


PR763

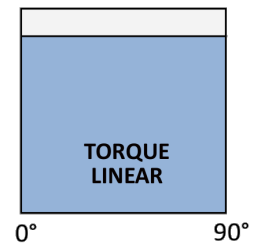
Design	Pneumatic double-piston rotary actuator in rack and pinion design
Function	Double- and single-acting execution
Standards	Interface actuator/feedback-unit - VDI/VDE 3845 (NAMUR) Interface actuator/control media - VDI/VDE 3845 (NAMUR) Interface actuator/valve - ISO5211 / DIN 3337
Temperature range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

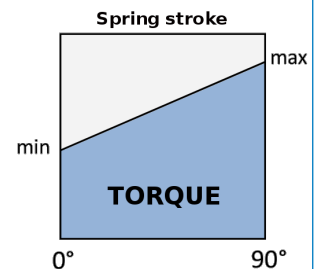
Double-acting

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

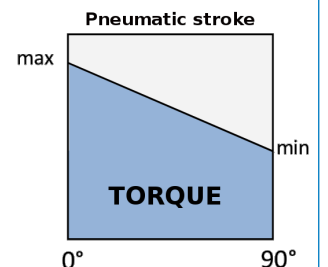


Single-acting

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.

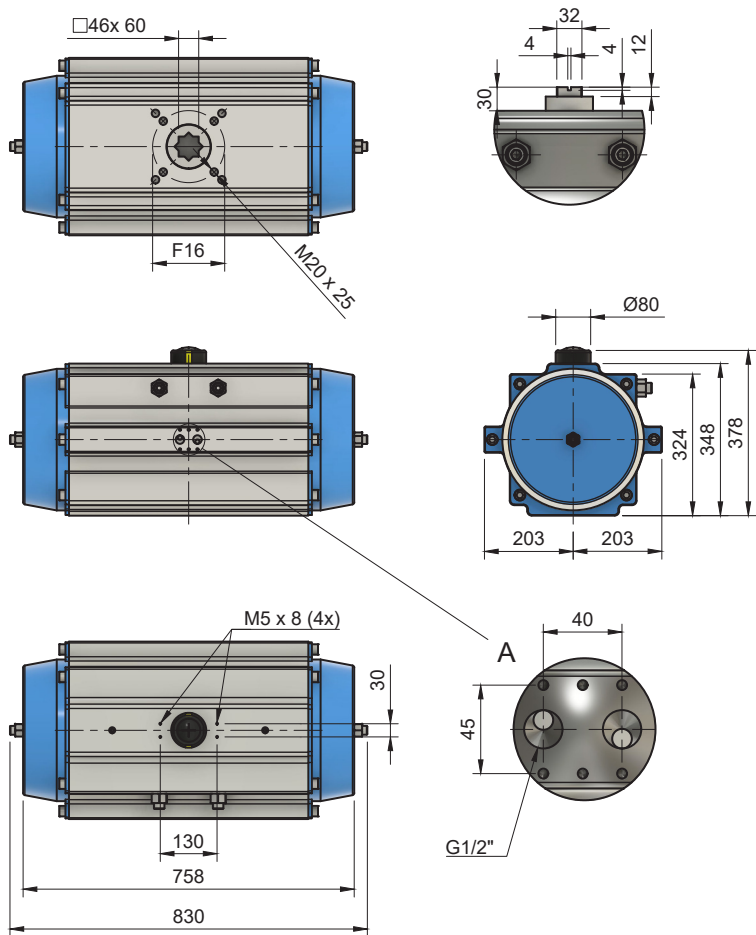


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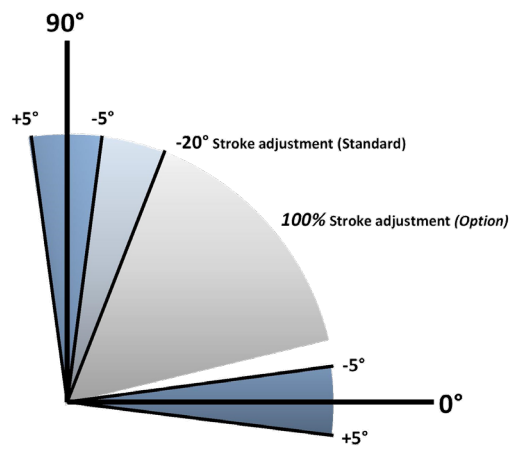
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Dimensions



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	1526	1908	2289	2671	3052	3434	3815	4197	4578	4960	5341	5723	6104

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	1061	730	1479	1111	1860	1493														
	6	1273	876	1316	875	1697	1257	2078	1638												
	7	1485	1022	1153	639	1535	1021	1916	1402												
	8	1697	1168	991	403	1373	785	1754	1166	2136	1548	2517	1929								
	9	1909	1314			1211	549	1592	930	1974	1312	2355	1693	2737	2075	3118	2456				
	10	2122	1460					1430	695	1812	1077	2193	1458	2575	1840	2956	2221	3719	2984	4482	3747
	11	2334	1606							1649	841	2030	1222	2412	1604	2793	1985	3556	2748	4319	3511
	12	2546	1752									1868	986	2250	1368	2631	1749	3394	2512	4157	3275

Weight, volume

Function	Weight (kg)	Volume (l)
double-acting	110,0	53,5
single-acting	130,0	23,8

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	160,5	187,3	214,0	240,8	267,5	294,3	321,0	374,5	428,0
single-acting	71,4	83,3	95,2	107,1	119,0	130,9	142,8	166,6	190,4