

LIMIT SWITCH USER MANUAL

PRODUCT INFORMATION

Valve Name: Limit Switch Box Material (Housing & Cover): Aluminium Alloy

Material (Sealing): NBR

Working temperature: (-15°C to +80°C)
Enclosure rating: Weather proof IP68
Visual indicator: Yellow / Open

Red / Closed

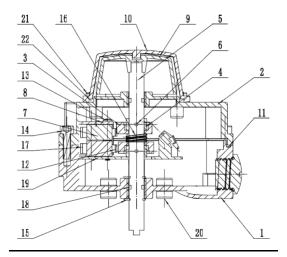
Conduits: 2 x Cable O.D. 6-12mm

INTRODUCTION

The limit switch box is designed to provide accurate and reliable valve position information of actuated and manual valves. The limit switch box consists of an aluminium body a polycarbonate visual position indicator, quick-set cam assemblies, terminal strip, switch assemblies and an easy mounting bracket.

Serrated cams locked together ensures adjusted settings secured against any vibration. A special laminated circuit board eliminates internal wiring and adds additional corrosion protection.

SECTION VIEW LSB



22	'O'RING	1	NBR
21	PHILIPS HEAD SCREW	4	STAINLESS STEEL
20	SCREW FOR EARTHING	2	STAINLESS STEEL
19	CIRCUIT BOARD	1	
18	'O'RING	2	NBR
17	PAD	1	POLYAMIDE
16	SPRING	1	STAINLESS STEEL
15	'E' TYPE CIRCLIP	1	SPRING STEEL
14	SCREW FOR COVER	4	STAINLESS STEEL
13	SCREW FOR CONN STRIP	2	STAINLESS STEEL
12	SCREW FOR MICROSWITCH	2	STAINLESS STEEL
11	GASKET	1	NBR
10	INDICATOR COVER	1	POLYCARBONATE
9	INDICATOR	1	ABS PLASTIC
8	CONNECTOR STRIP-6WAY	1	POLYMIDE
7	MSWITCH	2	-
6	SPRING DOWEL	2	SPRING STEEL
5	SHAFT	1	STAINLESS STEEL
4	CAM-LOCK	2	POM
3	CAM	2	POLYCARBONATE
2	COVER	1	ALUMINUM ALLOY
1	HOUSING	1	ALUMINUM ALLOY



INSPECTION

Upon receipt of the switch box, the user should inspect the condition of the product and ensure that the product specification stated on the name plate matches with the order sheet.

- Remove the packing carefully.
- Inspect the product for any physical damage that may have occurred during shipment.
- Verify the product specification of the received product.
 If a wrong product has been supplied, please immediately report this to the distributing company.

STORAGE

Limit switch boxes must be stored in a clean, cool and dry area. The unit should be stored with the cover installed and the conduit openings sealed. Storage must be off the floor, covered with a sealed dust protector.

INSTALLATION INSTRUCTIONS

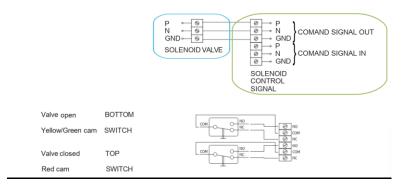
Limit switch boxes are supplied with a mounting bracket according to the VDI/VDE 3845 (NAMUR) standard. This standard bracket is selected for actuators with a VDI/VDE connection 30x80 mm and an actuator shaft height of 30mm. Brackets for other VDI/VDE dimensions are available upon request and may be requested through your ordinary Meson contacts..

- Put the actuator in the fully open or closed position.
- Mount the bracket on the switch box.
- Put the switch box with bracket on the actuator and do not tighten the bolts yet (4 pieces).
- Check the actuator shaft and switch box shaft alignment
- Check if the position of the open and closed switches/sensors

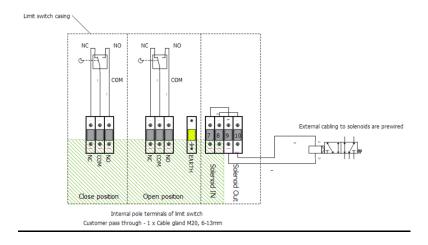
and also the visual position indicator corresponds with the valve position.

- Tighten the bolts in order to secure the bracket to the actuator (4 pieces).
- Check again if the position of the open and closed switches/sensors and also the visual position indicator corresponds with the valve position.

WIRING



For monostable solenoid valve solution there is only need to use 1 pole group for controlling the valve. Connect incoming cable to pole pair 7 and 8.



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MAINTENANCE

Maintenance should be performed every six month or after every 100,000 operation cycles. In severe operation

conditions inspections must be performed more frequently. During maintenance the following parts of the limit switch

box must be inspected:

- Check the alignment of the valve, actuator and limit switch box.
- Check the wiring insulation and the terminal strip connections.
- Check the adjustment of the cams.
- Check the cams on wear and replace them if necessary.
- Check if al screws are present and tightened.
- Check if the cable connections are installed properly and not leaking.
- Check internal devices for condensation.
- Check the enclosure for damages, especially on the sealing surfaces.
- Check the enclosure O-ring seals and also check if the O-ring is in the correct position.
- Visually inspect the limit switch box during operation.
- Inspect the type plate of the limit switch box and replace it if necessary.

CONTACT INFORMATION

You may get technical and commercial support through Meson AB with head office in Sweden

Meson AB

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