

## Semi-Rot. Drive DFPD-120-RP-90-RS60-F0507-R3-# - Festo 8048144

Item no. FES-8048144

Manufacturer Festo

EAN 4052568288105

Festo rotary actuator for defined swivel motion and positioning in automation.

### TECHNICAL DATA

|                         |           |
|-------------------------|-----------|
| Betriebsdruck max [bar] | 8.000000  |
| HS-Code                 | 84123900  |
| Pneumatischer Anschluss | G1/4      |
| Weight                  | 6 kg      |
| Werkstoff               | Aluminium |



### STANDARDS & COMPLIANCE

ISO 8573-1:2010 ISO 5211

### DESCRIPTION

Festo rotary actuator for defined swivel motion and positioning in automation. The key technical data of this genuine Festo article are listed below.

|                                            |                      |
|--------------------------------------------|----------------------|
| Position drive dimensions                  | 120                  |
| Flange drilling screen                     | F0507                |
| Swivel angle [deg]                         | 90                   |
| Adjustable range end position at 0° [deg]  | -5 to 5              |
| Adjustable range end position at 90° [deg] | -5 to 5              |
| Shaft connection Depth [mm]                | 19                   |
| Standard connection to fitting             | ISO 5211             |
| installation position                      | arbitrary            |
| Principle of operation                     | single action        |
| Construction set up                        | Toothed rack/pinion  |
| Closing direction                          | Right closing        |
| Valve connection corresponds to standard   | VDI/VDE 3845 (NAMUR) |

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|                                                                                       |                                                                                                                                                                            |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection for position controllers and position feedback signal comply with standard | VDI/VDE 3845 Size AA 1                                                                                                                                                     |
| Safety Integrity Level (SIL)                                                          | Produkt kann eingesetzt werden in SRP/CS bis SIL 2 High Demand                                                                                                             |
| Operating pressure [bar]                                                              | 2 to 8                                                                                                                                                                     |
| Nominal operating pressure [bar]                                                      | 6,0                                                                                                                                                                        |
| CE certificate (see declaration of conformity)                                        | to EU EX protection directive (ATEX)                                                                                                                                       |
| Certified awarding point                                                              | TÜV Rhineland                                                                                                                                                              |
| ATEX gas category                                                                     | II 2G                                                                                                                                                                      |
| ATEX dust category                                                                    | II 2D                                                                                                                                                                      |
| Ex ignition protection type gas                                                       | Ex h IIC T4 Gb X                                                                                                                                                           |
| Ex ignition protection type dust                                                      | Ex h IIIC T105°C Db X                                                                                                                                                      |
| Ex ambient temperature                                                                | -20°C &lt;= Ta &lt;= +80°C                                                                                                                                                 |
| Operating medium                                                                      | Compressed air to ISO 8573-1:2010 [7:4:4]                                                                                                                                  |
| Information about operating and control medium                                        | Oiled operation possible (required in further operations)<br>Pressure dew point 10°C under ambient and medium temperature                                                  |
| Bearing temperature [°C]                                                              | -20 to 60                                                                                                                                                                  |
| ambient temperature [°C]                                                              | -20 to 80                                                                                                                                                                  |
| Rotary torque for nominal operating pressure and 0° pivot angle [Nm]                  | 86,0                                                                                                                                                                       |
| Rotary torque for nominal operating pressure and 90° pivot angle [Nm]                 | 44,8                                                                                                                                                                       |
| Information about torque                                                              | The operating torque of the actuator may not be higher than the maximum permitted torque listed in ISO 5211, related to the size of the fastening flange and the coupling. |
| Air consumption a 6 bar per cycle 0°-90°-0° [LTR]                                     | 4,3                                                                                                                                                                        |
| Product weight [g]                                                                    | 5.736                                                                                                                                                                      |
| Shaft connection                                                                      | T17                                                                                                                                                                        |
| Pneumatic connection                                                                  | G1/4                                                                                                                                                                       |
| Material information                                                                  | RoHs compliant                                                                                                                                                             |
| Connection plate material                                                             | Aluminium wrought alloy, anodised                                                                                                                                          |
| Cover material                                                                        | Alu-Druckguss, beschichtet                                                                                                                                                 |
| Seals material                                                                        | NBR                                                                                                                                                                        |
| Housing material                                                                      | Aluminium wrought alloy, anodised                                                                                                                                          |
| Piston material                                                                       | Aluminium die casting                                                                                                                                                      |
| Bearing material                                                                      | POM                                                                                                                                                                        |
| Lug material                                                                          | Cast stainless steel                                                                                                                                                       |

|                                               |                               |
|-----------------------------------------------|-------------------------------|
| Screws material                               | High-alloyed stainless steels |
| Shaft material                                | High-alloyed stainless steels |
| Spring force torque at a swivel angle 0° [Nm] | 42,1                          |
| Spring force torque at 90° [Nm]               | 83,3                          |
| Spring material                               | spring steel                  |