

Quarter turn actuator DAPS-0090-090-RS3-F0710

Part number: 533441

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|--|--|
| Size of valve actuator | 0090 |
| Flange hole pattern | F07 F10 |
| 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 | 24.8 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 |
| Symbol | 00991266 |
| 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 | 0.42 MPa |
| Connection pressure for spring force | 4.2 bar |
| Operating pressure | 0.42 MPa ... 0.84 MPa |
| Operating pressure | 4.2 bar ... 8.4 bar |
| Nominal operating pressure | 0.56 MPa |
| Nominal operating pressure | 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) Zone 2 (ATEX) Zone 21 (ATEX) 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 |

| Feature | Value |
|---|---|
| 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 | 105 Nm |
| Torque at nominal operating pressure and 50° swivel angle | 56.5 Nm |
| Torque at nominal operating pressure and 90° swivel angle | 82.5 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 | 45 Nm |
| Spring return torque with 50° swivel angle | 33.9 Nm |
| Spring return torque with 90° swivel angle | 67.5 Nm |
| Spring force | 3 |
| Air consumption at 6 bar per cycle 0°-nominal swivel angle-0° | 3.85 l |
| Product weight | 5900 g |
| Shaft connection | T22 |
| Pneumatic connection | G1/8 |
| Note on materials | RoHS-compliant |
| Cover material | Wrought aluminum alloy |
| Seals material | FPM NBR PUR |
| Housing material | Wrought aluminum alloy |
| Material of screws | High-alloy steel |
| Shaft material | High-alloy steel |
| Material number for shaft | 1.4305 |