



- [Description](#)
- [Flow rates](#)
- [Dimensions](#)
- [Functions](#)
- [Connection types](#)
- [Max tightening torque BSP](#)
- [High pressure plate](#)
- [Fluids and materials](#)
- [Ordering number](#)

## The HC9 miniBOOSTER



### Up to 5,000 bar

**HC9 version:** 1 intensification factor

**P<sub>IN</sub>:** 20 – 200 bar (inlet pressure)

**P<sub>H</sub>:** 5,000 bar maximum (outlet pressure)

**P<sub>RETURN</sub>:** 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

### ▲ Description of the HC9 miniBOOSTER hydraulic intensifier

The HC9 is an ultra high-pressure unit which is capable of up to 5,000 bar and 0.3 l/min flow on the high-pressure end. Like [other miniBOOSTER models](#), the HC9 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 HC9 is a compact unit weighting only 9.9 kg.

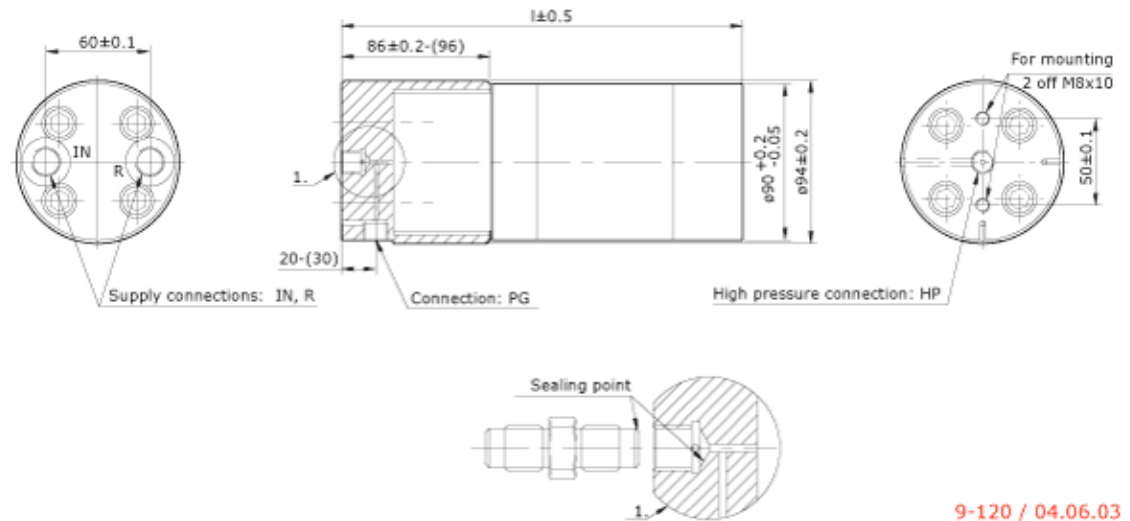
### ▲ Flow Rates

Intensification factor <i>i</i>	Approx. outlet flow l/min	Max. inlet flow l/min
25	0.3	20.0

### ▲ Fluids and materials

Please see [General Specifications](#).

▲ **Dimensions**



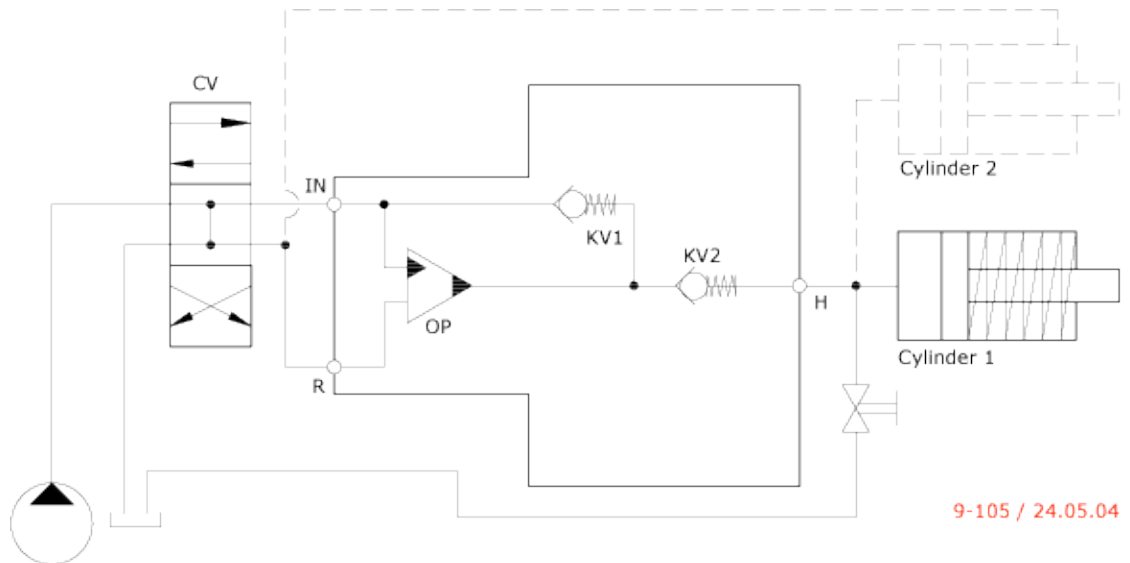
9-120 / 04.06.03

▲ **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 and KV2 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 and KV2 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*



9-105 / 24.05.04

▲ **Connection types**

Connection	IN / R
1	1/2" BSP
2	9/16-18 UNF

▲ **Max. tightening torque BSP**

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

▲ **High pressure plate**

Ordering Code	Port 1: HP-Connection		Port 2: PG-Connections		Port 3: Other Connections		Port 4: Other Connections		
	HP plate	Thread	Cone	Thread	Cone	Thread	Cone	Thread	Cone
8-281		1/2" BSP	120°	None	-	None	-	None	-
8-282		3/4" BSP	0°	None	-	None	-	None	-
8-283		M16 x 1.5	60°	None	-	None	-	None	-
8-284		1/4" BSP	120°	None	-	None	-	None	-
8-285		1/4" BSP	120°	9/16-18 UNF	60°	None	-	None	-
8-286		3/4" BSP	0°	9/16-18 UNF	60°	None	-	None	-
8-287		1/4" BSP	120°	9/16-18 UNF	60°	9/16-18 UNF	60°	None	-
8-288		9/16-18 UNF	60°	9/16-18 UNF	60°	None	-	None	-
8-289		1/4" BSP	120°	M14 x 1.5	60°	None	-	None	-
8-290		1/4" BSP	120°	M16 x 1.5	60°	None	-	None	-
8-291		1/4" BSP	120°	M15 x 1.0	0°	None	-	None	-
8-292		M16 x 1.5	60°	M16 x 1.5	60°	None	-	None	-
8-293		1/2" BSP	60°	None	-	None	-	None	-
8-294		M16 x 1.5	60°	9/16-18 UNF	60°	M16 x 1.5	60°	None	-
8-295		M16 x 1.5	60°	9/16-18 UNF	60°	None	-	None	-
8-296		M20 x 1.5	60°	None	-	None	-	None	-
8-297		1/4" BSP	120°	9/16-18 UNF	60°	M14 x 1.5	60°	None	-
8-298		1/4" BSP	120°	9/16-18 UNF	60°	M16 x 1.5	60°	None	-
8-299		3/4-16 UNF	60°	None	-	None	-	None	-
8-300		M22 x 1.5	60°	None	-	None	-	None	-
8-320		M22 x 1.5	60°	M22 x 1.5	60°	None	-	None	-
8-321		1/4" BSP	120°	1/4" BSP	120°	None	-	None	-
8-322		M22 x 1.5	60°	9/16-18 UNF	60°	M22 x 1.5	60°	None	-
8-323		1/4" BSP	120°	9/16-18 UNF	60°	1/2"-20 UNF	60°	None	-
8-324		M22 x 1.5	60°	9/16-18 UNF	60°	None	-	None	-
8-325		1/4" BSP	120°	None	-	9/16-18 UNF	60°	9/16-18 UNF	60°

8-900 issue 9

▲ **Fluids and materials**

Please see [General Specifications](#).

▲ **Ordering a HC9**

Ordering example of a HC9 with  $i = 25.0$ ,  
BSP connections: HC9 - 25.0 - A - 1

**Please note!**

High pressure plate ordering code - [see table](#)  
Other high pressure connections on request.



<b>Model</b>	<b>Intensification, <math>i</math></b>	<b>Dump Valve</b>	<b>Connections</b>
HC9	your selection...	your selection...	your selection...
	see <a href="#">flow rate table</a>	A = (no) / <a href="#">A model</a>	1
			2