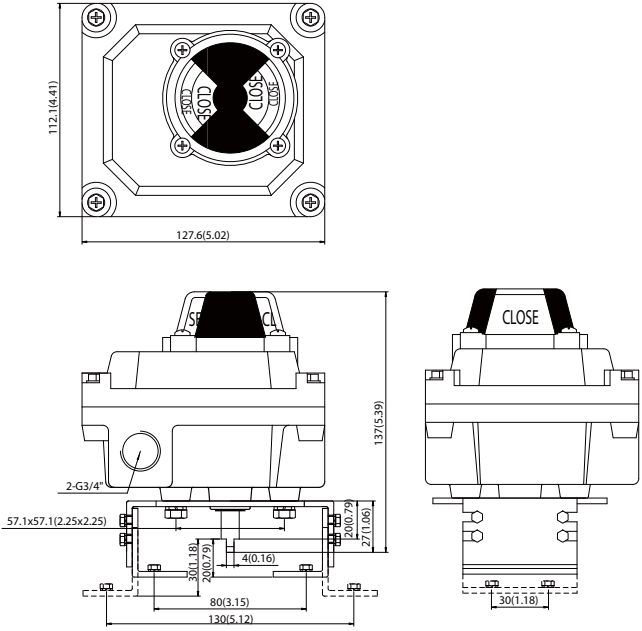
Enclosure	Die-cast aluminum
Coating	Dichromate conversion with polyester powder coating
Sealing	Buna-N O-ring
Environment Rating	NEMA 4/4X, IP67
Fasteners	Stainless Steel
Shaft	Stainless Steel
Conduit Entries	Two 1/2" NPT
Terminal Strip Contacts	8
Ambient Temperature	-10°F to 125°F
STANDARD SENSOR	
Sensor Model	PP2 (SIL2)
Manufacturer	Pepperl+Fuchs
Electrical Rating	8VDC <=1mA



MODEL NUMBER	DESCRIPTION
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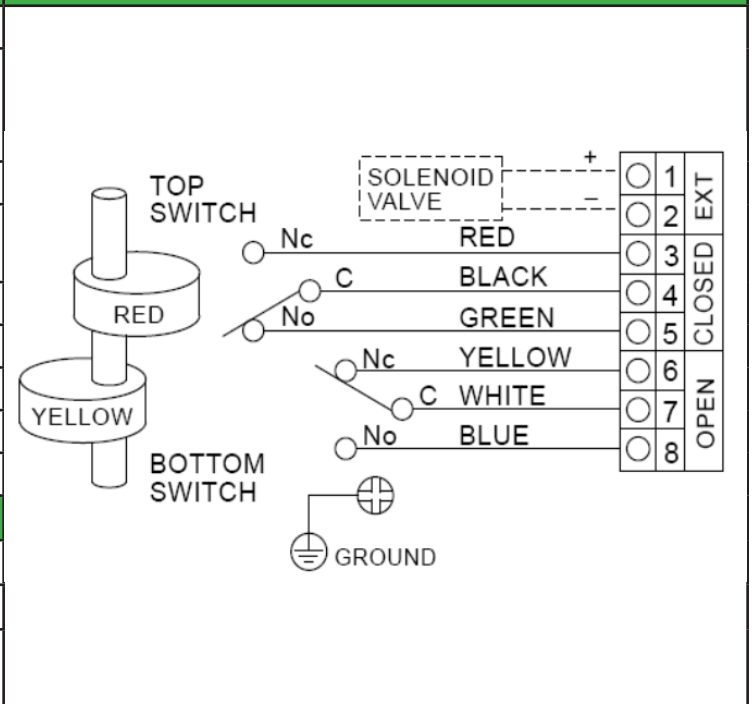
ALS-500	Designed for Hazardous environments, this o-ring sealed switchbox features large visual indicator and easy to adjust mechanical limit switches as standard. (Third party certified to EN 60079-0/60079-1)
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IMAGE	DIMENSIONS
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SPECIFICATIONS AND TECHNICAL DATA	STANDARD WIRING DIAGRAM
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Enclosure	Die-cast aluminum
Coating	Dichromate conversion with polyester powder coating
Sealing	Buna-N O-ring
Environment Rating	Ex II 2 G Ex d IIB T6 Class I, Div 1&2
Fasteners	Stainless Steel
Shaft	Stainless Steel
Conduit Entries	Two 3/4" NPT
Terminal Strip Contacts	8
Ambient Temperature	-10°F to 125°F
STANDARD SENSOR	
Sensor Model	M2
Manufacturer	Honeywell
Electrical Rating	16A 125-250VAC 0.6A 250VDC



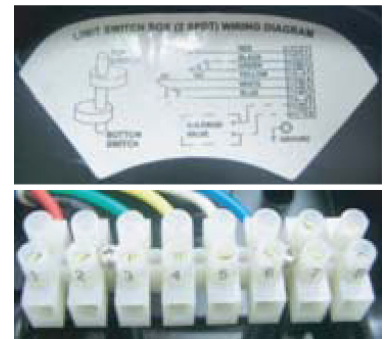
LIMIT SWITCH ADJUSTMENT:

1. Loosen limit switch box cover screws and remove cover.
2. Rotate actuator to full counterclockwise position.
3. Lift up bottom cam and turn clockwise or counterclockwise until switch is activated and then release. Ensure cam is engaged back onto the splined retainer. Spring will maintain cam engagement.
4. Rotate actuator to full clockwise position.
5. Push down top cam and turn clockwise or counterclockwise until switch is activated and then release. Ensure cam is engaged back onto the splined retainer. Spring will maintain cam engagement.
6. Place cover back onto limit switch box and tighten cover screws.



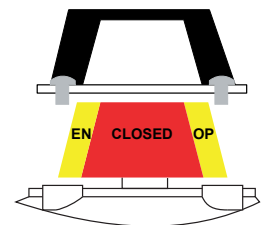
ELECTRICAL WIRING:

1. Disconnect supply circuit power before opening, if applicable.
2. Remove protection plugs from conduit entries and install conduit or plugs suitable for the type of protection required. Protection plugs shipped with switch box are NOT suitable for outdoor storage.
3. Engage wires in terminal strip and tighten using small flat head screwdriver.
4. Refer to wiring diagram associated with each ALS limit switch box in this document. A copy is supplied on a label inside the cover of every ALS limit switch box.
5. Be sure to properly ground the solenoid at provided ground terminal.



INDICATOR SETTING:

1. Remove four screws securing indicator cover and remove cover.
2. Lift up the indicator removing it from the shaft.
3. Set indicator back onto shaft in desired location.
4. Replace indicator cover ensuring that the o-ring seal is properly seated in the seal groove.
5. Fasten indicator cover screws.



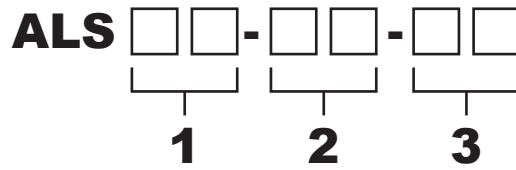
INSPECTION AND MAINTENANCE:

Inspect the components of the limit switch box for wear or damage and replace were necessary.

STORAGE:

The following cautions should be observed when storing ALS limit switch boxes

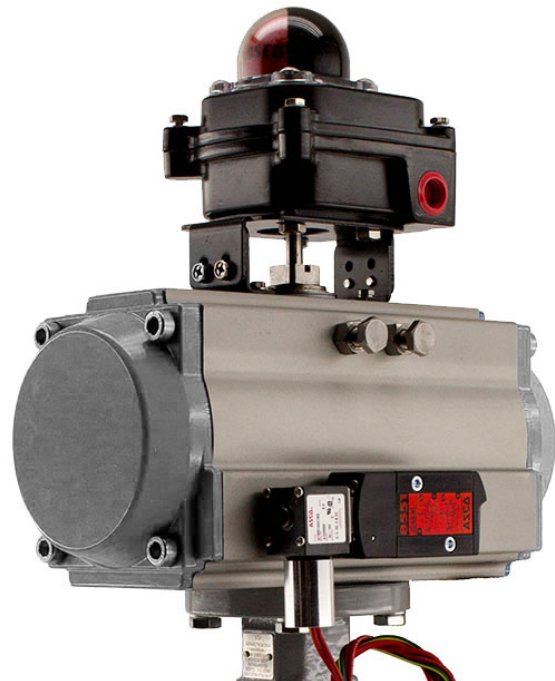
- On explosion proof enclosures ensure the machined housing mating surfaces are not scratched, dented, or otherwise damaged.
- Keep the limit switch box completely dry and water free
- Storage in environments where moisture is present requires the replacement of shipping housing plugs with appropriate weatherproof plugs.



1. Model	Code
Weatherproof	100
Intrinsically Safe	200
Explosion Proof	500

2. Switches	Code
2x SPDT Mechanical	M2
4x SPDT Mechanical	M4
2x Intrinsically Safe	PP2

3. Indicator	Code
O/C High Visibility	Blank
3-Way "Tee"	T
No Indicator	F





VSI Limited Product Warranty

This limited warranty applies in the United States to products manufactured by VSI, LLC. VSI, LLC. warrants the product purchased from it or its authorized reseller to be free from defects in material and workmanship under normal use during the one year warranty period from the date of its purchase. Other products not manufactured by VSI, LLC. which are provided as part of an assembly may carry additional warranties from that manufacturer or supplier.

During the warranty period, VSI, LLC. will repair or replace defective parts of the product, or, at VSI, LLC. sole option, issue a credit for the original purchase price of the product. Repaired or replaced product will be warranted hereunder only for the remaining portion of the original warranty period. All exchanged products under this Limited Warranty will become the property of VSI, LLC. A proper Return Material Authorization (RMA) number will have to be obtained for all products to be returned under this Limited Warranty. Any claim under this Limited Warranty must include a description of the problem encountered and any relevant information that may assist VSI, LLC. in the replication or resolution of the problem.

This Limited Warranty is transferable during its term to the end user of the product. Any transfer shall not extend or alter the terms of this Limited Warranty.

This Limited Warranty extends only to products purchased from VSI, LLC. or its authorized reseller and does not extend to any product that has been damaged or rendered defective as a result of (a) modification, repair, alteration or improper installation by any person other than VSI, LLC. or its authorized representative; (b) unreasonable or improper use or storage, use beyond rated conditions, operation other than per VSI, LLC. or the manufacturer's instructions, or being otherwise subjected to improper maintenance, negligence or accident; or (c) any use of the product after purchaser has knowledge of any defect in the product.

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