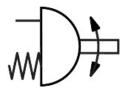
Quarter turn actuator DFPD-20-

Part number: 8042185







General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

FO3 FO4 FO5 Swivel angle 90 deg Ind-position adjustment range at 0° 5- deg 5 deg 5 deg Ind-position adjustment range at nominal swivel angle 5- deg 5 deg 5 deg Ind-position adjustment range at nominal swivel angle 5- deg 5 deg 5 deg Ind-position adjustment range at nominal swivel angle 5- deg 5 deg 5 deg Ind-position adjustment range at nominal swivel angle 150 S211 Indounting position Induction position position Induction position po	Feature	Value
FO4 FO5 Swivel angle 90 deg End-position adjustment range at 0° -5 deg 5 deg -6 deg 6 deg -6 deg 6 deg 6 deg 6 deg 6 deg -6 deg 6 deg 6 deg 6 deg 6 deg -6 deg 6 deg	Size of valve actuator	20
End-position adjustment range at 0° End-position adjustment range at nominal swivel angle End-position adjustment range at nominal swivel angle Shaft connection depth ID mm	Flange hole pattern	F04
End-position adjustment range at nominal swivel angle Shaft connection depth 10 mm 12 mm Sto 5211 Sto optional Mode of operation Mode of operation Mode of operation Double-acting Single-acting Single-acting Single-acting Single-acting Closes to the right Closes to the left Symbol Oop91265 Oo991266 Alave connection conforms to standard Obevice type according to VDMA 66413 Safety function Safety function Safety function Safety function Safety Integrity Level (SiL) To SiL 2 Low Demand mode Up to SiL 3 in a redundant architecture Up to SiL 3 in a redundant arc	Swivel angle	90 deg
Shaft connection depth 10 mm 12 mm Istitung connection conforms to standard Isto 5211 Mounting position Mode of operation Double-acting Single-acting Single-acting Single-acting Closes to the right Closes to the right Closes to the left Symbol O0991266 Alve connection conforms to standard VDI/VDE 3845 (NAMUR) Connection point for positioner and position sensor conforms to VDI/VDE 3845 size AA 1 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 realised by the spring force of the spring assembly. Safety Integrity Level (SIL) To SIL 2 Low Demand mode Up to SIL 3 in a redundant architecture Up to SIL 3 in	End-position adjustment range at 0°	-5 deg 5 deg
ISO 5211 Mounting position Optional Double-acting Single-acting Si	End-position adjustment range at nominal swivel angle	-5 deg 5 deg
Mounting position Mode of operation Double-acting Single-acting Single-acting Rack and pinion Closing direction Closing direction Closes to the right Closes to the left Op991265 Op991266 Alave connection conforms to standard VDI/VDE 3845 (NAMUR) Connection point for positioner and position sensor conforms to Standard Device type according to VDMA 66413 Safety device 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 realised by the spring force of the spring assembly. 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 SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 3 in a redundan	Shaft connection depth	10 mm 12 mm
Double-acting Single-acting Single-acting Single-acting Single-acting Single-acting Single-acting Single-acting Single-acting Rack and pinion Closing direction Closes to the right Closes to the left Symbol O0991265 O0991266 O099	Fitting connection conforms to standard	ISO 5211
Single-acting Rack and pinion Closing direction Closes to the right Closes to the left Opening direction conforms to standard VDI/VDE 3845 (NAMUR) VDI/VDE 3845 (NAMUR) VDI/VDE 3845 size AA 1 Safety device Safety function point for positioner and position sensor conforms to Safety function Safety function Safety function Safety function when the compressed air is switching to the defined safety switching position when the compressed air is switched off and the spring chamber is exhausted. This switching movement is realised by the spring force of the spring assembly. To SIL 2 Low Demand mode Up to SIL 3 in a redundant architecture Up to SIL 1 high demand mode Product can be used in SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 3 in a redundant architec	Mounting position	optional
Closes to the right Closes to the left Symbol Op91265 Op91266 Voll/VDE 3845 (NAMUR) Connection point for positioner and position sensor conforms to standard Device type according to VDMA 66413 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 force of the spring assembly. Safety Integrity Level (SIL) 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 SRP/CS up to SIL 1 (High Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 3 in a redundant arch	Mode of operation	
Closes to the left Symbol O0991265 O0991266 Voll/VDE 3845 (NAMUR) Connection point for positioner and position sensor conforms to standard Oevice type according to VDMA 66413 Safety function 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 realised by the spring force of the spring assembly. 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 SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture 24 bar Operating pressure 24 bar Operating pressure 25 bar 8 bar Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Design	Rack and pinion
O0991266 Valve connection conforms to standard VDI/VDE 3845 (NAMUR) Connection point for positioner and position sensor conforms to standard Device type according to VDMA 66413 Safety device 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 realised by the spring force of the spring assembly. Safety Integrity Level (SIL) 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 SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture 24 bar Operating pressure 24 bar Operating pressure 25 bar 8 bar Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Closing direction	,
Connection point for positioner and position sensor conforms to standard Device type according to VDMA 66413 Safety device 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 realised by the spring force of the spring assembly. 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 SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture 24 bar Operating pressure 0.2 MPa 0.8 MPa Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Symbol	
Safety function 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 realised by the spring force of the spring assembly. Safety Integrity Level (SIL) To SIL 2 Low Demand mode Up to SIL 3 in a redundant architecture Up to SIL 1 high demand mode Up to SIL 1 high demand mode Product can be used in SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 3 in a redundant architecture Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand) Up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Up to SIL 1 (High Demand)	Valve connection conforms to standard	VDI/VDE 3845 (NAMUR)
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 realised by the spring force of the spring assembly. To SIL 2 Low Demand mode Up to SIL 3 in a redundant architecture Up to SIL 1 high demand mode Product can be used in SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture 24 bar Operating pressure 2 bar 8 bar Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Connection point for positioner and position sensor conforms to standard	VDI/VDE 3845 size AA 1
switching position when the compressed air is switched off and the spring chamber is exhausted. This switching movement is realised by the spring force of the spring assembly. 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 SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture 24 bar Operating pressure 0.2 MPa 0.8 MPa Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Device type according to VDMA 66413	Safety device
Up to SIL 3 in a redundant architecture Up to SIL 1 high demand mode Product can be used in SRP/CS up to SIL 2 (Low Demand) Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture Burst pressure 24 bar Operating pressure 0.2 MPa 0.8 MPa Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Safety function	switching position when the compressed air is switched off and the spring chamber is exhausted. This switching movement is realised by
Product can be used in SRP/CS up to SIL 1 (High Demand) Up to SIL 3 in a redundant architecture 24 bar Operating pressure Operating pressure 2 bar 8 bar Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Safety Integrity Level (SIL)	Up to SIL 3 in a redundant architecture
Operating pressure Operating pressure Operating pressure 2 bar 8 bar Operating pressure 29 psi 116 psi Nominal operating pressure O.2 MPa 0.6 MPa	Certified for safety function to ISO 13849 and IEC 61508 (SIL)	Product can be used in SRP/CS up to SIL 1 (High Demand)
Operating pressure 2 bar 8 bar Operating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Burst pressure	24 bar
Deprating pressure 29 psi 116 psi Nominal operating pressure 0.2 MPa 0.6 MPa	Operating pressure	0.2 MPa 0.8 MPa
Nominal operating pressure 0.2 MPa 0.6 MPa	Operating pressure	2 bar 8 bar
	Operating pressure	29 psi 116 psi
Nominal operating pressure 2 bar 6 bar	Nominal operating pressure	0.2 MPa 0.6 MPa
	Nominal operating pressure	2 bar 6 bar

Feature	Value
Nominal operating pressure	29 psi 87 psi
Maritime classification	See certificate
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Explosion 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 dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T4 Gb X
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Dew point at least 10 °C below the ambient temperature and temperature of the medium Lubricated operation possible (in which case lubricated operation will always be required)
Storage temperature	-20 °C 60 °C
Ambient temperature	-20 °C 80 °C
Torque at nominal operating pressure and 0° swivel angle	4.9 Nm 20.1 Nm
Torque at nominal operating pressure and 90° swivel angle	2.5 Nm 20.1 Nm
Note on 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 at 0° swivel angle	2.4 Nm 7.2 Nm
Spring return torque at 90° swivel angle	4.8 Nm 14.3 Nm
Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0°-nominal swivel angle-0°	0.8 l 1.8 l
Product weight	1355 g 1423 g
Shaft connection	T9 T11
Pneumatic connection	G1/8 1/8 NPT
Note on materials	RoHS-compliant
Material sub-base	Coated wrought aluminium alloy
Material cover	Anodised die-cast aluminium
Material seals	NBR
Material spring	Spring steel
Material housing	Anodised aluminium Aluminium, powder-coated
Material piston	Die-cast aluminium
Material cam	High-alloy stainless steel
Material screws	High-alloy stainless steel
Material shaft	Nickel-plated steel High-alloy stainless steel