Intelligent Quarter-Turn Actuator

PSQ2003 AMS12
PSQ2803 AMS13

Positioner integrated

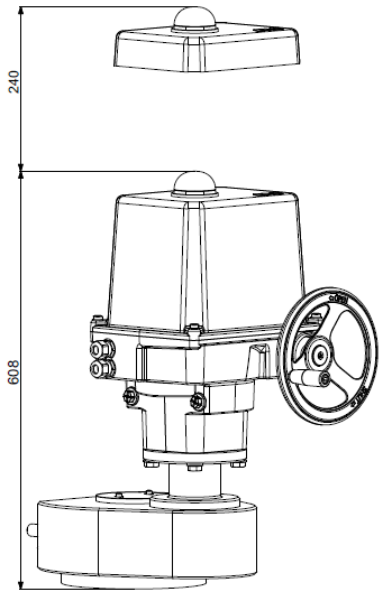
2000 / 2800 Nm
Switching torque)[1]

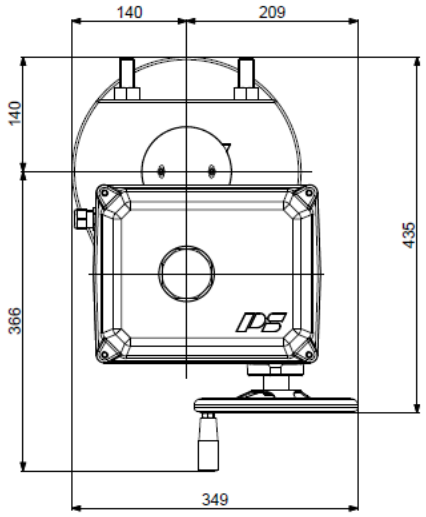
144 s - 560 s
Op. Time/90°

Flange F16

Modulating Actuator
Class C
acc. EN ISO 22153

Enclosure IP67
EN 60529





Approx. weight: 54 kg without accessories

Operating Time/90°		144 - 288 s (adjustable)				PSQ2003 AMS12
Power Supply	[V]	230 VAC 1~	115 VAC 1~	24 VAC/DC	360...575 VAC 3~)[2]	
Normal Current)[4]	[A]	0,7	1,4	6,8(AC) / 4,2(DC)	0,3)[3]	
Maximum Current)[4]	[A]	0,9	1,8	8,8(AC) / 5,5(DC)	0,4)[3]	
Power Consumption)[5]	[W]	138	138	130(AC) / 101(DC)	132)[3]	

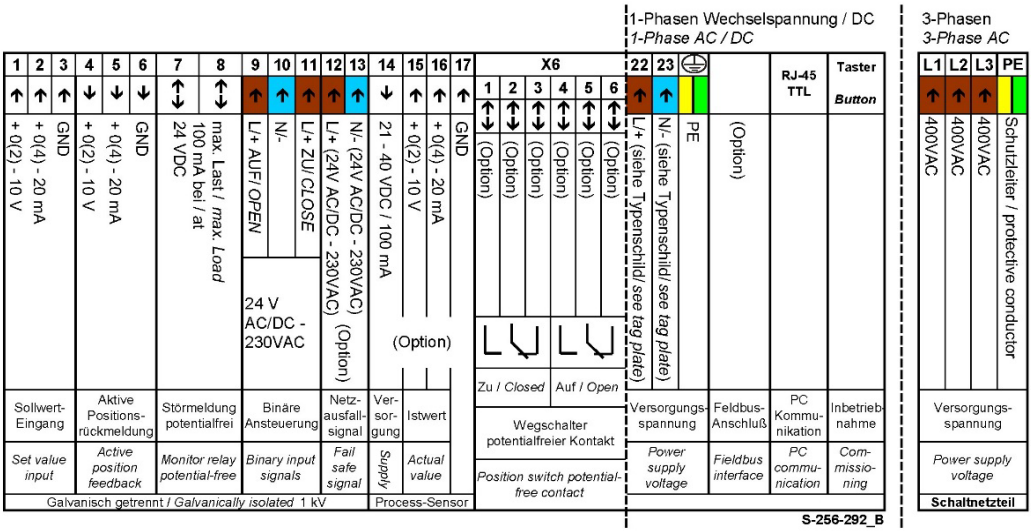
Operating Time/90°		280 - 560 s (adjustable)				PSQ2803 AMS13
Power Supply	[V]	230 VAC 1~	115 VAC 1~	24 VAC/DC	360...575 VAC 3~)[2]	
Normal Current)[4]	[A]	0,5	1,0	4,9(AC) / 3,0(DC)	0,2)[3]	
Maximum Current)[4]	[A]	0,7	1,3	6,3(AC) / 3,9(DC)	0,3)[3]	
Power Consumption)[5]	[W]	99	99	93(AC) / 73(DC)	98)[3]	

Standard		Description	Standard Equipment
Ambient Temperature	[°C]	-20 to +60 °C	
Motor Protection		electronic motor current monitoring with safety cut-off	
Overvoltage category		II	
Break away force		adjustable up to +50% nominal force	
Duty Cycle	IEC 60034-1,8	S2 30 min S4 50% ED @ 25°C	
Set value and Feedback		current 0 (4)... 20 mA, voltage 0 (2)... 10 V adjustable, split-range operation possible	
Binary control		24 V - 230 V for ON/OFF control (min. duration of pulse 1s)	
Valve Positioner Function		deadband adjustable from 0.5 .. 5%, shut-off minimum at torque switching	
Automatic Start-up		Recognizing the end position(s) and autoscaling set and feedback values	
Internal Fault Monitoring		Torque, set value, temperature, power supply, deviation of end positions, adjustable actions and signalisation	
Fault Indication Relay	FIR	potential-free opening contact provides a freely definable collective fault signal	
Diagnostics Function		Stores number of motor starts, motor and total running time. Rolling data storage of set value, feedback value, torque, temperature and status	
Communication Interface		for parametrisation and diagnosis with USB data cable and software PSCS	
Cable Glands		2 threaded holes ISO M20 x 1,5 (cable glands are not included)	

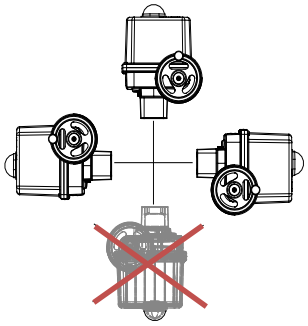
)[1] = Permissible average thrust over the entire travel is 50% of the max. thrust
)[2] = at nominal force
)[3] = at 400 V 3 phases and 50 Hz
)[4] = Data can change depending on accessories
)[5] = at switching torque, data can change depending on accessories

Technical Data

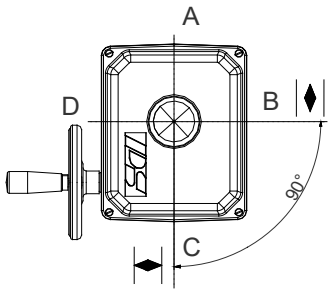
Electrical Connection Plan

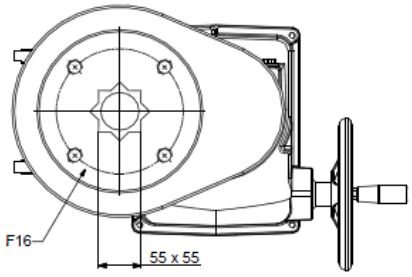


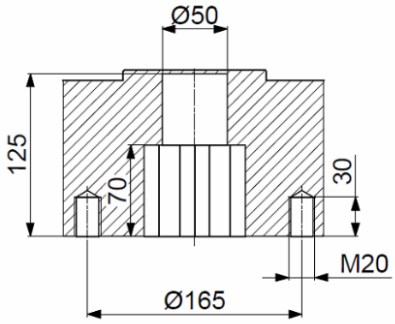
Mounting Position



Mechanical Connection







Accessories/Options

Add'l Position Switches	2WE	Potential-free additional position switches with silver contacts (0.1 A - 10 A switching current)
Add'l Position Switches Gold	2WE Gold	Potential-free additional position switches with gold contacts (0.1 mA - 100 mA switching current)
Integrated process	PSIC	Enables the autonomous control of a process so that an external controller is not required
Fail-Safe*	PSCP	Emergency power supply based on supercapacitors, safety position OPEN, CLOSED or free defined position
Fieldbus Interface*		Digital transmission of nominal and actual value per mill or percent, report of monitoring and diagnostic data using Profibus DP (PSPDP) or CANOpen (PSCA) interfaces, additional interfaces available on request
Local Control*	PSC.2	Illuminated display to show the actuator status and lockable selector to switch between modes: automatic, manual process ON/OFF, STOP and parameter menu. Control buttons for manual movement, menu operation and adjustment of parameters, display of diagnostic information
Remote Local Control		mounting separately from the actuator (incl. 10 m connection cable)
Data Cable	PSCS-USB	USB data cable enables the communication between the actuator and a PC by using the software PSCS
Fail-Safe Port*	FSP	Signal port to drive to a „safety position", selectable fail-safe position, standard 24 - 230 V
Heating Resistor	HR	Heating resistor to prevent condensation
Terminal Box*		Plug and socket in an IP68 box

*not retrofittable

For more information and accessories, please visit our website www.ps-automation.com!

Subject to changes!