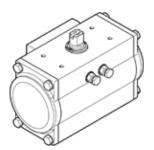
## semi-rotary drive DFPD-120-RP-180-RD-F0507 Part number: 8065339

**FESTO** 

double-acting, rack and pinion engineering design, connection pattern to NAMUR VDI/VDE 3845 for mounting solenoid valves, position sensors and positioners, standard connection to process valve fitting ISO 5211.





## **Data sheet**

| Feature                                                                       | Value                                                                                                                                                |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size of actuator                                                              | 120                                                                                                                                                  |
| Flange hole pattern                                                           | F0507                                                                                                                                                |
| Swivel angle                                                                  | 180 deg                                                                                                                                              |
| End-position adjustment range at 0°                                           | -5 5 deg                                                                                                                                             |
| End-position adjustment range at 90°                                          | -5 5 deg                                                                                                                                             |
| Shaft connection depth                                                        | 19 mm                                                                                                                                                |
| Fitting connection conforms to standard                                       | ISO 5211                                                                                                                                             |
| Assembly position                                                             | Any                                                                                                                                                  |
| Mode of operation                                                             | double-acting                                                                                                                                        |
| Design structure                                                              | Rack and pinion                                                                                                                                      |
| Closing direction                                                             | right-closing                                                                                                                                        |
| Valve connection conforms to standard                                         | VDI/VDE 3845 (NAMUR)                                                                                                                                 |
| Connection for positioner and position sensor conforms to standard            | VDI/VDE 3845 size AA 1                                                                                                                               |
| Safety Integrity Level (SIL)                                                  | Product can be used in SRP/CS up to SIL 2 (high demand)                                                                                              |
| Operating pressure                                                            | 2 8 bar                                                                                                                                              |
| Nominal operating pressure                                                    | 5.5 bar                                                                                                                                              |
| CE mark (see declaration of conformity)                                       | to EU directive explosion protection (ATEX)                                                                                                          |
| Certificate issuing department                                                | TÜV Rheinland                                                                                                                                        |
| ATEX category Gas                                                             | II 2G                                                                                                                                                |
| ATEX category Dust                                                            | II 2D                                                                                                                                                |
| Explosion ignition protection type Gas                                        | Ex h IIC T4 Gb X                                                                                                                                     |
| Explosion ignition protection type Dust                                       | Ex h IIIC T105°C Db X                                                                                                                                |
| Explosion-proof ambient temperature                                           | -20°C <= Ta <= +80°C                                                                                                                                 |
| Operating medium                                                              | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                                                                                             |
| Note on operating and pilot medium                                            | Pressure dew point 10°C below ambient temperature/temperature of medium  Lubricated operation possible (subsequently required for further operation) |
| Storage temperature                                                           | -20 60 °C                                                                                                                                            |
|                                                                               | -20 80 °C                                                                                                                                            |
| Ambient temperature  Torque at rated operating pressure and 0° rotation angle | 117.4 Nm                                                                                                                                             |
| Torque at nominal operating pressure with 90° swivel angle                    | 117.4 Nm                                                                                                                                             |
| Note about the torque                                                         | The operating torque of the actuator must not be higher than the                                                                                     |
| Note about the torque                                                         | maximum permissible torque listed in ISO 5211, with reference to the size of the mounting flange and of the coupling.                                |
| Air consumption at 6 bar per cycle 0°-90°-0°                                  | 12.81                                                                                                                                                |
| Product weight                                                                | 7,122 g                                                                                                                                              |
| Shaft connection                                                              | T17                                                                                                                                                  |
| Pneumatic connection                                                          | G1/4                                                                                                                                                 |
| Materials note                                                                | Conforms to RoHS                                                                                                                                     |
| Material of connecting plate                                                  | Anodised wrought aluminium alloy                                                                                                                     |
| Material cover                                                                | Die-cast aluminium, coated                                                                                                                           |



| Feature          | Value                            |
|------------------|----------------------------------|
| Material seals   | NBR                              |
| Material housing | Anodised wrought aluminium alloy |
| Material piston  | Aluminium die cast               |
| Material bearing | POM                              |
| Material cam     | Steel                            |
| Material screws  | High alloy steel, non-corrosive  |
| Material shaft   | Steel, nickel-plated             |