

Quarter turn actuator DAPS-0090-090-RS3-F0710

Part number: 533441

FESTO



Data sheet

Feature	Value
Size of valve actuator	0090
Flange hole pattern	F07 F10
Swivel angle	90 deg
End-position adjusting range at 0°	-1 deg...9 deg
End-position adjusting range at nominal swivel angle	81 deg...91 deg
Depth shaft connection	24.8 mm
Information on the end-position adjusting range	One end position optionally adjustable
Standard connection for valve	ISO 5211
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Single-acting
Structural design	Scotch yoke system
Position sensing	None
Closing direction	Clockwise closing
Valve connection conforms to standard	VDI/VDE 3845 (NAMUR)
Safety integrity level (SIL)	Up to SIL 2 low demand mode
Connection pressure for spring force	0.42 MPa 4.2 bar
Operating pressure	0.42 MPa...0.84 MPa 4.2 bar...8.4 bar
Nominal operating pressure	0.56 MPa 5.6 bar
Max. swivel frequency at 6 bar	1 Hz
CE marking (see declaration of conformity)	as per EU explosion protection directive (ATEX)
UKCA marking (see declaration of conformity)	acc. to UK EX instructions
Explosion prevention and 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 for dust	II 2D

Feature	Value
Type of ignition protection for gas	Ex h IIC T6...T3 Gb X
Type of (ignition) protection for dust	Ex h IIIC T85°C...T200°C Db X
Explosive ambient temperature	-20°C ≤ Ta ≤ +60°C
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Corrosion resistance class (CRC)	3 - High corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Ambient temperature	-20 °C...80 °C
Torque at nominal operating pressure and 0° swivel angle	105 Nm
Torque at nominal operating pressure and 50° swivel angle	56.5 Nm
Torque at nominal operating pressure and 90° swivel angle	82.5 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	45 Nm
Spring return torque with 50° swivel angle	33.9 Nm
Spring return torque with 90° swivel angle	67.5 Nm
Spring force	3
Air consumption at 6 bar per cycle 0°-nominal swivel angle-0°	3.85 l
Product weight	5900 g
Shaft connection	T22
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Cover material	Wrought aluminum alloy
Seals material	FPM NBR PUR
Housing material	Wrought aluminum alloy
Material of screws	High-alloy steel
Shaft material	High-alloy steel
Material number for shaft	1.4305