

# Sensor box SRBE-CA3-YR90-R-2A-1W-C2M20-EX

Part number: 3471021

**FESTO**



## Data sheet

| Feature                                                                  | Value                                                                                                                                                                                                  |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type code                                                                | SRBE                                                                                                                                                                                                   |
| Connection for valve positioner and position sensor conforms to standard | VDI/VDE 3845 size AA 1                                                                                                                                                                                 |
| Design                                                                   | Rectangular                                                                                                                                                                                            |
| Based on norm                                                            | EN 60947-5-2<br>ISO 5211<br>VDI/VDE 3845                                                                                                                                                               |
| CE marking (see declaration of conformity)                               | as per EU explosion protection directive (ATEX)<br>As per EU low voltage directive                                                                                                                     |
| Explosion prevention and protection                                      | Zone 1 (ATEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 22 (ATEX)<br>Zone 1 (BR)<br>Zone 21 (BR)<br>Zone 1 (IEC-EX)<br>Zone 21 (IEC-EX)<br>Zone 1 (KR)<br>Zone 21 (KR)<br>Zone 1 (CN)<br>Zone 21 (CN) |
| ATEX category gas                                                        | II 2G                                                                                                                                                                                                  |
| Type of ignition protection for gas                                      | Ex db IIC T6 Gb                                                                                                                                                                                        |
| ATEX category for dust                                                   | II 2D                                                                                                                                                                                                  |
| Type of (ignition) protection for dust                                   | Ex tb IIIC T61°C Db                                                                                                                                                                                    |
| Explosion protection certification outside the EU                        | EPL Db (BR)<br>EPL Db (CN)<br>EPL Db (IEC-EX)<br>EPL Db (IN)<br>EPL Db (KR)<br>EPL Gb (BR)<br>EPL Gb (CN)<br>EPL Gb (IEC-EX)<br>EPL Gb (IN)<br>EPL Gb (KR)                                             |
| Explosive ambient temperature                                            | -20°C ≤ Ta ≤ +60°C                                                                                                                                                                                     |
| Certificate issuing authority                                            | 18-GA4BO-0518X<br>18-GA4BO-0519X<br>DNV 16.0067X<br>FTZU 15 ATEX 0095X<br>GYJ 16.1497X<br>IECEX FTZU 15.0014X<br>KCC-18-GA4BO                                                                          |

| Feature                                  | Value                                                                                |
|------------------------------------------|--------------------------------------------------------------------------------------|
| Note on materials                        | Contains paint-wetting impairment substances<br>RoHS-compliant                       |
| Safety integrity level (SIL)             | SIL 2                                                                                |
| Measuring principle                      | Magnetic reed                                                                        |
| Ambient temperature                      | -20 °C ... 60 °C                                                                     |
| Switching output                         | Contact-based                                                                        |
| Switching element function               | Toggle switch, single-pin                                                            |
| Max. output current AC                   | 416 mA                                                                               |
| Max. output current DC                   | 3000 mA                                                                              |
| Operating voltage range AC               | 0 V ... 220 V                                                                        |
| DC operating voltage range               | 0 V ... 30 V                                                                         |
| Electrical connection                    | 10-pin<br>Screw terminal                                                             |
| Cable fitting                            | M20x1.5                                                                              |
| Closable nominal conductor cross-section | 0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                         |
| Type of mounting                         | On flange as per ISO 5211<br>With mounting bracket                                   |
| Mounting position                        | Any                                                                                  |
| Product weight                           | 1700 g                                                                               |
| Housing colour                           | Silver                                                                               |
| 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                                                           |
| Pointer material                         | PC                                                                                   |
| Circlip material                         | High-alloy stainless steel                                                           |
| Disc material                            | High-alloy stainless steel                                                           |
| Position indicator                       | Yellow/red                                                                           |
| Angle detection setting range            | 0 deg ... 90 deg                                                                     |
| Storage temperature                      | -20 °C ... 60 °C                                                                     |
| Degree of protection                     | IP67                                                                                 |
| Shock resistance                         | Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27                |
| Vibration resistance                     | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 |
| Contamination level                      | 3                                                                                    |