



# MICRO SWITCH Miniature Precision Limit Switches

914CE Series

**002381**

Issue 9

**Datasheet**



## DESCRIPTION

All MICRO SWITCH 914CE Series miniature precision switches incorporate fluorocarbon diaphragm sealing to provide reliable protection, meeting NEMA 1, 2, 3, 3R, 4, 6, 6P, and 13, as well as IP66, IP67, and IP68 requirements. Versions with a boot seal also meet NEMA 12 requirements (dust, falling dirt, liquid media with solid contaminants). The cable or connector and basic switch terminals are encapsulated in an epoxy sealant, offering excellent resistance in harsh environments. For low temperature applications (down to -40 °C, -40 °F), CE Series switches can be supplied with low temperature seals and lubricant.

The CE Series switches are rugged and versatile switches which can be applied indoors in many harsh factory floor applications, as well as on outdoor equipment in extreme temperatures. A full range of actuators are available, including pin plungers, roller plungers, side rotary, multi-directional wire, and manually operated. The switches are also available with the industry standard, M12 micro-change 4-pin connector. MICRO SWITCH 914CE products meet North American, cURus standards, as well as European CE requirements.

## VALUE TO CUSTOMERS

- Big performance in a small package
- Delivers consistent performance in many demanding environments where petroleum, synthetic, or water based fluids are present
- Product variation within defined nomenclature

## FEATURES

- Rugged, miniature construction means minimal real estate on equipment
- NEMA 1, 2, 3, 3R, 4, 6, 6P, 12 (boot seal), 13, and IP66/67/68 environmental sealing
- Pre-leaded (UL cable) or supplied with a M12 four-pin connector
- Wide selection of actuators and cable length variations with side and bottom exit cable/connector options
- 25 mm mounting centers engineered with a MICRO SWITCH SM switch for consistent, precise actuation
- Well suited for up to 10 million actuation cycles (Up to 5 million actuation cycles for wobble actuators)
- Gang mounting capability to provide a multi-plunger limit switch
- Low temperature variants available for indoor and outdoor applications
- cURus, CE approvals for world-wide use

## POTENTIAL APPLICATIONS

- Machine tools
- Off-road equipment
- Material handling
- Dock locks and dock levelers
- Access and mobility solutions
- Textile machinery
- Robotics
- Packaging equipment
- Commercial appliances
- Print trade machinery
- Agricultural machinery

## DIFFERENTIATION

- Diaphragm seal between the actuator and the switch cavity for high performance sealing
- CE Series incorporates a MICRO SWITCH SM basic switch for consistent, precise actuation
- Side exit termination for space constraints

## PORTFOLIO

Honeywell's MICRO SWITCH 914CE limit switch is part of a comprehensive offering of rugged and reliable limit switches. To view the entire product portfolio, click [here](#).

## MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

**Table 1. Specifications**

| Characteristic                         | Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                            | compact enclosed limit switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Actuators                              | <ul style="list-style-type: none"> <li>Top pin plunger (914CE1-)</li> <li>Cross roller plunger (914CE3-)</li> <li>Top pin plunger with boot seal (914CE18-)</li> <li>Wobble (914CE20-)</li> <li>Top pin plunger, panel mount (914CE27-)</li> <li>Top roller plunger, parallel and panel mount (914CE28-)</li> <li>Top roller plunger, perpendicular, panel mount (914CE29-)</li> <li>Top roller plunger, parallel &amp; boot sealed (914CE31-)</li> <li>Top roller plunger, perpendicular, boot seal (914CE55-)</li> <li>Parallel roller plunger (914CE2-)</li> <li>Side rotary (914CE16-)</li> <li>Top adjustable plunger (914CE19-)</li> <li>Manually operated (914CE22-)</li> <li>Ball bearing plunger (914CE66-)</li> </ul> |
| Terminations                           | SJTO 4 x 0,75 mm <sup>2</sup> (18 AWG) cable<br>Connector (dc), 4-pin male, M12 thread (-Q), (-Q2) Revised pin-out, see page 3<br>Connector (ac), 4-pin male, 1/2 in x 20 thread (-Q1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Switching options                      | SPDT, snap action contacts (1NC/1NO), Form C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Sealing                                | IP66, IP67, IP68*<br>NEMA 1, 2, 3, 3R, 4, 6, 6P, 12 (boot seal), 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Operating temperature                  | 0 °C to 105 °C [32 °F to 221 °F]; optional -40 °C to 105 °C [-40 °F to 221 °F]<br>Side rotary: -40° C to 100 °C [-40 °F to 212 °F]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Mechanical life                        | up to 10 million (up to 5 million for wobbles) cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Thermal current                        | 1 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Rated insulation voltage (Ui)          | 250 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Rated impulse withstand voltage (Uimp) | 1.5 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Short circuit protection device (SCPD) | Quick blow fuse suitable for rated current of switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pollution degree                       | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Min. actuation speed                   | 0.003 m/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Max. actuation speed                   | 0.1 m/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Max. actuation frequency               | ac – 200 Hz; dc – 20 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Shock                                  | 50 g – IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Vibration                              | 10 g – IEC 60068-2-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Approvals                              | cURus, CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Conforming to standards                | EN 60947-5-1; AC-14 D300, DC-13 R300<br>UL recognized to US and Canadian Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

\*IP68 sealing submerged in one meter of water for 24 hours

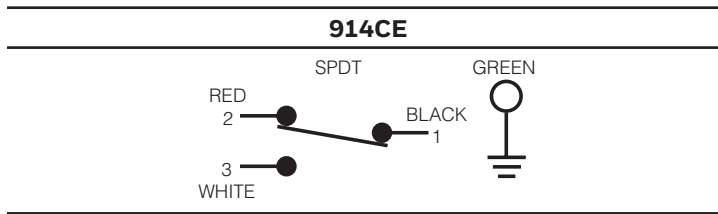
**Table 2. Electrical Ratings (in amperes)**

| Model example             | Contacts        | Rating                 |
|---------------------------|-----------------|------------------------|
| 914CE* - *                | Silver contacts | A                      |
| 914CE* - *G               | Gold contacts   | B                      |
| 914CE* -Q, -AQ, -AQ1, -Q2 | Silver contacts | C with 4-pin connector |

| Rating code |                                  | Make | Break |
|-------------|----------------------------------|------|-------|
| A           | 240 Vac, ind.                    | 1.2  | 0.2   |
|             | 240 Vac, res.                    | 5    | 5     |
|             | 28 Vdc, res.                     | 3    | 3     |
|             | 28 Vdc, ind.                     | 3    | 3     |
|             | 5 A, 1/10 HP, 125 Vac or 250 Vac | –    | –     |
| B           | 5-25 mA<br>5-50 Vdc              | –    | –     |
| C           | 3 A, 125 Vac or 250 Vac          | –    | –     |

# MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

## SWITCHING AND LEAD IDENTIFICATION

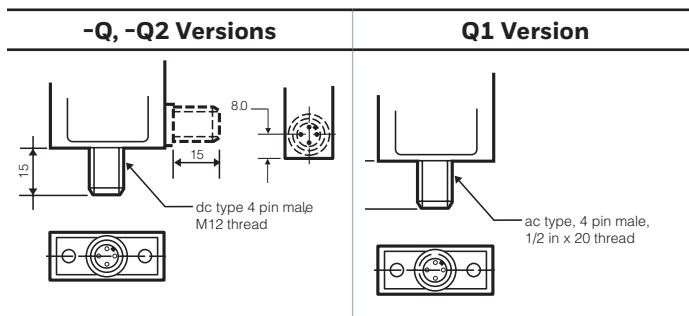


## PINOUTS

| Connector - (dc) (-Q) | Connector (dc) (-Q2) | Connector (ac) (-Q1) |
|-----------------------|----------------------|----------------------|
|                       |                      |                      |

## CONNECTOR VERSIONS

The 914CE Series is available with a 4-pin, M12 size connector in both bottom and side exit versions.



## MOUNTING

MICRO SWITCH 914CE Series switches are mounted by using two M5 or #10 screws. The mounting holes are counter bored to keep the screw heads within the overall switch housing dimensions.

## GANG MOUNT CAPABILITY

The housing on the 914CE Series has been designed to enable the user to build his own multiple plunger switch by gang mounting several switches. All pin plunger and roller plunger types are suitable for gang mounting. There is a 16 mm distance between the plungers. Both Series types are very versatile that even a lever-type version could be added at the end of the row.

## BOTTOM EXIT OR SIDE EXIT ORIENTATION

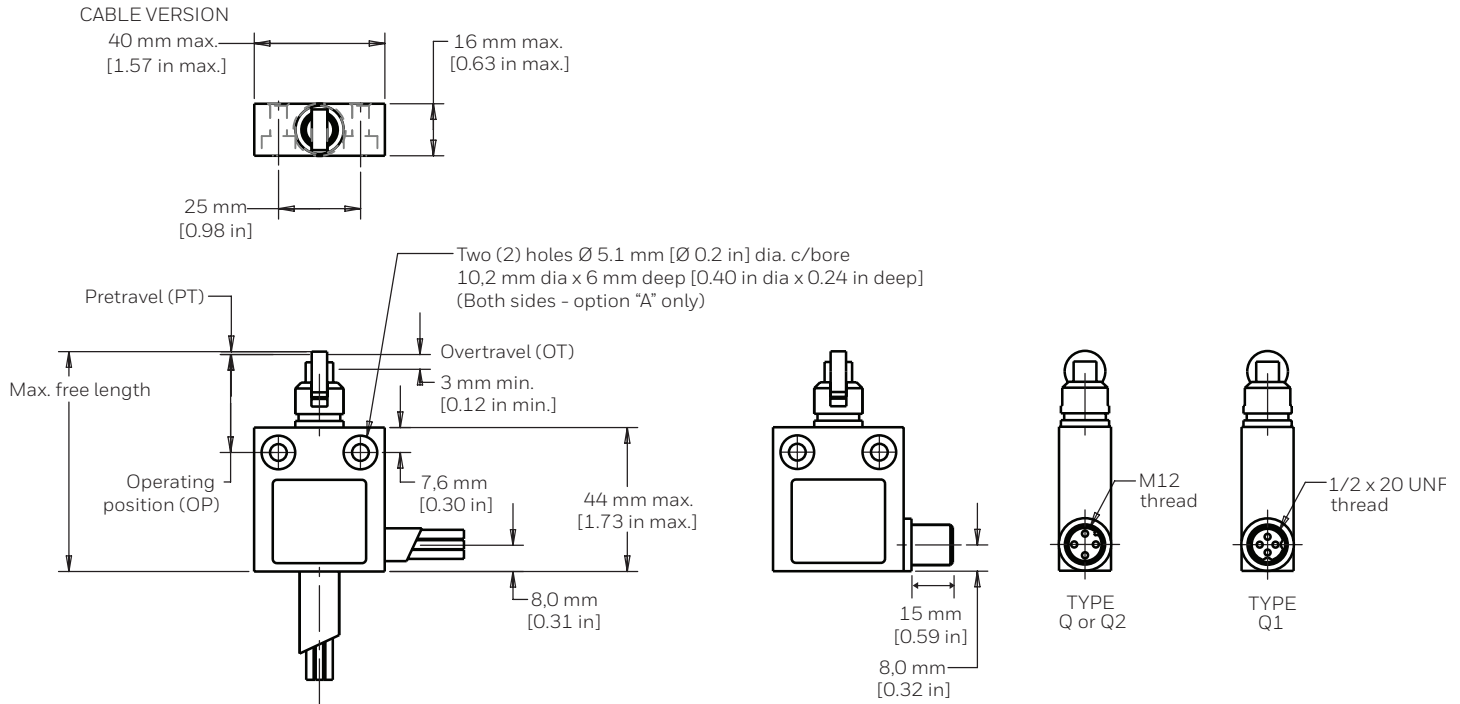
The CE Series has been designed with a pre-wired cable fitted in the bottom of the switch housing. Other variations are available with a side exit cable.

## GOLD CONTACT VERSIONS

For low energy applications, gold contact versions of the 914CE switches can be supplied upon request.

# MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

## GENERAL DIMENSIONS • ALL SWITCHES



## PRODUCT NOMENCLATURE

914CE

Switch Type

914CE Series

Small Precision

Limit Switch

29

Actuator Type

|    |                                          |
|----|------------------------------------------|
| 1  | Top pin plunger                          |
| 2  | Top roller plunger, parallel             |
| 3  | Top roller plunger, perp.                |
| 16 | Side rotary                              |
| 18 | Top pin plunger w/ boot seal             |
| 19 | Top adjustable pin plunger               |
| 20 | Coil wobble                              |
| 22 | Manually oper. nylon button              |
| 27 | Top pin plunger, panel mount             |
| 28 | Top roller plunger, parallel panel mount |
| 29 | Top roller plunger, perp. panel mount    |
| 31 | Top roller plunger, parallel boot seal   |
| 55 | Top roller plunger, perp. boot seal      |
| 66 | Top ball bearing plunger                 |

3

Cable Length\*

|    |         |
|----|---------|
| 3  | 3 feet  |
| 6  | 6 feet  |
| 9  | 9 feet  |
| 12 | 12 feet |
| 15 | 15 feet |

Options<sup>1</sup>

|    |                                                                   |
|----|-------------------------------------------------------------------|
| A  | Side entry                                                        |
| G  | Gold contacts                                                     |
| P  | Top mounting                                                      |
| L1 | Low temp. -40 °C, cable not for flexing                           |
| V  | Viton® seals/gasket (side rotary and booted sealed plungers only) |

Bottom exit is standard.

Connectors\*

|    |                          |
|----|--------------------------|
| Q  | dc type single keyway    |
| Q1 | ac type two keyways      |
| Q2 | dc type optional pin-out |

NOTE: not all combinations of model codes are available.  
Please contact your Honeywell provider/representative for assistance.

\*Select "Cable Length" or "Connectors".

<sup>1</sup>More than one option may be permissible.

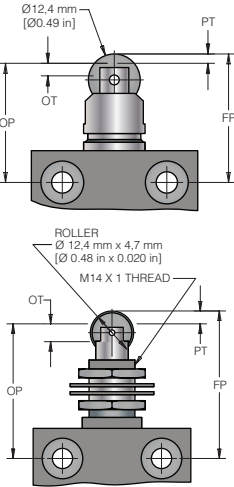
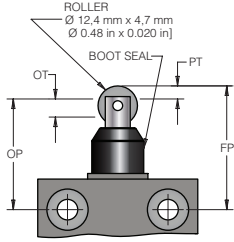
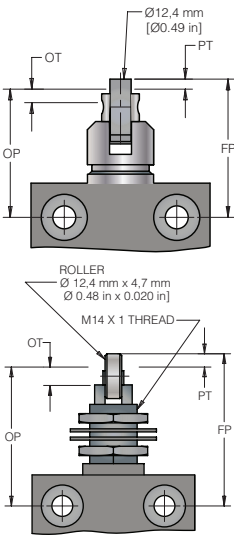
# MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

## PRODUCT SPECIFICATIONS AND LISTINGS

Contact your Honeywell rep or distributor for additional listings

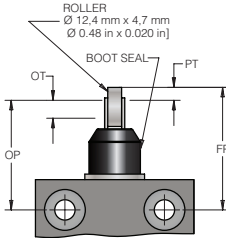
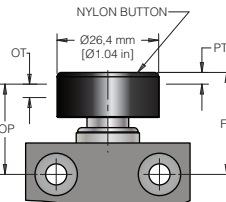
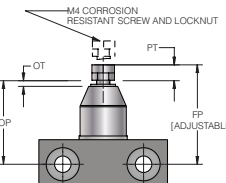
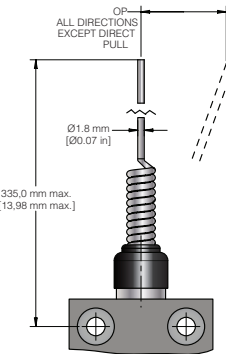
| <b>914CE1 • Pin Plunger</b><br><b>914CE27 • Pin Plunger Panel Mount</b>                                                                                                                     |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                | Listing            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------|-------------|---------------------------|--------------------|-------------------------|------------------------|--------------------|
| <p> <b>Pretravel</b> • 1,8 mm [0.071 in]<br/> <b>Diff. travel</b> • 0,1 mm [0.004 in]<br/> <b>Overtravel</b> • 3,0 mm [0.118 in]<br/> <b>Oper. force</b> • 12,2 N [2.75 in-lb]         </p> |  | Silver   | A           | Bottom                    | 17,5 mm [0.69 in]  | 15,7 mm [0.62 in]       | –                      | <b>914CE1-3</b>    |
|                                                                                                                                                                                             |  | Gold     | B           | Bottom                    | 17,5 mm [0.69 in]  | 15,7 mm [0.62 in]       | –                      | <b>914CE1-3G</b>   |
|                                                                                                                                                                                             |  | Silver   | A           | Side                      | 17,5 mm [0.69 in]  | 15,7 mm [0.62 in]       | –                      | <b>914CE1-3A</b>   |
|                                                                                                                                                                                             |  | Silver   | A           | Bottom                    | 31,1 mm [1.23 in]  | 29,3 mm [1.15 in]       | Panel mount            | <b>914CE27-3</b>   |
|                                                                                                                                                                                             |  | Silver   | C           | Bottom                    | 17,5 mm [0.69 in]  | 15,7 mm [0.62 in]       | dc-type, single keyway | <b>914CE1-Q</b>    |
|                                                                                                                                                                                             |  | Silver   | C           | Bottom                    | 17,5 mm [0.69 in]  | 15,7 mm [0.62 in]       | ac-type, two keyways   | <b>914CE1-Q1</b>   |
| <b>914CE18 • Boot Sealed Pin Plunger</b>                                                                                                                                                    |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                | Listing            |
| <p> <b>Pretravel</b> • 1,8 mm [0.071 in]<br/> <b>Diff. travel</b> • 0,1 mm [0.004 in]<br/> <b>Overtravel</b> • 3,0 mm [0.118 in]<br/> <b>Oper. force</b> • 22,2 N [5 in-lb]         </p>    |  | Silver   | A           | Bottom                    | 26,7 mm [1.05 in]  | 24,9 mm [0.98 in]       | –                      | <b>914CE18-3</b>   |
|                                                                                                                                                                                             |  | Silver   | A           | Side                      | 26,7 mm [1.05 in]  | 24,9 mm [0.98 in]       | –                      | <b>914CE18-3A</b>  |
|                                                                                                                                                                                             |  | Silver   | A           | Bottom                    | 26,7 mm [1.05 in]  | 24,9 mm [0.98 in]       | Fluorocarbon seals     | <b>914CE18-3V</b>  |
|                                                                                                                                                                                             |  | Silver   | C           | Bottom                    | 26,7 mm [1.05 in]  | 24,9 mm [0.98 in]       | ac-type, two keyways   | <b>914CE18-Q1</b>  |
|                                                                                                                                                                                             |  | Silver   | C           | Side                      | 26,7 mm [1.05 in]  | 24,9 mm [0.98 in]       | ac-type, two keyways   | <b>914CE18-AQ1</b> |
| <b>914CE66 • Ball Bearing Plunger</b>                                                                                                                                                       |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                | Listing            |
| <p> <b>Pretravel</b> • 1,8 mm [0.071 in]<br/> <b>Diff. travel</b> • 0,1 mm [0.004 in]<br/> <b>Overtravel</b> • 3,0 mm [0.118 in]<br/> <b>Oper. force</b> • 12,2 N [2.75 in-lb]         </p> |  | Silver   | A           | Bottom                    | 26,2 mm [1.03 in]  | 24,4 mm [0.96 in]       | –                      | <b>914CE66-3</b>   |

## MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

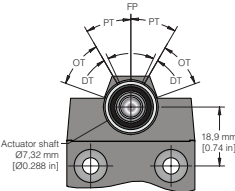
| <b>914CE2 • Roller Plunger</b><br><b>914CE28 • Roller Plunger Panel Mount</b>                                                                                                                                                                                                   |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                           | Listing           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------|-------------|---------------------------|--------------------|-------------------------|-----------------------------------|-------------------|
|  <p> <b>Pretravel</b> • 1,8 mm [0.071 in]<br/> <b>Diff. travel</b> • 0,1 mm [0.004 in]<br/> <b>Overtravel</b> • 3,0 mm [0.118 in]<br/> <b>Oper. force</b> • 12,2 N [2.75 in-lb]         </p>   |  | Silver   | A           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | –                                 | <b>914CE2-3</b>   |
|                                                                                                                                                                                                                                                                                 |  | Gold     | B           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | –                                 | <b>914CE2-3G</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | C           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | ac-type, two keyways              | <b>914CE2-Q1</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | C           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | dc-type, single keyway            | <b>914CE2-Q</b>   |
|                                                                                                                                                                                                                                                                                 |  | Silver   | A           | Side                      | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | –                                 | <b>914CE2-3A</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | A           | Bottom                    | 44,3 mm [1.75 in]  | 42,5 mm [1.67 in]       | Panel mount                       | <b>914CE28-3</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | C           | Bottom                    | 44,3 mm [1.75 in]  | 42,5 mm [1.67 in]       | Panel mount, ac-type, two keyways | <b>914CE28-Q1</b> |
| <b>914CE31 • Boot Sealed Roller Plunger</b>                                                                                                                                                                                                                                     |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                           | Listing           |
|  <p> <b>Pretravel</b> • 1,8 mm [0.071 in]<br/> <b>Diff. travel</b> • 0,1 mm [0.004 in]<br/> <b>Overtravel</b> • 3,0 mm [0.118 in]<br/> <b>Oper. force</b> • 22,2 N [5 in-lb]         </p>     |  | Silver   | A           | Bottom                    | 36,2 mm [1.43 in]  | 34,4 mm [1.36 in]       | –                                 | <b>914CE31-3</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | A           | Bottom                    | 36,2 mm [1.43 in]  | 34,4 mm [1.36 in]       | Fluorocarbon seals                | <b>914CE31-3V</b> |
| <b>914CE3 • Cross Roller Plunger</b><br><b>914CE29 • Cross Roller Panel Mount</b>                                                                                                                                                                                               |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                           | Listing           |
|  <p> <b>Pretravel</b> • 1,8 mm [0.071 in]<br/> <b>Diff. travel</b> • 0,1 mm [0.004 in]<br/> <b>Overtravel</b> • 3,0 mm [0.118 in]<br/> <b>Oper. force</b> • 12,2 N [2.75 in-lb]         </p> |  | Silver   | A           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | –                                 | <b>914CE3-3</b>   |
|                                                                                                                                                                                                                                                                                 |  | Gold     | B           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | –                                 | <b>914CE3-3G</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | A           | Side                      | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | –                                 | <b>914CE3-3A</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | A           | Bottom                    | 44,3 mm [1.75 in]  | 42,5 mm [1.67 in]       | Panel mount                       | <b>914CE29-3</b>  |
|                                                                                                                                                                                                                                                                                 |  | Silver   | C           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | dc-type, single keyway            | <b>914CE3-Q</b>   |
|                                                                                                                                                                                                                                                                                 |  | Silver   | C           | Bottom                    | 30,3 mm [1.19 in]  | 28,5 mm [1.12 in]       | ac-type, two keyways              | <b>914CE3-Q1</b>  |

Note: part numbers are shown with 3 ft of cable. The -X indicates the number of feet of cable provided. 6-foot, 9-foot, and 12-foot lengths along with custom lengths, are also available.

# MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

| 914CE55 • Boot Sealed Cross Roller Plunger                                          |                                                                                                                                                                   | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP)                              | Operating Position (OP)                     | Options                       | Listing    |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------------------|-------------------------------------------------|---------------------------------------------|-------------------------------|------------|
|    | <b>Pretravel</b> • 1,8 mm [0.071 in]<br><b>Diff. travel</b> • 0,1 mm [0.004 in]<br><b>Overtravel</b> • 3,0 mm [0.118 in]<br><b>Oper. force</b> • 22,2 N [5 in-lb] | Silver   | A           | Bottom                    | 36,2 mm [1.43 in]                               | 34,4 mm [1.36 in]                           | –                             | 914CE55-3  |
|                                                                                     |                                                                                                                                                                   |          |             |                           |                                                 |                                             |                               |            |
| 914CE22 • Manually Operated                                                         |                                                                                                                                                                   | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP)                              | Operating Position (OP)                     | Options                       | Listing    |
|    | <b>Pretravel</b> • 1,8 mm [0.071 in]<br><b>Diff. travel</b> • 0,1 mm [0.004 in]<br><b>Overtravel</b> • 3,0 mm [0.118 in]<br><b>Oper. force</b> • 8,9 N [2 in-lb]  | Silver   | A           | Bottom                    | 29,2 mm [1.15 in]                               | 27,4 mm [1.08]                              | 23,9 mm [0.94 in] dia. button | 914CE22-3  |
|                                                                                     |                                                                                                                                                                   |          |             |                           |                                                 |                                             |                               |            |
| 914CE19 • Adjustable Plunger                                                        |                                                                                                                                                                   | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP)                              | Operating Position (OP)                     | Options                       | Listing    |
|   | <b>Pretravel</b> • 1,8 mm [0.071 in]<br><b>Diff. travel</b> • 0,1 mm [0.004 in]<br><b>Overtravel</b> • 3,0 mm [0.118 in]<br><b>Oper. force</b> • 17,5 N [5 lb]    | Silver   | A           | Bottom                    | Adjust. 33,8 mm to 40,8 mm [1.33 in to 1.61 in] | Adjust. 32 mm to 39 mm [1.26 in to 1.54 in] | –                             | 914CE19-3  |
|                                                                                     |                                                                                                                                                                   | Gold     | B           | Bottom                    |                                                 |                                             | –                             | 914CE19-3G |
|                                                                                     |                                                                                                                                                                   | Silver   | A           | Side                      |                                                 |                                             | –                             | 914CE19-3A |
|                                                                                     |                                                                                                                                                                   | Silver   | C           | Bottom                    |                                                 |                                             | ac-type, two keyways          | 914CE19-Q1 |
| 914CE20 • Random Motion Wire Actuator                                               |                                                                                                                                                                   | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP)                              | Operating Position (OP)                     | Options                       | Listing    |
|  | <b>Oper. point</b> • 28 mm [1.10 in] max.<br><b>Oper. force</b> • 0,55 N [0.12 lb] max.                                                                           | Silver   | A           | Bottom                    | –                                               | –                                           | –                             | 914CE20-3  |
|                                                                                     |                                                                                                                                                                   | Silver   | A           | Side                      | –                                               | –                                           | –                             | 914CE20-3A |
|                                                                                     |                                                                                                                                                                   | Silver   | C           | Bottom                    | –                                               | –                                           | dc-type, single keyway        | 914CE20-Q  |

## MICRO SWITCH Miniature Precision Limit Switches, 914CE Series

| 914CE16 • Side Rotary                                                                                                                                                                                                   |  | Contacts | Elec Rating | Cable/ Connector Position | Free Position (FP) | Operating Position (OP) | Options                | Listing                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------|-------------|---------------------------|--------------------|-------------------------|------------------------|--------------------------------|
|  <p> <b>Pretravel • 30°</b><br/> <b>Diff. travel • 3°</b><br/> <b>Overtravel • 40°</b><br/> <b>Oper. force • 0,34 Nm [3 in-lb]</b> </p> |  | Silver   | A           | Bottom                    | –                  | –                       | –                      | <b>914CE16-3<sup>1</sup></b>   |
|                                                                                                                                                                                                                         |  | Silver   | A           | Side                      | –                  | –                       | –                      | <b>914CE16-3A<sup>1</sup></b>  |
|                                                                                                                                                                                                                         |  | Silver   | C           | Bottom                    | –                  | –                       | ac-type, two keyways   | <b>914CE16-Q1<sup>1</sup></b>  |
|                                                                                                                                                                                                                         |  | Silver   | C           | Bottom                    | –                  | –                       | dc-type, single keyway | <b>914CE16-Q<sup>1</sup></b>   |
|                                                                                                                                                                                                                         |  | Silver   | C           | Side                      | –                  | –                       | ac-type, two keyways   | <b>914CE16-AQ1<sup>1</sup></b> |

<sup>1</sup> Switch operates on clockwise and counterclockwise rotation of lever shaft.

Note: part numbers are shown with 3 ft of cable. The -X indicates the number of feet of cable provided. 6-foot, 9-foot, and 12-foot lengths along with custom lengths, are also available.

**Table 3. Levers for 914CE16 Series Side Rotary Switches**

| Catalog Listing                                                                     | Material     | Rod/Roller Dia. mm [in] | Rod/Roller Width mm [in] | Roller Mounting |
|-------------------------------------------------------------------------------------|--------------|-------------------------|--------------------------|-----------------|
| <b>Fixed 38,1 mm [1.5 in] radius</b>                                                |              |                         |                          |                 |
|   | –            | Rollerless              | n/a                      | n/a             |
| <b>LSZ51A</b>                                                                       | Nylon        | 19 [0.75]               | 6,35 [0.25]              | Front           |
| <b>LSZ51B</b>                                                                       | Steel        | 19 [0.75]               | 6,35 [0.25]              | Front           |
| <b>LSZ51C</b>                                                                       | Nylon        | 19 [0.75]               | 6,35 [0.25]              | Back            |
| <b>LSZ51D</b>                                                                       | Steel        | 19 [0.75]               | 6,35 [0.25]              | Back            |
| <b>LSZ51L</b>                                                                       | Ball bearing | 19 [0.75]               | 6,35 [0.25]              | Back            |
| <b>LSZ51P</b>                                                                       | Nylon        | 19 [0.75]               | 12,7 [0.50]              | Front           |
| <b>Adjustable 38,1 mm to 89,0 mm [1.5 in to 3.5 in] radius</b>                      |              |                         |                          |                 |
|  | –            | Rollerless              | n/a                      | n/a             |
| <b>LSZ52A</b>                                                                       | Nylon        | 19 [0.75]               | 6,35 [0.25]              | Back            |
| <b>LSZ52B</b>                                                                       | Steel        | 19 [0.75]               | 6,35 [0.25]              | Back            |
| <b>LSZ52C</b>                                                                       | Nylon        | 19 [0.75]               | 6,35 [0.25]              | Front           |
| <b>LSZ52D</b>                                                                       | Steel        | 19 [0.75]               | 6,35 [0.25]              | Front           |
| <b>LSZ52L</b>                                                                       | Ball bearing | 19 [0.75]               | 6,35 [0.25]              | Front           |

| Catalog Listing                                                                     | Material                                     | Rod/Roller Dia. mm [in] | Rod/Roller Width mm [in] | Roller Mounting |       |
|-------------------------------------------------------------------------------------|----------------------------------------------|-------------------------|--------------------------|-----------------|-------|
| Fixed 38,1 mm [1.5 in] radius                                                       |                                              |                         |                          |                 |       |
|   | -                                            | Rollerless              | n/a                      | n/a             |       |
|                                                                                     | LSZ55A                                       | Nylon                   | 19 [0.75]                | 6,35 [0.25]     | Back  |
|                                                                                     | LSZ55B                                       | Steel                   | 19 [0.75]                | 6,35 [0.25]     | Back  |
|                                                                                     | LSZ55C                                       | Nylon                   | 19 [0.75]                | 6,35 [0.25]     | Front |
|                                                                                     | LSZ55D                                       | Steel                   | 19 [0.75]                | 6,35 [0.25]     | Front |
| Short fixed - 33 mm [1.3 in] radius                                                 |                                              |                         |                          |                 |       |
|  | LSZ59A                                       | Nylon                   | 19 [0.75]                | 6,35 [0.25]     | Front |
|                                                                                     | LSZ59B                                       | Steel                   | 19 [0.75]                | 6,35 [0.25]     | Front |
|                                                                                     | LSZ59C                                       | Nylon                   | 19 [0.75]                | 6,35 [0.25]     | Back  |
|                                                                                     | LSZ59D                                       | Steel                   | 19 [0.75]                | 6,35 [0.25]     | Back  |
|                                                                                     | 38,1 mm [1.5 in] radius one-way roller lever |                         |                          |                 |       |
|  | LSZ60A                                       | Nylon                   | 19 [0.75]                | 6,35 [0.25]     | Front |
|                                                                                     | LSZ60B                                       | Steel                   | 19 [0.75]                | 6,35 [0.25]     | Front |

## ADDITIONAL MATERIALS

- Product installation instructions
- Product range guide
- Product nomenclature tree
- Product application-specific information
  - Limit and enclosed switches application information
  - Limit and enclosed switches operating characteristics
  - Limit and enclosed switches reference standards
  - Limit and enclosed switches typical applications
  - Product flyer: CE Family Miniature Limit Switches

### **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.**

### **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.**

## For more information

Honeywell Sensing and Internet of Things services its customers through a worldwide network of sales offices and distributors. For application assistance, current specifications, pricing or the nearest Authorized Distributor, visit [sensing.honeywell.com](http://sensing.honeywell.com) or call:

|              |                 |
|--------------|-----------------|
| Asia Pacific | +65 6355-2828   |
| Europe       | +44 1698 481481 |
| USA/Canada   | +1-800-537-6945 |

## Honeywell Sensing and Internet of Things

9680 Old Bailes Road  
Fort Mill, SC 29707  
[www.honeywell.com](http://www.honeywell.com)

Viton® is a registered trademark of DuPont Performance Elastomers L.L.C.

002381-9-EN | 9 | 05/19  
© 2019 Honeywell International Inc. All rights reserved.

**Honeywell**



# SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

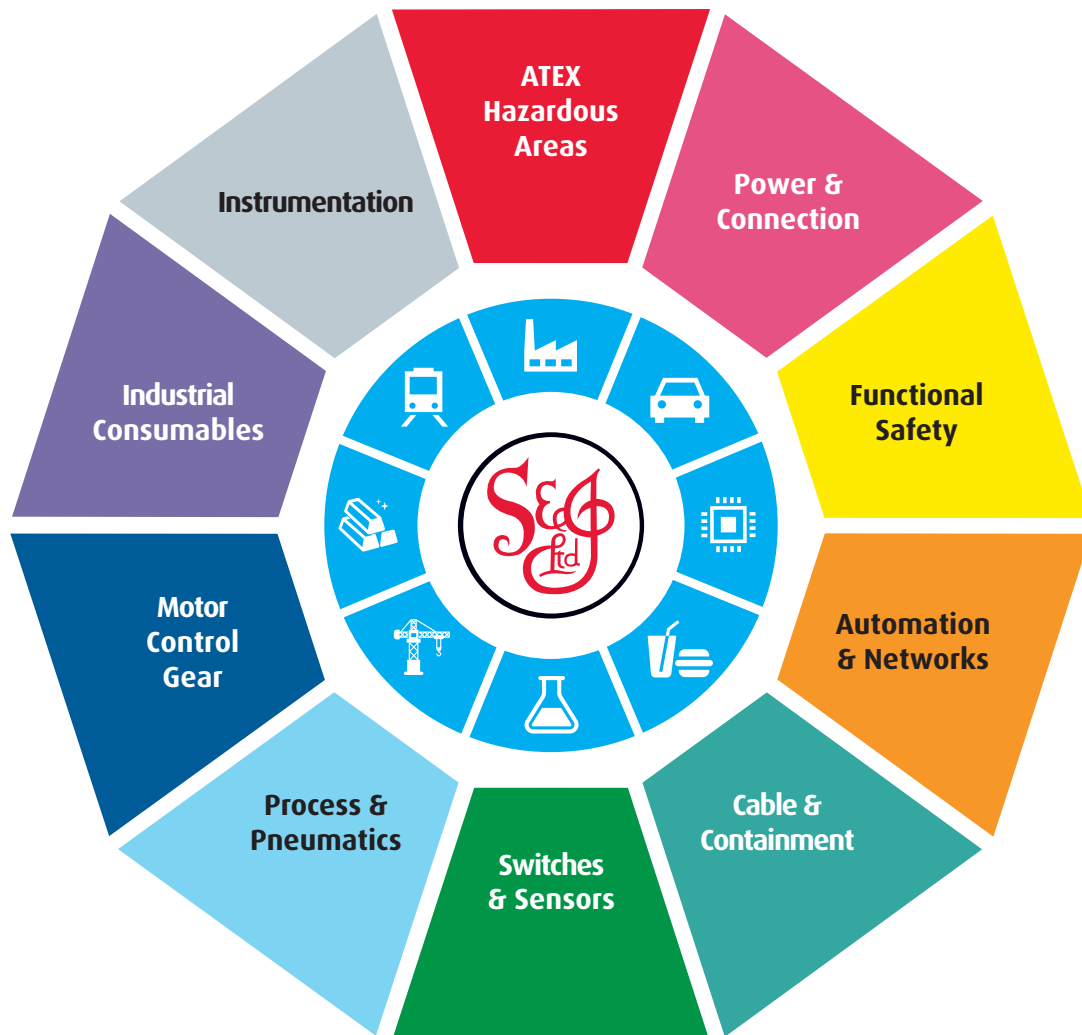
At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

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](http://www.scatts.co.uk)