

Quarter turn actuator DFPD-2300-

Part number: 8042196

FESTO



Data sheet

| Feature | Value |
|--|---|
| Size of valve actuator | 2300 |
| Flange hole pattern | F14 F16 F1216 |
| Swivel angle | 90 deg...180 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 | 38 mm...48 mm |
| Standard connection for valve | ISO 5211 |
| Mounting position | Any |
| Mode of operation | Double-acting Single-acting |
| Structural design | Gear rack/pinion |
| Closing direction | Clockwise closing Closes to the left |
| Valve connection conforms to standard | VDI/VDE 3845 (NAMUR) |
| Connection point for positioner and position sensor conforms to standard | VDI/VDE 3845 size AA 3 |
| Burst pressure | 24 bar |
| Operating pressure | 0.2 MPa...0.8 MPa 2 bar...8 bar 29 psi...116 psi |
| Nominal operating pressure | 0.2 MPa...0.6 MPa 2 bar...6 bar 29 psi...87 psi |
| Maritime classification | See certificate |
| 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 protection certification outside the EU | EPL Db (GB) EPL Gb (GB) |
| Explosion prevention and protection | Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX) |

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|---|---|
| Certificate issuing authority | DNV TAP00001CE German Technical Control Board (TÜV) Rheinland 968/V 1106.01/2023 |
| ATEX category gas | II 2G |
| ATEX category for dust | II 2D |
| Type of ignition protection for gas | Ex h IIC T3 Gb X Ex h IIC T4 Gb X Ex h IIC T6 Gb X |
| Type of (ignition) protection for dust | Ex h IIIC T105°C Db X Ex h IIIC T175°C Db X Ex h IIIC T85°C Db X |
| Explosive ambient temperature | -20°C ≤ Ta ≤ +80°C -50°C ≤ Ta ≤ +60°C 0°C ≤ Ta ≤ +150°C |
| Operating medium | Compressed air as per ISO 8573-1:2010 [7:4:4] |
| Information on operating and pilot media | Dew point min. 10 °C below the ambient temperature and temperature of medium Operation with oil lubrication possible (required for further use) |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L VDMA24364 zone III |
| Storage temperature | -20 °C...60 °C |
| Ambient temperature | -50 °C...150 °C |
| Torque at nominal operating pressure and 0° swivel angle | 533.3 Nm...2233.3 Nm |
| Torque at nominal operating pressure and 90° swivel angle | 338.6 Nm...2233.3 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 | 278.8 Nm...913.2 Nm |
| Spring return torque with 90° swivel angle | 473.5 Nm...1551 Nm |
| Air consumption at 6 bar per cycle 0°-nominal swivel angle-0° | 84.4 l...204 l |
| Product weight | 64900 g...77972 g |
| Shaft connection | T36 T46 |
| Pneumatic connection | G1/4 G1/2 1/4 NPT 1/2 NPT |
| Note on materials | RoHS-compliant |
| Material of sub-base | Coated die-cast aluminum Wrought aluminum alloy, anodized |
| Cover material | Die-cast aluminum, coated Wrought aluminum alloy, anodized |
| Seals material | FPM FVMQ NBR |
| Material of spring | Spring steel |
| Housing material | Die-cast aluminum, coated Wrought aluminum alloy, anodized |
| Material of piston | Die-cast aluminum |
| Material of bearing | POM PPS-reinforced |
| Cam material | Steel High-alloy stainless steel |
| Material of screws | High-alloy stainless steel |
| Shaft material | Steel, nickel-plated High-alloy stainless steel |