



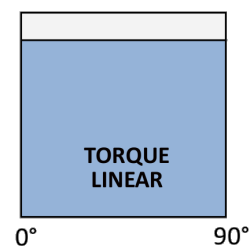
Design	Pneumatic double-piston rotary actuator in rack and pinion design
Function	Double- and single-acting execution
Standards	Interface actuator/feedback-unit - VDI/VDE 3845 (NAMUR) Interface actuator/control media - VDI/VDE 3845 (NAMUR) Interface actuator/valve - ISO5211 / DIN 3337
Temperature range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

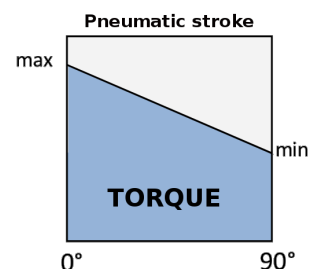
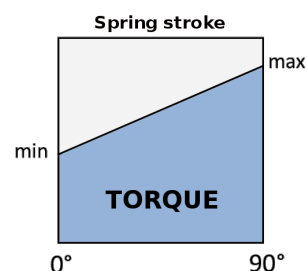
Provides a linear and constant torque through the complete pivoting angle in both pivoting directions.



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.

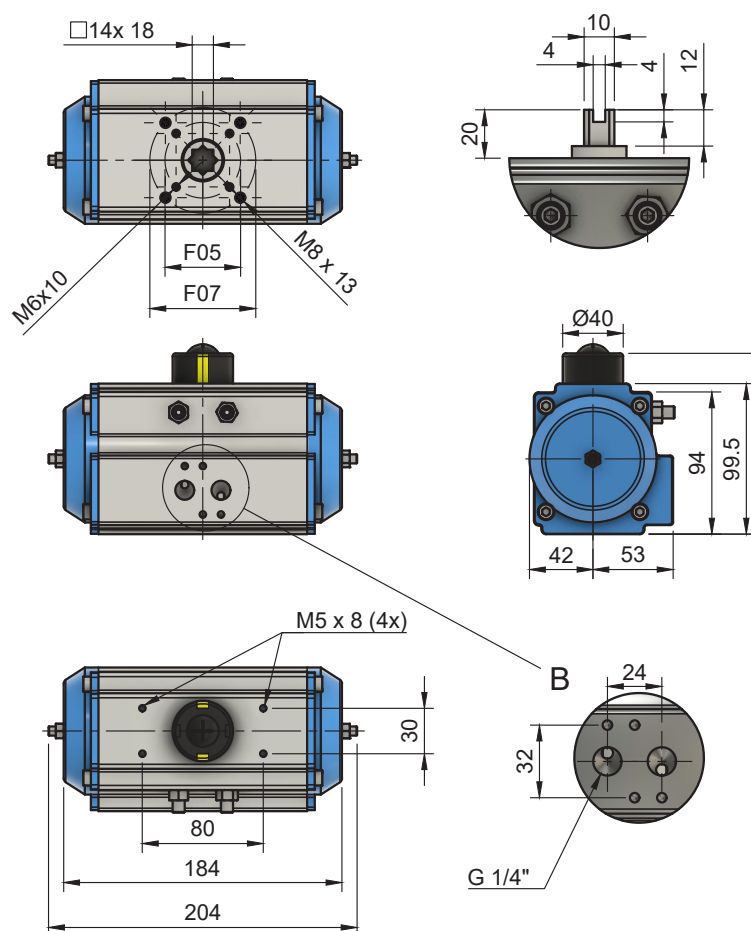


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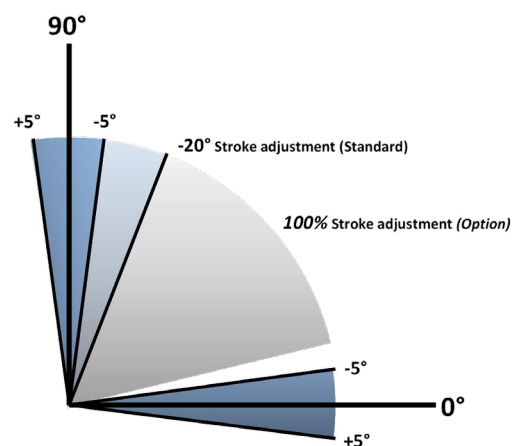
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Dimensions



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	7	8
Torque in Nm	20	25	30	35	40	45	50	55	60	70	79

Torques single-acting

				Control pressure in bar (g)																	
Torque spring stroke in Nm				3		3,5		4		4,5		5		5,5		6		7		8	
Spring set		min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
Torque in Nm	5	10	15	15	20	20	25	25	30	30	35	35	40	40	45	45	49	55	59	65	69
	6	12	18	12	18	17	23	22	28	27	33	32	37	37	42	42	47	52	57	62	67
	7	14	21	9	16	14	21	19	25	24	30	29	35	34	40	39	45	49	55	59	65
	8	16	24	6	14	11	18	16	23	21	28	26	33	31	38	36	43	46	53	56	63
	9	18	27	3	11	8	16	13	21	18	26	23	31	28	36	33	41	43	51	53	61
	10	20	30			5	14	10	19	15	24	20	29	25	34	30	39	40	49	50	59
	11	22	33					7	17	12	22	17	27	22	32	27	37	37	47	47	57
	12	25	36					4	15	9	20	14	25	19	30	24	35	34	45	44	55

Weight, volume

Function	Weight (kg)	Volume (l)
double-acting	2,7	0,64
single-acting	2,9	0,30

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	1,92	2,24	2,56	2,88	3,20	3,52	3,84	4,48	5,12
single-acting	0,90	1,05	1,20	1,35	1,50	1,65	1,80	2,10	2,40