

HC1W miniBOOSTER



HC1W versions: 9 different intensification factors

P_{IN} : 20 – 207 bar (inlet pressure)

P_{RETURN} : As low as possible (return pressure to tank)

P_H : 800 bar maximum (outlet pressure)

P_{OUTLET} : $P_H = (P_{IN} - P_{Return}) \times I$ (intensification)

Mounting: Inline tube

A model = no dump valve

B model = with dump valve

G model = direct proportionally controlled

Material Certificate 3.1 on request.

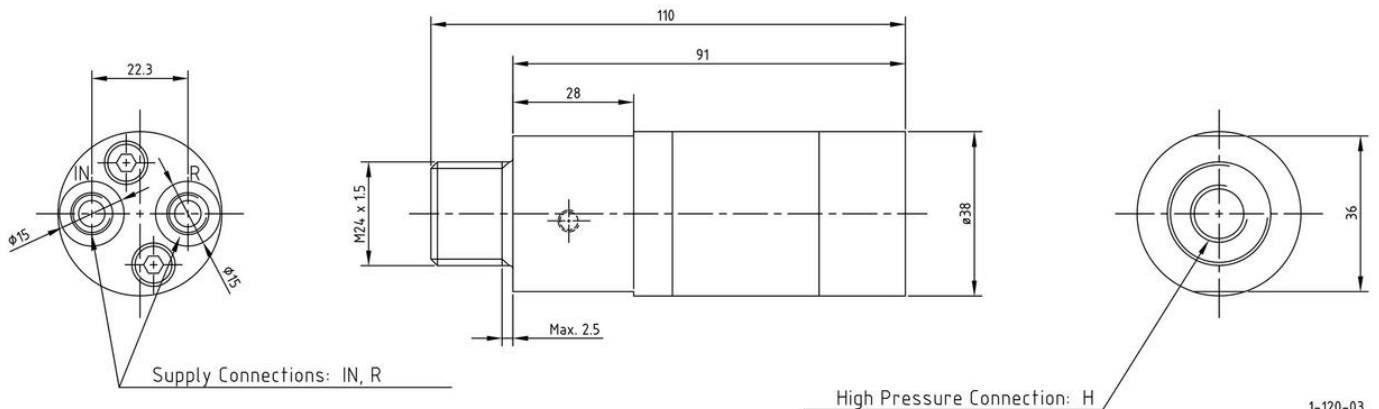
Description

The HC1W is the most compact miniBOOSTER stainless steel 316L unit weighing only 0.7 kg. It is ideal for use in applications where it is desirable to mount the unit on or in a tool, power pack, or other device.

The HC1W 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.

Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
1.2	0.5	8.0
1.5	0.5	8.0
2.0	0.5	8.0
2.8	0.5	8.0
3.3	0.5	8.0
4.0	0.4	8.0
4.8	0.4	8.0
6.2	0.3	8.0
7.5	0.3	8.0

Dimensions

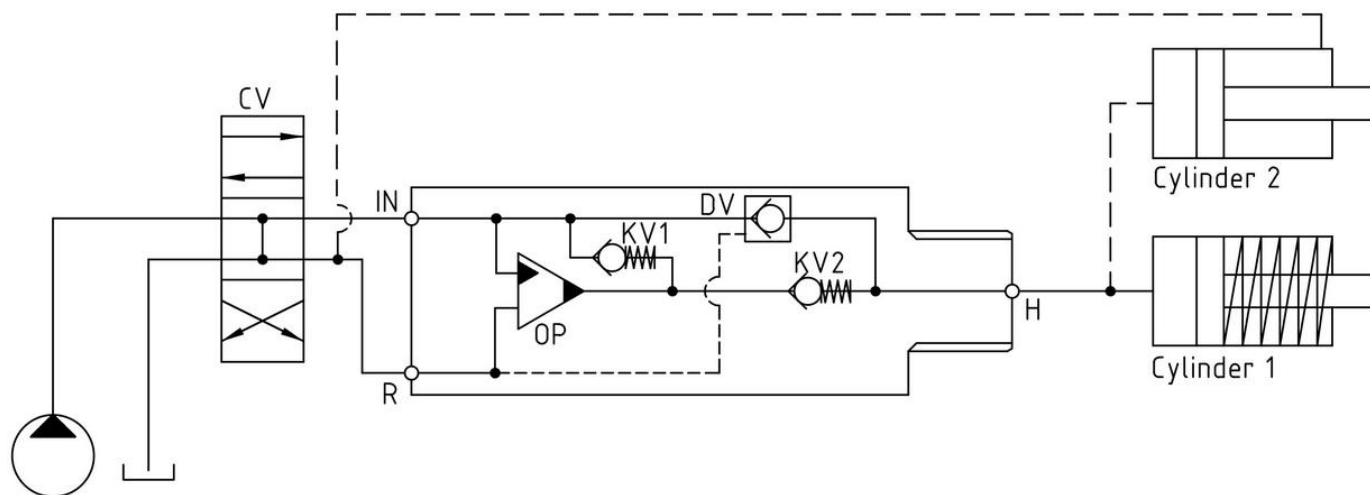


Functions

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, 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 a pressure drop on the high- pressure side exists 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	H
1	1/8" BSPP	1/4" BSPP

Max. tightening torque BSPP

	IN / R	H
	1/8" BSPP	1/4" BSPP
with stainless steel washer	2.0 da/ Nm	4.0 da/ Nm
with cutting edge	2.0 da/ Nm	4.0 da/ Nm

Max. tightening torque UNF

	IN / R	H
	3/8-24" UNF	9/16-18" UNF
with o- ring	1.5 da/ Nm	3.5 da/ Nm

Fluids and materials

Please see: General specifications

Ordering an HC1W

Ordering example of an HC1W with $i = 4.0$, DV incorporated and BSPP connections:

HC1W - 4.0 - B - 1 for media $< 5 \text{ cSt (mm}^2/\text{s)}$ tested in water

HC1W - 4.0 - B - 1S for media $> 5 \text{ cSt (mm}^2/\text{s)}$ tested in hydraulic oil

<i>Model</i>	<i>Intensification, i</i>	<i>Dump valve</i>	<i>Connections</i>	<i>Viscosity</i>
HC1W	your selection... see flow rate table	your selection... A = (no) / A model B = (yes) / B model G = (proportional) / G model	your selection... 1	Your selection... S