

The HC4W miniBOOSTER



HC4W versions: 9 different intensification factors

P_{IN}: Inlet pressure 20-200 bar

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

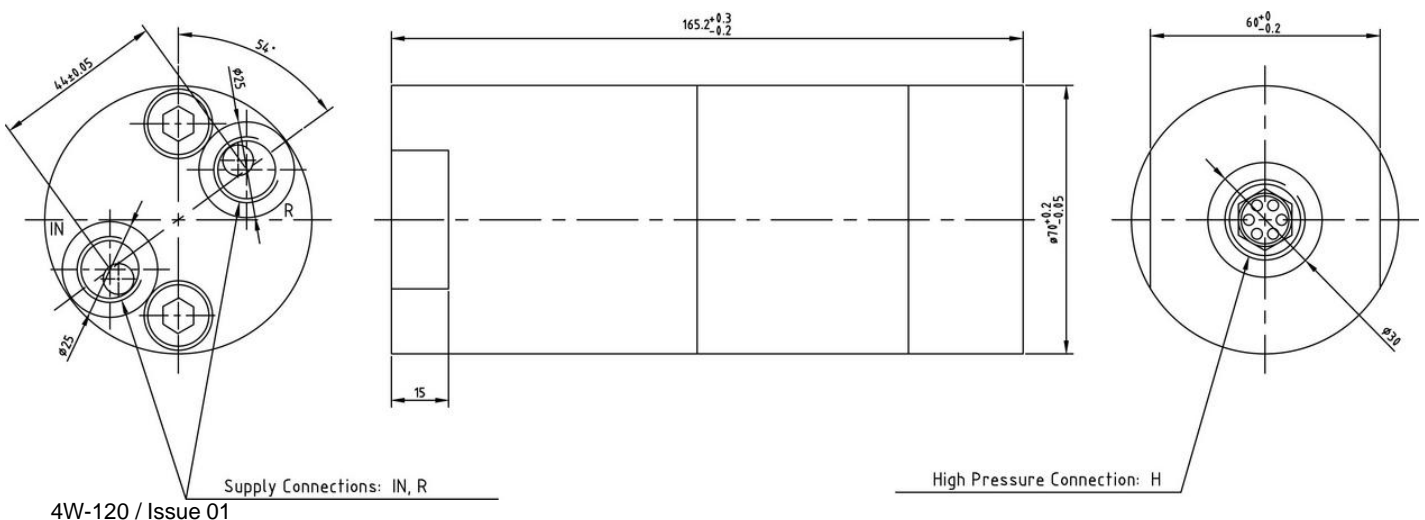
The HC4W is ideal for use in applications where a higher volume of high pressure fluid is required. The HC4W is a compact stainless steel unit weighing only 3.0 kg, but it delivers up to 5.0 liters/ min. outlet flow.

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	Max. outlet flow l/ min	Max. inlet flow l/ min
1.3	1.5	25.0
1.8	1.2	25.0
2.1	7.0	35.0
2.8	6.0	35.0
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



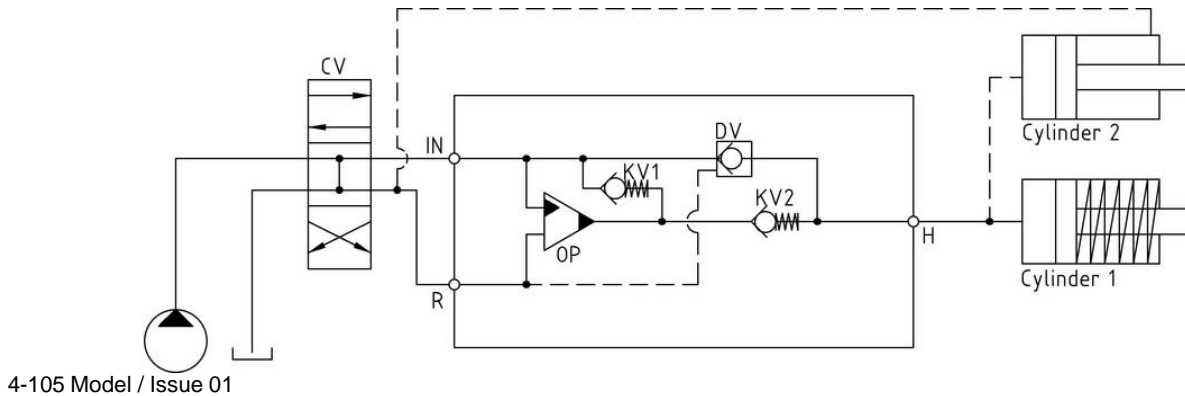
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Functions

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



Connection types

Connection	IN / R	H
1	3/8" BSP	1/2" BSP

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

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 $< 5 \text{ cSt (mm}^2/\text{s)}$ tested in water

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

Model	Intensification, i	Dump Valve	Connections
HC4W	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	
		G = (proportional) / G model	