## Semi-rotary actuator DAPS-1920-090-RS4-F16 Part number: 549692

single-acting, Namur valves not suited for direct flange-mounting.



## **Data sheet**

| Feature  | Value  |
|--|--|
| Size of actuator   | 1920   |
| Flange hole pattern  | F16  |
| Swivel angle   | 90 deg   |
| End-position adjustment range at 0°                        | -5 5 deg   |
| End-position adjusting range at nominal swivel angle       | 85 95 deg  |
| Shaft connection depth                                     | 49 mm  |
| 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 low demand                 |
| Connection pressure for spring force                       | 0.56 MPa   |
| Supply pressure for spring strength                        | 5.6 bar  |
| Operating pressure MPa                                     | 0.56 0.84 MPa  |
| Working pressure   | 5.6 8.4 bar  |
| Nominal operating pressure                                 | 0.56 MPa   |
| Nominal working pressure                                   | 5.6 bar  |
| Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)           | 1 Hz   |
| CE symbol (see declaration of conformity)                  | according to EU-Ex protection guideline (ATEX)                       |
| UKCA marking (see declaration of conformity)               | To UK EX instructions  |
| Certificate issuing department                             | TÜV Nord 212170801   |
| ATEX category Gas  | II 2G  |
| ATEX category Dust   | II 2D  |
| Explosion ignition protection type Gas                     | Ex h IIC T6T3 Gb X   |
| Explosion ignition protection type Dust                    | Ex h IIIC T85°CT200°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  |
| PWIS conformity  | VDMA24364-B1/B2-L  |
| Ambient temperature  | -20 80 °C  |
| Torque at rated working pressure and 0° rotation angle     | 1,920 Nm   |
| Torque at nominal operating pressure with 50° swivel angle | 960 Nm   |
| Torque at nominal operating pressure with 90° swivel angle | 1,280 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                  | 1,280 Nm   |
| Spring return torque with 50° swivel angle                 | 960 Nm   |
| Spring return torque at 90°                                | 1920 Nm  |





## FESTO

| Feature   | Value                  |
|---|------------------------|
| Spring strength   | 4                      |
| Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0°-nominal swivel angle-0° | 91.7 l                 |
| Product weight  | 67,000 g               |
| Shaft connection  | T46                    |
| Pneumatic connection  | G3/8                   |
| Materials note  | Conforms to RoHS       |
| Material cover  | Wrought Aluminum alloy |
| Material seals  | FPM                    |
|   | NBR                    |
|   | PUR                    |
| Material housing  | Wrought Aluminum alloy |
| Material screws   | High alloy steel       |
| Material shaft  | High alloy steel       |
| Material number for shaft   | 1.4305                 |