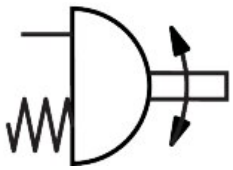
Quarter turn actuator
DAPS-0053-090-RS2-F0507

Part number: 533436



Data sheet

Feature	Value
Size of valve actuator	0053
Flange hole pattern	F05 F07
Swivel angle	90 deg
End-position adjustment range at 0°	-1 deg...9 deg
End-position adjustment range at nominal swivel angle	81 deg...91 deg
Shaft connection depth	19.3 mm
Note on end-position adjusting range	One end position optionally adjustable
Fitting connection conforms to standard	ISO 5211
Cushioning	No cushioning
Mounting position	optional
Mode of operation	Single-acting
Design	Scotch yoke system
Position detection	Without
Closing direction	Closes to the right
Valve connection conforms to standard	VDI/VDE 3845 (NAMUR)
Safety Integrity Level (SIL)	To SIL 2 Low Demand mode
Supply pressure for spring strength	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 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

Feature	Value
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	-20°C <= Ta <= +60°C
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-B1/B2-L
Ambient temperature	-20 °C...80 °C
Torque at nominal operating pressure and 0° swivel angle	66 Nm
Torque at nominal operating pressure and 50° swivel angle	36.3 Nm
Torque at nominal operating pressure and 90° swivel angle	55 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	22 Nm
Spring return torque at 50° swivel angle	16.5 Nm
Spring return torque at 90° swivel angle	33 Nm
Spring strength	2
Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0°-nominal swivel angle-0°	2.1 l
Product weight	3000 g
Shaft connection	T17
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy
Material seals	FPM NBR PUR
Material housing	Wrought aluminium alloy
Material screws	High-alloy steel
Material shaft	High-alloy steel
Material number shaft	1.4305