

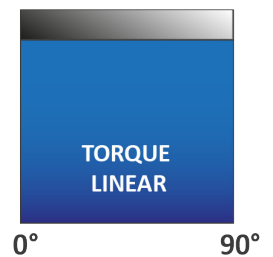
Design	Pneumatic double-piston rotary actuator in rack and pinion design	
Function	Double- and single-acting	
Material	Housing	Anodised aluminum ASTM 6083, UNI 4522
	Caps	Aluminum UNI 5076, epoxy resin coated
	Pistons	Aluminum UNI 5076
	Pinion	Steel, nickel-plated (optional: stainless steel)
	Bearings Sealings	POM NBR, optional: FKM or silicone
Temperature range	Standard (NBR)	-50°C...+70°C
	High temperature (Viton)	-15°C...+160°C
	Extended temperature (Silicone)	-60°C...+200°C
ATEX marking		II 2 G Ex h IIC T5...T2 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 one end position +/-5° (optional 100% stroke adjustment) Version BE: Adjustable in both end positions	
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

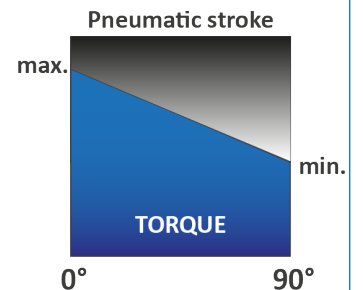
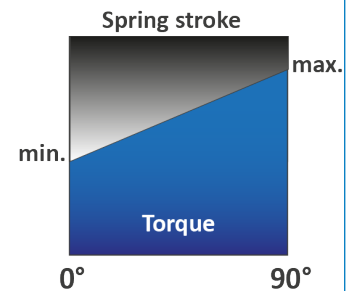
Provides a linear and constant torque through the complete pivoting angle in both pivoting directions.



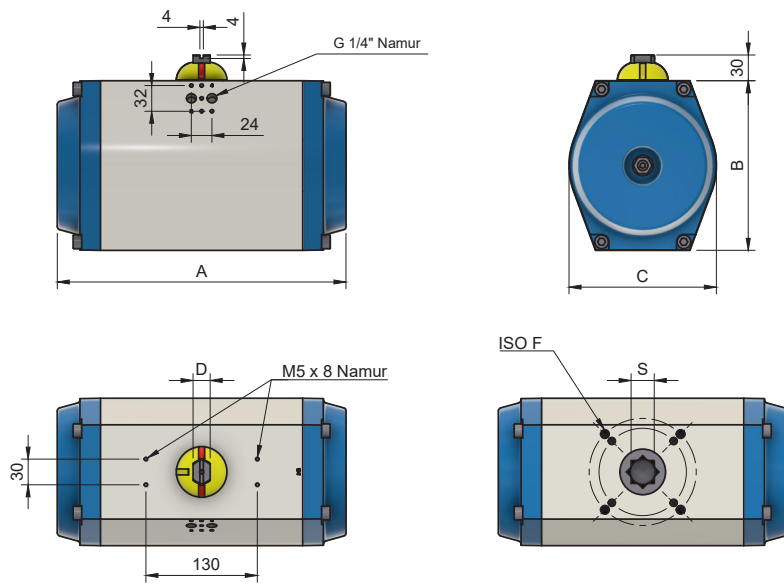
Single-acting

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.

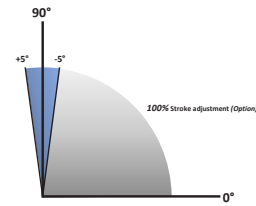


Dimensions



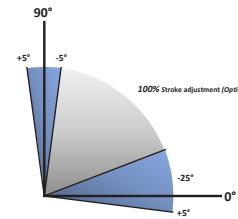
Angle adjustment

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°				
	422	-	-	255	224	28	F14

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
6,50	12,50	-	-	37,80	28,00	-	-

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	400	500	600	700	800	900	1000	1120	1200	1300	1400	1600

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	134	106	291	262	491	462	691	662	891	862	1011	982	1091	1062	1291	1262	1491	1462
	4	268	213	181	124	381	324	581	524	781	724	901	844	981	924	1181	1124	1381	1324
	6	402	319	-	-	272	186	472	386	672	586	792	706	872	786	1072	986	1272	1186
	8	536	425	-	-	162	48	362	248	562	448	682	568	762	648	962	848	1162	1048
	10	670	531	-	-	-	-	253	111	453	311	573	431	653	511	853	711	1053	911
	12	803	637	-	-	-	-	-	-	344	173	464	293	544	373	744	573	944	773