

# 旋轉驅動器

## DFPD-20-RP-90-RS30-F05

料號: 8048014

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 fitting ISO 5211.



### 技術參數

特性	值
驅動器尺寸	20
法蘭孔的樣式	F05
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 Up to SIL 3 in redundant architecture 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 高達 SIL 1 高需求模式 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) EPL Gb (GB)
認證核發部門	DNV TAP00001CE German Technical Control Board (TÜV) Rheinland 968/V 1106. 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
防塵爆	Ex h IIIC T105°C Db X

特性	值
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 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	7.4 Nm
扭矩在額定操作壓力具 90° 擺動角度	3.8 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	3.6 Nm
Spring return torque at 90°	7.1 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°	0.8 l
產品重量	1,371 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	Steel, nickel-plated