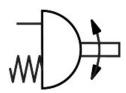# Semi-rotary drive
DAPS-0090-090-RS2-F0710-T6

Part number: 553196

Data sheet

Feature	Value
Size of valve actuator	0090
Flange hole pattern	F07 F10
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	24.8 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 T85ºC...T200ºC Db X
Explosion ambient temperature	-50ºC <= Ta <= +60ºC
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 ºC...60 ºC
Torque at nominal operating pressure and 0º swivel angle	112.6 Nm
Torque at nominal operating pressure and 50º swivel angle	61.9 Nm
Torque at nominal operating pressure and 90º swivel angle	93.8 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 0º swivel angle	37.5 Nm
Spring return torque at 50º swivel angle	28.1 Nm
Spring return torque at 90º swivel angle	56.3 Nm
Spring strength	2
Air consumption at 0.6 MPa (6 bar, 87 psi) per cycle 0º-nominal swivel angle-0º	3.85 l
Product weight	5900 g
Shaft connection	T22
Pneumatic connection	G1/8
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