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## The HC8W miniBOOSTER



**HC8W versions:** 5 different intensification factors

**P<sub>IN</sub>:** Inlet pressure 20-200 bar

**P<sub>H</sub>:** 2,000 bar maximum For media > 5 cSt (mm<sup>2</sup>/s)

**P<sub>H</sub>:** 1,000 bar maximum For media < 5 cSt (mm<sup>2</sup>/s)

**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 incorporated  
Pressure gauge/transducer connection available

### ▲ Description of the HC8W miniBOOSTER hydraulic intensifier

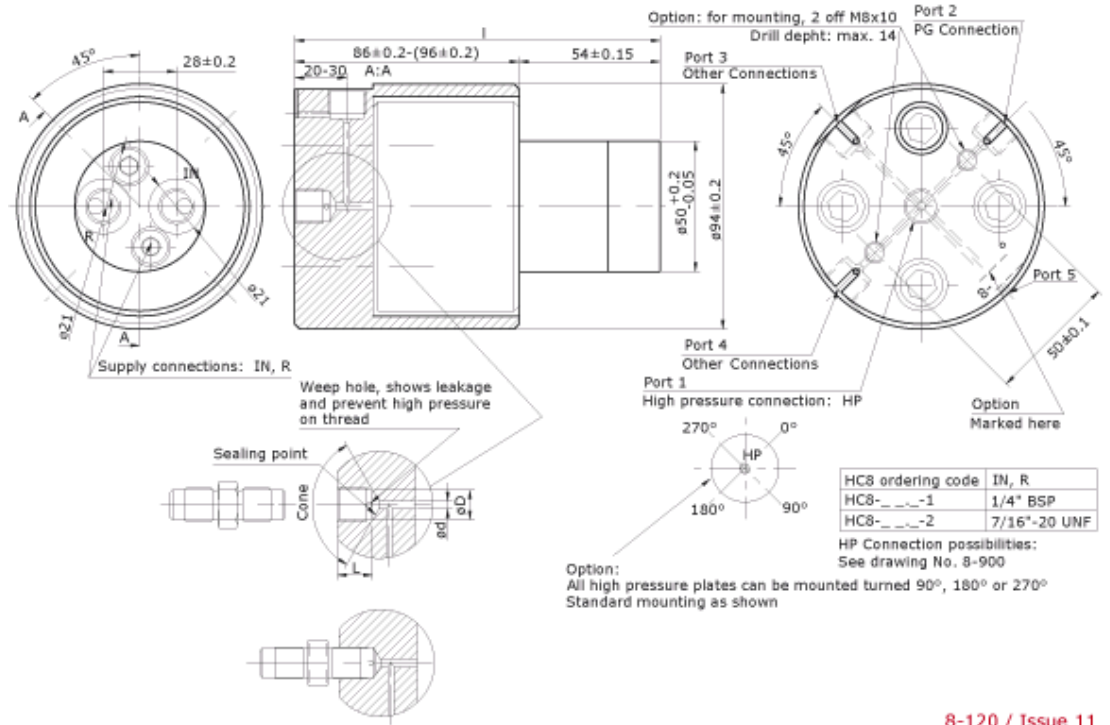
The HC8W is a high pressure stainless steel unit delivering pressure up to 2.000 bar. Operating like the HC2W, the HC8W is a unique, self contained device which boosts inlet pressure by up to a 20:1 ratio without the use of external power.

In addition, the HC8W maintains high pressure by automatically compensating for consumption of media on the high pressure side. High pressure is directly proportional to inlet pressure. The HC8W is compact in size. The HC8W works at inlet pressure from 20 to 200 bar. On standard versions maximum outlet pressure is 2,000 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

▲ **Dimensions**



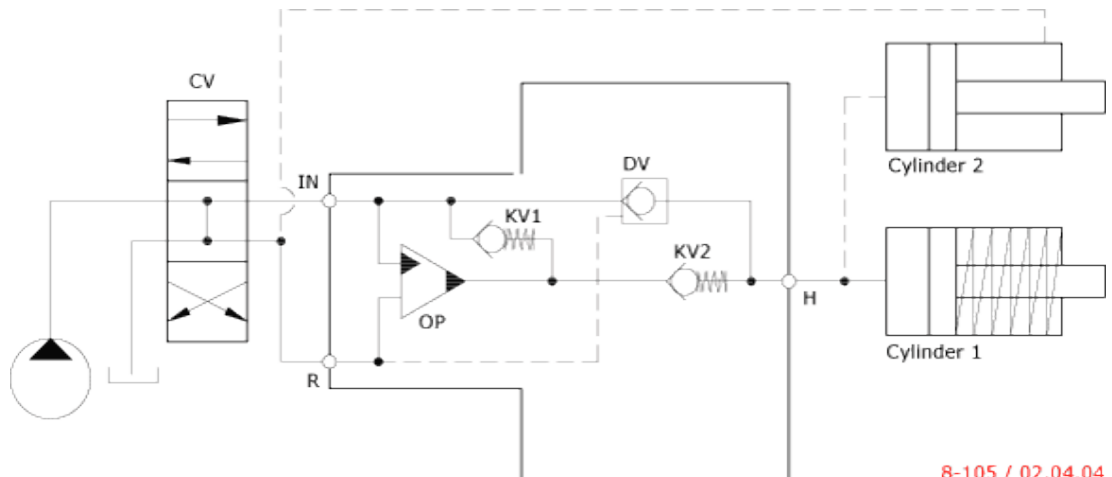
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▲ **Functions**

The basic operation is illustrated in the function diagram. Media 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
1	1/4" BSP
2	9/16-18 UNF

▲ **Max. tightening torque BSP**

	IN / R
	1/4" BSP
with stainless steel washer	4.0 da/Nm

▲ **Max. tightening torque UNF**

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

▲ **High pressure plates**

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

▲ **Fluids and materials**

Please see [General Specifications](#).

▲ **Ordering a HC8W**

Ordering example of a HC8W with  $i = 13,0$

DV incorporated and BSP connections:

HC8W - 13.0 - B - 1 For media < 5 cSt ( $\text{mm}^2/\text{s}$ ) tested in water

HC8W - 13.0 - B - 1S For media > 5 cSt ( $\text{mm}^2/\text{s}$ ) tested in hydraulic oil

**Please note!**

High pressure plate ordering code - see table

Other high pressure connections on request.



<b>Model</b>	<b>Intensification, <i>i</i></b>	<b>Dump Valve</b>	<b>Connections</b>
HC8W	your selection...	your selection...	your selection...
	see <a href="#">flow rate table</a>	A = (no) / <a href="#">A model</a>	1
		B = (yes) / <a href="#">B model</a>	2
		G = (proportional) / <a href="#">G model</a>	