

# Quarter turn actuator DAPS-0480-090-RS2-F1012

Part number: 533456

**FESTO**



## Data sheet

| Feature  | Value  |
|--|--|
| Size of valve actuator                               | 0480   |
| Flange hole pattern                                  | F10<br>F12   |
| Swivel angle   | 90 deg   |
| End-position adjusting range at 0°                   | -1 deg...9 deg   |
| End-position adjusting range at nominal swivel angle | 81 deg...91 deg  |
| Depth shaft connection                               | 38.5 mm  |
| Information on the end-position adjusting range      | One end position optionally adjustable                             |
| Standard connection for valve                        | ISO 5211   |
| Cushioning   | No cushioning  |
| Mounting position                                    | Any  |
| Mode of operation                                    | Single-acting  |
| Structural design                                    | Scotch yoke system   |
| Position sensing                                     | None   |
| Closing direction                                    | Clockwise closing  |
| Valve connection conforms to standard                | VDI/VDE 3845 (NAMUR)   |
| Safety integrity level (SIL)                         | Up to SIL 2 low demand mode  |
| Connection pressure for spring force                 | 0.35 MPa<br>3.5 bar  |
| Operating pressure                                   | 0.35 MPa...0.84 MPa<br>3.5 bar...8.4 bar                           |
| Nominal operating pressure                           | 0.56 MPa<br>5.6 bar  |
| Max. swivel frequency at 6 bar                       | 1 Hz   |
| CE marking (see declaration of conformity)           | as per EU explosion protection directive (ATEX)                    |
| UKCA marking (see declaration of conformity)         | acc. to UK EX instructions   |
| Explosion prevention and protection                  | Zone 1 (ATEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 22 (ATEX) |
| Certificate issuing authority                        | German Technical Control Board North (TÜV Nord) 212170801          |
| ATEX category gas                                    | II 2G  |
| ATEX category for dust                               | II 2D  |

| Feature   | Value   |
|---|---|
| Type of ignition protection for gas                           | Ex h IIC T6...T3 Gb X   |
| Type of (ignition) protection for dust                        | Ex h IIIC T85°C...T200°C Db X   |
| Explosive ambient temperature                                 | -20°C ≤ Ta ≤ +60°C  |
| Operating medium  | Compressed air as per ISO 8573-1:2010 [7:4:4]   |
| Information on operating and pilot media                      | Operation with oil lubrication possible (required for further use)  |
| Corrosion resistance class (CRC)                              | 3 - High corrosion stress   |
| LABS (PWIS) conformity  | VDMA24364-B1/B2-L   |
| Ambient temperature   | -20 °C...80 °C  |
| Torque at nominal operating pressure and 0° swivel angle      | 600 Nm  |
| Torque at nominal operating pressure and 50° swivel angle     | 330 Nm  |
| Torque at nominal operating pressure and 90° swivel angle     | 500 Nm  |
| Note about the torque   | The actuator's operating torque must not be higher than the maximum permissible torque listed in ISO 5211, based on the size of the mounting flange and the coupling. |
| Spring return torque at 0° swivel angle                       | 200 Nm  |
| Spring return torque with 50° swivel angle                    | 150 Nm  |
| Spring return torque with 90° swivel angle                    | 300 Nm  |
| Spring force  | 2   |
| Air consumption at 6 bar per cycle 0°-nominal swivel angle-0° | 19.6 l  |
| Product weight  | 22700 g   |
| Shaft connection  | T36   |
| Pneumatic connection  | G1/4  |
| Note on materials   | RoHS-compliant  |
| Cover material  | Wrought aluminum alloy  |
| Seals material  | FPM<br>NBR<br>PUR   |
| Housing material  | Wrought aluminum alloy  |
| Material of screws  | High-alloy steel  |
| Shaft material  | High-alloy steel  |
| Material number for shaft                                     | 1.4305  |