



- Description
- Flow rates
- Dimensions
- Functions
- Connection types
- Max tightening torque BSP
- Max tightening torque UNF
- Materials and fluids
- Ordering number

## The HC4W miniBOOSTER



**HC4W versions:** 9 different intensification factors

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

**P<sub>H</sub>:** 800 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

**G model** = direct proportionally controlled

### ▲ Description of the HC4W miniBOOSTER hydraulic intensifier

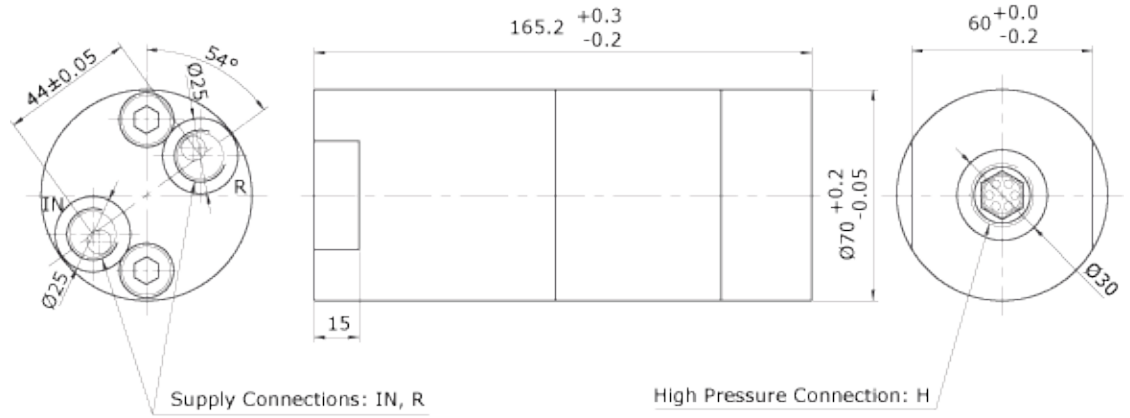
The HC4W is ideal for use in [applications](#) where a higher volume of high pressure fluid is required. The HC4W is a compact stainless steel unit weighing only 3.0 kg, but it delivers up to 5.0 liters/min. outlet flow.

Like the [HC2W](#), it raises supplied pressure and automatically compensates for consumption of media to maintain the high pressure. Adjustment of the outlet pressure is carried out by varying the supplied pressure relative to its flow capability.

### ▲ Flow Rates

Intensification factor <i>i</i>	Max. outlet flow l/min	Max. inlet flow l/min
1.3	1.5	25.0
1.8	1.2	25.0
2.1	1.0	25.0
2.6	0.7	25.0
3.2	5.0	35.0
4.3	4.0	35.0
5.1	3.5	35.0
6.3	2.5	35.0
9.8	2.0	35.0

▲ **Dimensions**



	IN, R	H
1	3/8" BSP	1/2" BSP
2	9/16"-18 UNF	3/4"-16 UNF

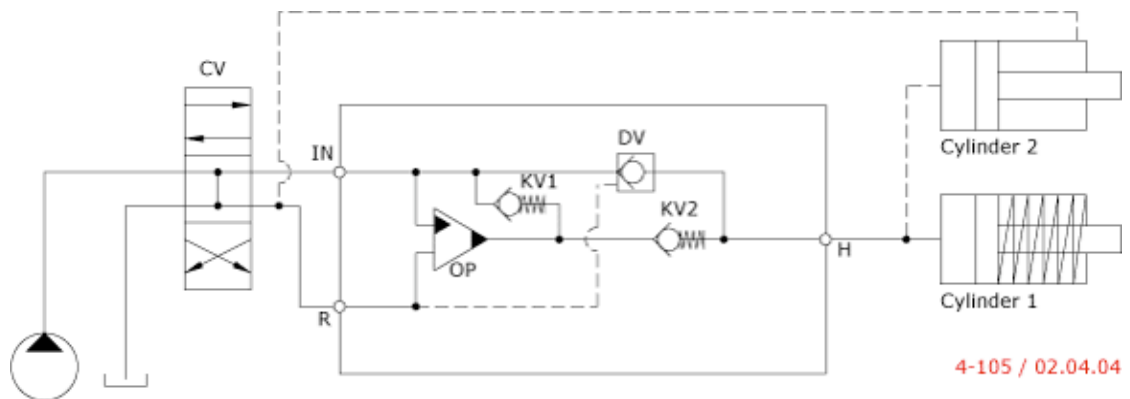
4W-120 / Issue 0

▲ **Functions**

The basic operation is illustrated in the function diagram. Water 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



4-105 / 02.04.04

▲ **Connection types**

Connection	IN / R	H
1	3/8" BSP	1/2" BSP
2	9/16-18 UNF	3/4-16 UNF

▲ **Max. tightening torque BSP**

	IN / R	H
	3/8" BSP	1/2" BSP
with stanley steel washer	6.0 da/Nm	13.0 da/Nm

▲ **Max. tightening torque UNF**

	IN / R	H
	9/16-18" 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 HC4W**

Ordering example of a HC4W with  $i = 4.3$ ,  
DV incorporated and BSP connections:

HC4W - 4.3 - B - 1 For media < 5 cSt ( $\text{mm}^2/\text{s}$ ) tested in water

HC4W - 4.3 - B - 1S For media > 5 cSt ( $\text{mm}^2/\text{s}$ ) tested in hydraulic oil

Model	Intensification, $i$	Dump Valve	Connections
HC4W	your selection... <a href="#">see flow rate table</a>	your selection... A = (no) / <a href="#">A model</a> B = (yes) / <a href="#">B model</a> G = (proportional) / <a href="#">G model</a>	your selection... 1 2

ISO 9001  
BUREAU VERITAS  
Certification

