

HC22 miniBOOSTER



HC22 with adjustable outlet pressure

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

G model = direct proportionally controlled

Material certificate 3.1 on request

Description

The HC22 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 HC22 raises supplied pressure to a higher outlet pressure and automatically compensates for oil consumption to maintain the high pressure.

The HC22 incorporates a Pressure Reducing Valve (PRV) to control inlet pressure to the booster section, and an optional orifice to reduce inlet flow to the maximum allowed for the intensification ratio selected.

The integrated Pressure Reducing Valve (PRV) protects both booster and high-pressure tool against too high pressure. It secures a stable high pressure regardless of changes in the tank line pressure.

Flow rates

Intensification factor <i>i</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

Dimensions

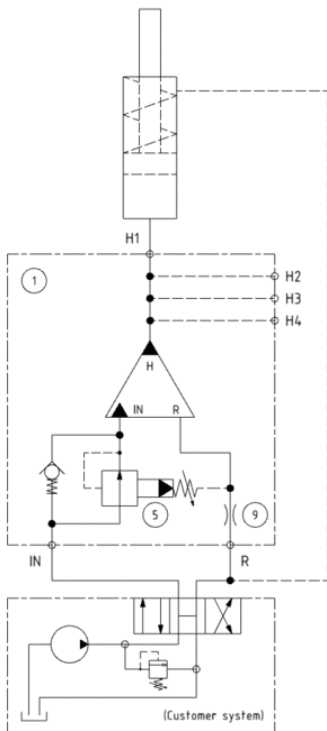
 Download PDF file: 2-136-01._Assembly drawing

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 PRV (pos. 5) and the internal check valves to the high- pressure side H. In this condition maximum flow through the booster is achieved giving a fast- forward function.

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 end pressure on 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: **0-402-02. Function diagram**

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 HC22

Ordering example of an HC22 with $i = 4.0$, DV incorporated and BSPP connections: HC22 - 4.0 - B - 1

Model	Intensification, i	Dump valve	Connections
HC22	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	2
		G = (proportional) / G model	