

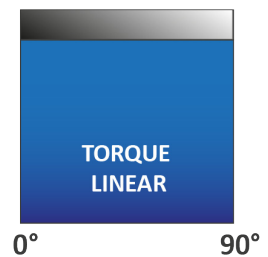
<b>Design</b>	Pneumatic double-piston rotary actuator in rack and pinion design	
<b>Function</b>	Double- and single-acting	
<b>Material</b>	<b>Housing</b>	Anodised aluminum ASTM 6083, UNI 4522
	<b>Caps</b>	Aluminum UNI 5076, epoxy resin coated
	<b>Pistons</b>	Aluminum UNI 5076
	<b>Pinion</b>	Steel, nickel-plated (optional: stainless steel)
	<b>Bearings</b> <b>Sealings</b>	POM NBR, optional: FKM or silicone
<b>Temperature range</b>	<b>Standard (NBR)</b>	-50°C...+70°C
	<b>High temperature (Viton)</b>	-15°C...+160°C
	<b>Extended temperature (Silicone)</b>	-60°C...+200°C
<b>ATEX marking</b>		II 2 G Ex h IIC T5...T2 Gb II 2 D Ex h IIIC 170°C Db
<b>Control pressure</b>	2...8 bar	
<b>Control media</b>	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	
<b>Mounting position</b>	Any mounting position	
<b>Nominal rotation angle</b>	90°, 120°, 180° resp. 240° Adjustable in one end position +/-5° (optional 100% stroke adjustment) Version BE: Adjustable in both end positions	
<b>Standards</b>	<b>Interface actuator/ feedback-unit</b>	VDI/VDE 3845 resp. NAMUR
	<b>Interface actuator/ control media</b>	VDI/VDE 3845 resp. NAMUR
	<b>Interface actuator/ valve</b>	ISO 5211 and DIN 3337



### Torque diagram

#### Double-acting

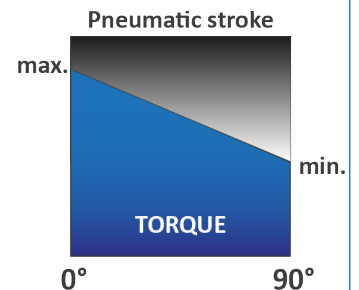
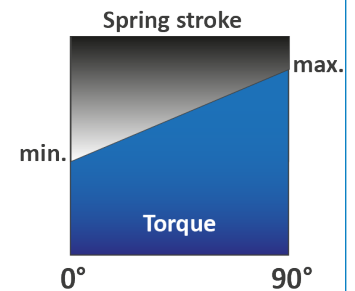
Provides a linear and constant torque through the complete pivoting angle in both pivoting directions.



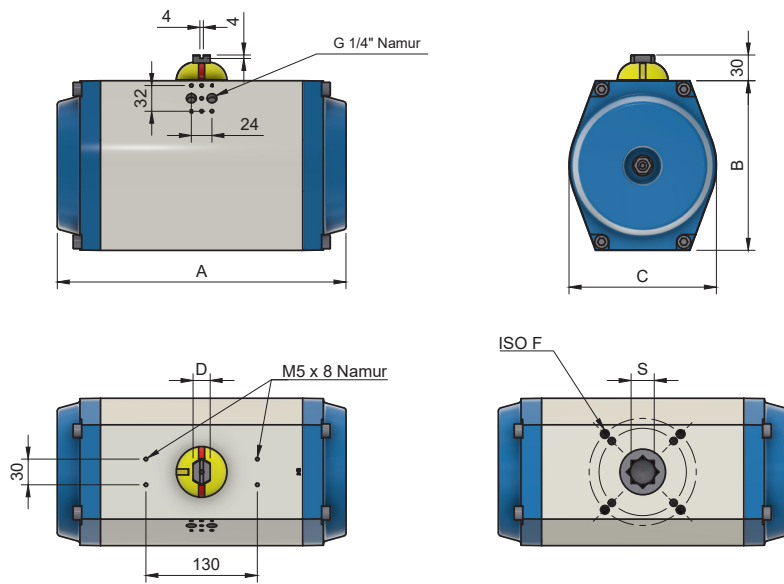
#### Single-acting

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.

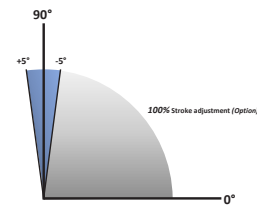


## Dimensions



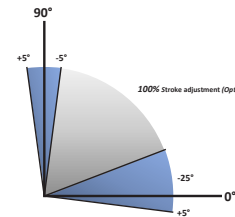
## Angle adjustment

### Variant „Standard“



The switch position 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.

### Variant „BE“



With the “BE” option, both end position can be set independently of one another for fine adjustment.

## Dimension table

Dimensions in mm							
	A		B	C	D	S	ISO-F
90°	120°	180°					
337	387	488	198	172	20	27	F10/F12

## Volume, weight

Volume (l)				Weight (kg)			
90° single-acting	90° double-acting	120° double-acting	180° double-acting	90° single-acting	90° double-acting	120° double-acting	180° double-acting
2,50	4,60	6,12	9,20	15,80	12,40	14,00	16,00

## Torques double-acting

Control Pressure in bar (g)	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	8
Torque in Nm	186,0	232,5	279,0	325,5	372,0	418,5	465,0	520,8	558,0	604,5	651,0	744,0

## Torques single-acting

		Torque pneumatic stroke in Nm at Control Pressure in bar (g)																	
		Torque spring in Nm		2		3		4		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.
Torque in Nm	2	69	48	137	116	230	209	323	302	416	395	472	451	509	488	602	581	695	674
	4	138	96	88	46	181	139	274	232	367	325	423	380	460	418	553	511	646	604
	6	207	144	-	-	132	68	225	161	318	254	374	310	411	347	504	440	597	533
	8	276	192	-	-	-	-	176	91	269	184	325	240	362	277	455	370	548	463
	10	344	240	-	-	-	-	127	21	220	114	276	170	313	207	406	300	499	393
	12	413	288	-	-	-	-	-	-	171	43	227	99	264	136	357	229	450	322