



## HC2DHW miniBOOSTER



**HC2DHW versions:** 5 different intensification factors

**P<sub>IN</sub>:** Inlet pressure 20-207 bar

**P<sub>H</sub>:** 1,380 bar maximum (outlet pressure)

**P<sub>RETURN</sub>:** As low as possible (return pressure to tank)

**P<sub>OUTLET</sub>:**  $P_H = (P_{IN} - P_{Return}) I$  (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

Material certificate 3.1 on request

### Description

The HC2DHW is a dual-acting stainless unit which is capable of delivering up to 5.0 l/min flow on the high-pressure end. Like other miniBOOSTER models, the HC2DHW 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 HC2DHW is a compact unit weighing 8.0 kg.

### Flow rates

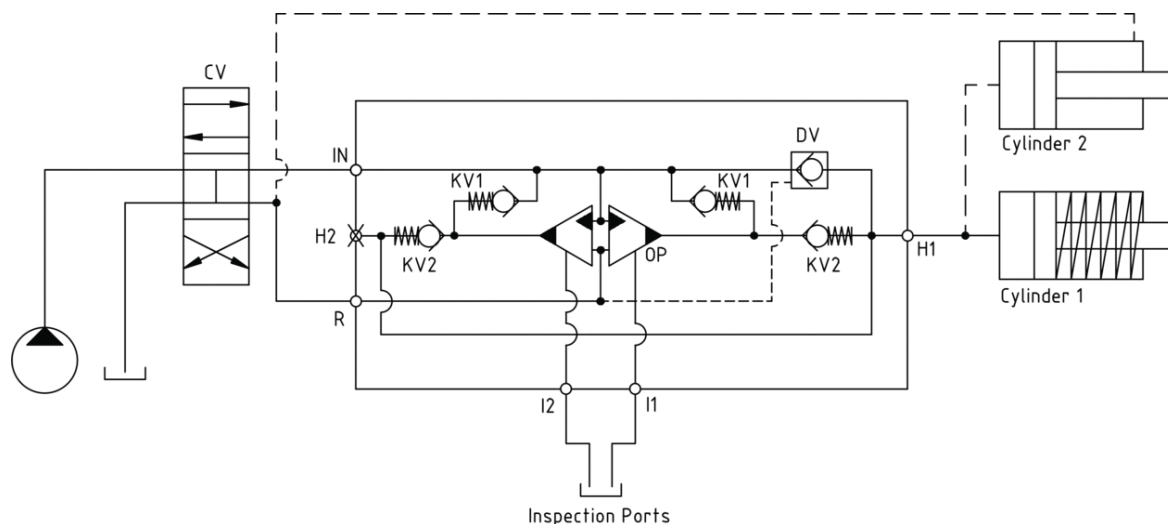
Intensification factor i	Max. outlet flow l/min	Max. inlet flow l/min
4.0	5.0	14.0
5.0	4.0	14.0
6.6	3.2	13.0
9.0	2.2	13.0
13.0	1.5	12.0

## 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



Function diagram 2DW-105-02

## Dimensions

Dimension drawing 2DHW-120-00

## Connection types

Connection	IN / R	I1 / I2
1	1/4" BSPP	1/8" BSPP

## Max. tightening torque BSPP

	IN / R	I1 / I2
	1/4" BSPP	1/8" BSPP
with stainless steel washer	4.0 da/ Nm	2.0 da/ Nm

## High- pressure adapters

Ordering code	Male connection 1	Female connection 2	Max. pressure
7W-431	M22 x 1.5	Plug	2,000 bar
7W-432	M22 x 1.5	9/16-18 UNF	2,000 bar
7W-433	M22 x 1.5	1/4" BSPP	2,000 bar
7W-436	M22 x 1.5	M16 x 1.5	2,000 bar
7W-444	M22 x 1.5	1/2" BSPP	2,000 bar

High- pressure adapter ordering codes and specifications can be seen from the table in the PDF- file below:



High- pressure adapters: 7W-900-01

## Fluids and materials

Please see: General specifications

## Ordering an HC2DHW

Ordering example of an HC2DHW with  $i = 4.0$ , DV incorporated and BSPP connections:

HC2DHW - 4.0 - B - 1 for media < 5 cSt (mm<sup>2</sup>/s) tested in water

HC2DHW - 4.0 - B - 1S for media > 5 cSt (mm<sup>2</sup>/s) tested in hydraulic oil

High- pressure adapter ordering code - see table

Model	Intensification, $i$	Dump valve	Connections
HC2DHW	your selection...	your selection...	your selection...
	see flow rate table	A = (no) /A model	1
		B = (yes) /B model	
		G = (proportional)/G model	