The HC2DW miniBOOSTER

HC2DW versions: 8 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

The HC2DW is a dual acting stainless unit which is capable of up to 7.8 l/ min flow on the high pressure end. Like other miniBOOSTER models, the HC2DW 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. Relative to its flow capability, the HC2DW is a compact unit weighing 8.0 kg.

Flow Rates

Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
2.2	7.8	15.0
2.6	7.0	15.0
3.2	6.2	15.0
4.0	5.0	14.0
5.0	4.0	14.0
6.6	3.2	13.0
9.0	2.2	13.0
13.0	1.5	12.0

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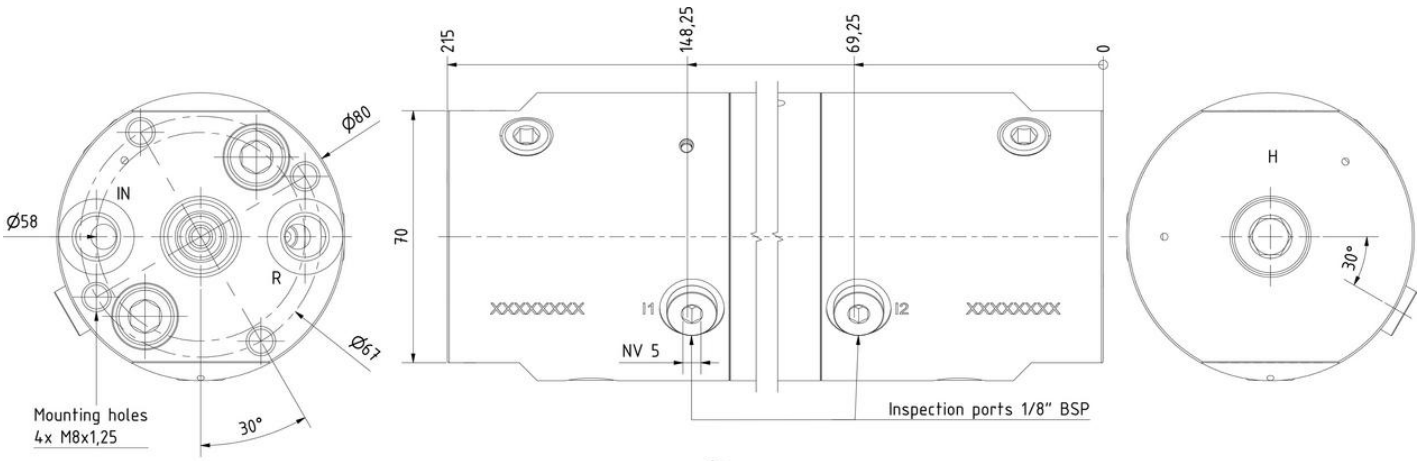
Dimensions



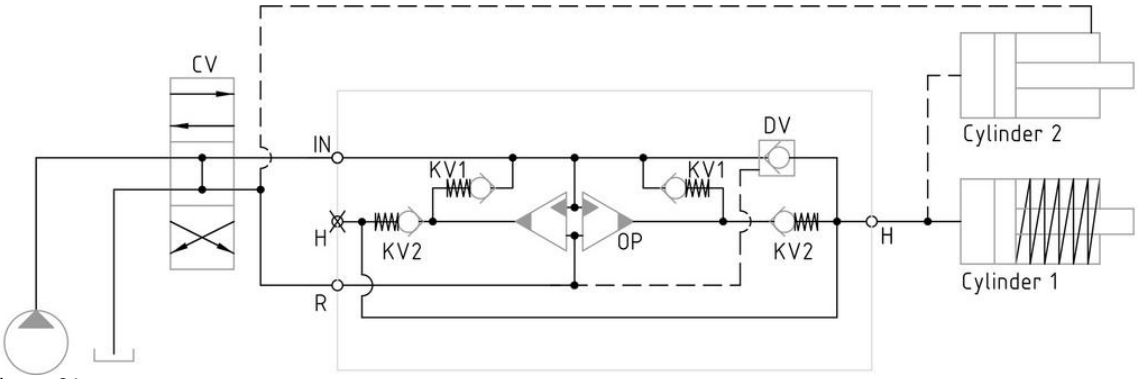
2DW-120 / Issue 01

Functions

The basic operation is illustrated in the function diagram. Oil is fed through the directional valve CV to the IN port, flowing freely trough the check valves 2x KV1, 2x KV2 and DV to the high pressure side H. In this condition maximum flow trough 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 units OP1 and OP2 by turns. 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 OP1 and OP2 units will automatically operate to maintain the end pressure. It is possible to change the high pressure connection H to the opposite end of the booster.

Function Diagram



2D-105 / issue 01

Connection types

Connection	IN / R	H
1	1/4" BSP	1/4" BSP

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

Fluids and materials

Please see General Specifications

Ordering a HC2DW

Ordering example of a HC2DW with i = 4.0,

DV incorporated and BSP connections:

HC2DW - 4.0 - B - 1

Model	*Intensification, i*	*Dump Valve*	*Connections*
HC2DW	your selection...	your selection...	your selection...
	seeflow rate table	A = (no) /A model	1
		B = (yes) /B model	
		G = (proportional)/G model	