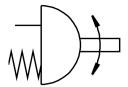
## Quarter turn actuator DFPD-N-480-RP-90-RS30-F1012 Part number: 8066454

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## **Data sheet**

Feature	Value
Size of valve actuator	480
Flange hole pattern	F1012
Swivel angle	90 deg
End-position adjusting range at 0°	-5 deg5 deg
End-position adjusting range at nominal swivel angle	-5 deg5 deg
Depth shaft connection	29 mm
Standard connection for valve	ISO 5211
Mounting position	Any
Mode of operation	Single-acting
Structural design	Gear rack/pinion
Closing direction	Clockwise closing
Valve connection conforms to standard	VDI/VDE 3845 (NAMUR)
Connection point for positioner and position sensor conforms to standard	VDI/VDE 3845 size AA 2
Devices type according to VDMA 66413	Safety device
Safety function	The safety function consists of the drive switching to the defined safety switching position when the compressed air is switched off and the spring chamber is exhausted. This switching movement is achieved by the spring force of the spring assembly.
Safety integrity level (SIL)	Up to SIL 2 low demand mode up to SIL 3 in a 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 safety-related parts of control systems up to SIL 2, low demand Product can be used in safety-related parts of control systems up to SIL 1, high demand up to SIL 3 in a redundant architecture
Operating pressure	0.2 MPa0.8 MPa 2 bar8 bar 29 psi116 psi
Nominal operating pressure	0.3 MPa 3 bar 43.5 psi
Maritime classification	See certificate
CE marking (see declaration of conformity)	as per EU explosion protection directive (ATEX)

Feature	Value
UKCA marking (see declaration of conformity)	acc. to UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Explosion prevention and protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
Certificate issuing authority	DNV TAP00001CE German Technical Control Board (TÜV) Rheinland 968/V 1106.01/2023
ATEX category gas	II 2G
ATEX category for dust	II 2D
Type of ignition protection for gas	Ex h IIC T4 Gb X
Type of (ignition) protection for dust	Ex h IIIC T105°C Db X
Explosive ambient temperature	-20°C <= Ta <= +80°C
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Dew point min. 10 °C below the ambient temperature and temperature of medium Operation with oil lubrication possible (required for further use)
Corrosion resistance class (CRC)	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Storage temperature	-20 °C60 °C
Ambient temperature	-20 °C80 °C
Torque at nominal operating pressure and 0° swivel angle	173.5 Nm
Torque at nominal operating pressure and 90° swivel angle	90.5 Nm
Note about the torque	The actuator's operating torque must not be higher than the maximum permissible torque listed in ISO 5211, based on the size of the mounting flange and the coupling.
Spring return torque at 0° swivel angle	85 Nm
Spring return torque with 90° swivel angle	168.1 Nm
MTTFd	1126 years
PFH	0.00000101
PFD	0.00078
Air consumption at 6 bar per cycle 0°-nominal swivel angle-0°	17.2 l
Product weight	17261 g
Shaft connection	T27
Pneumatic connection	1/4 NPT
Note on materials	RoHS-compliant
Material of sub-base	Wrought aluminum alloy, anodized
Cover material	Die-cast aluminum, coated
	NBR
Seals material	INBR
Seals material Material of spring	Spring steel
	Spring steel
Material of spring Housing material	
Material of spring Housing material Material of piston	Spring steel Wrought aluminum alloy, anodized
Material of spring Housing material	Spring steel Wrought aluminum alloy, anodized Die-cast aluminum
Material of spring Housing material Material of piston Material of bearing	Spring steel Wrought aluminum alloy, anodized Die-cast aluminum POM