

## The HC9 miniBOOSTER



**HC9 version:** 8 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

**B model** = with dump valve, up to 3,000 bar

### Description

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 weighing only 9.9 kg.

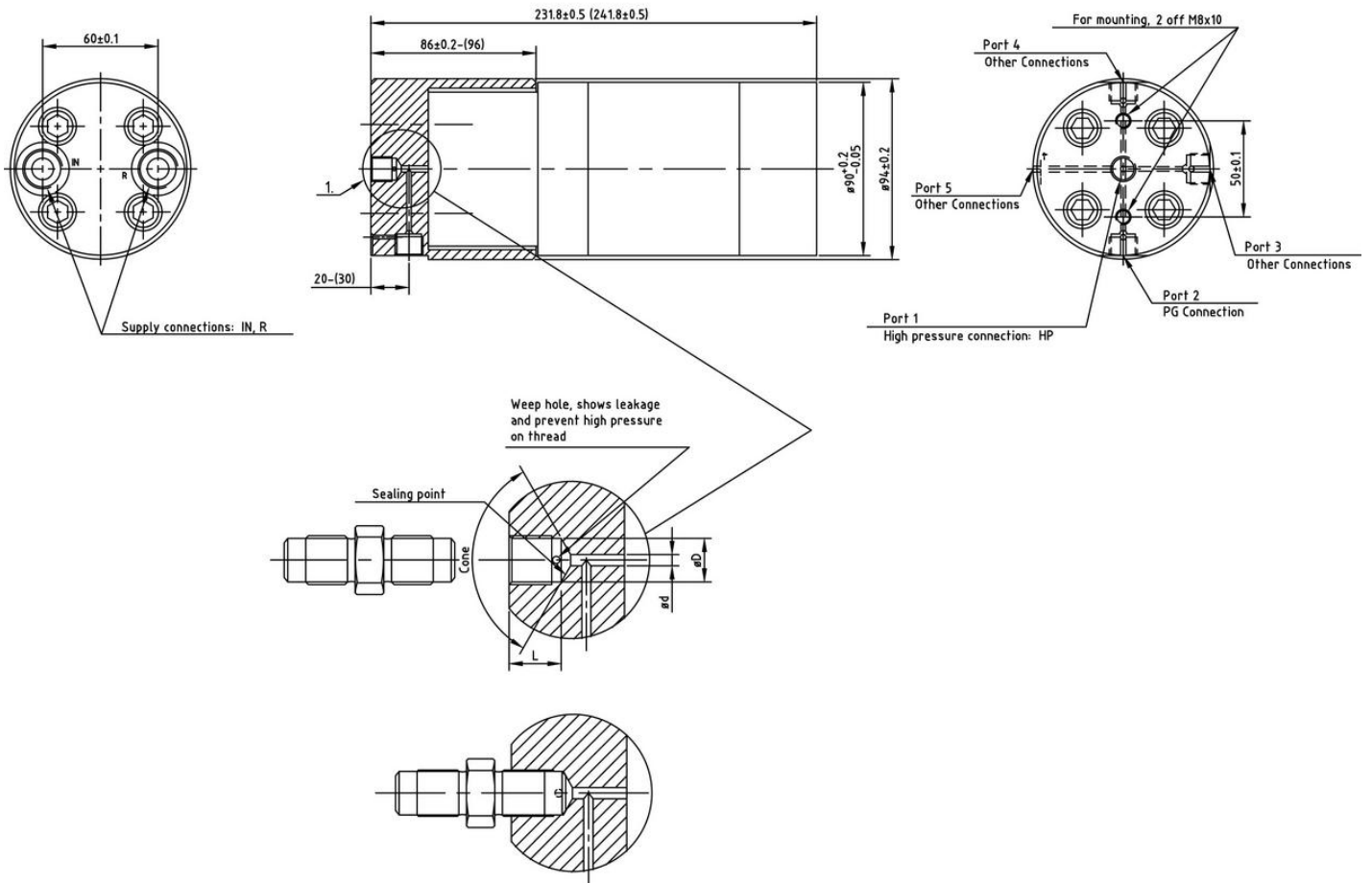
### Flow Rates

Intensification factor i	Approx. outlet flow l/ min	Max. inlet flow l/ min
6.2	4.0	20.0
8.2	3.3	20.0
9.5	3.0	20.0
11.0	2.5	20.0
13.0	2.0	20.0
16.0	1.5	20.0
20.0	0.8	20.0
25.0	0.3	20.0

### Fluids and materials

Please see General Specifications.

## Dimensions



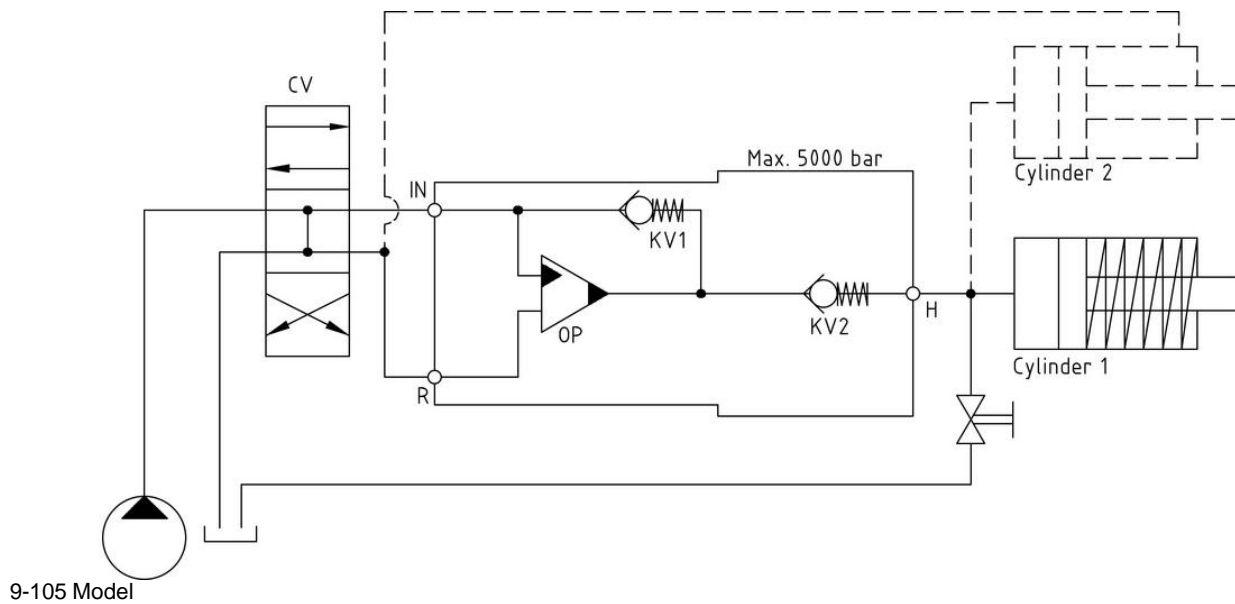
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## Functions

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 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



## 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°

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## 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.

Model	Intensification, $i$	Dump Valve	Connections
HC9	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1 2