

SHORT STROKE HYDRAULIC CYLINDERS

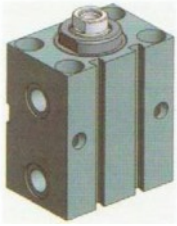
(Stroke 20 to 100mm)

CM → Magnetic Version, body in aluminium, till 160 bar

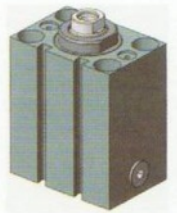
CS → Version without magnet, body in aluminium, till 160 bar

CSA → Version without magnet, body in steel, till 250 bar

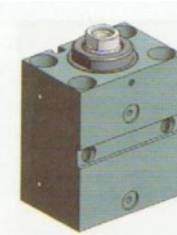
Feed



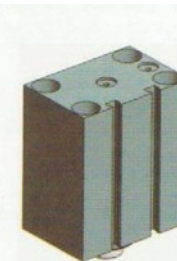
Base feed (X)



Front feed (A)



Side feed (L)



Rear Feed (P)

ØD	Thrust cm ²	Taction cm ²	Force at 80 bar kN		Force at 100 bar kN		Force at 120 bar kN		Force at 160 bar kN	
			S	T	S	T	S	T	S	T
25	4.90	2.36	3.92	1.89	4.90	2.36	6.12	2.95	7.84	3.77
32	8.03	4.23	6.42	3.38	8.03	4.23	10.03	5.28	12.85	6.77
40	12.56	8.76	10.05	7.01	12.56	8.76	15.70	10.95	20.09	14.01
50	19.62	13.47	15.69	10.77	19.62	13.47	24.52	16.83	31.39	21.55
63	31.15	25	24.92	20	31.15	25	38.94	31.25	49.84	40
80	50.24	40.62	40.19	32.49	50.24	40.62	62.80	50.77	80.38	64.99
100	78.5	62.6	62.80	50.08	78.5	62.60	98.12	78.25	125.6	100.16

Description and Applications

Designed for use in the numerous industrial automation functions.

The bodies are the very compact and robust compact type.

They guarantee very high performance for constant, safe functioning over a long period without any particular need of maintenance.

The speed of intervention in applying pressure and very strong force in relation to their sizes are the two most noteworthy characteristics they possess.

Version with magnetic sensors equipped with a magnet assembled on the piston, which, through its magnetic field, enables the action of the magnetic sensors, which, inserted in the cylinder body detect the intermediary and final positions of the piston.

They can be attached to either a front flange or a lateral key.

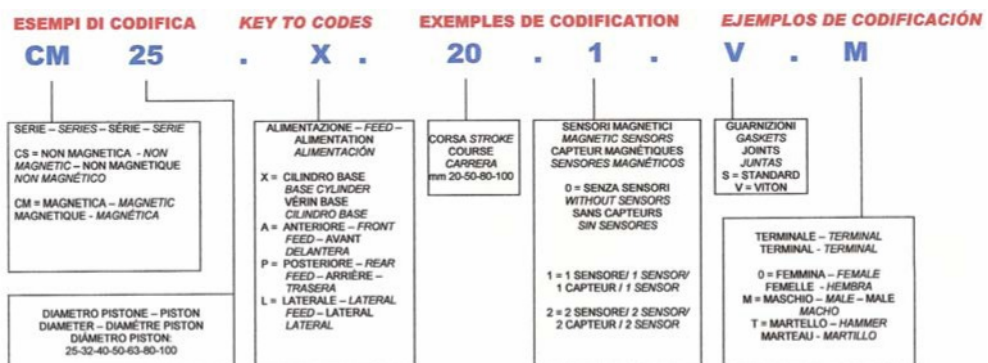
Maximum cylinder speed m/s 0.05

Tolerance of the stroke -0 + 1mm

The end of stroke cylinder impact speed must never exceed 0.1 m/s

We recommend the use of flow adjusters to limit speed.

Key to codes



SHORT STROKE HYDRAULIC CYLINDERS (Magnetic Sensor)

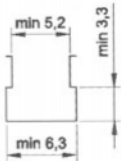
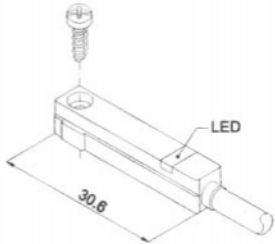
Viton gaskets for high temperature (not-magnetic cylinders)
Only -10°C +120°C)

Not Standard stroke by spacer

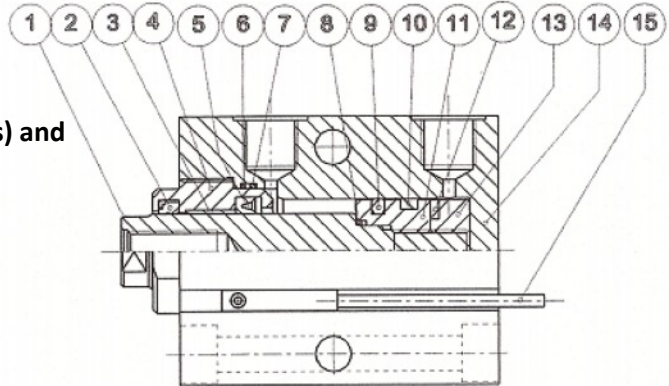
Body and piston in light alloy of aluminium (CS-CM versions) and
body in steel (CSA vers.)

Rod and guide flange in steel, Gaskets in PTFE+NBR

Standard Magnetic Sensor



Contact	N.O
Voltage drop	3.5V
Power Max	20W
Tension	3 à 130 AC/DC
Current Max	100mA
Sheath	PVC



PARTI DEL CILINDRO

- 1) Stelo cromato
- 2) Guarnizione e raschiastelo
- 3) Boccia guida stelo
- 4) Ghiera guida stelo
- 5) Guarnizione tenuta stelo
- 6) Antiestrusore
- 7) Guarnizione O-ring
- 8) Guarnizione O-ring
- 9) Guarnizione
- 10) Fascetta di guida
- 11) Pistone
- 12) Anello magnetico
- 13) Flangia porta magnete
- 14) Corpo cilindro
- 15) Sensore

PART OF CYLINDER

- 1) Chrome plated rod
- 2) Gasket and scraper
- 3) Bush
- 4) Nut
- 5) Gasket
- 6) Ant extruder
- 7) Gasket O-ring
- 8) Gasket O-ring
- 9) Gasket
- 10) Guide clamp
- 11) Piston
- 12) Magnetic ring
- 13) Flange
- 14) Body
- 15) Sensor

Description and Instruction for sensor use

The magnetic sensors assembled on the CM hydraulic cylinders series are reed type, which guarantee the bearing of a precise and continuous position of the piston, a very important characteristic in Moulding processes.

The possibility of using magnetic sensors for detecting position in replacement for the traditional Mechanical switches greatly installation, is considerably less expensive and improves performance, above all in those applications which require very frequent interventions and a rapid reaction. These magnetic sensors offer high repetitive position precision and high mechanical sturdiness also in Environments which are particularly demanding .

Be careful never any circumstances to exceed the maximum change current, the operating voltage or the maximum change capacity of the sensor.

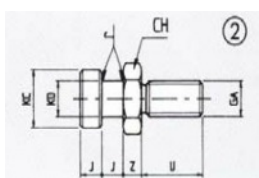
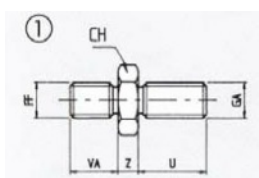
To get maximum life out of the sensors we recommend using them at lower voltage than those indicated in the table.

Under no circumstances use the sensors to light filament lamps.

Peaks of current caused by capacitive loads (cables exceeding 3m. In length) or peaks in voltage caused by electrovalves, relays, switches, impulse counters, etc.. may sensibility reduce the normal life span of the sensors.

When bench adjusting the sensors we recommend using and ohmic set tester.

In order to avoid possible magnetic distortions or faults where the housing for the magnetic sensor is positioned inside iron masses (as for example inside a mould) there must be sufficient distance between the body of the cylinder and the iron mass.



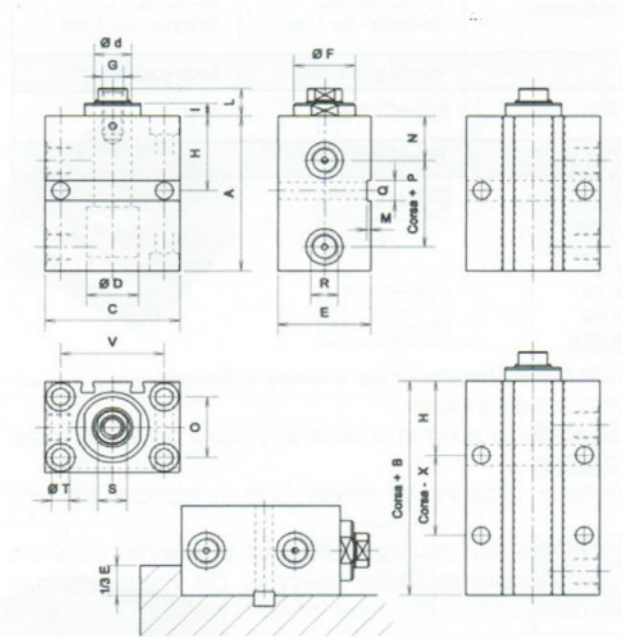
∅D	CH	FF	GA	J	KC	KD	VA	U	r	Z
25	17	M10x1.25	M10	7	16	10	14	19.5	0.5	6
32	19	M12x1.25	M12	8	18	11	16	20	0.5	7
40	22	M14x1.5	M14	8	18	11	18	26	0.5	8
50	30	M20x1.5	M20	10	22	14	28	28	0.5	9
63	30	M20x1.5	M20	10	22	14	28	28	0.5	9
80	36	M27x2	M27	12.5	28	18	36	39	0.8	12
100	46	M33x2	M33	16	35	22	45	45	0.8	14

SHORT STROKE HYDRAULIC CYLINDERS

(Dimensions)

Dimensions

ØD	Ød	B	C	E	F	G
25	18	57	65	45	30	M10
32	22	60	75	55	34	M12
40	22	73	85	63	34	M14
50	28	75	100	75	42	M20
63	28	85	115	85	50	M20
80	35	100	140	110	60	M27
100	45	110	170	140	72	M33



Dimensions

ØD	H	I	L	M	N	O	P	Q	R	S	T	V	X	WA	W	Y	K	KA	GA	KB	KK
25	37	6.5	14	2	22	30	23	10	G1/4	15	8.5	50	10	10	3	1.3	51	22	M10	28	25.5
32	40	8	15	3	22	35	26	12	G1/4	18	10.5	55	10	10	3	1.3	60	22	M12	31	30
40	43	7	17	3	24	40	35	12	G1/4	18	10.5	63	5	10	4	1.3	65	24	M14	39	32.5
50	45	8	20	5	25	45	33	15	G1/4	24	13	76	5	10	4	1.3	80	25	M20	40	40
63	55	7	20	5	29	55	36	15	G1/4	24	13	90	10	13	5	1.3	95	29	M20	41	47.5
80	60	7	20	5	35	75	40	20	G1/4	30	17	110	10	13	6	1.3	118	35	M27	48	59
100	70	8	25	5	37	95	45	20	G1/4	40	17	135	20	13	7	1.3	140	37	M33	53	70

A= Rod Return
B= Rod Leaving

Oil Feed by o-ring holding gaskets
The o-ring gaskets are included in the supply

