

## Semi-Rotary Drive DFPD-40-RP-90-RS60-F0507-R3-EP - Festo 8047630

Item no. FES-8047630

Manufacturer Festo

EAN 4052568287481

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

### TECHNICAL DATA

|                         |                     |
|-------------------------|---------------------|
| Betriebsdruck max [bar] | 8.000000            |
| Design                  | Toothed rack/pinion |
| Dichtmaterial           | NBR                 |
| Funktion                | single-acting       |
| HS-Code                 | 84123900            |
| Material                | Aluminium           |
| Medium                  | Compressed air      |
| Mounting position       | arbitrary           |
| Pneumatic connection    | G1/8                |
| Series                  | DFPD                |
| Temperature (max.)      | 80                  |
| Weight                  | 2.3 kg              |



### 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                  | 40                  |
| 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]                | 16                  |
| Standard connection to fitting             | ISO 5211            |
| installation position                      | arbitrary           |
| Principle of operation                     | single action       |
| Construction set up                        | Toothed rack/pinion |
| Closing direction                          | Right closing       |

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|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Valve connection corresponds to standard                                              | VDI/VDE 3845 (NAMUR)                                                                                                                                                       |
| 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]                  | 28,0                                                                                                                                                                       |
| Rotary torque for nominal operating pressure and 90° pivot angle [Nm]                 | 14,5                                                                                                                                                                       |
| 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]                                     | 1,5                                                                                                                                                                        |
| Product weight [g]                                                                    | 2.180                                                                                                                                                                      |
| Shaft connection                                                                      | T14                                                                                                                                                                        |
| Pneumatic connection                                                                  | G1/8                                                                                                                                                                       |
| 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] | 13,8                          |
| Spring force torque at 90° [Nm]               | 27,2                          |
| Spring material                               | spring steel                  |