

M/162000/MI Rack & pinion version - Rotary cylinders

Double acting - Ø 32 ... 125 mm



Torques from 1,2 ... 51,0 Nm/bar
 Rotation angles 90°, 180°, 270°, 360°
 Switches can be mounted flush with the profile
 ISO 15552 pitch to use standard mountings

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston, adjustable cushioning

Operating pressure:

1,5 ... 10 bar

Operating temperature:

-5°C ... +80°C max.

Consult our Technical Service for use below +2°C

Rotation angles:

90, 180, 270, 360°

Fixed up to +8°

MATERIALS

Profile barrel: anodized aluminium

End covers: pressure diecast aluminium

Central body: anodized aluminium

Rack: normalized steel






Pinion: surface hardened high strength steel

Pinion bearings: ball bearings (Ø 32 teflon bronze bearings)

Rack guide shoe: acetal resin

Piston seals: polyurethane O-rings: nitrile rubber

STANDARD MODELS

Ø	Theoretical torque (Nm) at 6 bar	Cushion length (mm)	Initial cushion volume (cm ³)	MODELS	ACCESSORIES	Banjo flow control	Straight fitting	Elbow fitting
					Reed switch with integral 5 m cable			
						Tube diameter in bold		
								
32	7,2	19	12,3	M/162032/MI/*	M/50/LSU/5V	C0K510618	C02250618	C02470618
40	13,8	22	20,7	M/162040/MI/*	M/50/LSU/5V	C0K510628	C02250628	C02470628
50	23,4	24	36	M/162050/MI/*	M/50/LSU/5V	C0K510828	C02250828	C02470828
63	43,8	24	64,0	M/162063/MI/*	M/50/LSU/5V	C0K510838	C02250838	C02470838
80	94,2	27	116	M/162080/MI/*	M/50/LSU/5V	C0K511038	C02251038	C02471038
100	157,8	34	242,0	M/162100/MI/*	M/50/LSU/5V	C0K511248	C02251248	C02471248
125	306	41	451	M/162125/MI/*	M/50/LSU/5V	C0K511248	C02251248	C02471248



* Insert rotation angle in degrees

For information on additional magnetic switches see page 1-290
 Other fittings are available, please see section 7

Rotation angle

Ø	90°	180°	270°	360°
32	•	•	•	•
40	•	•	•	•
50	•	•	•	•
63	•	•	•	•
80	•	•	•	•
100	•	•	•	•
125	•	•	•	•

OPTIONS SELECTOR

M/162****/****/****

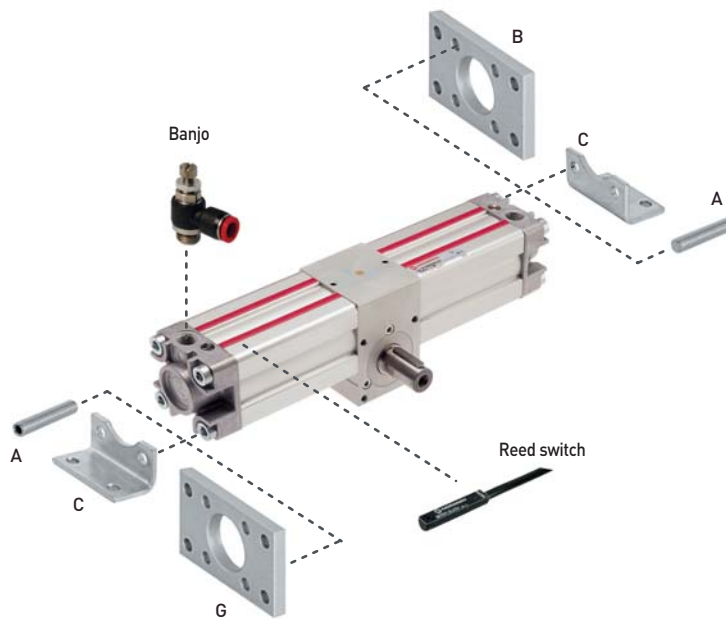
Cylinder diameters (mm)	Substitute	Standard rotation angle	Substitute
32	032	90°	90
40	040	180°	180
50	050	270°	270
63	063	360°	360
80	080		
100	100		
125	125		

Cylinder variants	Substitute	Pinion variants	Substitute
Non-magnetic piston	I	Male pinion	None
Magnetic piston	M	Female pinion	X

	Tolerances of rotation angle	Substitute
	Adjustable $\pm 5^\circ$	E
	Fixed up to $+8^\circ$	I

Note: If option is not required, disregard option position within part number eg. M/162100/ME/90
 This options selector explains only the cylinder variants.
 Additional variants/options are not possible.

MOUNTINGS



∅	A	B, G	C
32	QM/8032/35	QA/8032/22	QA/8032/21
40	QM/8032/35	QA/8040/22	QA/8040/21
50	QM/8050/35	QA/8050/22	QA/8050/21
63	QM/8050/35	QA/8063/22	QA/8063/21
80	QM/8080/35	QA/8080/22	QA/8080/21
100	QM/8080/35	QA/8100/22	QA/8100/21
125	QM/8125/35	QM/8125/22	QM/8125/21

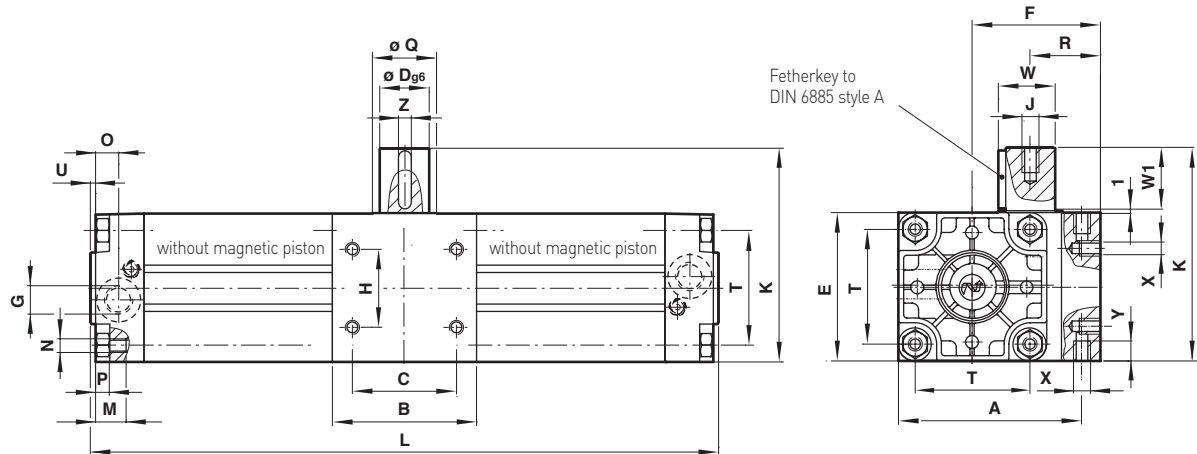
For details of mountings see page 1-092

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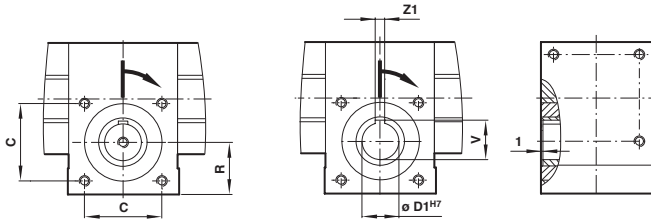
BASIC DIMENSIONS

M/162000/*/*/Angle - Rotary cylinders with fixed angle (up to +8°)



Rotary cylinders with male pinion

Rotary cylinders with female pinion



MODELS	\varnothing	A	B	C	$\varnothing D_{g6}$	$\varnothing D1^{H7}$	E	F	G	H	J	K	L	(90°)	(180°)	(270°)	(360°)
M/162032/.	32	71,5	50	33	14	14	50	46,5	G 1/8	18	M 5	81	227	274	321	368,5	
M/162040/.	40	82	60	40	14	14	60	54,5	G 1/4	22	M 5	91	266	323	379,5	436	
M/162050/.	50	94	70	50	19	19	65	60,5	G 1/4	25	M 6	106	282	345	408	471	
M/162063/.	63	110	75	60	24	19	75	71	G 3/8	35	M 8	116	331	406	480,5	555	
M/162080/.	80	142	99	80	28	24	99	93,5	G 3/8	50	M 8	150	396	495	594	693	
M/162100/.	100	156,5	115	80	38	28	115	99	G 1/2	60	M 10	166	414	521	628	735	
M/162125/.	125	188	125	90	38	28	140	118	G 1/2	70	M 10	191	483,5	615,5	747,5	879,5	
MODELS	\varnothing	M	N	O	P	$\varnothing Q$	R	T	U	V	W	W1	X	Y	Z	Z1	
M/162032/.	32	18	M 6	13	4	25	25	32,5	3	16,3	16	30	M 6	10	5	5	
M/162040/.	40	18	M 6	15	4	25	30	38	3,5	16,3	16	30	M 6	10	5	5	
M/162050/.	50	18	M 8	18,5	5	30	32,5	46,5	3,5	21,8	21,5	40	M 8	13	6	6	
M/162063/.	63	17,5	M 8	19	5	30	37	56,5	4	21,8	27	40	M 8	13	8	6	
M/162080/.	80	21,5	M 10	19	-	45	50	72	4	27,3	31	50	M 10	16	8	8	
M/162100/.	100	21,5	M 10	18	-	50	54	89	4	31,3	41	50	M 10	16	10	8	
M/162125/.	125	32	M 12	20	-	60	60	110	6	31,3	41	50	M 12	20	10	8	