Boosters series MHB are used for generating of high pressure of hydraulic oil by air with common pressure. They are designed to save energy, time, space and money in wide variety of applications. These abilities and benefits of power cylinders make them ideal component in many applications, you can use them for such operation as marking, forming, punching riveting, shearing, stearing, straightening, and so on.

For more information, please visit our web page on www.sappv.cz/r/w13e

Working pressure	0,2 to 0,7 MPa
Temp. range	+5°C to +60°C
Working medium	modified compressed air
Installation	horizontal

2

Type	078	110	250
Intensified pressure ratio	7.8	11	25
Max. oil pressure at air pressure 0.7 MPa [MPa]	5.3	7.6	17.2
Max. discharged oil volume at high pressure [ml]	50	120	120
Recommended oil	hydraulic petroleum oil ISO 68		

Order codes

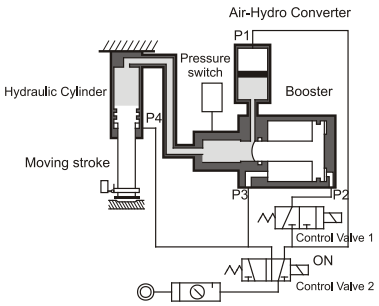
P MHBD 110

Booster	
MHBS	single pressure 
MHBD	double pressure 

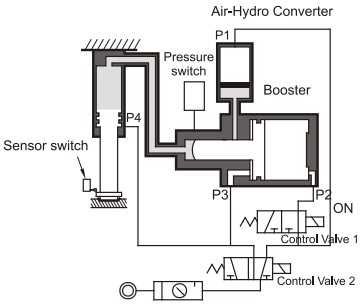
Type	
078	ratio 7,8x
110	ratio 11x
250	ratio 25x

Operating principle
of double pressure booster MHBD

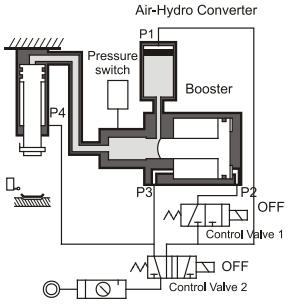
This type of booster is used for applications, where the auxiliary stroke with low force and working short stroke with big force is needed. Working stroke then conform to the oil volume, which is discharged by booster. Auxiliary stroke depends on volume of external air-hydro converter (which isn't in the supply).



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.

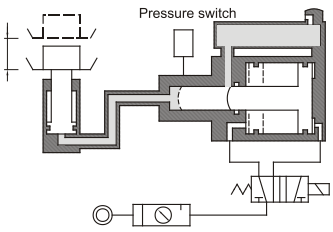


Intensified feeding
When the air is charged from the port P2, a ram will advance. the highly pressured fluid will come in to the hydraulic cylinder which will be forwarded by large thrust.



Swift release
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.

Operating principle
of single pressure booster MHBS



Booster can be used for short stroke hydraulic cylinders, for which is volume discharged by booster sufficient. In this case, any 5/2 valve can be used for control of booster and hydraulic cylinder, which copy the movement of booster.

Notice

- booster must be levelled
- booster must be placed higher than hydraulic cylinder
- frequency of use should be 6 times/min or lower