


PR134

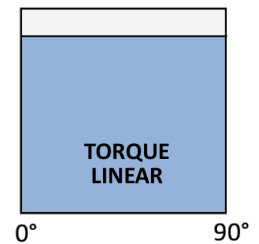
Design	Pneumatic double-piston rotary actuator in rack and pinion design
Function	Double- and single-acting execution
Standards	Interface actuator/feedback-unit - VDI/VDE 3845 (NAMUR) Interface actuator/control media - VDI/VDE 3845 (NAMUR) Interface actuator/valve - ISO5211 / DIN 3337
Temperature range	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	 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

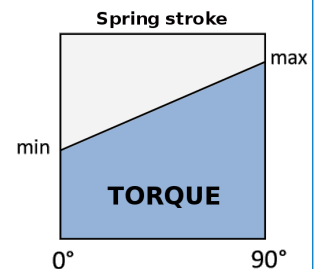
Double-acting

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

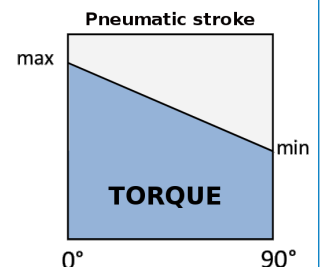


Single-acting

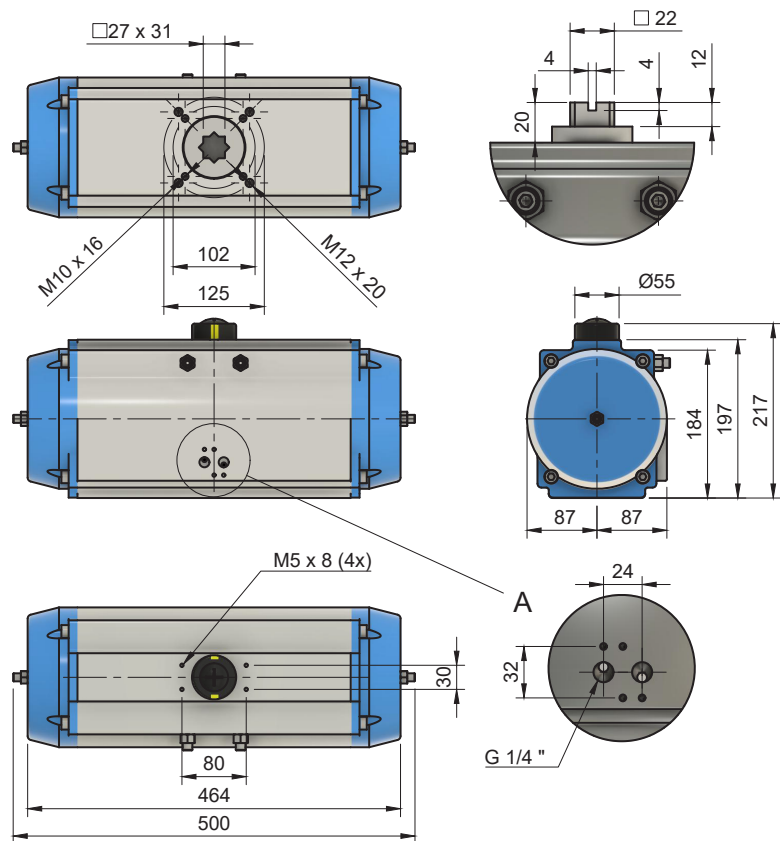
Provides a linearly reducing torque through the complete pivoting angle in both pivoting directions.



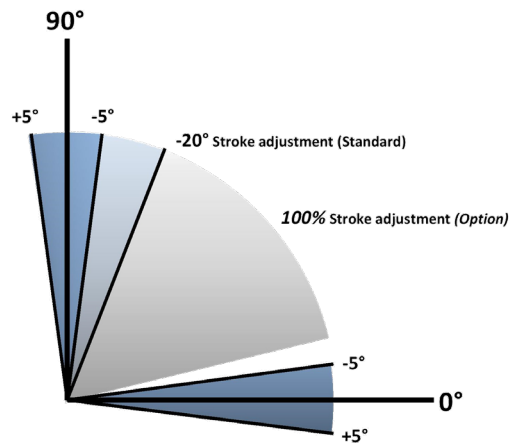
Offers the maximum torque at the beginning of each stroke to overcome the breakaway torque.



Dimensions



Angle adjustment



Both end positions can be adjusted by +/-5° 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	267	334	401	468	535	602	669	736	803	870	937	1004	1071

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	max	min	
Torque in Nm	5	208	140	259	191	326	258	392	324												
	6	250	168	232	149	299	216	365	282	432	349	498	415								
	7	292	196	203	107	270	174	336	240	403	307	469	373								
	8	333	223	176	66	243	133	309	199	376	265	442	331	509	398	575	465	708	598		
	9	375	251			214	91	280	157	347	224	413	290	480	357	546	423	679	556		
	10	417	279					253	115	320	182	386	248	453	315	519	381	652	514	785	647
	11	458	307							292	141	358	207	425	274	491	340	624	473	757	606
	12	500	335									330	165	397	232	463	298	596	431	729	564

Weight, volume

Function	Weight (kg)	Volume (l)
double-acting	20,0	6,9
single-acting	24,0	3,7

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	20,7	24,2	27,6	31,1	34,5	38,0	41,4	48,3	55,2
single-acting	11,1	13,0	14,8	16,7	18,5	20,4	22,2	25,9	29,6