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The HC6 miniBOOSTER



HC6 versions: 9 different intensification factors

P_{IN}: 20 – 200 bar (inlet pressure)

P_H: 800 bar maximum (outlet pressure)

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

Intensification ratios: $P_H = (P_{IN} - P_{Return}) \cdot i$
 (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

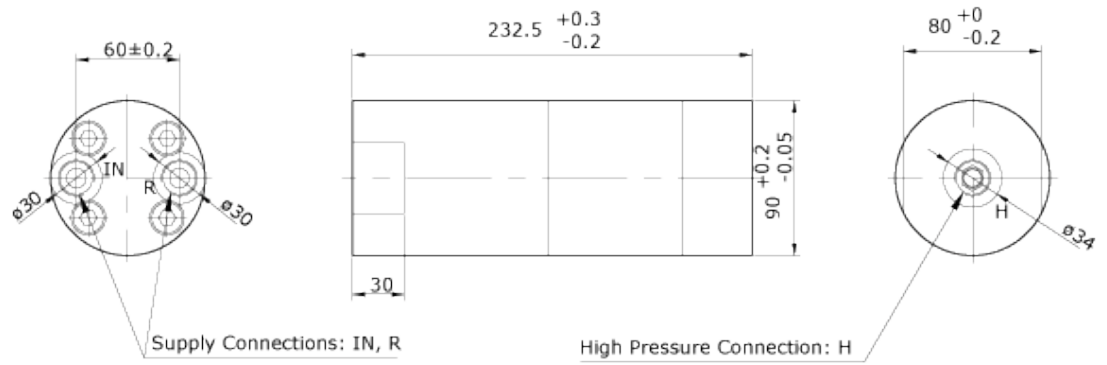
▲ Description of the HC6 miniBOOSTER hydraulic intensifier

The HC6 is a high flow unit which is capable of up to 11 l/min flow on the high pressure end. Like other miniBOOSTER models, the HC6 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. Relative to its flow capability, the HC6 is a compact unit weighing only 9.5 kg.

▲ Flow Rates

| Intensification factor i | Max. outlet flow l/min | Max. inlet flow l/min |
|-----------------------------|---------------------------|--------------------------|
| 1.3 | 3.1 | 50.0 |
| 1.5 | 2.5 | 50.0 |
| 1.9 | 2.0 | 50.0 |
| 2.5 | 13.0 | 70.0 |
| 3.3 | 11.0 | 70.0 |
| 4.0 | 9.0 | 70.0 |
| 4.9 | 7.0 | 70.0 |
| 6.3 | 5.5 | 70.0 |
| 8.2 | 4.5 | 70.0 |

▲ Dimensions



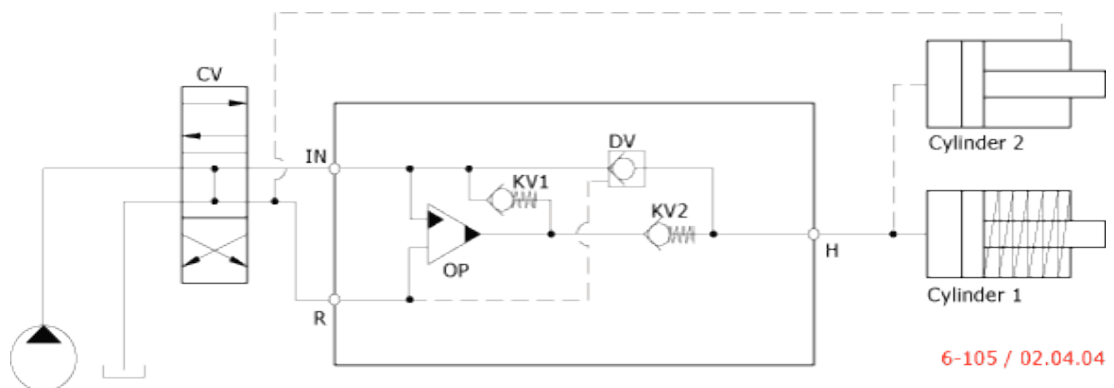
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▲ Functions

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 high pressure side H 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



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▲ Connection types

| Connection | IN / R | H |
|------------|-------------|-------------|
| 1 | 1/2" BSP | 1/2" BSP |
| 2 | 3/4-16" UNF | 3/4-16" UNF |

▲ Max. tightening torque BSP

| | IN / R | H |
|-----------------------|------------|------------|
| | 1/2" BSP | 1/2" BSP |
| with steel washer | 13.0 da/Nm | 13.0 da/Nm |
| with aluminium washer | 7.0 da/Nm | - |
| with cutting edge | 13.0 da/Nm | 13.0 da/Nm |

▲ Max. tightening torque UNF

| | IN / R | H |
|-------------|-------------|-------------|
| | 3/4-16" UNF | 3/4-16" UNF |
| with o-ring | 3.5 da/Nm | 6.0 da/Nm |

▲ Fluids and materials

Please see [General Specifications](#).

▲ Ordering a HC6

Ordering example of a HC6 with $i = 4.0$,
DV incorporated and BSP connections: HC6 - 4.0 - B - 1

| Model | Intensification, i | Dump Valve | Connections |
|-------|-------------------------------------|--|-------------------|
| HC6 | your selection... | your selection... | your selection... |
| | see flow rate table | A = (no) / A model | 1 |
| | | B = (yes) / B model | 2 |
| | | G = (proportional) / G model | |

