

HC2D2W miniBOOSTER



HC2D2W versions: 8 different intensification factors

P_{IN}: 20 – 207 bar (inlet pressure)

P_H: 800 bar maximum (outlet pressure)

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

P_{OUTLET}: $P_H = (P_{IN} - P_{RETURN}) \cdot i$ (intensification)

The intensification ratio is related to the inlet pressure at media 2, the values in the table are measured at 1 bar on media 2

Drain connections: Max. 5 bar

Mounting: Inline tube

A model = no dump valve

Material certificate 3.1 on request

Description

HC2D2W is a dual media unit which is capable of delivering up to 4.2 l/ min flow on the high- pressure end. Like other miniBOOSTER models, the HC2D2W 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 HC2D2W is a compact unit weighing 8.0 kg.

Flow rates

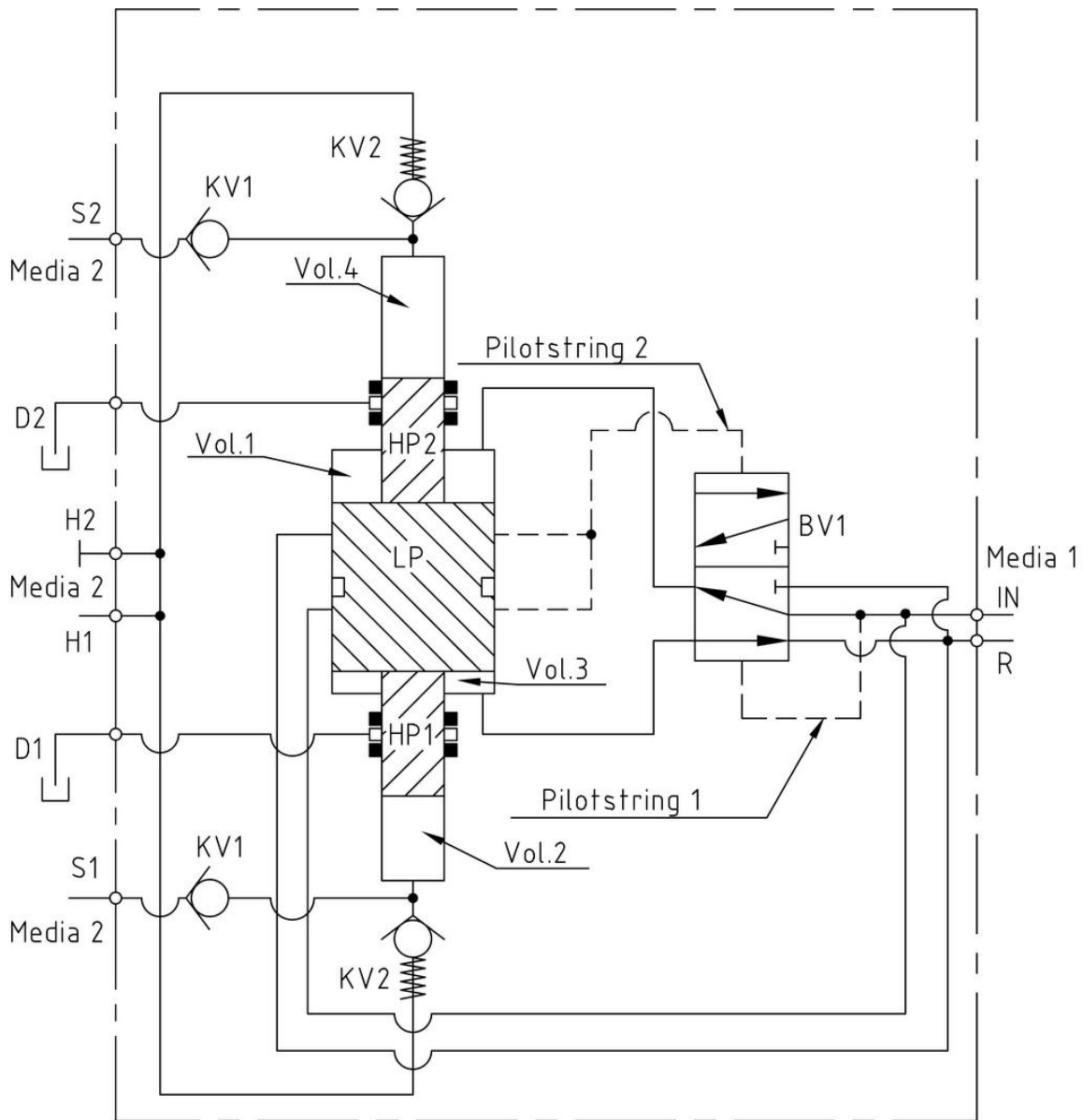
Intensification factor <i>i</i>	Max. outlet flow l/ min	Max. inlet flow l/ min
1.2	4.2	6.0
1.6	3.2	6.0
2.2	2.7	7.0
3.0	2.1	7.0
4.0	1.6	7.0
5.6	1.3	8.0
8.0	1.0	8.0
12.0	0.6	8.0


Functions

The basic operation is illustrated in the function diagram. Media 1 is fed through the IN port flowing freely through the bistable valve BV1 driving the LP pistons. From the suction inlet IN Media 2 is drawn through the check valves 2 x KV1, and pumped through the 2 x KV2 to the high- pressure side H. In this condition maximum flow through the booster is achieved giving a fast- forward function.

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 HP1 and HP2 units will automatically operate to maintain the end pressure.

Function diagram



 Function diagram 0-122-04

Dimensions

 Dimension drawing 2D2W-120-01

Connection types

Connection	IN / R	H1 & H2	S1 & S2	D1 & D2
1	1/4" BSPP	M22 x 1,5	3/8" BSPP	1/8" BSPP

Max. tightening torque BSPP

	IN / R	S1 & S2	D1 & D2
Stainless	1/4" BSPP	3/8" BSPP	1/8" BSPP
with steel washer	4.0 da/ Nm	6.0 da/ Nm	2.0 da/ Nm
with cutting edge	4.0 da/ Nm	6.0 da/ Nm	2.0 da/ Nm

High- pressure adapters

High- pressure adapter ordering codes and specifications are shown in the PDF- file below:

 High- pressure adapters in BOOSTER Hydraulics A/ S, Fynsgade 3, DK - 6400 Sønderborg, Tel: + 45 7442 9292
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Dynamic seals

Code	Media 1 & 2	Outlet pressure
HH	H- PUR / H- PUR	Max 800 bar HP
HP	H- PUR / PEEK	Max 800 bar HP
EE	EPDM / EPDM	Max 500 bar HP
EP	EPDM / PEEK	Max 800 bar HP
PP	PEEK / PEEK	Max 800 bar HP

Fluids

Media 1: Recognized hydraulic fluids, glycol solutions (Min > 5%)

Media 2: Hydraulic fluids, glycol, water, sea water

For other media, such as methanol - contact miniBOOSTER

Materials

- Body and internal components: Stainless steel 316 W.1.4404 - Material certificate 3.1 on request
- Dynamic seals, see table

Ordering an HC2D2W

Ordering example of an HC2D2W with $i = 4.0$, with BSPP connections, H1 and H2 M22 x 1.5 and H_PUR seals:

HC2D2W - 4.0 - A - 1HH

High- pressure adapter ordering code – see table

Model	Intensification, i	Dump valve	Connections	Dynamic seals
HC2D2W	your selection...	your selection...	your selection...	your selection...
	see flow rate table	A = (no) / A model	1	see seal table