

91MCE Series

Mini Compact Limit Switch



DESCRIPTION

The 91MCE series limit switch is a compliment to Honeywell's existing product line of smaller, lower cost limit switches. Designed for modern industrial OEMs, the miniature package size fits in applications where space is limited. The small package size can be gang mounted for applications requiring more than two switch circuits. The 20mm mounting pattern is a globally accepted mounting standard.

This product family offers the user many options including a variety of different actuator styles. Connection options include

pre-leaded cable in various lengths or M12 connectors, both with side or bottom exits. Design flexibility is further enhanced with the availability of both slow action and snap action circuitry. Direct acting contacts ensure the NC contact opens when actuated. The epoxy-sealed rugged die-cast housing provides environmental durability.

Priced competitively, the 91MCE is a drop-in replacement to many products, and provides enhanced quality that customers expect from Honeywell.

FEATURES

- Direct acting contacts ensures NC contacts open when actuated ➡
- Sealed to IP67; NEMA 1, 4, 12, 13 suitable for outdoor applications
- CE, cULus, CCC approvals meet most global approvals
- Nine actuator styles offer design flexibility
- Slow-action and snap-action circuitry options
- Pre-leaded cable and M12 connector options
- Mechanical life: 5 million operations
- Side exit and bottom exit connection options

POTENTIAL APPLICATIONS

- Machine equipment
- Material handling
- Outdoor equipment

91MCE Series

TECHNICAL SPECIFICATIONS

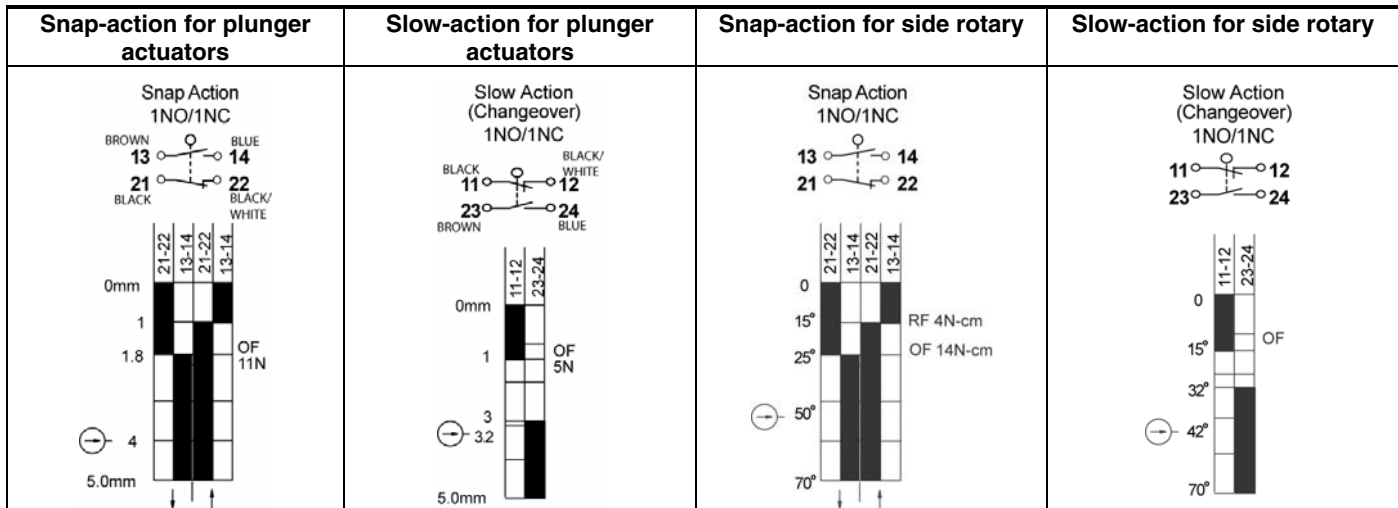
| Parameter | Measure |
|----------------------------------|--|
| Operating speed | 0,05 mm to 1 m per second |
| Operating frequency – mechanical | 120 ops per minute |
| Operating frequency – electrical | 30 ops per minute |
| Insulation resistance | > 100 Mohm @ 500 Vdc |
| Rated voltage | 300 Vac (EN60947-5-1) |
| Rated thermal current | 10A pre-leaded versions; 3A connector versions |
| Electrical rating | ac 15 A 300; dc 13 Q300 |
| Dielectric strength | 1000 Vac for one minute between current carrying parts 2500 Vac for one minute between non-current carrying parts |
| Mechanical life | 5 million operations |
| Electrical life | 5 x 10 ⁵ operations |
| Operating temperature | -25 °C to 85 °C [-13 °F to 185 °F] without the formation of ice |
| Humidity | < 95 % RH |
| Cable | 5 core, 0.75 mm ² |
| Degree of protection | IP67 |

ELECTRICAL RATINGS

IEC 947-5-1 / EN 90947-5-1

| Designation & Utilization Category | Rated operational current I _e (A) at rated operational voltage U _e | | | | | | VA rating | |
|------------------------------------|--|-------|---------|-------|-------|-------|-----------|-------|
| | 120 V | 240 V | 380 V | 480 V | 500 V | 600 V | Make | Break |
| AC15 A300 | 6 | 3 | – | – | – | – | 7200 | 720 |
| | 125 Vdc | | 250 Vdc | | | | | |
| DC13 Q300 | 0.55 | 0.27 | | | | | 69 | 69 |

BAR CHARTS



PIN OUT – “Q” OPTION

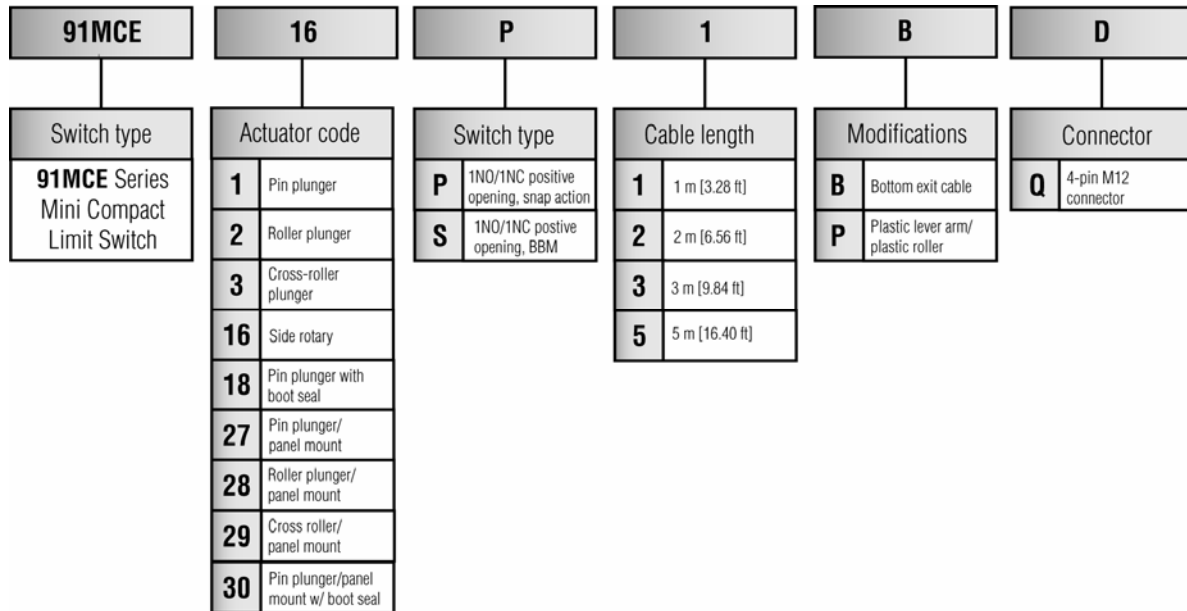
| | |
|--|-----------------------------|
| | Pin 1 & 2 – Normally Closed |
| | Pin 3 & 4 – Normally Open |

Mini Compact Limit Switch

DIMENSIONS

| | | |
|---|--|--|
| <p>91MCE1-P1/S1 – PIN PLUNGER</p> | <p>91MCE2-P1/S1 – ROLLER PLUNGER</p> | <p>91MCE3-P1/S1 – CROSS ROLLER PLUNGER</p> |
| <p>91MCE16-P1/S1 – SIDE ROTARY LEVER WITH METAL ROLLER</p> | <p>91MCE18-P1/S1 - PIN PLUNGER WITH BOOT SEAL</p> | <p>91MCE27-P1/S1 - PANEL MOUNT PIN PLUNGER</p> |
| <p>91MCE30-P1/S1 - PANEL MOUNT BOOTED PIN PLUNGER</p> | <p>91MCE28-P1/S1 – PANEL MOUNT ROLLER PLUNGER</p> | <p>91MCE29-P1/S1 – PANEL MOUNT CROSS ROLLER PLUNGER</p> |

91MCE SWITCH PART NUMBER TREE



WARNING

IF USED IN APPLICATIONS CONCERNING HUMAN SAFETY

- Only use NC direct opening ("positive opening"/"positive break") contacts, identified by the symbol .
- Do NOT use flexible/adjustable actuators. Only use actuators designed for safety applications.
- Do NOT defeat, tamper, remove, or bypass this switch.
- Hazardous voltage, disconnect power before servicing.
- Strictly adhere to all installation and maintenance instructions
- Consult with local safety agencies and their requirements when designing a machine-control link, interface, and all control elements that affect safety.

Failure to comply with these instructions could result in death or serious injury.



WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.



WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

E-mail: info.sc@honeywell.com

Internet: www.honeywell.com/sensing

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