

# Limit switch box SRBC-CA4-YR90-N-20N-ZC-C2-EX6

Part number: 8137096

**FESTO**



## Data sheet

| Feature                                            | Value                                                                                                                                                                                                          |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certification                                      | RCM compliance mark                                                                                                                                                                                            |
| CE marking (see declaration of conformity)         | As per EU EMC directive<br>as per EU explosion protection directive (ATEX)<br>As per EU RoHS directive                                                                                                         |
| UKCA marking (see declaration of conformity)       | To UK instructions for EMC<br>acc. to UK EX instructions<br>To UK RoHS instructions                                                                                                                            |
| Explosion prevention and protection                | Zone 0 (ATEX)<br>Zone 0 (CN)<br>Zone 0 (IEC-EX)<br>Zone 0 (UKEX)<br>Zone 1 (ATEX)<br>Zone 2 (ATEX)<br>Zone 20 (ATEX)<br>Zone 20 (CN)<br>Zone 20 (IEC-EX)<br>Zone 20 (UKEX)<br>Zone 21 (ATEX)<br>Zone 22 (ATEX) |
| ATEX category gas                                  | II 1G                                                                                                                                                                                                          |
| Type of ignition protection for gas                | Ex ia IIC T6/T5 Ga                                                                                                                                                                                             |
| ATEX category for dust                             | II 1D                                                                                                                                                                                                          |
| Type of (ignition) protection for dust             | Ex ia IIIC Txx°C Da                                                                                                                                                                                            |
| Explosion protection certification outside the EU  | EPL Da (CN)<br>EPL Da (GB)<br>EPL Da (IEC-EX)<br>EPL Ga (CN)<br>EPL Ga (GB)<br>EPL Ga (IEC-EX)                                                                                                                 |
| Explosive ambient temperature                      | See ATEX certificate<br>See IECEx certificate                                                                                                                                                                  |
| Max. input voltage Vi                              | 16 V                                                                                                                                                                                                           |
| Effective internal inductance Li                   | 100 µH                                                                                                                                                                                                         |
| Effective internal capacitance Ci                  | 100 nF                                                                                                                                                                                                         |
| Max. input parameter of intrinsically safe circuit | See IECEx certificate<br>See ATEX certificate                                                                                                                                                                  |
| Certificate issuing authority                      | Eurocert. SIL202587141<br>FTZU 17 ATEX 0105X                                                                                                                                                                   |

| Feature                                                                  | Value                                                                      |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------|
|                                                                          | GYJ20.1409X<br>IECEX FTZU 17.0017X                                         |
| Note on materials                                                        | RoHS compliant                                                             |
| Safety integrity level (SIL)                                             | SIL 3                                                                      |
| Measuring principle                                                      | Inductive                                                                  |
| Ambient temperature                                                      | -20 °C...80 °C                                                             |
| Switching output                                                         | NAMUR                                                                      |
| Switching element function                                               | NC contact                                                                 |
| Max. switching frequency                                                 | 2000 Hz                                                                    |
| Max. output current DC                                                   | 3 mA                                                                       |
| DC operating voltage range                                               | 8.2 V                                                                      |
| Microswitch type                                                         | P&F NCB2-V3-N0                                                             |
| Electrical connection                                                    | Screw terminal                                                             |
| Electrical connection 1, connection type                                 | Terminal strip                                                             |
| Electrical connection 1, cable outlet                                    | Straight                                                                   |
| Electrical connection 1, connection technology                           | Spring-loaded terminal                                                     |
| Electrical connection 1, number of pins/wires                            | 10                                                                         |
| Closable nominal conductor cross-section                                 | 0.25 mm²...2.5 mm²                                                         |
| Approved cable diameter                                                  | 6 mm...12 mm                                                               |
| Dimensions W x L x H                                                     | 127 mm x 98 mm x 122 mm                                                    |
| Connection point for positioner and position sensor conforms to standard | VDI/VDE 3845 Size AA 1<br>VDI/VDE 3845 Size AA 2<br>VDI/VDE 3845 Size AA 3 |
| Mounting position                                                        | Any                                                                        |
| Product weight                                                           | 800 g                                                                      |
| Housing colour                                                           | Gray                                                                       |
| Housing material                                                         | Die-cast aluminum                                                          |
| Seals material                                                           | NBR                                                                        |
| Shaft material                                                           | high-alloy stainless steel                                                 |
| Material of screws                                                       | high-alloy stainless steel                                                 |
| Material of mounting bracket                                             | high-alloy stainless steel                                                 |
| Circlip material                                                         | high-alloy stainless steel                                                 |
| Disc material                                                            | high-alloy stainless steel                                                 |
| Cover cap material                                                       | PC                                                                         |
| Position indicator                                                       | Yellow/red                                                                 |
| Angle detection setting range                                            | 0 deg...90 deg                                                             |
| Storage temperature                                                      | -20 °C...50 °C                                                             |
| Degree of protection                                                     | IP66<br>IP67<br>NEMA 4/4X                                                  |
| Corrosion resistance class (CRC)                                         | 0 - No corrosion stress                                                    |
| LABS (PWIS) conformity                                                   | VDMA24364 Zone III                                                         |
| Contamination level                                                      | 3                                                                          |