

# 旋轉驅動器

## DFPD-40-RP-90-RS30-F04-R3-EP

料號: 8047642

FESTO

single-acting, rack and pinion design, connection pattern to NAMUR VDI/VDE 3845 for mounting solenoid valves, position sensors and positioners, standard connection to process valve fitting ISO 5211, epoxy coating, stainless steel shaft.



### 技術參數

| 特性   | 值   |
|--|---|
| 驅動器尺寸  | 40  |
| 法蘭孔的樣式   | F04   |
| 擺動角度   | 90 deg  |
| 0°時的端點位置調節範圍   | -5 ... 5 deg  |
| End-position adjusting range at nominal swivel angle               | -5 ... 5 deg  |
| 軸連接深度  | 12 mm   |
| 連接件接口符合標準  | ISO 5211  |
| 裝配位置   | 任何  |
| 操作模式   | 單動  |
| 設計結構   | 齒輪齒條機構  |
| 關閉方向   | 右側-關閉   |
| 閥的接口符合標準   | VDI/VDE 3845 (NAMUR)  |
| Connection for positioner and position sensor conforms to standard | VDI/VDE 3845 size AA 1  |
| Component suitable for safety functions                            | Safety device   |
| 安全功能   | The safety function consists of the actuator switching to the specified safety switching position when the compressed air is switched off and the spring chamber is exhausted. This switching movement is achieved through the spring force of the spring assembly. |
| 安全完整性等級 (SIL)  | 產品可用於在 SRP/CS 高達 SIL2 的低需求<br>Up to SIL 3 in redundant architecture<br>高達 SIL 1 高需求模式   |
| 安全功能認證符合 ISO 13849 及 IEC 61508 (SIL)                               | 產品可用於在 SRP/CS 高達 SIL2 的低需求<br>高達 SIL 1 高需求模式<br>Up to SIL 3 in redundant architecture   |
| Operating pressure MPa   | 0.2 ... 0.8 MPa   |
| 操作壓力   | 2 ... 8 bar   |
| Operating pressure   | 29 ... 116 psi  |
| Nominal operating pressure   | 0.3 MPa   |
| 額定操作壓力   | 3 bar   |
| Nominal operating pressure (psi)                                   | 43.5 psi  |
| Maritime classification  | see certificate   |
| CE 符號 (參見符合的標準)  | 根據 EU-Ex 防爆指導原則 (ATEX)  |
| UKCA marking (see declaration of conformity)                       | To UK EX instructions   |
| EU以外的防爆保護認證  | EPL Db (GB)<br>EPL Gb (GB)  |
| 認證核發部門   | DNV TAP00001CE<br>German Technical Control Board (TÜV) Rheinland 968/V 1106.<br>01/2023   |
| ATEX(防爆) 標準-氣體   | II 2G   |
| ATEX(防爆) 標準-灰塵   | II 2D   |
| 防氣爆  | Ex h IIC T4 Gb X  |

| 特性  | 值  |
|---|--|
| 防塵爆   | Ex h III C T105°C Db X   |
| 周遭防爆溫度  | -20°C ≤ Ta ≤ +80°C   |
| 操作介質  | 壓縮空氣符合 ISO8573-1:2010 [7:4:4]  |
| 注意: 操作和嚮導介質   | 壓力露點 10°C 低於環境溫度/介質溫度<br>潤滑操作可行 (隨後需要進一步操作)  |
| 耐腐蝕等級 CRC   | 1 - Low corrosion stress   |
| PWIS conformity   | VDMA24364-B1/B2-L  |
| 儲藏溫度  | -20 ... 60 °C  |
| 環境溫度  | -20 ... 80 °C  |
| 額定操作壓力以及 0° 旋轉角度時的扭矩  | 14 Nm  |
| 扭矩在額定操作壓力具 90° 擺動角度   | 7.3 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. |
| 彈簧復位扭矩具 0° 擺動角度   | 6.9 Nm   |
| Spring return torque at 90°   | 13.6 Nm  |
| Mean Time to Dangerous Failure (MTTFd)  | 1126 years   |
| 每小時失效率為 [1/h].  | 1.01E-07   |
| PFD (Probability of Failure on Demand), 失效率                                     | 7.8E-04  |
| Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0°-nominal swivel angle-0° | 1.5 l  |
| 產品重量  | 2,087 g  |
| 柱軸連接  | T11  |
| 氣壓連接  | G1/8   |
| 材料備註  | 符合 RoHS  |
| Material of connecting plate  | Anodised wrought aluminium alloy   |
| Material cover  | Die-cast aluminium, coated   |
| Material seals  | NBR  |
| Material spring   | 彈簧鋼  |
| Material housing  | Anodised wrought aluminium alloy   |
| Material piston   | 壓鑄鋁  |
| Material bearing  | POM  |
| Material cam  | 高合金鋼, 耐腐蝕  |
| Material screws   | 高合金鋼, 耐腐蝕  |
| Material shaft  | 高合金鋼, 耐腐蝕  |