

PR263

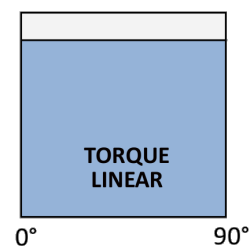
Design	Pneumatic double-piston rotary actuator in rack and pinion design
Function	Double- and single-acting execution
Standards	Interface actuator/feedback-unit - VDI/VDE 3845 (NAMUR) Interface actuator/control media - VDI/VDE 3845 (NAMUR) Interface actuator/valve - ISO5211 / DIN 3337
Temperature range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

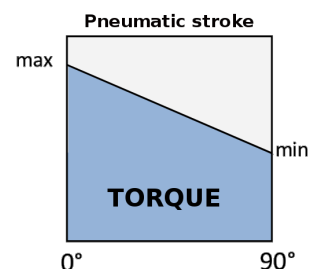
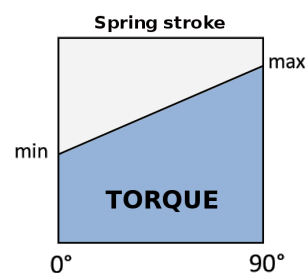
Provides a linear and constant torque through the complete pivoting angle in both pivoting directions.



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.

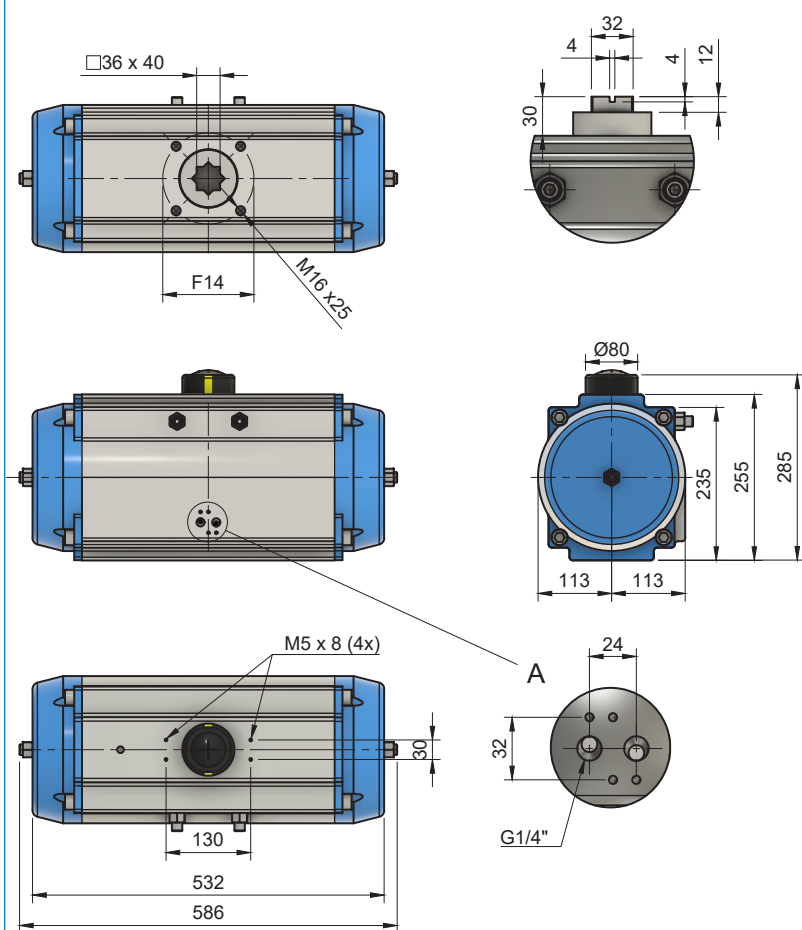


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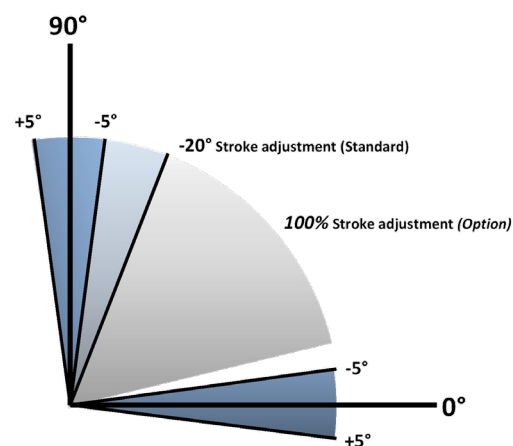
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Dimensions



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	526	658	789	921	1052	1184	1315	1447	1578	1710	1841	1973	2104

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	
				max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min
Spring set	max	min																			
Torque in Nm	5	380	275	523	418	656	551	789	684												
	6	456	330	468	342	601	475	734	608	867	741	1000	874								
	7	532	385	413	266	546	399	679	532	812	665	945	798								
	8	608	440	358	190	491	323	624	456	757	589	890	722	1023	855	1156	988	1422	1254		
	9	684	495			436	247	569	380	702	513	835	646	968	779	1101	912	1367	1178		
	10	760	550					514	304	647	437	780	570	913	703	1046	836	1312	1102	1578	1368
	11	836	605							592	361	725	494	858	627	991	760	1257	1026	1523	1292
	12	912	660									670	418	803	551	936	684	1202	950	1468	1216

Weight, volume

Function	Weight (kg)	Volume (l)
double-acting	47,0	15,0
single-acting	55,0	7,5

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	45,0	52,5	60,0	67,5	75,0	82,5	90,0	105,0	120,0
single-acting	22,5	26,3	30,0	33,8	37,5	41,3	45,0	52,5	60,0