









# **ALS Series**

IP67 Limit Switch Box

**Installation Operating & Maintenance Instructions** 



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#### Instruction

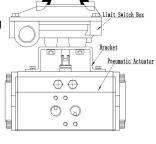
ALS series IP67 limit switch boxes include ALS200 which is a primary rotary position indication device both for local and remote. The ALS products were designed to integrate valve and rotary pneumatic actuator with internal Mechanical switches. This kind of limit switch box was designed through advance and state-of-the-art engineering technology which have the product to be solid, beautiful and with high-level quality. The product also fully meets IP67 specifications and the bracket is designed in light of ISO5211 and NAMUR standard.

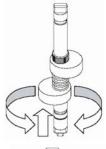
# Specification

Model No.	□ALS200-	
Photo		
Enclosure	Die-cast Aluminum with polyester powder coated, O-ring sealed	
Weather Proof	IP67	
Temperature Range	-20℃~80℃	
Cable Entry	$\square$ 2 × G1/2", $\square$ 2 × 1/2NPT or $\square$ 2 × M20-1.5	
Terminal Strips	8	
Position Indicator	90° Yellow Open, Red Closed	
Mechanical	Honeywell Max5A125-250VAC	☐M2: 2SPDT
Switches	☐ML2: 2SPDT Low Temp40℃	☐MG2: 2SPDT Gold contacts
	☐PP: p+f Sensors	□PA: ALPS Sensors
Proximity	NCB2-V3-No, NAMUR	10-30VDC,<=100mA(2 or 3 wire)
Sensors	Intrinsical safe(Ex ia II CT6)	
	8VDC,<=1mA	
	□QA: ALMS Sensor	
Magnet Sensors	5 ~ 240VAC/DC,<=300mA	
	(2 or 3 wire)	
Analog Output		
☐MB1.0: 30x80 H:20		1:20
	☐MB1.0: 30x80 H:30	
Bracket	☐MB1.1: 30x130 H:30-50	
	□MB2.3: 30x80,1	30 H:20-30

#### Installation

- 1. Attach proper mounting bracket to the limit switch box housing using four aniseed cap screws provided.
- 2. Align limit switch box shaft to top of actuator shaft and engage it.
- 3. Attach bracket to actuator using suitable hardware.
- 4. By actuating package the switch and actuator will self-align.
- 5. Tighten bracket to top of actuator.







- 1. Loosen limit switch box cover screws and remove cover.
- 2. Rotate actuator to full counterclockwise position. Valve is on fully open or closed position.
- 3. Lift up bottom cam and turn until switch is activated and then release. Engage cam back onto the splined retainer. Spring will maintain cam engagement.
- 4. Rotate actuator to full clockwise position. Valve is on fully closed or open position.
- 5. Push down top cam and turn until switch is activated and then release. Engage cam back onto the splined retainer. Spring will maintain cam engagement.
- 6. Place cover on limit switch box and tighten. Take care to ensure that housing O-ring is properly located in seal groove."

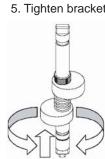


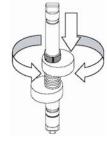
- 1. Remove limit switch box cover
- 2. Remove protection plugs from conduit entries and install conduit or plugs suitable for type of protection required.
- 3. Engage wires in terminal strip using a small screwdriver.

#### INSTRUCTION

- All user connections are made at a numbered terminal strip. A wiring diagram is located inside the cover and indicated which terminal numbers correspond to switch contacts: normally open, normally closed common, etc. Simply follow the wiring diagram and electric code to connect switches to your system.
- Solenoids may also be wired through the switch box. At least two auxiliary terminals are included as an option. A ground screw is also included. Simply wire the solenoid to auxiliary terminals, and then connect power leads to the opposite terminal side. Be sure to properly ground the solenoid at provided ground terminal.
- ALS series IP67 switch boxes include two 1/2" NPT conduit entries. Be sure to follow the National Electric Code regulations for rigid conduit, flexible conduit or cable systems as applicable.

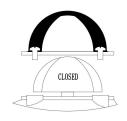






# Indicator Setting

- 1. Remove four screws and remove indicator cover.
- 2. Lift up indicator from the cover.
- 3. Set indicator on cover according to valve position.
- Replace indicator cover and fasten with cover screws. Check to ensure that position indicator O-ring is properly located in seal groove.



### Inspection and Maintenance

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

#### - RECOMMENDED REPLACEMENT PARTS:

Limit switch.

- 3. Housing O-ring.
- Position indicator O-ring.
- 4. Shaft O-rings(top and bottom)

## Storage

To store ALS series IP67 limit switch box, the following cautions are recommended:

- Ensure the limit switch box is completely dry and water free.
- Maintain the entrances of cable by fitting the original or replacement plastic corks.
- Protect from dust, dirt and damage by packing in box or plastic bag.

# Important Notice

- \* ALL ALS LIMIT SWITCH BOX HAVE BEEN 100% FACTORY TESTED IN OPERATION AND WATERTIGHTNESS.
- \* TECHNOLOGY CONSULTING, CONTACT WITH WILSONALPHA@GMAIL.COM
- \* INFORMATION HEREIN INCLUDING PRODUCT SPECIFICATION IS SUBJECT TO CHANGE WITHOUT NOTICE.