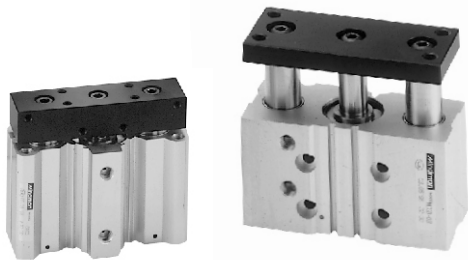


MCG* series Stop / Lift / Push

TWIN-GUIDE CYLINDER

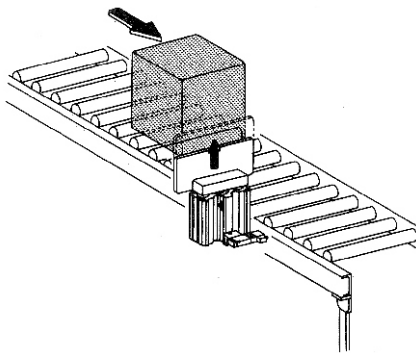


Several uses

- Stopper cylinder
- Lift cylinder
- Pusher cylinder

S-function

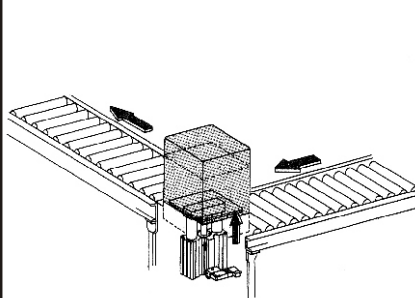
Stopper cylinder



Tough type of stopping a large-load work carrier at a fixed point, and for the straggle of a number of work carriers, etc.

L-function

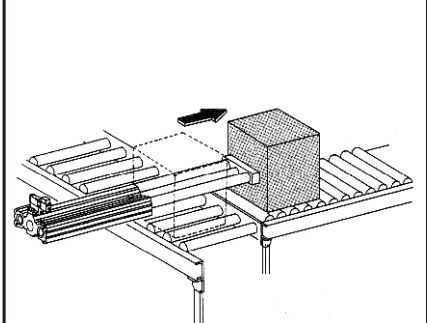
Lift cylinder



Special design which stands the large one-sided load. Lifts the work carrier at a fixed point not changing the posture.

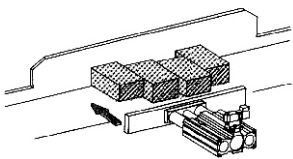
P-function

Pusher cylinder



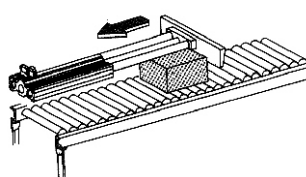
Long strokes available, the highly precise pushing work transfers and places a work carrier and changes the direction.

Multi purpose



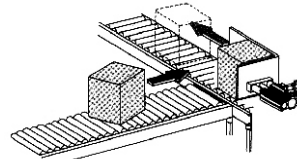
Arranges in line

Arranges the work carriers in line which have the same side face and which have been carried on the free flow line.



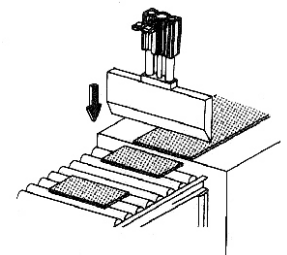
Draws in

Draws in the work carrier for the length of the stroke and slide it on the conveyor line.



Arranges the posture

Arranges the posture of a work carrier and push it out.



Cuts sheets

Can be used as a power source of sheets shearing machine.

MCG3 series Lift / Turntable

TRIPLE-GUIDE CYLINDER



Features:

- Three guide rods equally spaced in the aluminum body provide more space saving and eliminate the directionality of the unbalanced load.
- Conveyor line's productivity increases.
- By connecting with the Rotary actuator, can be used as a Automatic turn lifter.

Specification:

| Model | MCG3 | |
|---------------------------|---|--------------|
| Model (Stop type view) | (Lift type) (Turntable type) | |
| Acting type | Double acting | |
| Tube I.D.(mm) | 63 | 80 |
| Port size Rc(PT) | 1/4 | 3/8 |
| Standard stroke | 30, 50, 75, 100 mm | |
| Medium | Air | |
| Operating pressure range | 1~9.9 kgf/cm ² | |
| Proof pressure | 15 kgf/cm ² | |
| Ambient temperature | -5~+60°C (No freezing) | |
| Lubrication | Not required | |
| Cushion | With rubber cushion pad | |
| Sensor switch | RCE,RCE1 | RCB,RCE,RCE1 |

Order example:

MCG3 — 63 — 50 — D — BSP

MODEL

STROKE*

TUBE I.D.

63
80: only for life type

APPLICATION / TYPE OF BEARING

| Code | Purpose / Type of bearing |
|-------------|--|
| D | Circle table lift / Slide bearing |
| B | Circle table lift / Linear bush bearing |
| D90 | Turntable / Angle 90° / Slide bearing |
| B90 | Turntable / Angle 90° / Linear bush bearing |
| D180 | Turntable / Angle 180° / Slide bearing |
| B180 | Turntable / Angle 180° / Linear bush bearing |
| QD | Quad table lift / Slide bearing |
| QB | Quad table lift / Linear bush bearing |

PORT THREAD
Blank: PT thread
BSP: BSP thread
NPT: NPT thread

*Stroke out of specification is also available.

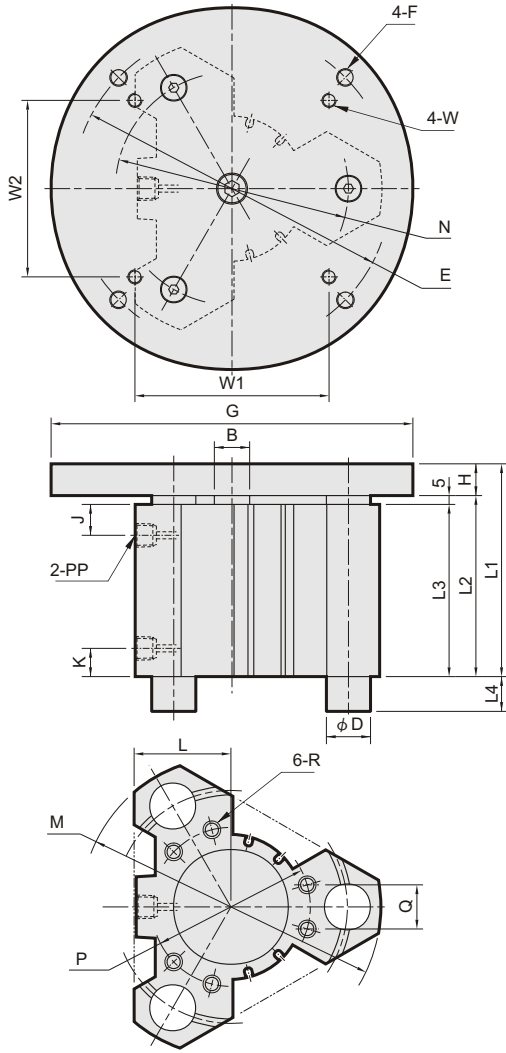
MCG3 Lift / Turntable

TRIPLE-GUIDE CYLINDER



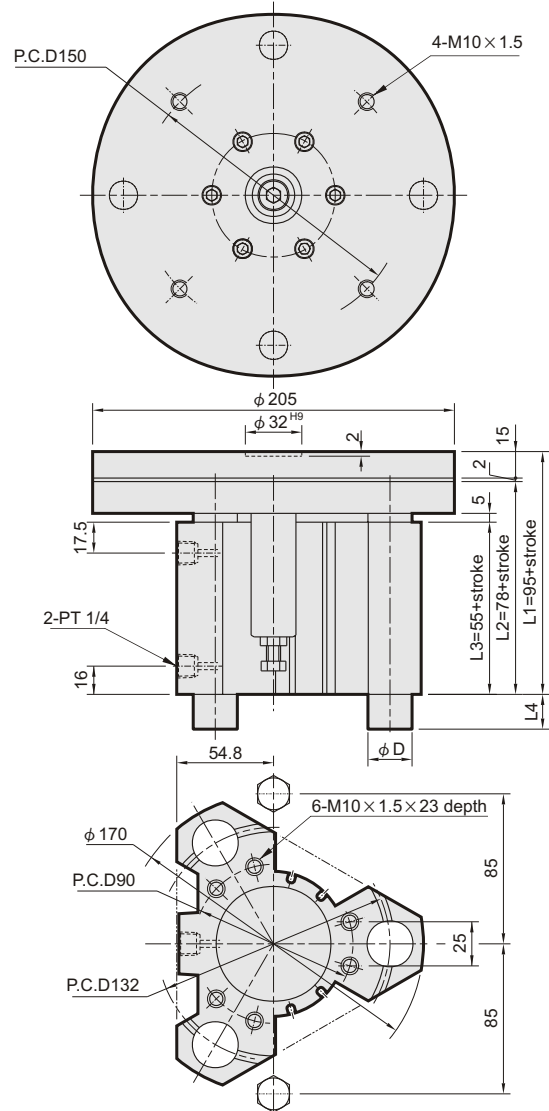
MCG3-D/B

(Life type)



MCG3-D90/B90/D180/B180

(Turntable type)



MCG3-D/B

| Code Tube I.D. | B | E | F | G | H | J | K | L | M | N | P | PP | Q | R | W | W1 | W2 |
|-------------------|--------|----------|---------|---------|----|------|----|------|---------|----------|----------|-------|----|-----------------|---------|-----|-----|
| 63 | phi 20 | P.C.D180 | M10x1.5 | phi 205 | 18 | 17.5 | 16 | 54.8 | phi 170 | P.C.D132 | P.C.D90 | PT1/4 | 25 | M10x1.5x23depth | M8x1.25 | 110 | 100 |
| 80 | phi 25 | P.C.D190 | M10x1.5 | phi 220 | 18 | 17.5 | 16 | 61.2 | phi 190 | P.C.D150 | P.C.D106 | PT3/8 | 32 | M10x1.5x23depth | M8x1.25 | 110 | 100 |

| Tube I.D. | L1 | | | | L2 | | | | L3 | | | |
|-----------|-------------|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|
| | Stroke (mm) | | | | | | | | | | | |
| | 30 | 50 | 75 | 100 | 30 | 50 | 75 | 100 | 30 | 50 | 75 | 100 |
| 63 | 108 | 128 | 153 | 178 | 90 | 110 | 135 | 160 | 85 | 105 | 130 | 155 |
| 80 | 118 | 138 | 163 | 188 | 100 | 120 | 145 | 170 | 95 | 115 | 140 | 165 |

| Tube I.D. | L4 | | phi D | |
|-----------|--------|--------|--------|--------|
| | MCG3-D | MCG3-B | MCG3-D | MCG3-B |
| 63 | 0 | 26 | phi 25 | phi 16 |
| 80 | 0 | 25 | phi 28 | phi 20 |

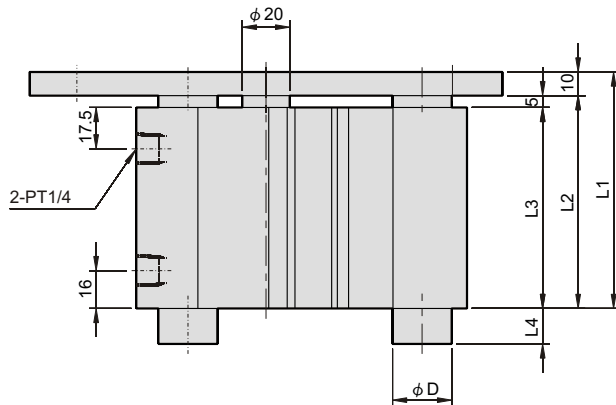
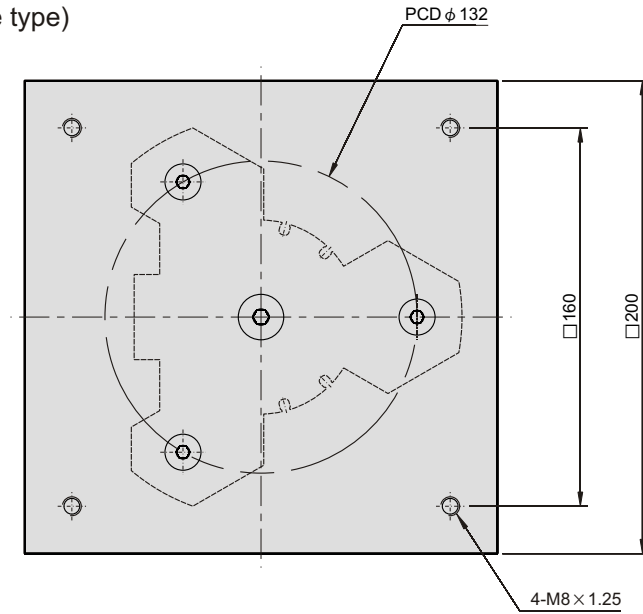
MCG3-D90/B90/D180/B180

| Tube I.D. | L1 | | | L2 | | | L3 | | |
|-----------|-------------|-----|-----|-----|-----|-----|----|-----|-----|
| | Stroke (mm) | | | | | | | | |
| | 30 | 50 | 100 | 30 | 50 | 100 | 30 | 50 | 100 |
| 63 | 125 | 145 | 195 | 108 | 128 | 178 | 85 | 105 | 155 |

| Tube I.D. | L4 | | phi D | |
|-----------|------------|------------|------------|------------|
| | D90 / D180 | B90 / B180 | D90 / D180 | B90 / B180 |
| 63 | 0 | 26 | phi 25 | phi 16 |

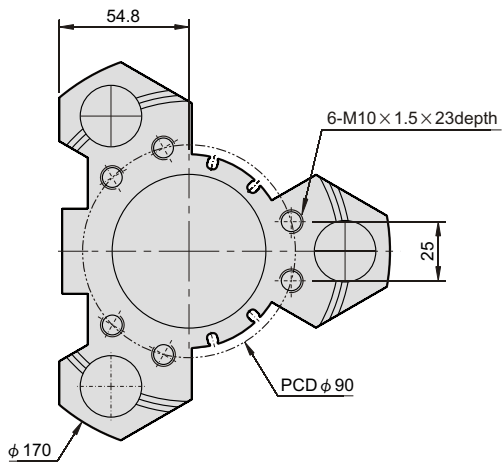
MCG3-QD/QB

(Life type)



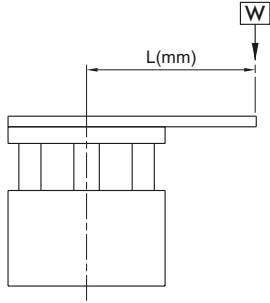
| Tube I.D. | Stroke (mm) | L1 | L2 | L3 |
|-----------|-------------|-----|-----|-----|
| 63 | 30 | 100 | 90 | 85 |
| | 50 | 120 | 110 | 105 |
| | 75 | 145 | 135 | 130 |
| | 100 | 170 | 160 | 155 |

| Tube I.D. | L4 | | ϕD | |
|-----------|---------|---------|-----------|-----------|
| | MCG3-QD | MCG3-QB | MCG3-QD | MCG3-QB |
| 63 | 0 | 26 | $\phi 25$ | $\phi 16$ |



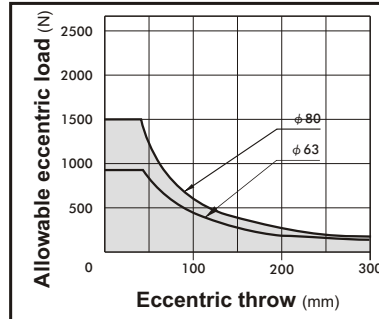
Allowable eccentric load :

(at supply pressure 0.5MPa)

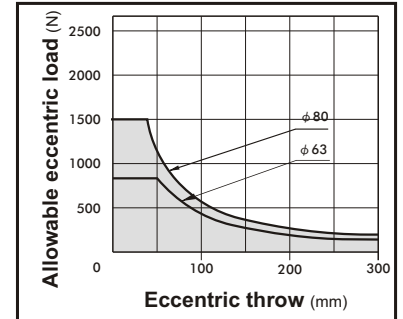


Shows the dynamic allowable value at L(mm) eccentricity from the center of the guide rod.

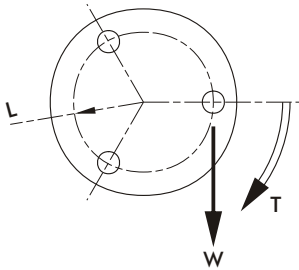
MCG3-D/D90/D180



MCG3-B/B90/B180



Allowable rotating torque :

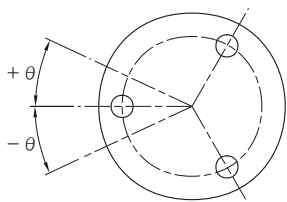


Shows the dynamic allowable value, when actuating the cylinder with a rotating torque T at the guide rods' top.

| Tube I.D. | Bearing type | Stroke (mm) | | |
|-----------|---------------------|-------------|------|-----|
| | | 30 | 50 | 100 |
| φ 63 | Slide bearing | 13.2 | 12.7 | 7.6 |
| | Linear bush bearing | 13.5 | 12.7 | 8.8 |

(N.m)

Anti-roll accuracy :



The values are the deflection angle against the piston rod.

| Tube I.D. | Bearing type | Anti-roll accuracy |
|-----------|---------------------|--------------------|
| | | θ |
| φ 63 | Slide bearing | ±0.07° |
| | Linear bush bearing | ±0.03° |