



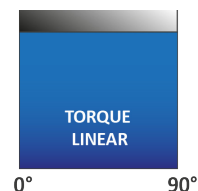
Design	Pneumatic double-piston rotary actuator in rack and pinion design	
Function	Double- and single-acting	
Material	Body	Aluminum, powder-coated
	Caps	Aluminum, powder-coated
	Pistons	Aluminum
	Pinion shaft	Carbon steel, nickel plated
	Bearings	POM
	Sealings	Standard: NBR Optional: HNBR/FPM/Silicone
	Screws	Stainless steel
Temperature range	Standard	-20°C...+80°C
	Low temperature version	-40°C...+80°C
	High temperature version	-10°C...+150°C
ATEX marking	  II 2 G Ex h IIC T6...T3 Gb II 2 D Ex h IIIC 170°C Db	
Control pressure	2...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	
Mounting position	Any mounting position	
Nominal rotation angle	90° Adjustable in both end positions +/-5° (optional stroke adjustment up to 100%)	
Standards	Interface actuator/ feedback-unit	VDI/VDE 3845 resp. NAMUR
	Interface actuator/ control media	VDI/VDE 3845 resp. NAMUR
	Interface actuator/ valve	ISO 5211 and DIN 3337



Torque diagram

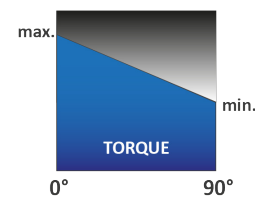
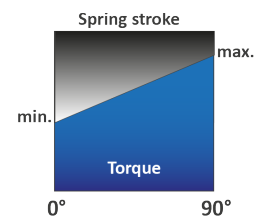
Double-acting

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.



[illegible]

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

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	31	38	46	53	61	69	76	84	92	107	122	115,5	123,2

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.
Torque in Nm	5	23	16	31	24	39	32	47	40	55	48	63	55	70	63	78	71	94	87	110	102
	6	28	19	28	19	36	27	44	35	52	43	59	51	67	59	75	66	91	82	106	98
	7	32	22	25	15	33	23	41	31	48	38	56	46	64	54	72	62	88	78	103	93
	8	37	25	22	10	30	18	37	26	45	34	53	42	61	49	69	57	85	73	100	89
	9	41	29			26	13	34	21	42	29	50	37	58	45	66	53	81	68	97	84
	10	46	32					31	17	39	24	47	32	55	40	62	48	78	64	94	79
	11	51	35							36	20	44	28	51	36	59	43	75	59	91	75
	12	55	38									40	23	48	31	56	39	72	55	87	70

Function	Weight (kg)	Volume (l)
double-acting	3,1	0,90
single-acting	3,6	0,43

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	2,70	3,15	3,60	4,05	4,50	4,95	5,40	6,30	7,20
single-acting	1,29	1,51	1,72	1,94	2,15	2,37	2,58	3,01	3,44