miniBOOSTER®

Minimum Size
Maximum Power

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The HC2W miniBOOSTER

HC2W versions: 11 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: $P_H = (P_{IN} - P_{Return})$ 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 HC2W miniBOOSTER hydraulic intensifier

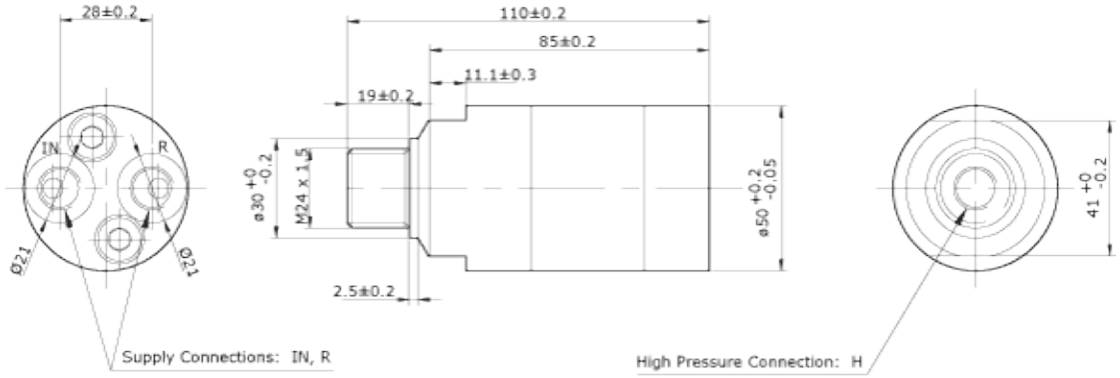
The HC2W is a compact stainless steel unit weighing only 1.0 kg. It is ideal for use in a variety of applications where building and maintaining high pressure is required.

The HC2W raises supplied pressure to a higher outlet pressure and automatically compensates for consumption to maintain the high pressure. Adjustment of the outlet pressure is carried out by varying the supplied pressure.

Flow Rates

Intensification factor i	Max. outlet flow l/min	Max. inlet flow l/min
1.2	1.2	8.0
1.5	1.0	8.0
2.0	0.8	8.0
2.8	0.6	8.0
3.2	2.5	15.0
4.0	2.0	14.0
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



	IN, R	H
1	1/4" BSP	1/4" BSP
2	7/16"-20 UNF	9/16"-18 UNF

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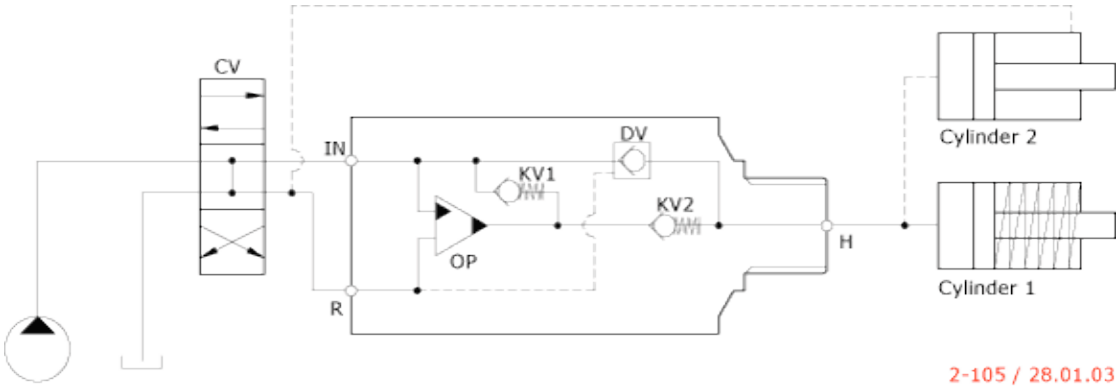
Functions

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	H
1	1/4" BSP	1/4" BSP
2	7/16-20 UNF	9/16-18 UNF

Max. tightening torque BSP

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

Max. tightening torque UNF

	IN / R	H
	7/16-18" UNF	9/16-18" UNF
with o-ring	2.0 da/Nm	3.5 da/Nm

Fluids and materials

Please see General Specifications.

Ordering a HC2W

Ordering example of a HC2W with i = 4.0,
DV incorporated and BSP connections:
HC2W - 4.0 - B - 1 For media < 5 cSt (mm^2/s) tested in water
HC2W - 4.0 - B - 1S For media > 5 cSt (mm^2/s) tested in hydraulic oil

Model	*Intensification, i*	*Dump Valve*	*Connections*
HC2W	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	2
		G = (proportional) / G model	