

HC8 miniBOOSTER



HC8 versions: 5 different intensification factors

P_{IN}: 20-207 bar (inlet pressure)

P_H: 2,000 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 incorporated.
Pressure gauge/ transducer connection available.

A model = no dump valve

B model = with dump valve

G model = direct proportionally controlled

Description

The HC8 is developed for applications where intensified pressure up to 2,000 bar are required. Operating like the HC2, the HC8 is a unique, self-contained device which, boosts inlet pressure by up to a 20:1 ratio without the use of an external power source.

In addition, the HC8 maintains high pressure by automatically compensating for consumption of oil on the high-pressure side. High pressure is directly proportional to inlet pressure. The HC8 is a compact unit weighing 4.5 kg. The HC8 works at inlet pressure from 20 to 200 bar. Higher pressure is available on special request.

Flow rates

Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
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

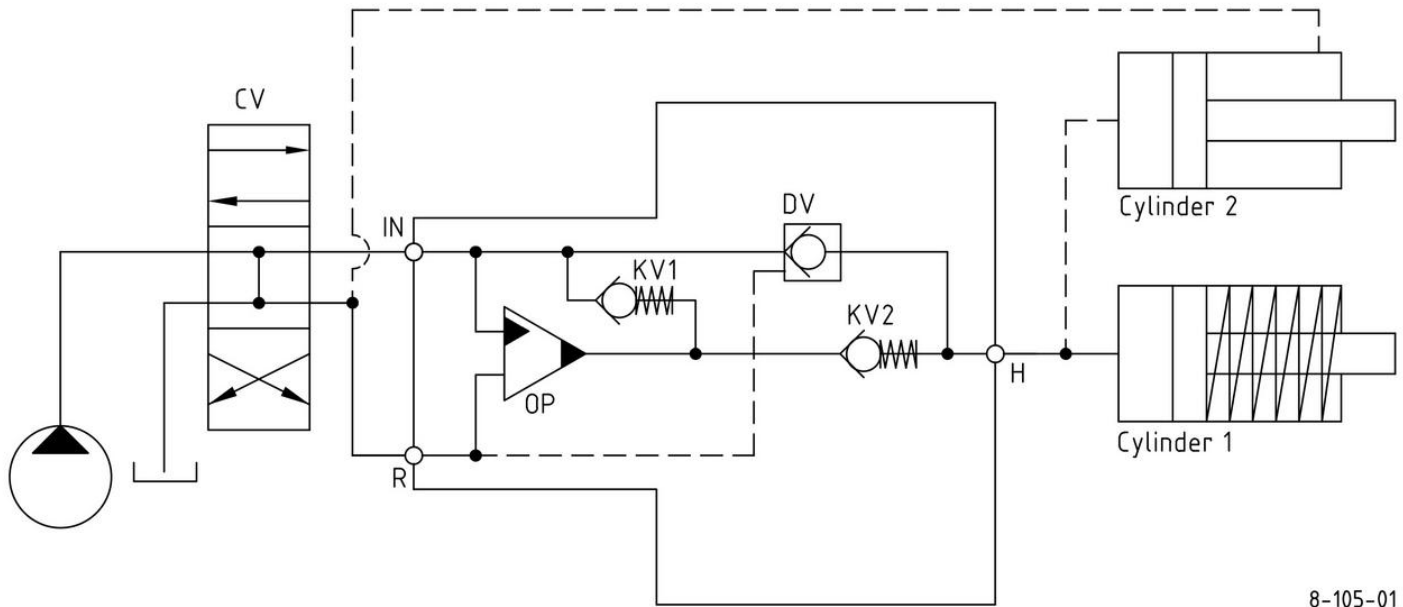
Functions

The basic operation is illustrated in the function diagram. Oil is fed through the directional valve CV to the IN port, flowing freely through the check valves KV1, KV2 and DV 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, valves KV1, KV2 and DV 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

 HC8 Function diagram 8-105-01



8-105-01

Dimensions

 Dimension drawing 8-120-15

Connection types

Connection	IN / R
1	1/4" BSPP
2	7/16-20 UNF

Max. tightening torque BSPP

	IN / R
	1/4" BSPP
with steel washer	4.0 da/ Nm
with aluminium washer	3.0 da/ Nm
with cutting edge	4.0 da/ Nm

Max. tightening torque UNF

	IN / R
	7/16-18" UNF
with o- ring	2.0 da/ Nm

High Pressure Plate

High- pressure plate ordering code and specifications can be seen from the table in the PDF- file below:



High Pressure Plate connection possibilities: 8-900-12

Fluids and materials

Please see: General specifications

Ordering an HC8

Ordering example of an HC8 with $i = 13.0$, DV incorporated and BSPP connections, mounted with high- pressure plate with HP- connection 1/4" BSPP, PG- connection 9/16-18 UNF:

HC8 - 13.0 - B - 1 with 8-285

Attention note!

High- pressure plate ordering code - see table

Other high- pressure connections on request.

<i>Model</i>	<i>Intensification, i</i>	<i>Dump valve</i>	<i>Connections</i>
HC8	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	2
		G = (proportional) / G model	