

# semi-rotary drive DAPS-0720-090-RS2-F12

Part number: 549678

FESTO

Single-acting, air connection as per VDI/VDE 3845, Namur valves can be directly flange-mounted



## Data sheet

| Feature  | Value  |
|--|--|
| Size of actuator   | 0720   |
| Flange hole pattern  | F12  |
| Swivel angle   | 90 deg   |
| End-position adjustment range at 0°                        | -1 ... 9 deg   |
| End-position adjustment range at 90°                       | 81 ... 91 deg  |
| Shaft connection depth                                     | 38.5 mm  |
| Note regarding end position setting range                  | One selectable end position is adjustable  |
| Fitting connection conforms to standard                    | ISO 5211   |
| Cushioning   | No cushioning  |
| Assembly position  | Any  |
| Mode of operation  | single-acting  |
| Design structure   | Yoke kinematics  |
| Position detection   | No   |
| Closing direction  | right-closing  |
| Valve connection conforms to standard                      | VDI/VDE 3845 (NAMUR)   |
| Safety Integrity Level (SIL)                               | Product can be used in SRP/CS up to SIL 2 (high demand)<br>Product can be used in SRP/CS up to SIL 2 low demand  |
| Supply pressure for spring strength                        | 3.5 bar  |
| Operating pressure   | 3.5 ... 8.4 bar  |
| Nominal operating pressure                                 | 5.6 bar  |
| CE mark (see declaration of conformity)                    | to EU directive explosion protection (ATEX)  |
| ATEX category Gas  | II 2G  |
| ATEX category Dust   | II 2D  |
| Explosion ignition protection type Gas                     | Ex h IIC T6...T3 Gb X  |
| Explosion ignition protection type Dust                    | Ex h IIIC T85°C...T200°C Db X  |
| Explosion-proof ambient temperature                        | -20°C ≤ Ta ≤ +60°C   |
| Operating medium   | Compressed air in accordance with ISO8573-1:2010 [7:4:4]   |
| Note on operating and pilot medium                         | Lubricated operation possible (subsequently required for further operation)  |
| Corrosion resistance classification CRC                    | 3 - High corrosion stress  |
| Ambient temperature  | -20 ... 80 °C  |
| Torque at rated operating pressure and 0° rotation angle   | 900 Nm   |
| Torque at nominal operating pressure with 50° swivel angle | 495 Nm   |
| Torque at nominal operating pressure with 90° swivel angle | 750 Nm   |
| Note about the torque                                      | The operating torque of the actuator must not be higher than the maximum permissible torque listed in ISO 5211, with reference to the size of the mounting flange and of the coupling. |
| Spring return torque with 0° swivel angle                  | 300 Nm   |
| Spring return torque with 50° swivel angle                 | 225 Nm   |
| Spring return torque at 90°                                | 450 Nm   |
| Spring strength  | 2  |
| Air consumption at 6 bar per cycle 0°-90°-0°               | 29.4 l   |
| Product weight   | 33,000 g   |
| Shaft connection   | T36  |

| Feature                   | Value                   |
|---------------------------|-------------------------|
| Pneumatic connection      | G1/4                    |
| Materials note            | Conforms to RoHS        |
| Material cover            | Wrought Aluminium alloy |
| Material seals            | FPM<br>NBR<br>PUR       |
| Material housing          | Wrought Aluminium alloy |
| Material screws           | High alloy steel        |
| Material shaft            | High alloy steel        |
| Material number for shaft | 1.4305                  |