

- > \varnothing 12 ... 100 mm
- > High performance, stability and reliability
- > Magnetic switches can be mounted flush with the profile
- > Cylinder mounting dimensions conform to ISO 15524 for bore size \varnothing 12 ~ 100 mm



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated

Standard:

ISO 15524

Operation:

Double acting, magnetic piston, mechanical cushion

Operating pressure:

0.5 ... 10 bar (7.25 ... 145 psi)

Ports:

M5, G1/8 ... G1/2

Cylinder diameters:

12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm

Standard strokes:

5, 10, 20, 25, 30, 35, 40, 45, 50, 75, 100 mm

Non-standard strokes:

Available (Max 300 mm)

Operating temperature:

-5 ... +70°C max.

Air supply must be dry enough

Standard Materials:

Barrel: Anodised aluminium

End covers: Anodised aluminium

Piston rod: Hard chromium plated

Piston rod seals: PUR

Piston seals: NBR

'O'-rings: NBR

Technical data

Cylinder \varnothing (mm)	12	16	20	25	32	40	50	63	80	100
Profile barrel	•	•	•	•	•	•	•	•	•	•
Port size	M5	M5	M5	M5	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Piston rod \varnothing (mm)	6	8	10	12	16	16	20	20	25	32
Theoretical thrusts at 6 bar outstroke (N)	68	121	188	294	482	754	1178	1870	3016	4710
Theoretical thrusts at 6 bar instroke (N)	51	90	141	227	362	633	990	1680	2722	4228
Air consumption at 6 bar outstroke (l/cm)	0,008	0,014	0,022	0,035	0,056	0,088	0,137	0,218	0,35	0,55
Air consumption at 6 bar instroke (l/cm)	0,007	0,011	0,017	0,027	0,042	0,074	0,114	0,195	0,32	0,49

Standard strokes

Cylinder \varnothing (mm)	Stroke length (mm)											
	5	10	15	20	25	30	35	40	45	50	75	100
12	•	•	•	•	•	•	–	–	–	–	–	–
16	•	•	•	•	•	•	–	–	–	–	–	–
20	•	•	•	•	•	•	•	•	•	•	–	–
25	•	•	•	•	•	•	•	•	•	•	–	–
32	•	•	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•	•
50	–	•	•	•	•	•	•	•	•	•	•	•
63	–	•	•	•	•	•	•	•	•	•	•	•
80	–	•	•	•	•	•	•	•	•	•	•	•
100	–	•	•	•	•	•	•	•	•	•	•	•

Option selector

CM/712****/****/****

Piston rod material	Substitute	←
Hard Chromium plated	C	
Standard	Substitute	←
ISO15524	M	
Action	Substitute	←
Double acting	2	

Stroke length (mm)	Substitute
005...300	
Fixing type	Substitute
Thread on barrel	A
Through hole on barrel	B
Piston rod thread	Substitute
Male thread	M
Female thread	MX
Bore size (mm)	Substitute
12	012
16	016
20	020
25	025
32	032
40	040
50	050
63	063
80	080
100	100

Service kits



∅	
12	QM/712012/00
16	QM/712016/00
20	QM/712020/00
25	QM/712025/00
32	QM/712032/00
40	QM/712040/00
50	QM/712050/00
63	QM/712063/00
80	QM/712080/00
100	QM/712100/00

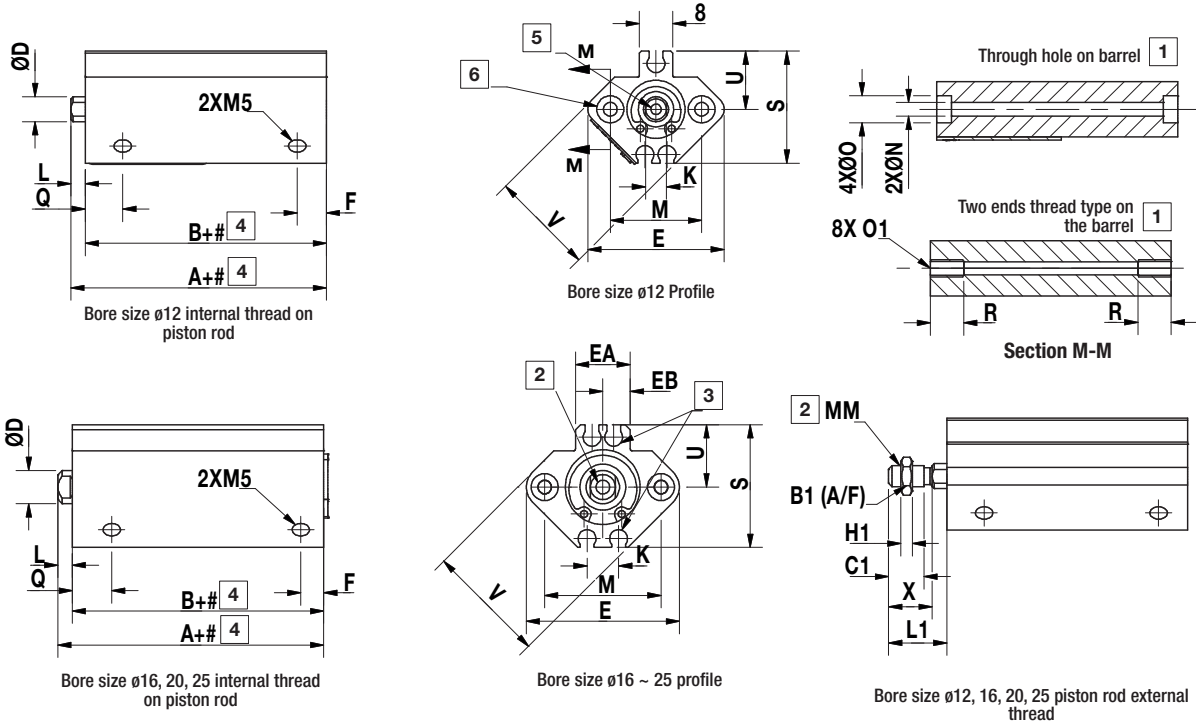
Dimensions

Dimensions in mm
Projection/First angle



CM/712000/M, CM/712000/MX

Bore size $\phi 12\sim 25$



- 1 Two options for the fixing type on the barrel
- 2 Two options for the piston rod thread
- 3 Magnetic switch can be mounted flush with the profile
- 4 # Stroke: Bore size 12 to 16, Max 50 mm
Bore size 20 to 32, Max 100 mm
Bore size 40 to 100, Max 300 mm
- 5 "H" thread effective depth "C"
- 6 4 x ϕ O counterbore
2 x ϕ N counterbore

Bore size	Stroke	A	B	C	D	E	EA	EB	F	H	K	L	M	N
12	5~30	31.5	28	6	6	33	—	—	7	M3 x 0.5	5	3.5	22	3.5
16	5~30	34	30.5	8	8	37	13.2	6.6	5.5	M4 x 0.7	6	3.5	28	3.5
20	5~50	36	31.5	7	10	47	13.6	6.8	5.5	M5 x 0.8	8	4.5	36	5.5
25	5~50	37.5	32.5	12	12	52	13.6	6.8	5.5	M6 x 1	10	5	40	5.5

Bore size	Stroke	O	Q	S	U	V	B1	C1	H1	L1	MM	X	O1	R
12	5~30	6.5 depth 3.5	9	27.5	14	25	8	9	4	14	M5 x 0.8	10.5	M4X0.7	7
16	5~30	6.5 depth 3.5	9.5	29.5	15	29	10	10	5	15.5	M6 x 1	12	M4X0.7	7
20	5~50	9 depth 7	8	35.5	18	36	13	12	5	18.5	M8 x 1.25	14	M6X1	10
25	5~50	9 depth 7	9	40.5	21	40	17	15	6	22.5	M10 x 1.25	17.5	M6X1	10

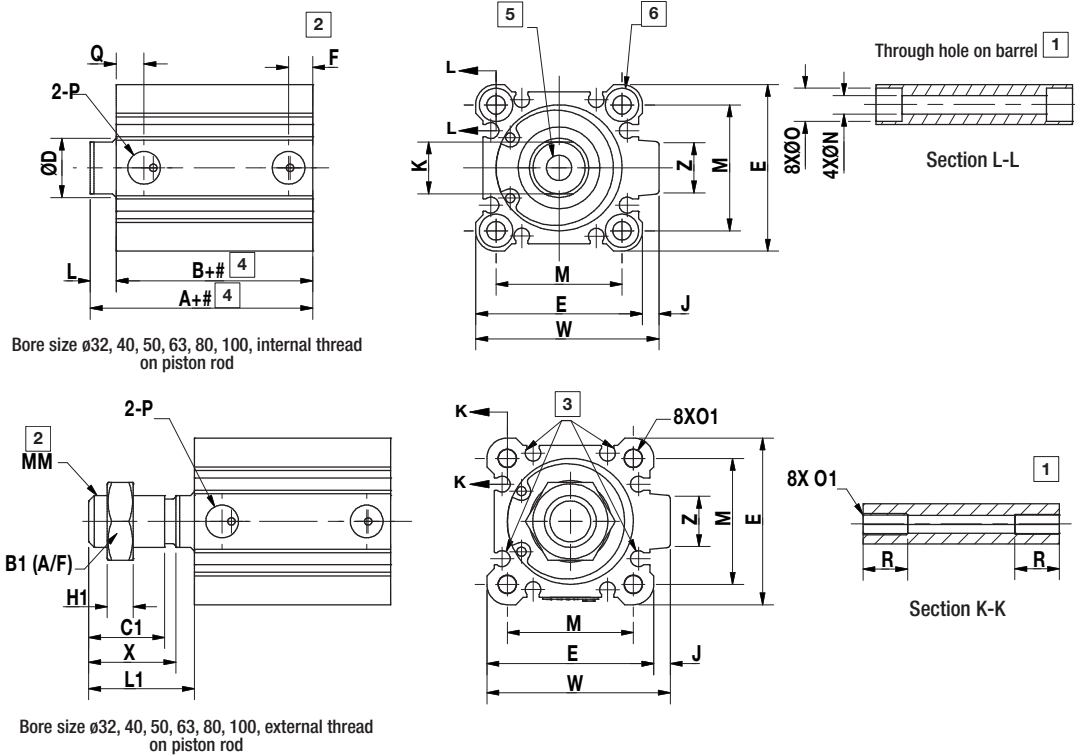
Dimensions

Dimensions in mm
Projection/First angle



CM/712000/M, CM/712000/MX

Bore size $\varnothing 32\sim 100$



Bore size $\varnothing 32, 40, 50, 63, 80, 100$, internal thread on piston rod

Bore size $\varnothing 32, 40, 50, 63, 80, 100$, external thread on piston rod

- 1 Two options for the fixing type on the barrel
- 2 Two options for the piston rod thread
- 3 Magnetic switch can be mounted flush with the profile
- 4 # Stroke: Bore size 12 to 16, Max 50 mm
Bore size 20 to 32, Max 100 mm
Bore size 40 to 100, Max 300 mm
- 5 "H" thread effective depth "C"
- 6 4 x \varnothing O counterbore
2 x \varnothing N counterbore

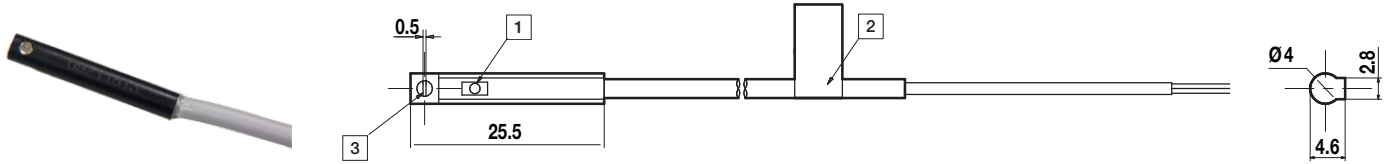
Bore size	Stroke	A	B	C	D	E	EA	EB	F	H	K	L	M	N
32	5~100	40	33	7.5	10	13	16	45	M8 x 1.25	4.5	14	7	34	5.5
40	5~100	46.5	39.5	7.5	12.5	13	16	52	M8 x 1.25	5	14	7	40	5.5
50	5~100	48.5	40.5	10.5	10.5	15	20	64	M10 x 1.5	7	17	8	50	6.6
63	5~100	54	46	10.5	15	15	20	77	M10 x 1.5	7	17	8	60	9
80	5~100	63.5	53.5	12.5	16	21	25	98	M16 x 2	6	22	10	77	11
100	5~100	75	63	13	23	27	32	117	M20 x 2.5	6.5	27	12	94	11

Bore size	Stroke	O	P	W	Z	B1	C1	H1	L1	MM	X	O1	R
32	5~100	9 depth 7	G1/8	49.5	14	22	20.5	8	28.5	M14 x 1.5	23.5	M6 x 1	10
40	5~100	9 depth 7	G1/8	57	15	22	20.5	8	28.5	M14 x 1.5	23.5	M6 x 1	10
50	5~100	11 depth 8	G1/4	71	19	27	26	11	33.5	M18 x 1.5	28.5	M8 x 12.5	14
63	5~100	14 depth 10.5	G1/4	84	19	27	26	11	33.5	M18 x 1.5	28.5	M10 x 1.5	18
80	5~100	17.5 depth 13.5	G3/8	104	25	32	32.5	13	43.5	M22 x 1.5	35.5	M12 x 1.75	22
100	5~100	17.5 depth 13.5	G3/8	123.5	25	41	32.5	13	43.5	M26 x 1.5	35.5	M12 x 1.75	22

Dimensions

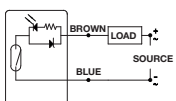
 Dimensions in mm
Projection/First angle


Magnetic Switch



- 1 Light
- 2 Label
- 3 Fixing screw M2.5

Technical data – Magnetic Switch

Symbol	Voltage (V d.c./ V a.c.)	Current maximum (mA)	Max Power (W)	Function	Operating temperature (°C)	LED	Protection class	Cable length (m)	Cable type	Weight (g)	Model
	5 ... 240	100	10	SPST	-10 ... +70	•	IP 67	1	PVC 2 x 0,12	30	M/71/LSU/1V

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering, Norgren Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.