

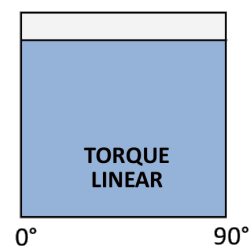
Design	Pneumatic double-piston rotary actuator in rack and pinion design
Function	Double- and single-acting execution
Standards	Interface actuator/feedback-unit - VDI/VDE 3845 (NAMUR) Interface actuator/control media - VDI/VDE 3845 (NAMUR) Interface actuator/valve - ISO5211 / DIN 3337
Temperature range	Standard: -20°C ... +80°C Low temperature version: -40°C ... +80°C High temperature version: -10°C ... +150°C
Nominal angle	90°
Angle adjustment	Adjustable in both end positions +/-5° Optional stroke adjustment up to 100%
ATEX marking	CE  II 2 G Ex h IIC T6...T3 Gb II 2 D Ex h IIIC 170°C Db
Control Pressure	2 up to 8 bar
Control media	dry, filtered air or inert gases in respect of remaining oil-, dust and water-content according to DIN ISO 8573-1 / class 4, maximum particle diameter 30µm, dew point minimum 10°C below ambient temperature
Material	Body: Aluminium, powder-coated Caps: Aluminium, powder-coated Pistons: Aluminium Pinion shaft: Carbon steel, nickel plated Bearings: POM Sealings: Standard: NBR Optional: HNBR/FPM/Silicone Screws: Stainless steel



Torque diagram

Double-acting

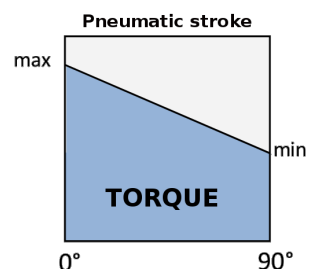
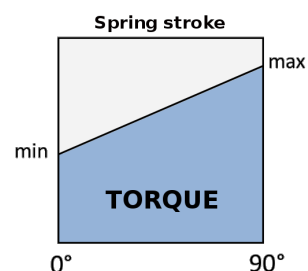
Provides a linear and constant torque through the complete pivoting angle in both pivoting directions.



Single-acting

Provides a linearly reducing torque through the complete pivoting angle in both pivoting directions.

Offers the maximum torque at the beginning of each stroke to overcome the breakaway torque.

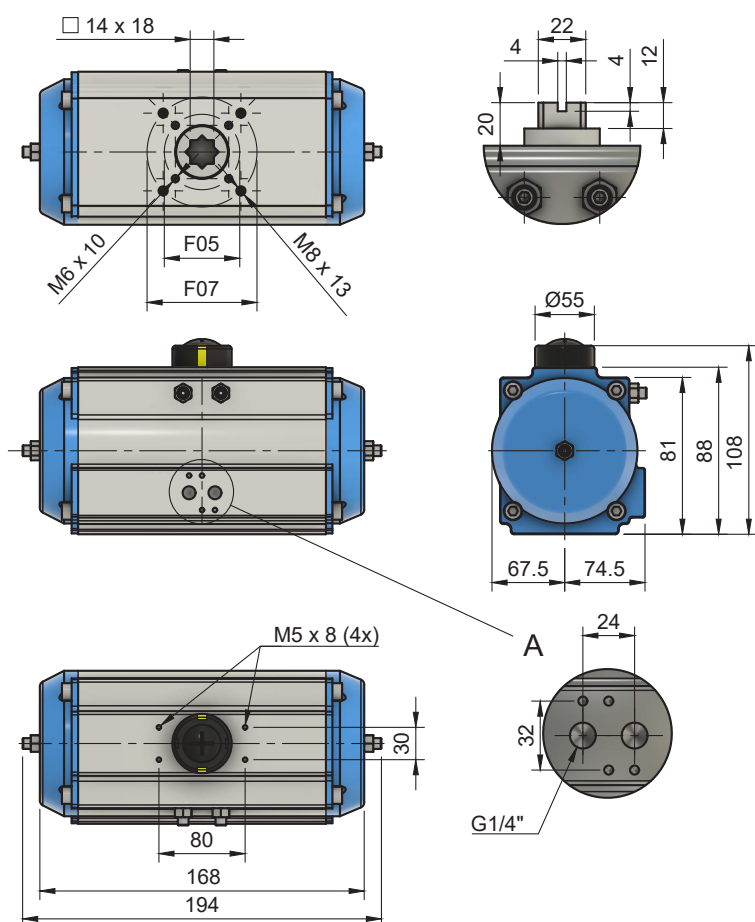


ProtACT GmbH
Märkerstraße 18
56307 Dernbach

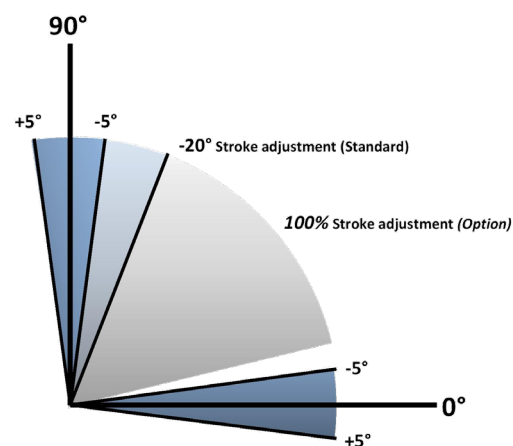
Tel: +49 (0) 2605 96 25 19-0
Fax: +49 (0) 2605 96 25 19-6
Email: protact@protact-gmbh.de

Website: www.protact-gmbh.de

Dimensions



Angle adjustment



Both end positions can be adjusted by $\pm 5^\circ$ for a precise setting of the final valve position.

The optional stroke adjustment offers a 100% setting of the switched end position.

Torques double-acting

Control pressure in bar (g)	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8
Torque in Nm	14,2	17,8	21,3	24,9	28,4	32,0	35,5	39,1	42,6	46,2	49,7	53,3	56,8

Torques single-acting

Torque spring stroke in Nm				Control pressure in bar (g)																	
				3		3,5		4		4,5		5		5,5		6		7		8	
Spring set				max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min
Torque in Nm	5	10	7	15	11	19	13	22	15												
	6	13	8	14	9	17	13	21	17	25	20	28	24								
	7	15	10	13	7	16	11	20	15	23	18	27	22								
	8	17	11	11	5	15	9	18	12	22	16	26	20	29	23	33	27	40	34		
	9	19	12			13	7	17	10	20	14	24	18	28	21	31	25	39	32		
	10	21	14					15	8	19	12	23	16	26	19	30	23	37	30	45	37
	11	23	15							18	10	22	14	25	17	29	21	36	28	43	35
	12	25	16									20	11	24	15	27	19	35	26	42	33

Weight, volume

Function	Weight (kg)	Volume (l)
double-acting	2,0	0,44
single-acting	2,1	0,21

Air consumption

Function	Air consumption for pivoting angle 90° at control pressure in bar (g) in litres/cycle								
	3	3,5	4	4,5	5	5,5	6	7	8
double-acting	1,32	1,54	1,76	1,98	2,20	2,42	2,64	3,08	3,52
single-acting	0,63	0,74	0,84	0,95	1,05	1,16	1,26	1,47	1,68