

# Quarter turn actuator DAPS-0720-090-R-F1012-T6

Part number: 553181

**FESTO**



## Data sheet

| Feature                                      | Value                                                              |
|----------------------------------------------|--------------------------------------------------------------------|
| Size of valve actuator                       | 0720                                                               |
| Flange hole pattern                          | F10<br>F12                                                         |
| Swivel angle                                 | 90 deg                                                             |
| End-position adjusting range at 0°           | -1 deg...9 deg                                                     |
| Depth shaft connection                       | 29.5 mm                                                            |
| Standard connection for valve                | ISO 5211                                                           |
| Cushioning                                   | No cushioning                                                      |
| Mounting position                            | Any                                                                |
| Mode of operation                            | Double-acting                                                      |
| Structural design                            | Kinematic yoke system                                              |
| Position sensing                             | None                                                               |
| Closing direction                            | Closes to the right                                                |
| Valve connection conforms to standard        | VDI/VDE 3845 (NAMUR)                                               |
| Safety integrity level (SIL)                 | Up to SIL 2 low demand mode                                        |
| Operating pressure                           | 0.3 MPa...0.84 MPa<br>3 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                                                              |
| 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                | -50°C ≤ Ta ≤ +60°C                                                 |
| Operating medium                             | Compressed air as per ISO 8573-1:2010 [7:4:4]                      |

| Feature                                                       | Value                                                                                                                                                                 |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Zone III                                                                                                                                                    |
| Ambient temperature                                           | -50 °C...60 °C                                                                                                                                                        |
| Torque at nominal operating pressure and 0° swivel angle      | 720 Nm                                                                                                                                                                |
| Torque at nominal operating pressure and 50° swivel angle     | 360 Nm                                                                                                                                                                |
| Torque at nominal operating pressure and 90° swivel angle     | 540 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. |
| Air consumption at 6 bar per cycle 0°-nominal swivel angle-0° | 24.5 l                                                                                                                                                                |
| Product weight                                                | 12000 g                                                                                                                                                               |
| Shaft connection                                              | T27                                                                                                                                                                   |
| Pneumatic connection                                          | G1/4                                                                                                                                                                  |
| Note on materials                                             | RoHS compliant                                                                                                                                                        |
| Cover material                                                | Wrought aluminum alloy                                                                                                                                                |
| Seals material                                                | FVMQ<br>PTFE-reinforced                                                                                                                                               |
| Housing material                                              | Wrought aluminum alloy                                                                                                                                                |
| Material of screws                                            | High-alloy steel                                                                                                                                                      |
| Shaft material                                                | High-alloy steel                                                                                                                                                      |
| Material number for shaft                                     | 1,4305                                                                                                                                                                |