

M- HC25 miniBOOSTER



M- HC25 for fast forward movement of cylinder

Versions: 11 different intensification factors

P_{IN}: 20 – 207 bar (inlet pressure)

P_H: 800 bar maximum (outlet pressure)

P_{RETURN}: As low as possible (return pressure to tank)

P_{OUTLET}: $P_H = (P_{IN} - P_{Return}) \times I$ (intensification)

Accessories: Pilot- operated dump valve available

A model = no dump valve

B model = with dump valve

Description

The M- HC25 is a compact field unit weighing only 5.0 kg. It is ideal for use in a variety of applications where building and maintaining high pressure is required.

The M- HC25 incorporates a counterbalance valve, which allows fast- forward movement of a cylinder by directing the full inlet flow to pass directly through the booster section until the set pressure has been reached. Then the counterbalance valve opens, and the booster starts oscillating.

The M- HC25 booster will automatically stall when the high- pressure side H is reached. The booster will continuously compensate for oil consumption to maintain the high pressure. Adjustment of the outlet pressure is carried out by varying the supplied pressure.

An optional orifice can be mounted in the booster to reduce inlet flow to the maximum allowed for the intensification ratio selected.

Flow rates

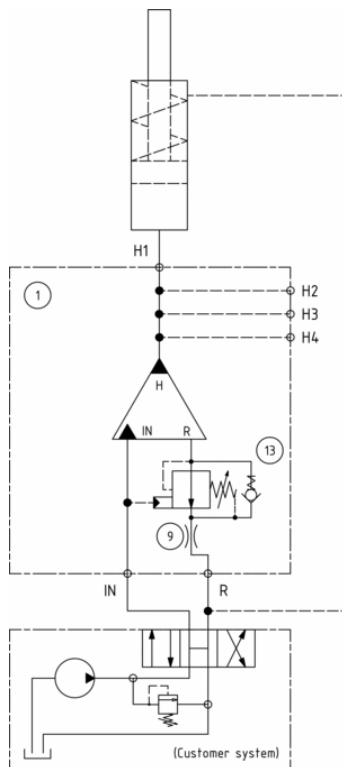
Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
1.2	1.2	8.0
1.5	1.0	8.0
2.0	2.0	12.0
2.8	2.2	13.0
3.2	2.5	15.0
4.0	2.0	14.0
5.0	1.6	14.0
6.6	1.3	13.0
9.0	0.9	13.0
13.0	0.6	12.0
20.0	0.3	12.0

Functions

The basic operation is illustrated in the function diagram. Oil is fed through the directional valve (in the customer system) to the IN port, flowing freely through the internal check valves to the high- pressure side H.

When pump pressure is reached on the high- pressure side H, the internal check valves will close. The end pressure will be achieved by the oscillating pump unit OP. The unit will automatically stall when the high- pressure side H is reached. If a pressure drop on the high- pressure side exists due to consumption or leakage, the OP valve will automatically operate to maintain the end pressure.

Function Diagram



 Download PDF file: **0-405-02. Function diagram**

Dimensions

 Download PDF file: **M- HC25-00_Asembly drawing**

Connection types

Connection	P / T / Z	H
1	M14 x 1.5 / 24° cone	1/4" BSPP

Max. tightening torque BSPP

	P / T / Z	H
	M14 x 1.5	1/4" BSPP
with steel washer	4.0 da/ Nm	4.0 da/ Nm
with aluminium washer	3.0 da/ Nm	–
with cutting edge	4.0 da/ Nm	4.0 da/ Nm

Fluids and materials

Please see: General specifications

Ordering an M- HC25

Ordering example of an M- HC25 with $i = 4.0$, DV incorporated and BSPP connections: M- HC25 - 4.0 - B - 1

Model	Intensification, i	Dump valve	Connections
M- HC25	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	