

Rotary cylinders Series 69

∅32, 40, 50, 63, 80, 100, 125 magnetic

The rotary cylinders in the 69 Series are available in seven different bores from 32 to 125mm and in order to satisfy a large range of operational requirements, they are available in two different versions, one with male pinion and one with female.

As a result of their design and the materials used, these cylinders can be used in extreme conditions with optimum results. The high quality of the materials used together with the excellent workmanship means that the rotational tolerances are small.

The piston and the cushioning system (double sided) are the same as those mounted on the tried and tested linear cylinders in the 60 Series, which, with the aid of a special grease, are able to operate with or without lubrication.

On the heads there is a screw which allows rotation to be adjusted by $\pm 5^\circ$.



ACTUATORS

- ▶ High durability
- ▶ Clean design

GENERAL DATA

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

PNEULATIC SPECIFICATIONS

Operating pressure	0,5 ÷ 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

CODING ROTATING CYLINDER SERIES 69

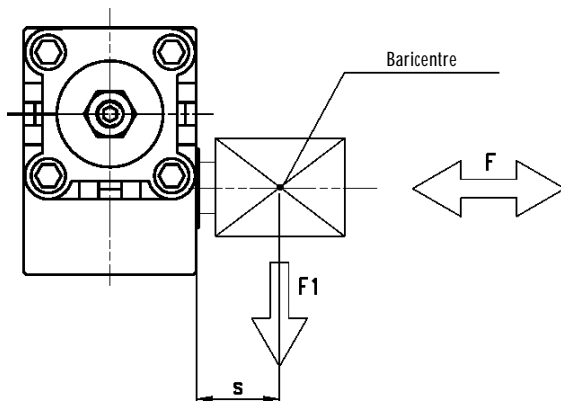
Rotating cylinder ø50 rotation 90° with female pinion;
Series 69 (magnetic): **Mod. 69-050/090-F.**

Rotating cylinder ø50 rotation 90° with male pinion;
Series 69 (magnetic): **Mod. 69-050/090-M.**

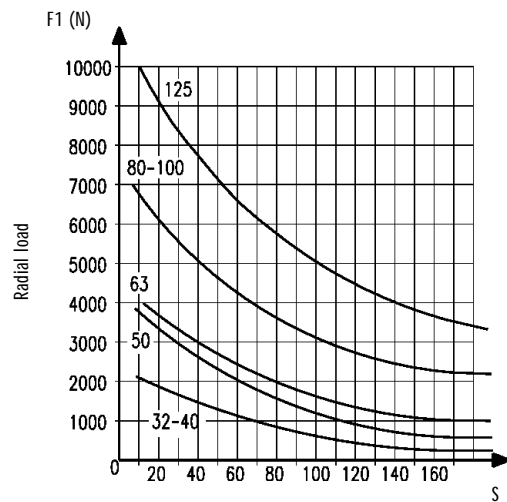
TABLE SHOWING OUTPUT TORQUES IN Nm (THEORETICAL)

Bore 32	40	50	63	80	100	125
Torque moment (Nm)						
1 bar	1.2	2.25	3.9	7.3	15.7	26.35
2 bar	2.4	4.5	7.8	14.6	31.4	52.7
3 bar	3.6	6.75	11.7	21.9	47.1	79.05
4 bar	4.8	9	15.6	29.2	62.8	105.4
5 bar	6	11.25	19.5	36.5	78.5	131.75
6 bar	7.2	13.5	23.4	43.8	94.2	158.1
7 bar	8.4	15.75	27.3	51.1	109.9	184.45
8 bar	9.6	18	31.2	58.4	125.6	210.8
9 bar	10.8	20.25	35.1	65.7	141.3	237.15
10bar	12	22.5	39	73	157	263.5

Applicable loads



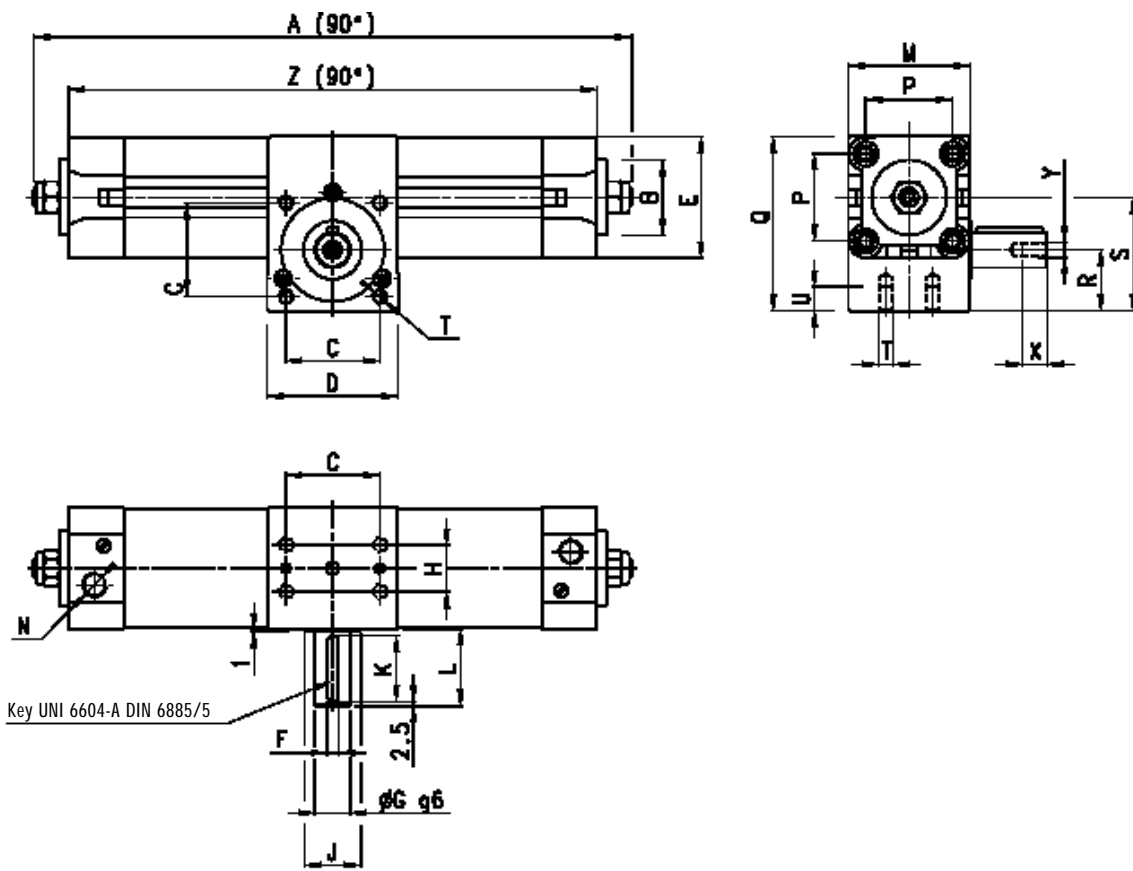
Max. radial load F1 with F=0



AXIAL LOAD F MAX WITH F1=0

øCyl.	32	40	50	63	80	100	125
F (N)	100	100	120	120	200	250	300

Mod. 69 male pinion

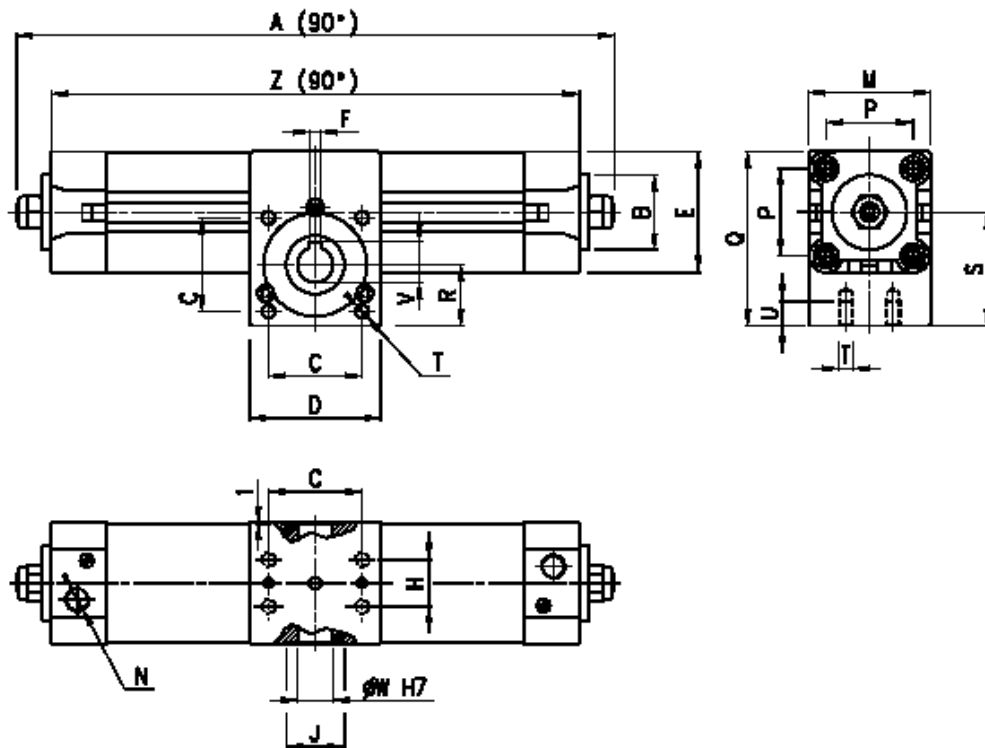


DIMENSIONS

Series	Bore	A	B _{d11}	*	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	Y	X	Z
69	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	221
69	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	265
69	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	286
69	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	328
69	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	395
69	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	416
69	125	518	60	132	90	125	135	10	38	70	60	45	51	140	G1/2	110	188	60	118	M12	20	M10	22	530

*Increase in "A" and "Z" for each 90° rotation.

Mod. 69 female pinion



DIMENSIONS

Series	bore	A	B _{d11}	*	C	D	E	F	H	J	M	N	P	Q	R	S	T	U	V	W	Z
69	32	249	30	47	33	50	46	5	18	25	50	G1/8	32,5	71,5	25	46,5	M6	10	16,3	14	219
69	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
69	50	316	40	63	50	70	64,5	6	25	30	65	G1/4	46,5	94	32,5	60,5	M8	13	21,8	19	282
69	63	357	45	74,5	60	75	75	6	35	30	75	G3/8	56,5	110	37	70,8	M8	13	21,8	19	325
69	80	443	45	99	80	99	93	8	50	45	99	G3/8	72	142	50	93,5	M10	16	27,3	24	404
69	100	472	55	107	80	115	110	8	60	50	115	G1/2	89	156,5	54	99	M10	16	31,3	28	434
69	125	518	60	132	90	125	135	8	70	60	140	G1/2	110	188	60	118	M12	20	31,3	28	478

*Increase in "A" and "Z" for each 90° rotation.