

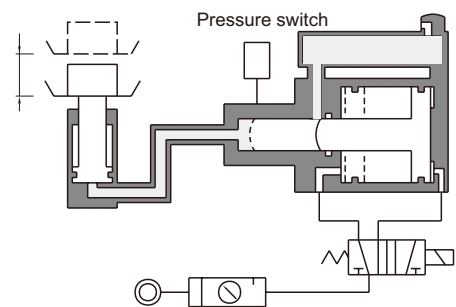


Features

- Generates high pressure by use of high pressure hydraulic fluid.
- Universal design enables unit to be used in a wide variety of applications.
- Ideal for providing the motive force for marking, punching, shearing, straightening, embossing and welding.

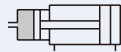
Single pressure booster

Optimum for high output, short stroke cylinder.



MHBS Single pressure type

MHBD Dual pressure type

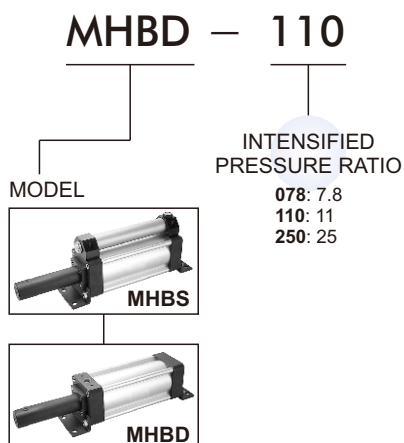


Specification

Model	Single pressure type			Dual pressure type		
	MHBS-078	MHBS-110	MHBS-250	MHBD-078	MHBD-110	MHBD-250
Intensified pressure ratio	7.8	11	25	7.8	11	25
Generated hydraulic pressure (MPa)	5.3	7.6	17.2	5.3	7.6	17.2
Discharging volume (cc)	50	120	120	50	120	120
Ambient temperature	+5~+60 °C					
Operating pressure range	0.2~0.7 MPa					
Driving fluid	Hydraulic work oil viscosity					
Mounting form	Side foot type					
Sensor switch (※)	LN02A	LN03A		LN02A	LN03A	

※ LN** A specification, please refer to page 5-15(Vol.3).

Order example



The method of calculation (Booster consumption)

$$A = (D)^2 \times \frac{\pi}{4} \text{ mm}^2$$

$$P2 = R \times P$$

$$F = A \times P2 = \text{___} \text{ N}$$

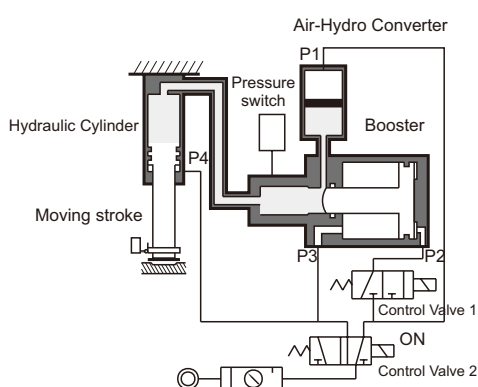
A:	Piston area	(mm ²)
D:	Piston I.D.	(mm)
F:	Cylinders force	(N)
P:	Air pressure	(MPa)
P2:	Intensified pressure	(MPa)
R:	Intensified pressure ratio	

Dual pressure booster

Points in usage

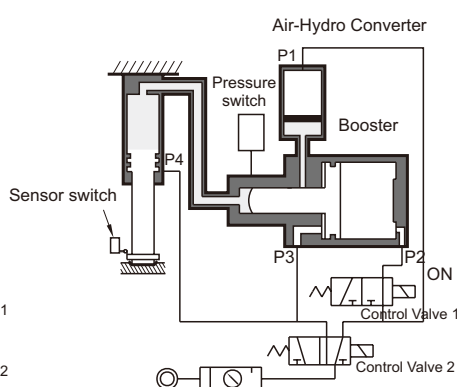
- The booster must be levelled.
- Standard booster are designed for use with petroleum base hydraulic oil.
- The booster must be higher than the work cylinder.
- Frequency of use should be 6 times/min or lower.

① Quick traverse



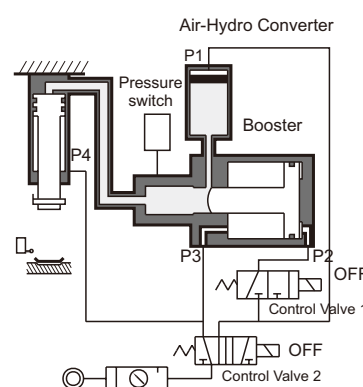
When the air is charged from the port P1, the oil in the tank will forward the hydraulic cylinder quickly. The pressure is the same as the air pressure, but the inflow of oil is large in volume.

② Intensified feeding



When the air is charged from the port P2, a ram will advance. the highly pressured fluid will come in to the hydraulic cylinder which will be forwarded by large thrust.

③ Swift reverse



When the air is send into port P4 and P3. the hydraulic cylinder is swiftly reversed. and at the same time the ram goes back.

Compressed air consumption

l / cycle

Boosters	Operating pressure (MPa)					
	0.2	0.3	0.4	0.5	0.6	0.7
MHBS-078	2.40	3.19	3.98	4.78	5.56	6.36
MHBD-078	2.40	3.19	3.98	4.78	5.56	6.36
MHBS-110	7.58	10.07	12.57	15.07	17.57	20.06
MHBD-110	7.58	10.07	12.57	15.07	17.57	20.06
MHBS-250	18.09	24.06	30.02	35.99	41.95	47.92
MHBD-250	18.09	24.06	30.02	35.99	41.95	47.92

How to order the seal kit

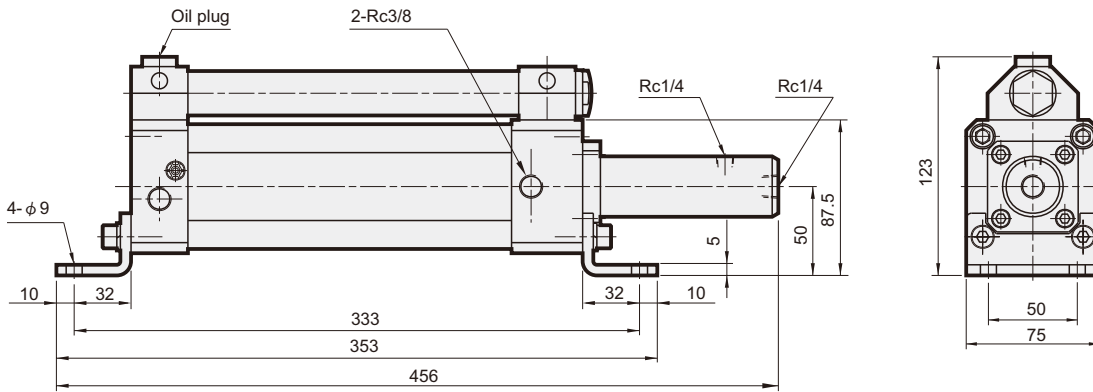
Model	Code
MHBS-078	MHBSSK-078
MHBD-078	MHBDSK-078
MHBS-110	MHBSSK-110
MHBD-110	MHBDSK-110
MHBS-250	MHBSSK-250
MHBD-250	MHBDSK-250

Booster weight

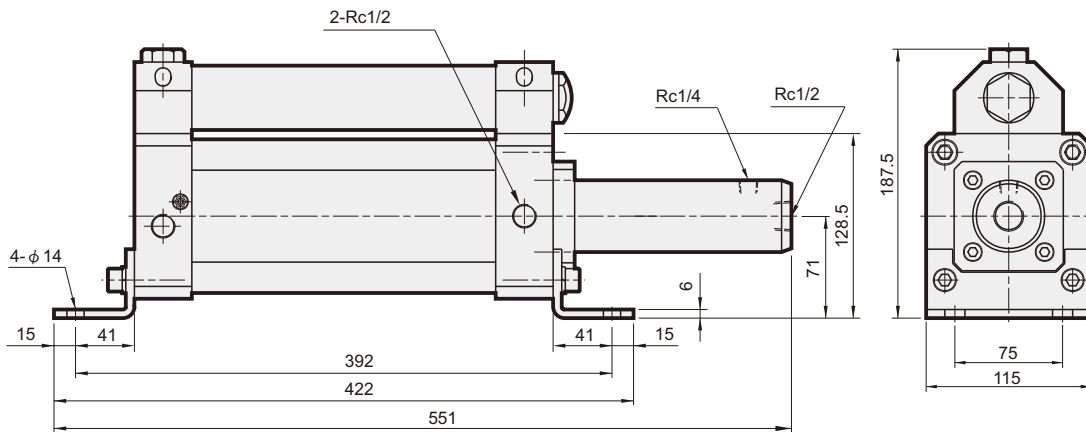
Unit: kg

Type	MHBS	MHBD
	078	3.4
110	10.1	9.1
250	20.0	18.0

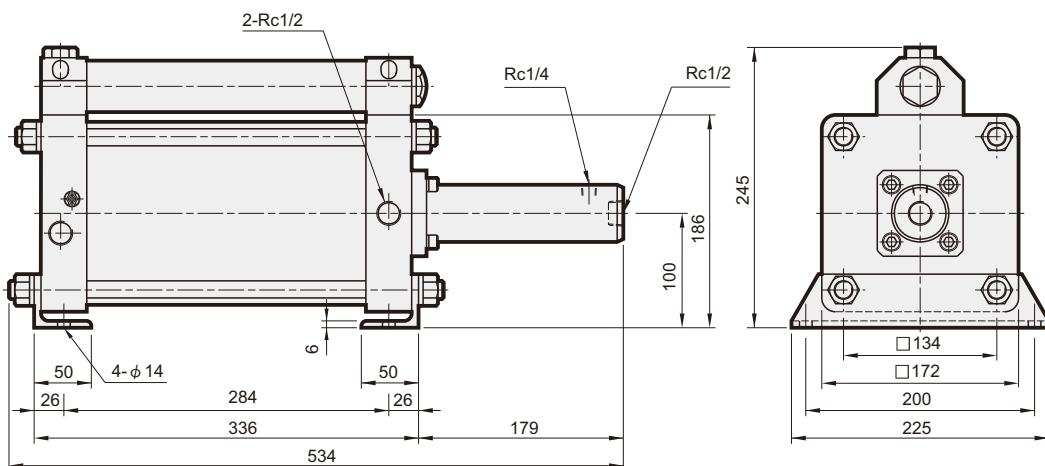
MHBS-078



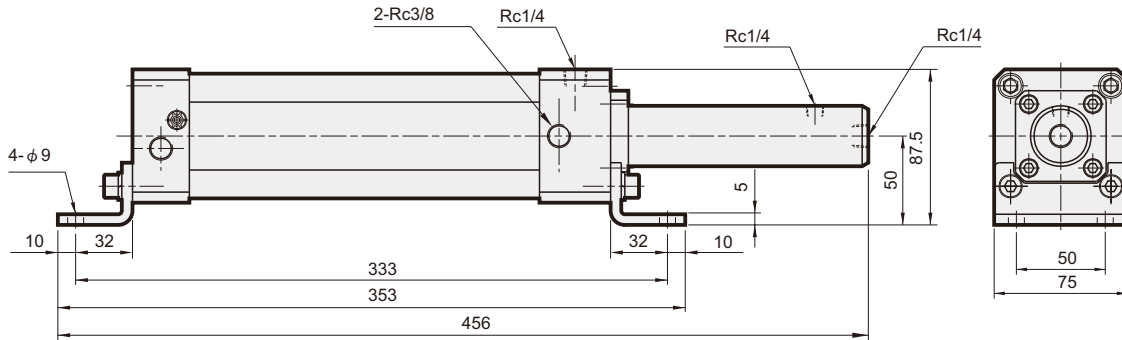
MHBS-110



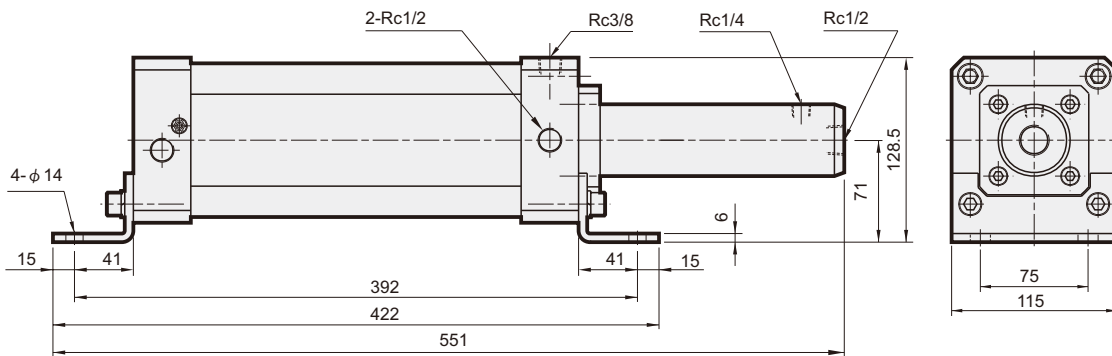
MHBS-250



MHBD-078



MHBD-110



MHBD-250

