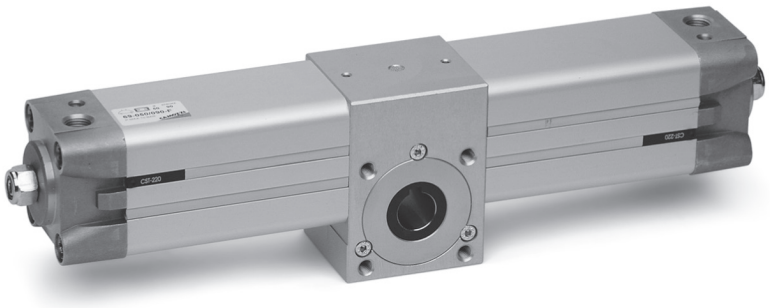
Rotary cylinders
Series 69

Magnetic, cushioned
ø32, 40, 50, 63, 80, 100, 125
Rotational angles: 90°, 180°, 270° and 360°

» Male or female version
» Clean design



The rotary cylinders of the 69 Series are available in 7 different bores (from 32 to 125 mm) and can 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.

Through an adjustment screw it is possible to recover part of the play between pinion and rack.
On the heads there is a screw which allows rotation to be adjusted by ± 5°.

GENERAL DATA

Type of construction	with internal tie-rods
Operation	double-acting
Materials	end blocks / tube / body = AL rack = steel - rack guide shoe = acetal resin - pinion = hardened steel seals = NBR
Type of mounting	threaded holes in the central body by means of Series 60 brackets
Bore	ø 32, 40, 50, 63, 80, 100, 125
Operating temperature	0°C ÷ 80°C (with dry air - 20°C)
Standard rotation angles	90°, 180°, 270°, 360° (others on request)
Bearings	Ball bearings (ø 32 mm teflon bronze guide)
Operating pressure	1 ÷ 10 bar
Fluid	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)

Ø	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar	9 bar	10 bar
32	1,2	2,4	3,6	4,8	6	7,2	8,4	9,6	10,8	12
40	2,25	4,5	6,75	9	11,25	13,5	15,75	18	20,25	22,5
50	3,9	7,8	11,7	15,6	19,5	23,4	27,3	31,2	35,1	39
63	7,3	14,6	21,9	29,2	36,5	43,8	51,1	58,4	65,7	73
80	15,7	31,4	47,1	62,8	78,5	94,2	109,9	125,6	141,3	157
100	26,35	52,7	79,05	105,4	131,75	158,1	184,45	210,8	237,15	263,5
125	51	102	153	204	255	306	357	408	459	510

CODING EXAMPLE

69	-	050	/	090	-	F	

69	SERIES	PNEUMATIC SYMBOL CD18
050	BORE 032 = 32 mm 040 = 40 mm 050 = 50 mm 063 = 63 mm 080 = 80 mm 100 = 100 mm 125 = 125 mm	
090	ROTATIONAL ANGLES 090 = 90° 180 = 180° 270 = 270° 360 = 360°	
F	PINION F = Female M = Male	

PNEUMATIC SYMBOLS

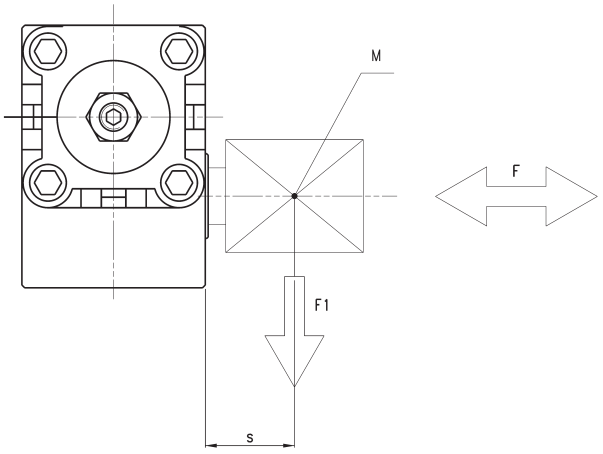
The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.

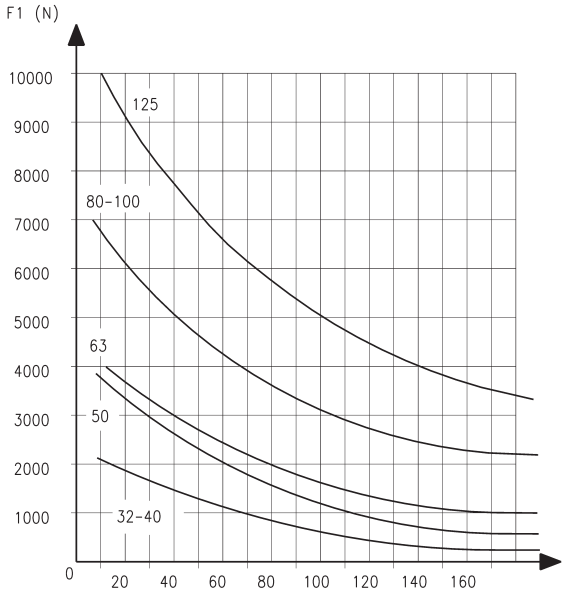
AXIAL LOAD

Max. axial load F with F1 = 0

Table of loads							
Ø	32	40	50	63	80	100	125
Force F	100 N	100 N	120 N	120 N	200 N	250 N	300 N

RADIAL LOAD



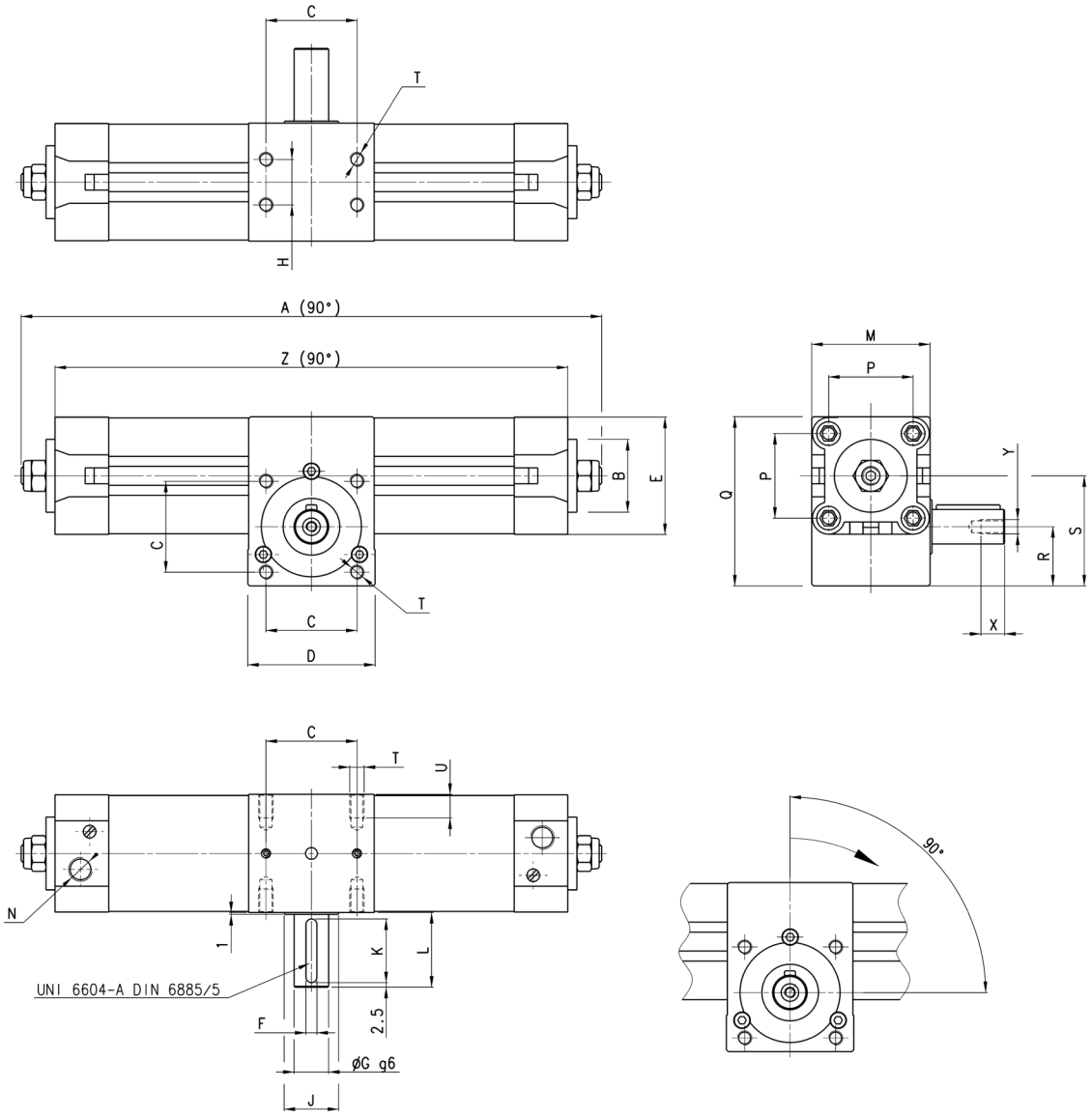


M = Barycenter of the applied theorical load.

Max. radial load F1 with F = 0

Cylinders Series 69 - male pinion

* increase in “A” and “Z” for each 90° of rotation

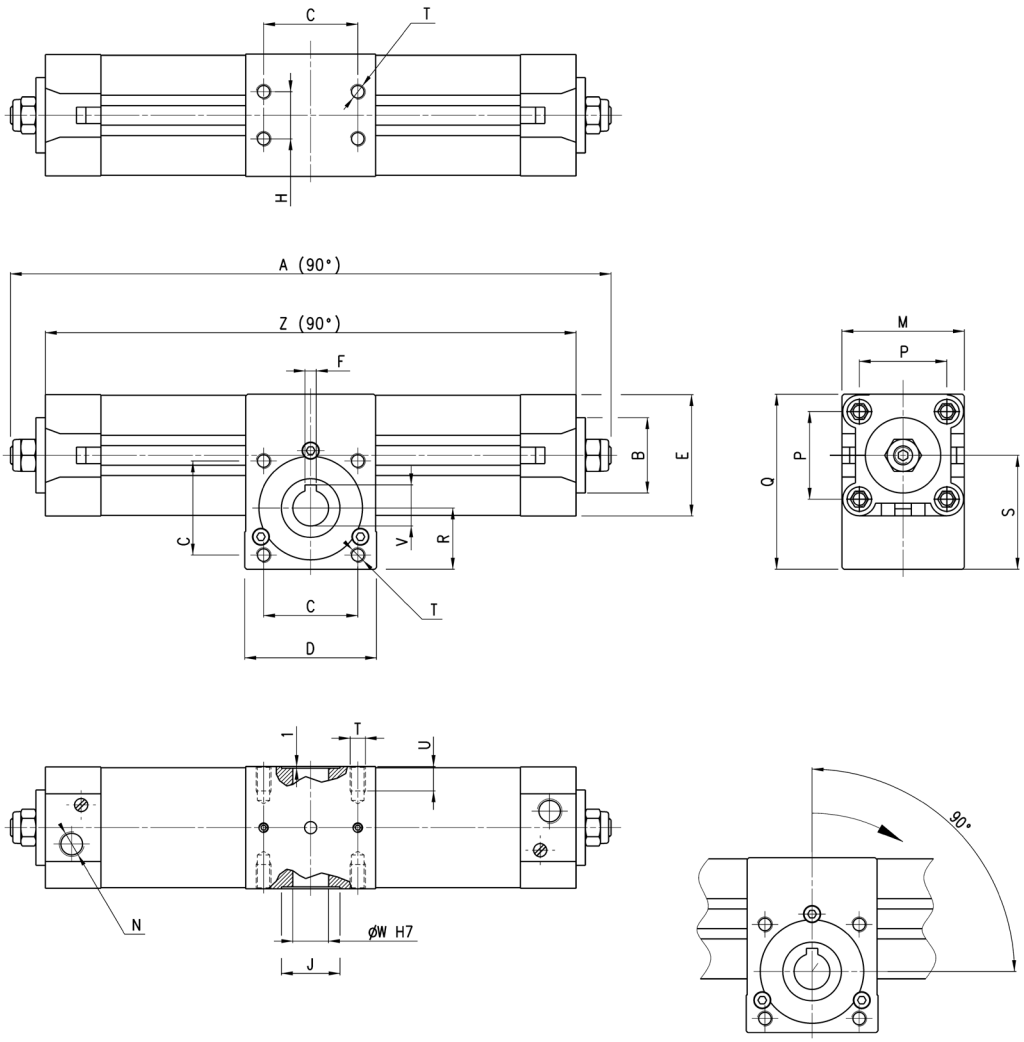


DIMENSIONS

Ø	A	B	*	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	Y	X	Z
32	249	30	47	33	50	46	5	14	18	25	25	31	50	G1/8	32,5	71,5	25	46,5	M6	10	M5	12,5	219
40	295	35	56,5	40	60	55	5	14	22	25	25	31	60	G1/4	38	82	30	54,5	M6	10	M5	12,5	263
50	316	40	63	50	70	64,5	6	19	25	30	35	41	65	G1/4	46,5	94	32,5	60,5	M8	13	M6	16	282
63	357	45	74,5	60	75	75	8	24	35	30	35	41	75	G3/8	56,5	110	37	70,8	M8	13	M8	19	325
80	443	45	99	80	99	93	8	28	50	45	45	51	99	G3/8	72	142	50	93,5	M10	16	M8	19	404
100	472	55	107	80	115	110	10	38	60	50	45	51	115	G1/2	89	156,5	54	99	M10	16	M10	22	434
125	549	60	132	90	125	135	10	38	70	60	45	51	140	G1/2	110	188	60	118	M12	20	M10	22	505

Cylinders Series 69 - female pinion

* increase in “A” and “Z” for each 90° of rotation



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40	295	35	56,5	40	60	55	5	22	25	60	G1/4	38	82	30	54,5	M6	10	16,3	14	263
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125	549	60	132	90	125	135	8	70	60	140	G1/2	110	188	60	118	M12	16	31,3	28	505