HC25 miniBOOSTER

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)

Mounting: Inline tube

Accessories: Pilot- operated dump valve available

A model = no dump valve
B model = with dump valve

Material certificate 3.1 on request

Description

The HC25 is a compact unit weighing only 2.3 kg. It is ideal for use in a variety of applications where building and maintaining high pressure is required.

The 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 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

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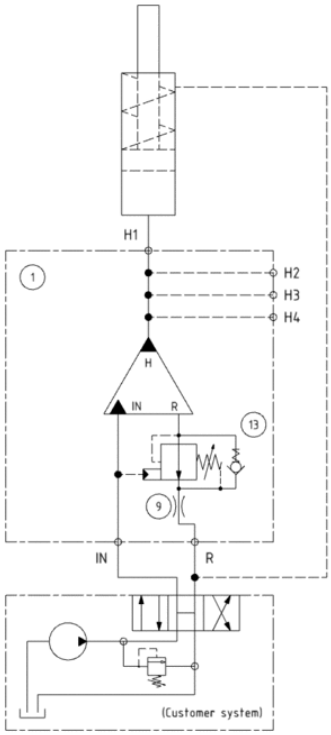
Functions

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: **2-137-01._Assembly drawing**

Connection types

Connection	IN/ R	H1	H2, H3, H4
1	1/4" BSPP	1/4" BSPP	On request
2	7/16-20 UNF	9/16-18 UNF	On request

Max. tightening torque BSPP

	IN / R	H1
	1/4" BSPP	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

Max. tightening torque UNF

	IN / R	H1
	7/16-20" UNF	9/16-18" UNF
with o- ring	2.0 da/ Nm	3.5 da/ Nm

Fluids and materials

Please see: General specifications

Ordering an HC25

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

Model	*Intensification, i*	*Dump valve*	*Connections*
HC25	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	2