

# Quarter turn actuator DAPS-1920-090-RS3-F16-T6

Part number: 553227

FESTO



 [General operating condition](#)

## Data sheet

Feature	Value
Size of valve actuator	1920
Flange hole pattern	F16
Swivel angle	90 deg
End-position adjustment range at 0°	-5 deg ... 5 deg
End-position adjustment range at nominal swivel angle	85 deg ... 95 deg
Shaft connection depth	49 mm
Fitting connection conforms to standard	ISO 5211
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Single-acting
Design	Scotch yoke system
Position detection	None
Closing direction	Closes to the right
Symbol	00991266
Valve connection conforms to standard	VDI/VDE 3845 (NAMUR)
Safety Integrity Level (SIL)	up to SIL 2 Low Demand mode
Supply pressure for spring strength	0.42 MPa
Supply pressure for spring strength	4.2 bar
Operating pressure	0.42 MPa ... 0.84 MPa
Operating pressure	4.2 bar ... 8.4 bar
Nominal operating pressure	0.56 MPa
Nominal operating pressure	5.6 bar
Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)	1 Hz
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection	Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)
Certificate issuing authority	German Technical Control Board North (TÜV Nord) 212170801
ATEX category gas	II 2G
ATEX category dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T6...T3 Gb X
Explosion ignition protection type for dust	Ex h IIIC T85°C...T200°C Db X
Explosion ambient temperature	-50°C ≤ Ta ≤ +60°C

Feature	Value
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Ambient temperature	-50 °C ... 60 °C
Torque at nominal operating pressure and 0° swivel angle	2240 Nm
Torque at nominal operating pressure and 50° swivel angle	1200 Nm
Torque at nominal operating pressure and 90° swivel angle	1760 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	960 Nm
Spring return torque at 50° swivel angle	720 Nm
Spring return torque at 90° swivel angle	1440 Nm
Spring strength	3
Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0°-nominal swivel angle-0°	91.7 l
Product weight	67000 g
Shaft connection	T46
Pneumatic connection	G3/8
Note on materials	RoHS compliant
Material cover	Wrought aluminium alloy
Material seals	FVMQ PTFE-reinforced
Material housing	Wrought aluminium alloy
Material screws	High-alloy steel
Material shaft	High-alloy steel
Material number shaft	1,4305