

HC2DW miniBOOSTER



HC2DW versions: 8 different intensification factors

P_{IN}: Inlet pressure 20-207 bar

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)

Mounting: Inline tube

Accessories: Pilot- operated dump valve available

A model = no dump valve

B model = with dump valve

G model = direct proportionally controlled

Material certificate 3.1 on request

Description

The HC2DW is a dual- acting stainless unit which is capable of delivering 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

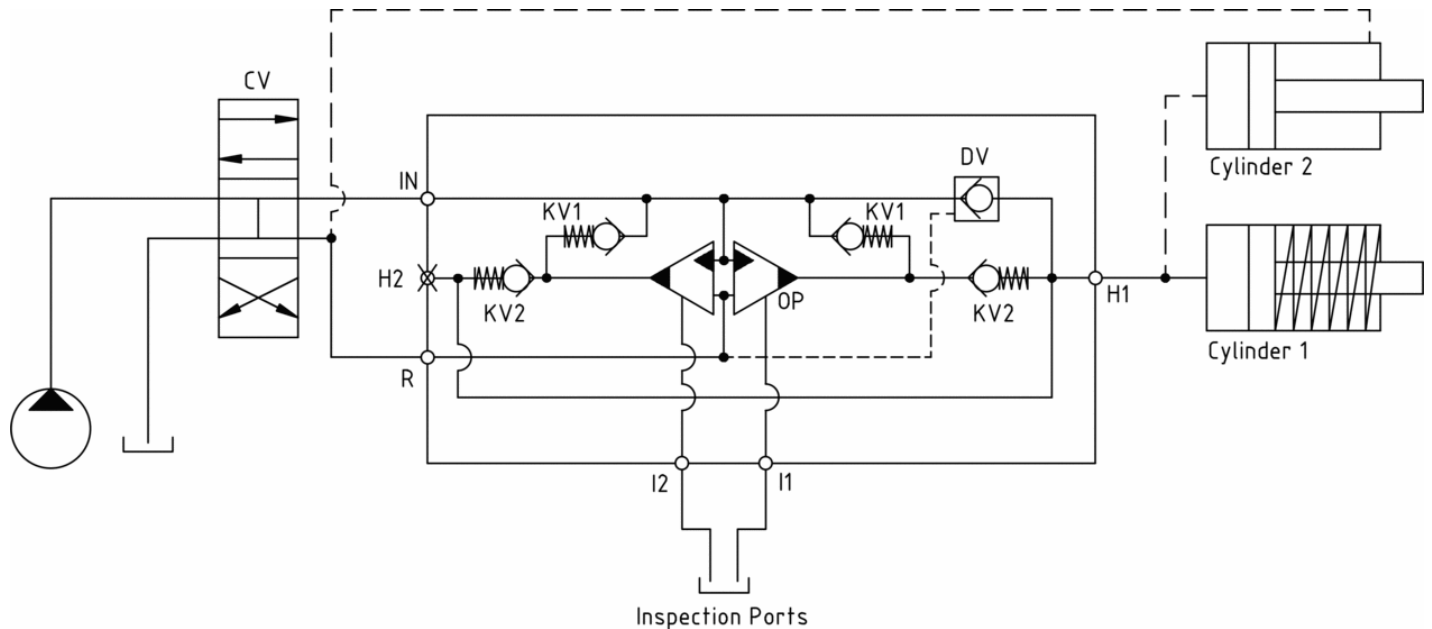
Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
2.2	7.8	15.0
2.6	7.0	15.0
3.2	6.2	15.0
4.0	5.0	14.0
5.0	4.0	14.0
6.6	3.2	13.0
9.0	2.2	13.0
13.0	1.5	12.0

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 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 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



2DW-105-02



Function diagram 2DW-105-02

Dimensions



Dimension drawing 2DW-120-04

Connection types

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

Max. tightening torque BSPP

	IN / R	H
	1/4" BSPP	1/4" BSPP
with stainless steel washer	4.0 da/ Nm	4.0 da/ Nm

Fluids and materials

Please see: General specifications

Dynamic seals

Code	Seal material	Outlet pressure
HH	H- PUR	Max 800 bar HP
PP	PEEK	Max 800 bar HP
EE	EPDM	Max 500 bar HP

Ordering an HC2DW

Ordering example of an HC2DW with $i = 4.0$, DV incorporated, BSPP connections and H- PUR dynamic seals:

HC2DW - 4.0 - B - 1HH for media $< 5 \text{ cSt (mm}^2/\text{s)}$ tested in water

HC2DW - 4.0 - B - 1SHH for media $> 5 \text{ cSt (mm}^2/\text{s)}$ tested in hydraulic oil

Model	Intensification, i	Dump valve	Connections	Dynamic seals
HC2DW	your selection...	your selection...	your selection...	your selection...
	see flow rate table	A = (no) /A model	1	HH
		B = (yes) /B model		PP
		G = (proportional)/G model		EE