

# semi-rotary drive

## DFPD-20-RP-90-RS60-F03-R3-EP

Part number: 8047647

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.



### Data sheet

Feature	Value
Size of actuator	20
Flange hole pattern	F03
Swivel angle	90 deg
End-position adjustment range at 0°	-5 ... 5 deg
End-position adjustment range at 90°	-5 ... 5 deg
Shaft connection depth	10 mm
Fitting connection conforms to standard	ISO 5211
Assembly position	Any
Mode of operation	single-acting
Design structure	Rack and pinion
Closing direction	right-closing
Valve connection conforms to standard	VDI/VDE 3845 (NAMUR)
Connection for positioner and position sensor conforms to standard	VDI/VDE 3845 size AA 1
Safety Integrity Level (SIL)	Product can be used in SRP/CS up to SIL 2 (high demand)
Operating pressure	2 ... 8 bar
Nominal operating pressure	6 bar
CE mark (see declaration of conformity)	to EU directive explosion protection (ATEX)
Certificate issuing department	TÜV Rheinland
ATEX category Gas	II 2G
ATEX category Dust	II 2D
Explosion ignition protection type Gas	Ex h IIC T4 Gb X
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)
Storage temperature	-20 ... 60 °C
Ambient temperature	-20 ... 80 °C
Torque at rated operating pressure and 0° rotation angle	14.7 Nm
Torque at nominal operating pressure with 90° swivel angle	7.6 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	7.2 Nm
Spring return torque at 90°	14.3 Nm
Air consumption at 6 bar per cycle 0°-90°-0°	0.8 l
Product weight	1,419 g
Shaft connection	T9
Pneumatic connection	G1/8
Materials note	Conforms to RoHS

Feature	Value
Material of connecting plate	Anodised wrought aluminium alloy
Material cover	Die-cast aluminium, coated
Material seals	NBR
Material spring	Spring steel
Material housing	Anodised wrought aluminium alloy
Material piston	Aluminium die cast
Material bearing	POM
Material cam	Stainless steel casting
Material screws	High alloy steel, non-corrosive
Material shaft	High alloy steel, non-corrosive