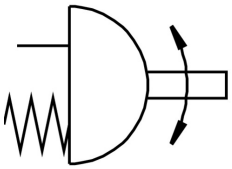
# Quarter turn actuator
# DFPD-2300-RP-90-RS60-F16-R3-C-VDE2

Part number: 8102913





## Data sheet

| Feature | Value |
|---|---|
| Size of valve actuator | 2300 |
| Flange hole pattern | F16 |
| Swivel angle | 90 deg |
| End-position adjusting range at 0° | -5 deg ... 5 deg |
| End-position adjusting range at nominal swivel angle | -5 deg ... 5 deg |
| Depth shaft connection | 48 mm |
| Type code | DFPD |
| Standard connection for valve | ISO 5211 |
| Mounting position | Any |
| Mode of operation | Single-acting |
| Design | Gear rack/pinion |
| Closing direction | Clockwise closing |
| Symbol | 00991266 |
| Valve connection conforms to standard | VDI/VDE 3845 (NAMUR) |
| Connection for valve positioner and position sensor conforms to standard | VDI/VDE 3845 size AA 3 |
| Devices type according to VDMA 66413 | Safety device |
| Safety function | The fundamental safety function is that the control valve moves to the switching position when the compressed air is turned off. It is reset by spring force. |
| Safety integrity level (SIL) | Up to SIL 2 low demand mode<br>up to SIL 3 in a redundant architecture<br>up to SIL 1 high demand mode |
| Certified for safety function to ISO 13849 and IEC 61508 (SIL) | Product can be used in safety-related parts of control systems up to SIL 2, low demand<br>Product can be used in safety-related parts of control systems up to SIL 1, high demand<br>up to SIL 3 in a redundant architecture |
| Operating pressure | 0.2 MPa ... 0.8 MPa |
| Operating pressure | 2 bar ... 8 bar |
| Operating pressure | 29 psi ... 116 psi |
| Nominal operating pressure | 0.6 MPa |
| Nominal operating pressure | 6 bar |
| Nominal operating pressure | 87 psi |
| Maritime classification | See certificate |
| CE marking (see declaration of conformity) | as per EU explosion protection directive (ATEX) |

| Feature | Value |
|---|---|
| Explosion prevention and protection | Zone 1 (ATEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 22 (ATEX) |
| Certificate issuing authority | DNVGL TAP00001CE<br>German Technical Control Board (TÜV) Rheinland 968/V 1106.00/19 |
| ATEX category gas | II 2G |
| ATEX category for dust | II 2D |
| Type of ignition protection for gas | Ex h IIC T4 Gb X |
| Type of (ignition) protection for dust | Ex h IIIC T105°C Db X |
| Explosive ambient temperature | -20°C <= Ta <= +80°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) | 2 - Moderate corrosion stress |
| Storage temperature | -20 °C ... 60 °C |
| Ambient temperature | -20 °C ... 80 °C |
| Torque at nominal operating pressure and 0° swivel angle | 1523 Nm |
| Torque at nominal operating pressure and 90° swivel angle | 885.2 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 | 913.2 Nm |
| Spring return torque with 90° swivel angle | 1551 Nm |
| MTTFd | 1126 years |
| PFH | 1.01E-7 |
| PFD | 7.8E-4 |
| Air consumption at 6 bar per cycle 0°-nominal swivel angle-0° | 84.4 l |
| Product weight | 77941 g |
| Shaft connection | T46 |
| Pneumatic connection | G1/4 |
| Note on materials | RoHS-compliant |
| Material of sub-base | Wrought aluminum alloy, anodized |
| Cover material | Die-cast aluminum, coated |
| Seals material | NBR |
| Material of spring | Spring steel |
| Housing material | Wrought aluminum alloy, anodized |
| Material of piston | Die-cast aluminum |
| Material of bearing | POM |
| Cam material | Steel |
| Material of screws | High-alloy stainless steel |
| Shaft material | High-alloy stainless steel |