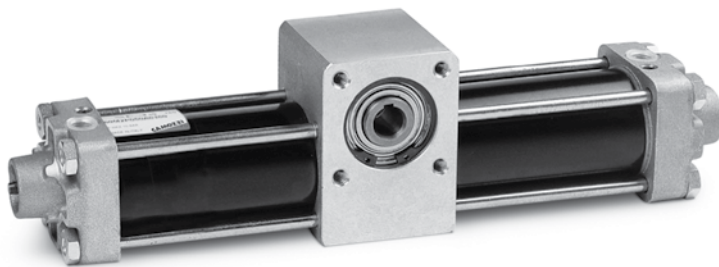


# Rotary cylinders Series 18

Non magnetic, cushioned  
 ø32, 40, 50, 63, 80, 100, 125  
 Rotational angles 90° and 180°



The rotary cylinders 18 Series have been designed with seven different bores in order to satisfy a large range of operational requirements. As a result of their design and the materials used, these cylinders can be used in extreme conditions with optimum results. The rack and pinion are made of hardened ground steel and the pinion is mounted on two bearings. In the cylinder end caps there are screws, which allow rotation to be adjusted by  $\pm 7^\circ$ .

## GENERAL DATA

<b>Type of construction</b>	with tie-rods
<b>Operation</b>	double-acting
<b>Materials</b>	aluminium end-blocks, ST35 tube, NBR seals, other parts hardened steel
<b>Operating temperature</b>	0 + 80°C (with dry air -20°C)
<b>Standard rotation angles</b>	90° - 180°
<b>Operating pressure</b>	0,5 + 10 bar
<b>Fluid</b>	clean air, without lubrication. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.

**TABLE OF TORQUE FORCE IN Nm (THEORETICAL)**

∅	1 Bar	2 Bar	3 Bar	4 Bar	5 Bar	6 Bar	7 Bar	8 Bar	9 Bar	10 Bar
<b>32</b>	1,42	2,84	4,26	5,68	7,10	8,50	9,94	11,36	12,77	14,19
<b>40</b>	2,22	4,44	6,65	8,87	11,09	13,31	15,52	17,74	19,96	22,18
<b>50</b>	3,47	6,93	10,40	13,86	17,33	20,79	24,26	27,72	31,19	34,65
<b>63</b>	6,60	13,20	19,81	26,41	33,01	39,61	46,21	52,82	59,42	66,02
<b>80</b>	10,65	21,29	31,94	42,58	53,23	63,87	74,52	85,17	95,81	106,46
<b>100</b>	22,18	44,36	66,54	88,71	110,89	133,07	155,25	177,43	199,61	221,78
<b>125</b>	34,65	69,31	103,96	138,62	173,27	207,92	242,58	277,23	311,90	346,50

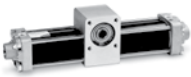
**CODING EXAMPLE**

<b>18</b>	-	<b>050</b>	/	<b>090</b>
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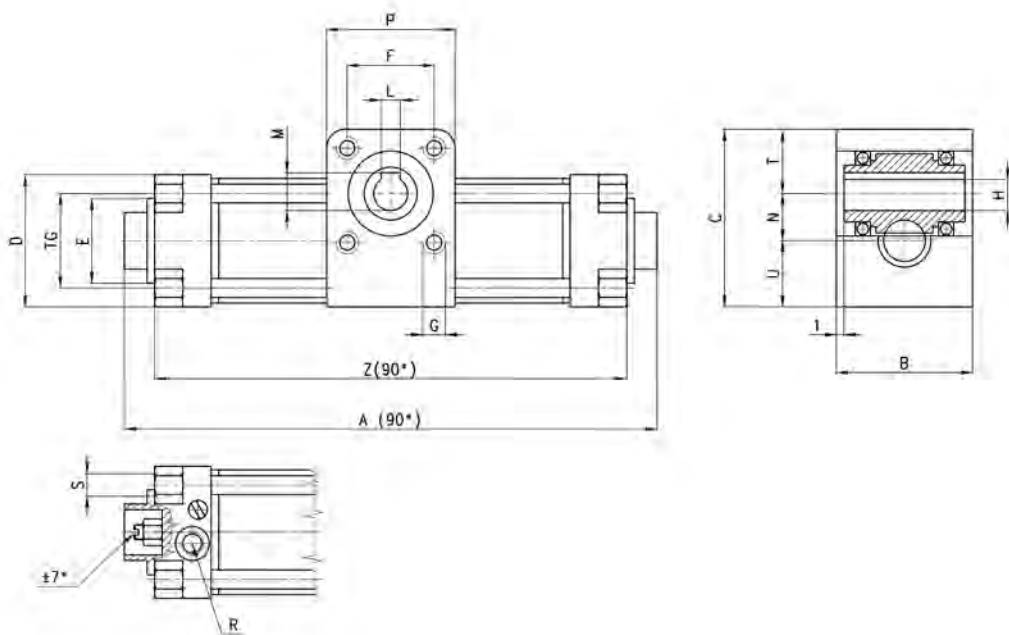
<b>18</b>	SERIES
<b>050</b>	BORE 32 mm 40 mm 50 mm 63 mm 80 mm 100 mm 125 mm
<b>090</b>	ROTATIONAL ANGLES 90 - 180°

Rotating cylinders Series 18

\* increase in "A" and "Z" for each 90° of rotation



Note: Grease the rack using a suitable grease gun.



DIMENSIONS

∅	A	*	B	C	D	E <sup>h8</sup>	F	G	H <sup>h7</sup>	L	M	N	P	R	S	T	U	TG	Z
32	298	63	52	85	47	25	50	M6	15	5	17.3	26.5	68	G1/8	M6	34	24.5	32.5	254
40	298	63	56	89	54	32	50	M6	15	5	17.3	26.5	68	G1/4	M6	34	28.5	38.2	254
50	298	63	66	94	65	38	50	M8	15	5	17.3	26.5	68	G1/4	M8	34	33.5	46.6	258
63	366	75,5	80	111	78	35	60	M8	20	6	22.8	31	80	G3/8	M8	40	40	58,5	314
80	366	75,5	98	120	97	45	60	M10	20	6	22.8	31	80	G3/8	M10	40	49	72	314
100	426	100,5	118	153	116	45	80	M10	25	8	28,3	41	102	G3/8	M10	53	59	89	374
125	432	100,5	142	165	140	53	80	M12	25	8	28,3	41	102	G1/2	M12	53	71	110	381