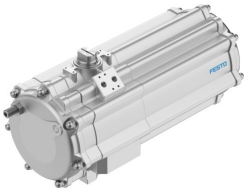
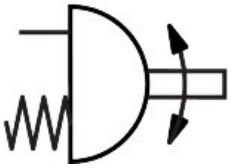
Quarter turn actuator
DAPS-1440-090-RS2-F16-T6

Part number: 553207





Data sheet

Feature	Value
Size of valve actuator	1440
Flange hole pattern	F16
Swivel angle	90 deg
End-position adjusting range at 0°	-5 deg...5 deg
End-position adjusting range at nominal swivel angle	85 deg...95 deg
Depth shaft connection	49.5 mm
Standard connection for valve	ISO 5211
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Single-acting
Structural design	Kinematic yoke system
Position sensing	None
Closing direction	Closes to the right
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	0.35 MPa 3.5 bar
Operating pressure	0.35 MPa...0.84 MPa 3.5 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
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

Feature	Value
Explosive ambient temperature	-50°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 Zone III
Ambient temperature	-50 °C...60 °C
Torque at nominal operating pressure and 0° swivel angle	1800 Nm
Torque at nominal operating pressure and 50° swivel angle	990 Nm
Torque at nominal operating pressure and 90° swivel angle	1500 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	600 Nm
Spring return torque with 50° swivel angle	450 Nm
Spring return torque with 90° swivel angle	900 Nm
Spring force	2
Air consumption at 6 bar per cycle 0°-nominal swivel angle-0°	77 l
Product weight	74000 g
Shaft connection	T46
Pneumatic connection	G3/8
Note on materials	RoHS compliant
Cover material	Wrought aluminum alloy
Seals material	FVMQ PTFE-reinforced
Housing material	Wrought aluminum alloy
Material of screws	High-alloy steel
Shaft material	High-alloy steel
Material number for shaft	1,4305