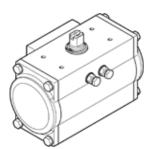
semi-rotary drive DFPD-40-RP-180-RD-F0507 Part number: 8065336

FESTO

double-acting, rack and pinion engineering design, connection pattern to NAMUR VDI/VDE 3845 for mounting solenoid valves, position sensors and positioners, standard connection to process valve fitting ISO 5211.





Data sheet

Size of actuator Flange hole pattern Filange hole pattern Find-position adjustment range at 0° Find-position adjustment range at 0° Find-position adjusting range at nominal swivel angle Find-position adjusting range at nominal swivel angle Fitting connection conforms to standard Filange hole pattern Find-position adjustment range at 0° Filange hole pattern Find hole gettern Find mm Filange hole gettern Find hole gettern Find mm Filange hole gettern Find hole gettern Find mm Find mm Find mm Find multiple for safety function consists of the actuator switching to the specific safety switching position. This switching movement is achieved by pressurising the	
Swivel angle End-position adjustment range at 0° End-position adjusting range at nominal swivel angle Shaft connection depth Fitting connection conforms to standard Assembly position Any Mode of operation Design structure Closing direction Valve connection conforms to standard Component suitable for safety functions Safety function Tiso deg 180 deg -5 5 deg 180 mm ISO 5211 Assembly position Any Any Mode of operation double-acting Rack and pinion right-closing VDI/VDE 3845 (NAMUR) VDI/VDE 3845 size AA 1 Component suitable for safety functions Safety device The safety function consists of the actuator switching to the specis safety switching position.	
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Connection for positioner and position sensor conforms to standard VDI/VDE 3845 size AA 1	
Safety function The safety function consists of the actuator switching to the specific safety switching position.	
safety switching position.	
corresponding pressure chamber with compressed air. The value of the torque generated depends on the differential pre-	
between the two pressure chambers separated by the piston.	
Safety Integrity Level (SIL) Product can be used in SRP/CS up to SIL 2 low demand	
Up to SIL 3 in redundant architecture	
up to SIL 1 high demand mode Certified for safety function to ISO 13849 and IEC 61508 (SIL) Product can be used in SRP/CS up to SIL 2 low demand	
Certified for safety function to ISO 13849 and IEC 61508 (SIL) Product can be used in SRP/CS up to SIL 2 low demand up to SIL 1 high demand mode Up to SIL 3 in redundant architecture	
Operating pressure MPa 0.2 0.8 MPa	
Operating pressure 2 8 bar	
29 116 psi	
Nominal operating pressure 0.55 MPa	
5.5 bar	
Nominal operating pressure (psi) 79.75 psi	
Maritime classification see certificate	
CE mark (see declaration of conformity) to EU directive explosion protection (ATEX)	
UKCA marking (see declaration of conformity) To UK EX instructions	
Explosion protection certification outside the EU EPL Db (GB)	
EPL Gb (GB)	
Certificate issuing department DNV TAP00001CE	
German Technical Control Board (TÜV) Rheinland 968/V 1106.01/	2023
ATEX category Gas II 2G	-023
ATEX category Dust II 2D	
Explosion ignition protection type Gas Ex h IIC T4 Gb X	



Feature	Value
Explosion ignition protection type Dust	Ex h IIIC T105°C Db X
Explosion-proof ambient temperature	-20°C <= Ta <= +80°C
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Pressure dew point 10°C below ambient temperature/temperature of medium
	Lubricated operation possible (subsequently required for further operation)
Corrosion resistance classification CRC	1 - Low corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
Storage temperature	-20 60 °C
Ambient temperature	-20 80 °C
Torque at rated operating pressure and 0° rotation angle	38.3 Nm
Torque at nominal operating pressure with 90° swivel angle	38.3 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.
Mean Time to Dangerous Failure (MTTFd)	1126 years
Probability of Failure per Hour in [1/h].	1.01E-07
PFD (Probability of Failure on Demand)	1.42E-03
Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0°-nominal swivel angle-0°	5.2 l
Product weight	2,608 g
Shaft connection	T14
Pneumatic connection	G1/8
Materials note	Conforms to RoHS
Material of connecting plate	Anodised wrought aluminium alloy
Material cover	Die-cast aluminium, coated
Material seals	NBR
Material housing	Anodised wrought aluminium alloy
Material piston	Aluminium die cast
Material bearing	POM
Material cam	High alloy steel, non-corrosive
Material screws	High alloy steel, non-corrosive
Material shaft	Steel, nickel-plated