

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 meets most globally accepted mounting standards.

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 are designed to open the NC contact when actuated. The epoxy-sealed rugged die-cast housing provides enhanced 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 are designed to open NC contacts 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
- Expected mechanical life: 5 million operations
- Side exit (standard) and bottom exit connection options

POTENTIAL APPLICATIONS

- Machine equipment
- Material handling
- Aerial lifts
- Forklifts
- Off road and 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
Expected mechanical life	5 million operations
Expected 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

Snap-action for plunger actuators	Slow-action for plunger actuators	Snap-action for side rotary	Slow-action for side rotary
Snap Action 1NO/1NC	Slow Action (Changeover) 1NO/1NC	Snap Action 1NO/1NC	Slow Action (Changeover) 1NO/1NC

PIN OUT – “Q” OPTION

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

Mini Compact Limit Switch

DIMENSIONS

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

91MCE SWITCH PART NUMBER TREE

91MCE	16	P	1	B																																																		
Switch type	Actuator code	Switch type	Cable length	Cable/connector exit	Lever type	Connector																																																
91MCE Series Mini Compact Enclosed Switch	<table><tr><td>1</td><td>Pin plunger</td></tr><tr><td>2</td><td>Roller plunger</td></tr><tr><td>3</td><td>Cross-roller plunger</td></tr><tr><td>16</td><td>Side rotary with metal lever</td></tr><tr><td>18</td><td>Pin plunger with boot seal</td></tr><tr><td>27</td><td>Pin plunger/ panel mount</td></tr><tr><td>28</td><td>Roller plunger/ panel mount</td></tr><tr><td>29</td><td>Cross roller/ panel mount</td></tr><tr><td>30</td><td>Pin plunger/panel mount w/ boot seal</td></tr></table>	1	Pin plunger	2	Roller plunger	3	Cross-roller plunger	16	Side rotary with metal lever	18	Pin plunger with boot seal	27	Pin plunger/ panel mount	28	Roller plunger/ panel mount	29	Cross roller/ panel mount	30	Pin plunger/panel mount w/ boot seal	<table><tr><td>P</td><td>1NO/1NC direct acting, snap action</td></tr><tr><td>S</td><td>1NO/1NC direct acting, BBM</td></tr></table>	P	1NO/1NC direct acting, snap action	S	1NO/1NC direct acting, BBM	<table><tr><td></td><td>Connector version</td></tr><tr><td>1</td><td>1 m [3.28 ft]</td></tr><tr><td>2</td><td>2 m [6.56 ft]</td></tr><tr><td>3</td><td>3 m [9.84 ft]</td></tr><tr><td>5</td><td>5 m [16.40 ft]</td></tr></table>		Connector version	1	1 m [3.28 ft]	2	2 m [6.56 ft]	3	3 m [9.84 ft]	5	5 m [16.40 ft]	<table><tr><td></td><td>Side exit</td></tr><tr><td>B</td><td>Bottom exit</td></tr></table>		Side exit	B	Bottom exit	<table><tr><td></td><td>Standard lever, metal roller</td></tr><tr><td>P</td><td>Standard lever, plastic roller</td></tr><tr><td>O</td><td>Short lever, metal roller</td></tr><tr><td>OP</td><td>Short lever, plastic roller</td></tr></table>		Standard lever, metal roller	P	Standard lever, plastic roller	O	Short lever, metal roller	OP	Short lever, plastic roller	<table><tr><td></td><td>Cable (no connector)</td></tr><tr><td>Q</td><td>4-pin M12 connector</td></tr></table>		Cable (no connector)	Q	4-pin M12 connector
1	Pin plunger																																																					
2	Roller plunger																																																					
3	Cross-roller plunger																																																					
16	Side rotary with metal lever																																																					
18	Pin plunger with boot seal																																																					
27	Pin plunger/ panel mount																																																					
28	Roller plunger/ panel mount																																																					
29	Cross roller/ panel mount																																																					
30	Pin plunger/panel mount w/ boot seal																																																					
P	1NO/1NC direct acting, snap action																																																					
S	1NO/1NC direct acting, BBM																																																					
	Connector version																																																					
1	1 m [3.28 ft]																																																					
2	2 m [6.56 ft]																																																					
3	3 m [9.84 ft]																																																					
5	5 m [16.40 ft]																																																					
	Side exit																																																					
B	Bottom exit																																																					
	Standard lever, metal roller																																																					
P	Standard lever, plastic roller																																																					
O	Short lever, metal roller																																																					
OP	Short lever, plastic roller																																																					
	Cable (no connector)																																																					
Q	4-pin M12 connector																																																					

⚠ 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.

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

Phone and Fax:

Asia Pacific	+65 6355-2828; +65 6445-3033 Fax
Europe	+44 (0) 1698 481481; +44 (0) 1698 481676 Fax
Latin America	+1-305-805-8188; +1-305-883-8257 Fax
USA/Canada	+1-800-537-6945; +1-815-235-6847
	+1-815-235-6545 Fax

Sensing and Control
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422
www.honeywell.com/sensing

002311-2-EN IL50 GLO Printed in USA
June 2010
Copyright © 2010 Honeywell International Inc. All rights reserved.

Honeywell



SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

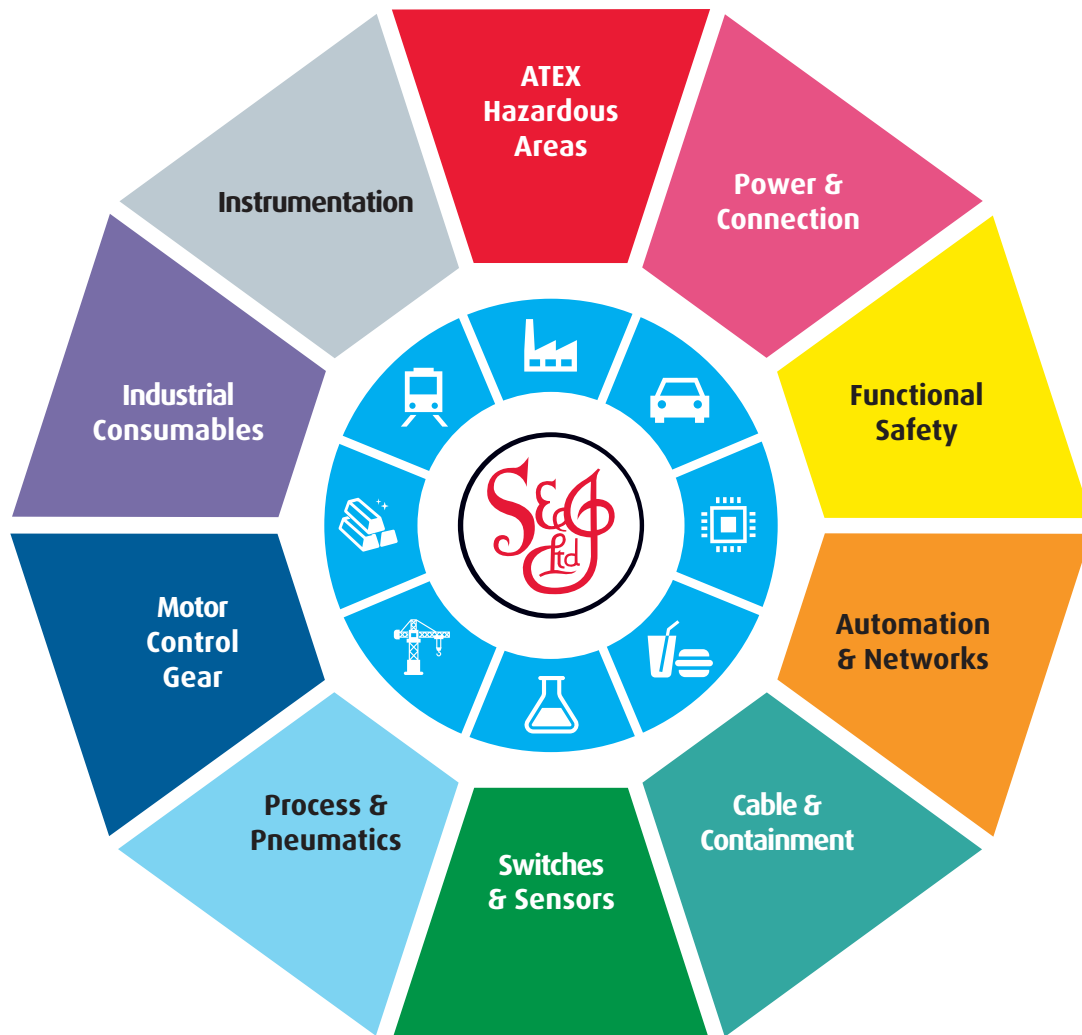
At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk