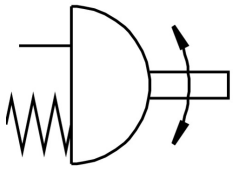
# Quarter turn actuator
# DAPS-0720-090-RS3-F14

Part number: 549683



## Data sheet

| Feature | Value |
|---|---|
| Size of valve actuator | 0720 |
| Flange hole pattern | F14 |
| 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 |
| Type code | DAPS |
| 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 high demand mode<br>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 |
| 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) |
| 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 | -20°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 |
| Ambient temperature | -20 °C ... 80 °C |
| Torque at nominal operating pressure and 0° swivel angle | 840 Nm |
| Torque at nominal operating pressure and 50° swivel angle | 450 Nm |
| Torque at nominal operating pressure and 90° swivel angle | 660 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 | 360 Nm |
| Spring return torque with 50° swivel angle | 270 Nm |
| Spring return torque with 90° swivel angle | 540 Nm |
| Spring force | 3 |
| Air consumption at 6 bar per cycle 0°-nominal swivel angle-0° | 29.4 l |
| Product weight | 33000 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 |