

HC3-9 miniBOOSTER



HC3-9 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}: $P_H = (P_{IN} - P_{RETURN}) \cdot i$ (intensification)

Mounting: Cartridge

Accessories: Pilot- operated dump valve available

A model = no dump valve

B model = with dump valve

G model = direct proportionally controlled

Description

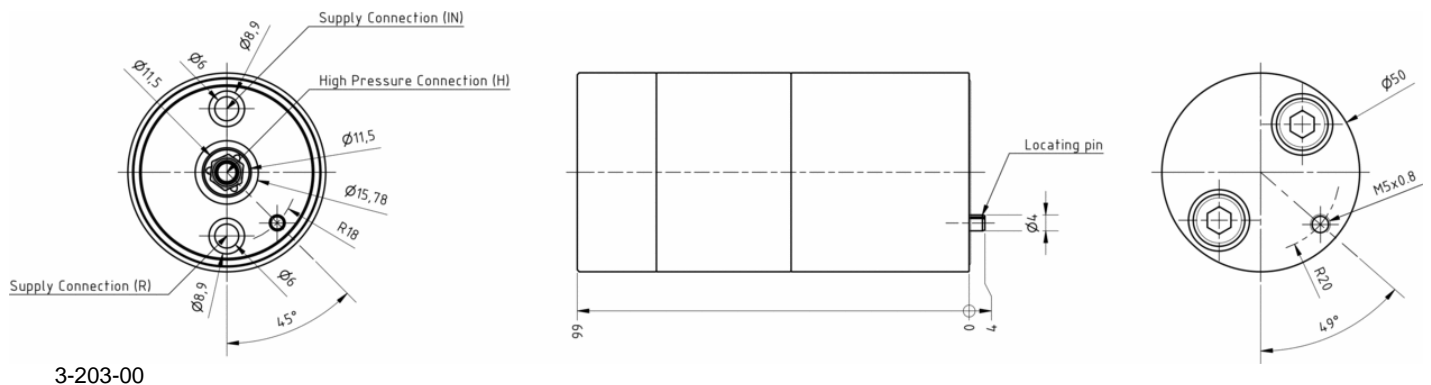
HC3-9 is a compact hydraulic cartridge miniBOOSTER unit weighing only 1.3 kg. It is ideal for use in applications where it is desirable to mount the unit on or in a manifold, cylinder, or other device.

The HC3-9 raises supplied pressure to a higher outlet pressure and automatically compensates for consumption of oil to maintain the high pressure. Adjustment of the outlet pressure is carried out by varying the supplied 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



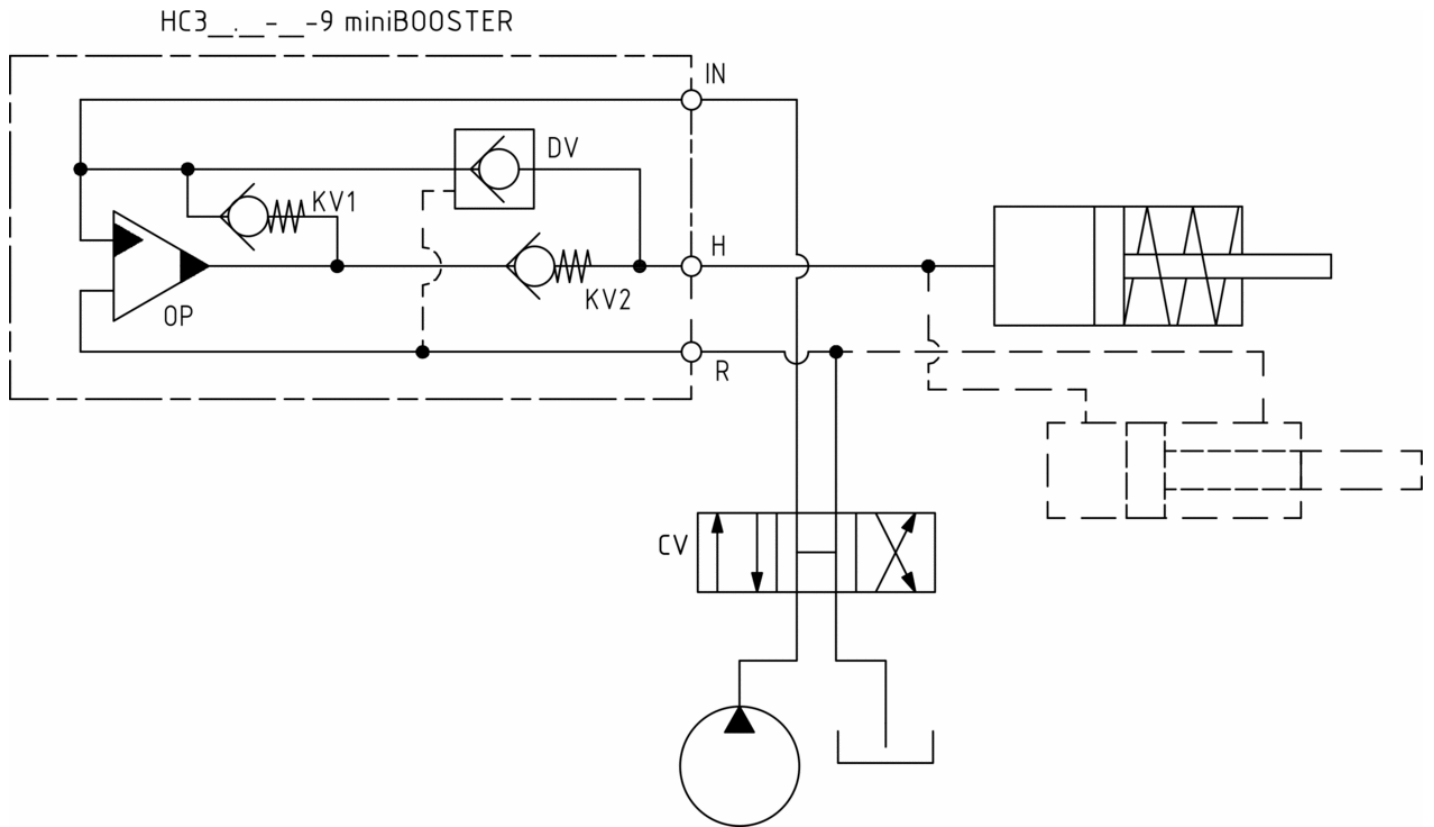
 Download PDF file: [3-204-01_Mounting instruction](#)

Functions

The basic operation is illustrated in the function diagram. The oil is fed through the connecting plate to the control valve to the IN port of the HC3 flowing freely through check valves KV1, KV2 and DV to the high pressure side H.

From the high pressure side H oil is fed to port A on the connecting plate. 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 high pressure side is reached. If there is a pressure drop on the high pressure side due to consumption or leakage, the OP valve will automatically operate to maintain the end pressure.

Function diagram



3-146-00

Fluids and materials

Please see: General specifications

Ordering an HC3-9

Ordering example of an HC3-9 with $i = 4.0$ DV incorporated and BSPP connections: HC3 - 4.0 - B - 9

Model	Intensification, i	Dump valve	Connections
HC3	your selection... see flow rate table	your selection... A = (no) / A model B = (yes) / B model G = (proportional) / G model	your selection... 9