



Order example

MCHG – 50 M – OS

MODEL

BODY
DIAMETER
50, 64,
125, 160

M: Magnet

Mechanical gripping
force safety device for
O.D. gripping even with
a drop pressure

Features

- Compact, yet rugged design enables high clamping force from the jaws.
- Body manufactured from high tensile, anodised aluminum giving good resistance to corrosion.
- Available with sensors.
- Available with sprung loaded sensor plate.
- Low overall height with long stroke on jaws.

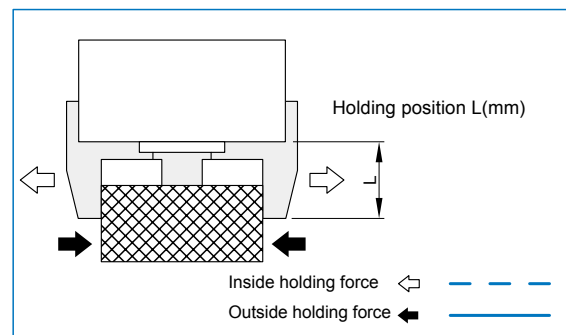
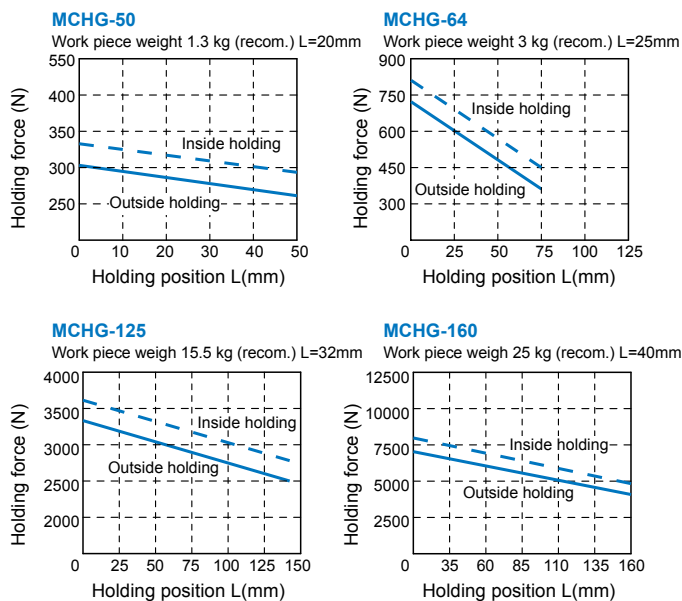
Specification

Model	MCHG			
Acting type	Double acting			
Body diameter (mm)	50	64	125	160
Stroke (mm)	8	12	26	32
Medium	Air			
Operating pressure range	0.1~0.6 MPa			
Ambient temperature	-10°C~+60°C (No freezing)			
Repeatability	± 0.05 mm			
Lubrication	Not required			
Sensor switch (*1)	RH: Reed switch, RHN: NPN, RHP: PNP			
Weight (kg)	0.23	0.41	2.4	4.7

* 1. RH specification, please refer to page 5-12.

* 2. Maintenance: Re-Lubrication after appr. 1.5 million cycles recommended.

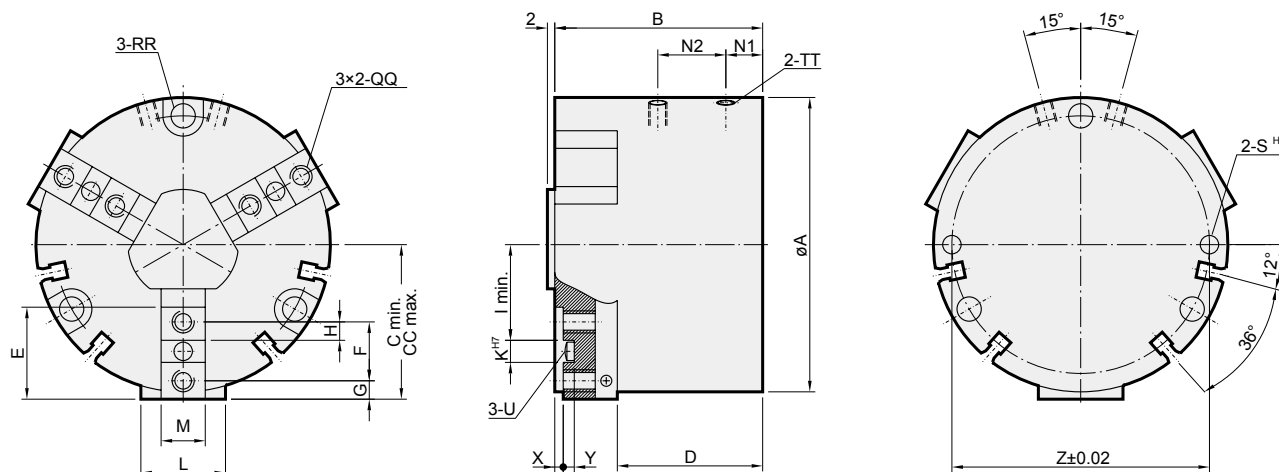
Gripping force in relation to the holding position "L" at 0.6 MPa



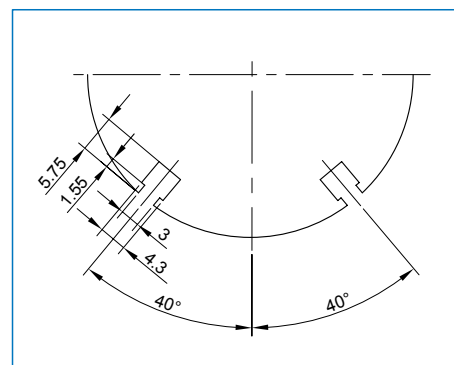
* With reference to the holding force, under the condition must be considered.

Condition: friction coefficient, great acceleration impact is expected during work piece rotate.

* Recommend: Select a type of arithmetic holding force that can produce 10 to 20 times for work piece weight.



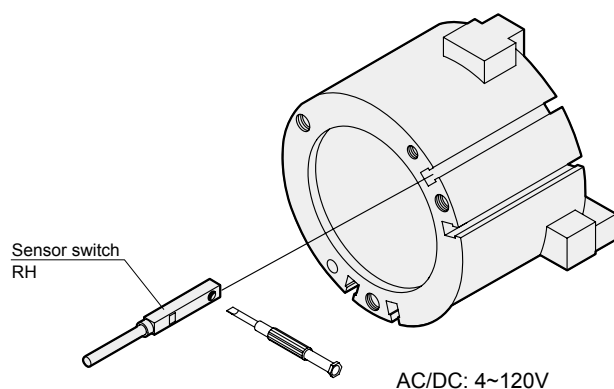
MCHG-50 auto switch mounting groove position



Code Model	A	B	C	CC	D	E	F	G	H	I	K
MCHG-50	50	39	26.5	30.5	28	18	12	3	3.5	15	5
MCHG-64	64	47.6	32	38	32	20	13	4	4	19	5
MCHG-125	125	76	65.5	78.5	53.5	40	24	8.5	8	41	8
MCHG-160	160	95	85	101	67	50	32	9	11	55	10

Code Model	L	M	N1	N2	RR	QQ	S	TT	U	X	Y	Z
MCHG-50	14	8.2	8.1	14.8	$\phi 3.4$ thru, 7C/B $\times$ 5dp P.C.D44	M3 $\times$ 0.5 $\times$ 7dp	$\phi 3 \times 8$ dp	M5	$\phi 4$	—	2	45
MCHG-64	17	10.2	10	16.5	$\phi 5.5$ thru, 10C/B $\times$ 6dp P.C.D56	M4 $\times$ 0.7 $\times$ 8dp	$\phi 4 \times 10$ dp	M5	$\phi 4$	3	2.5	56
MCHG-125	30	16.2	13.5	28.5	$\phi 8.5$ thru, 15C/B $\times$ 9dp P.C.D112	M6 $\times$ 1.0 $\times$ 12dp	$\phi 6 \times 16$ dp	Rc1/8	$\phi 6$	3	3.5	112
MCHG-160	40	20.2	15.5	32.5	$\phi 9$ thru, 15C/B $\times$ 9dp P.C.D146	M8 $\times$ 1.25 $\times$ 20dp	$\phi 6 \times 20$ dp	Rc1/8	$\phi 8$	4	4	146

Installation of sensor switch

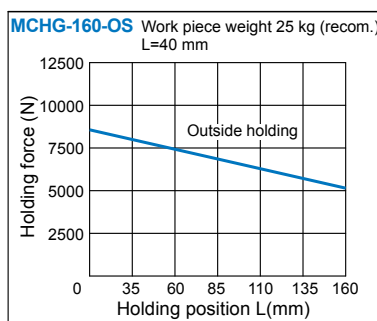
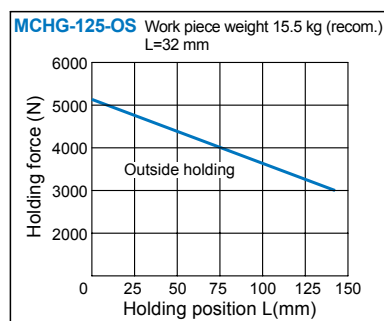
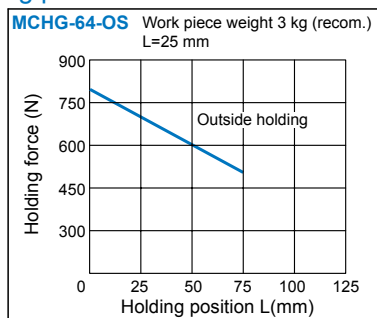
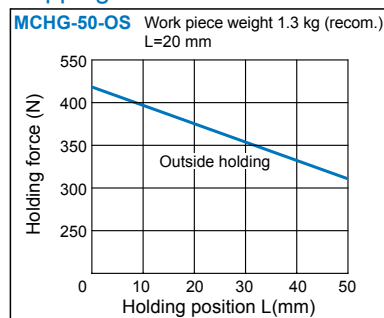


Gripping force safety device

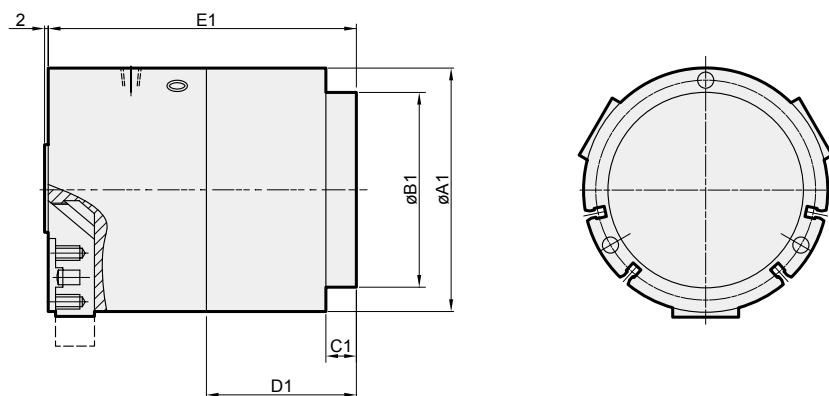
Operating pressure min.5 bars, max. 6.5 bars

Gripping force = pneum. gripping force + spring force.

Gripping force in relation to the holding position "L" at 0.6 MPa

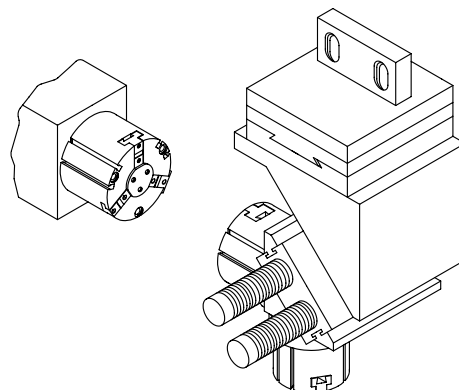
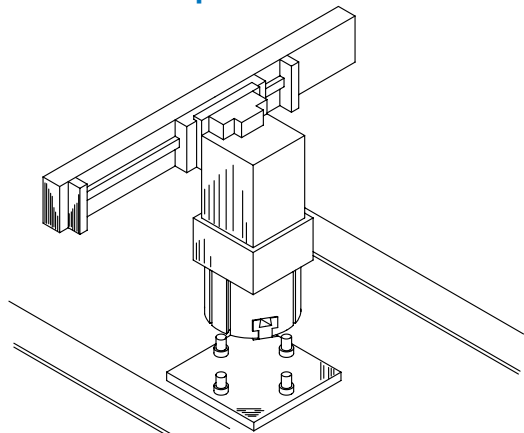


Gripping force safety device for O.D gripping, even with a drop in pressure.

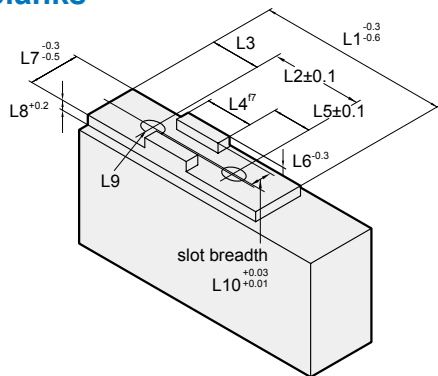


Code Model	A1	B1	C1	D1	E1
MCHG-50-OS	50	—	—	19.2	58.2
MCHG-64-OS	64	45	5	25	72.6
MCHG-125-OS	125	97	5	37	113
MCHG-160-OS	160	128	5	46	141

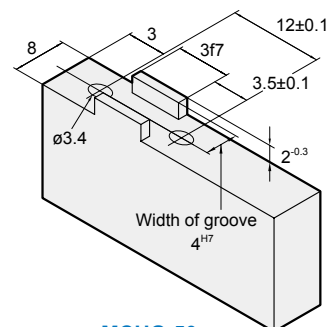
Application examples



Finger blanks

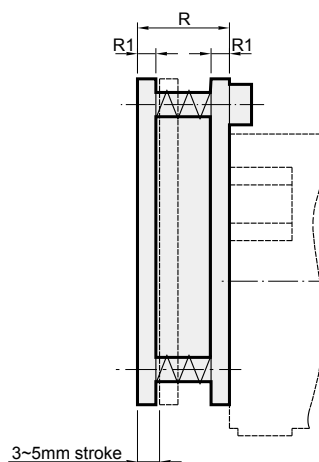
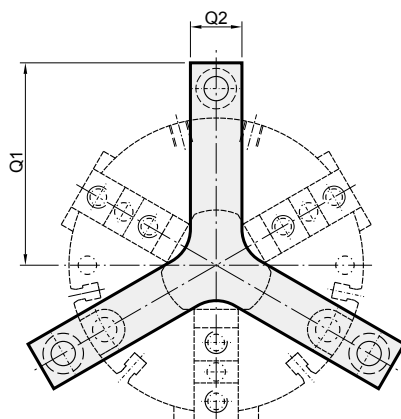


MCHG-64~160



MCHG-50

Spring-packaged Pressure Plate



Code Model	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Q1	Q2	R	R1
MCHG-50	—	12	3	5	3.5	2	8	—	$\phi 3.4$	4	38	12	25	5
MCHG-64	20	13	4	5	4	2.5	10.2	4.5	$\phi 4.5$	4	44	14	25	5
MCHG-125	40	24	8.5	8	8	3.5	16.2	5.5	$\phi 6.6$	6	85	20	25	6
MCHG-160	50	32	9	10	11	4	20.2	6.5	$\phi 9$	8	100	25	25	6