

90° pneumatic actuators and accessories

Model 50830 Limit switch box (O/C position sensing) for 90° pneumatic actuators

Inductive sensors or mechanical switches

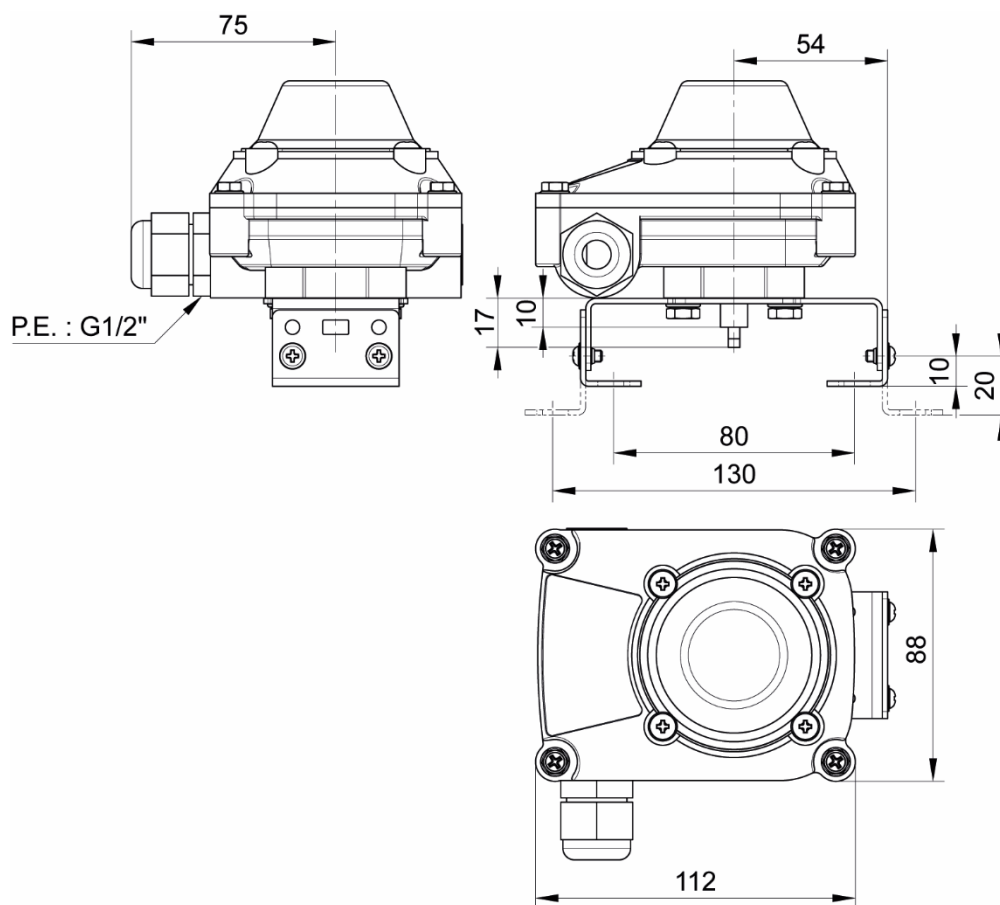


Specifications

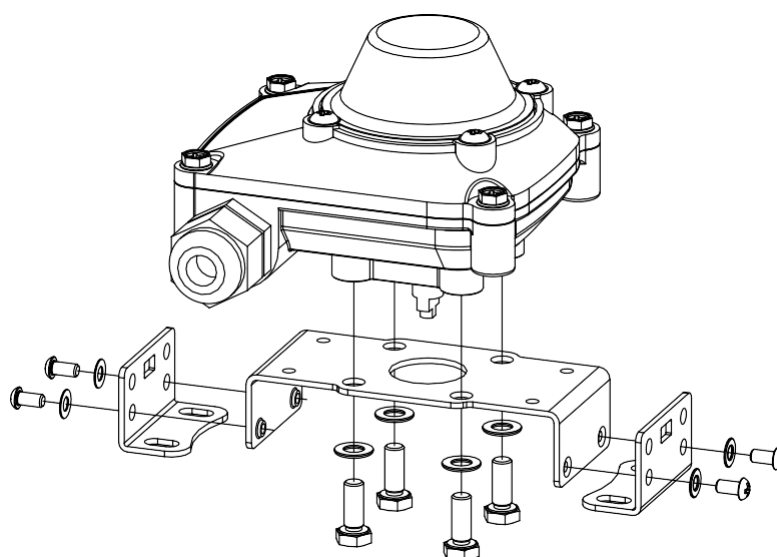
Temperature: -20°C to +85°C

Material: Aluminium case, epoxy paint, stainless steel bracket

Installation according to NAMUR, VDI/VDE 3845
IP 67 according to IEC 60529



Part Name	Part number
Limit switch box IP67 plastic housing with inductive sensors 10-30V	750830-2D
Limit switch box IP67 plastic housing with mechanical switches 24-250V	750830-2M

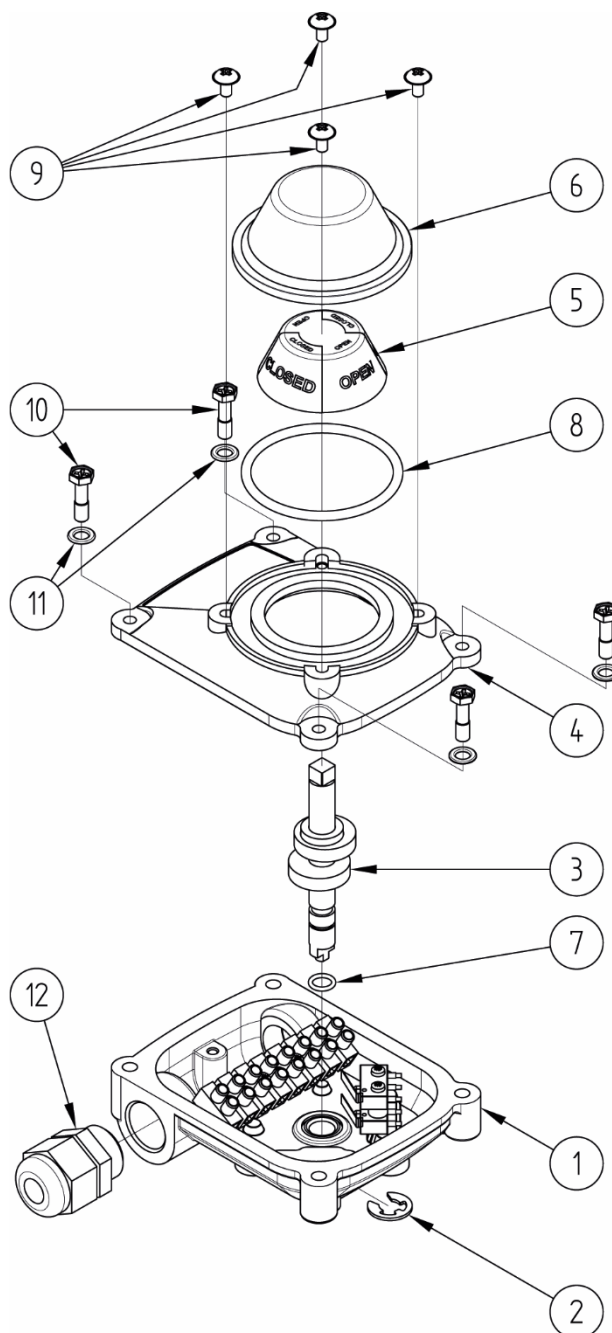


Fixing bracket assembly

Béné Inox – 11 chemin de la Pierre Blanche – 69800 SAINT-PRIEST – S.A.S with 240 000 € share capital – SIREN N° 311 810 287
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Technical information, illustrations and photographs are provided for information only, they are not contractual. Some may vary according to the tolerances accepted in the profession and the applicable standards. All instructions for use, disassembly and maintenance are recommendations only. These could also vary depending on product usage conditions, its installation environment and purchaser requirements – of which the purchaser alone is responsible for their definition.

50830-B V0925



	Part Name	Material
1	HOUSING	ALUMINIUM + EPOXY PAINT
2	RETAINING RING	STAINLESS STEEL
3	SHAFT + CAMS	STAINLESS STEEL
4	CAP + CAP GASKET	ALUMINIUM + EPOXY PAINT + NBR
5	VISUAL POSITION INDICATOR	ALUMINUM
6	PROTECTIVE COVER	PLASTIC
7	GASKET (SHAFT/HOUSING)	NBR
8	GASKET (COVER/CAP)	NBR
9	FIXING SCREW (COVER/CAP)	STAINLESS STEEL
10	FIXING SCREW (CAP/HOUSING)	STAINLESS STEEL
11	WASHER	STAINLESS STEEL
12	CABLE GLAND	PLASTIC

The position sensing box allows you to control and view the opening and closing of 1/4 turn (90°) valves. For 3 way, T or L-shaped bore valves we will pre-install a specific indicator:

- Visual indicator for a 3 way L-shaped bore valve: **D5461-IL**
- Visual indicator for a 3 way T-shaped bore valve: **D5461-IT**

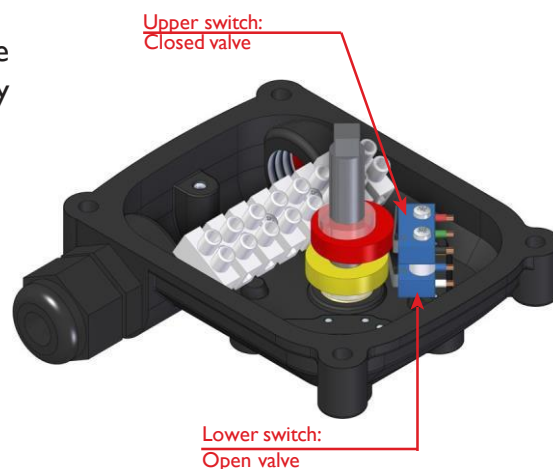
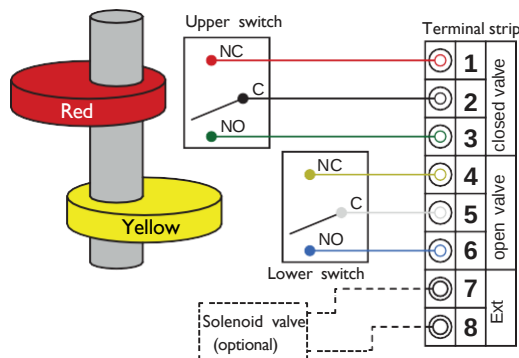
The box can be installed on a 1/4 turn (90°) pneumatic actuator (installation diagram according to VDI/VDE 3845) using the fixing bracket that is supplied with it.

The cable passage gland can be installed on the right-hand side or the left-hand side of the box.

Electrical connection

Switch wiring

On the following diagrams, the two switches are installed one above the other, these mechanical switches are wired directly onto the white terminal strip:



The terminal strip contains 8 input/output connectors:

The upper switch is wired to terminals **1, 2 and 3**:

- Terminal **1**: connect the phase, the switch's red wire corresponding to the NC function
- Terminal **2**: connect the common/neutral, the switch's black wire
- Terminal **3**: connect the phase, the switch's green wire corresponding to the NO function

The lower switch is wired to terminals **4, 5 and 6**:

- Terminal **4**: connect the phase, the switch's yellow wire corresponding to the NC function
- Terminal **5**: connect the common/neutral, the switch's white wire
- Terminal **6**: connect the phase, the switch's blue wire corresponding to the NO function

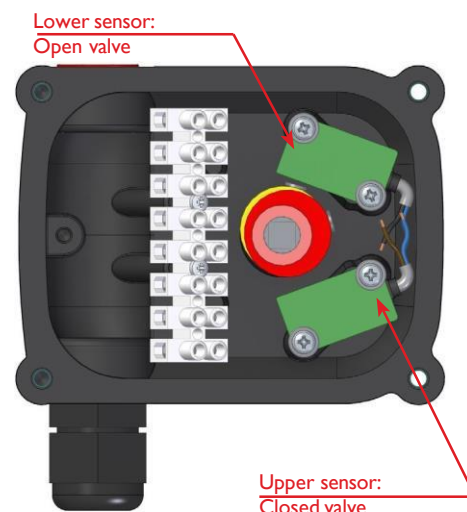
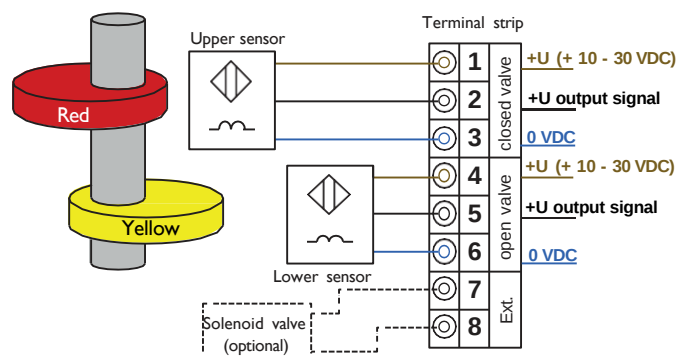
The terminals **7 and 8** of the external section (Ext.) can be used to connect a solenoid valve in order to bring all the wires together in a single cable.

QM50, unipolar SPDT switch:

- Supported voltages: 24 to 250 VAC or VDC
- Current: Max. 5 A
- Ambient temperature: -25°C to +85°C

Inductive sensor wiring

On the following diagrams the two inductive sensors are installed one opposite the other, these sensors are directly connected to the white terminal strip:



The terminal strip contains 8 input/output connectors:

The upper sensor is wired to terminals **1, 2** and **3**:

- Terminal **1**: connect the phase, the sensor's brown wire
- Terminal **2**: the sensor's black wire corresponds to the sensor's output signal
- Terminal **3**: connect the neutral, the sensor's blue wire

The lower sensor is wired to terminals **4, 5** and **6**:

- Terminal **4**: connect the phase, the sensor's brown wire
- Terminal **5**: the sensor's black wire corresponds to the sensor's output signal
- Terminal **6**: connect the neutral, the sensor's blue wire

The terminals **7** and **8** of the external section (Ext.) can be used to connect a solenoid valve in order to bring all the wires together in a single cable.

Inductive sensor ALPS-24:

- Interface: PNP NO
- Supply voltage: 10-30 VDC
- Current: Max. 150 mA
- Ambient temperature: -25°C to +85°C

Standards and compliance

- IP67 according to IEC 60529
- Low voltage directive 2014/35/UE