

HC6DW miniBOOSTER



HC6DW versions: 14 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

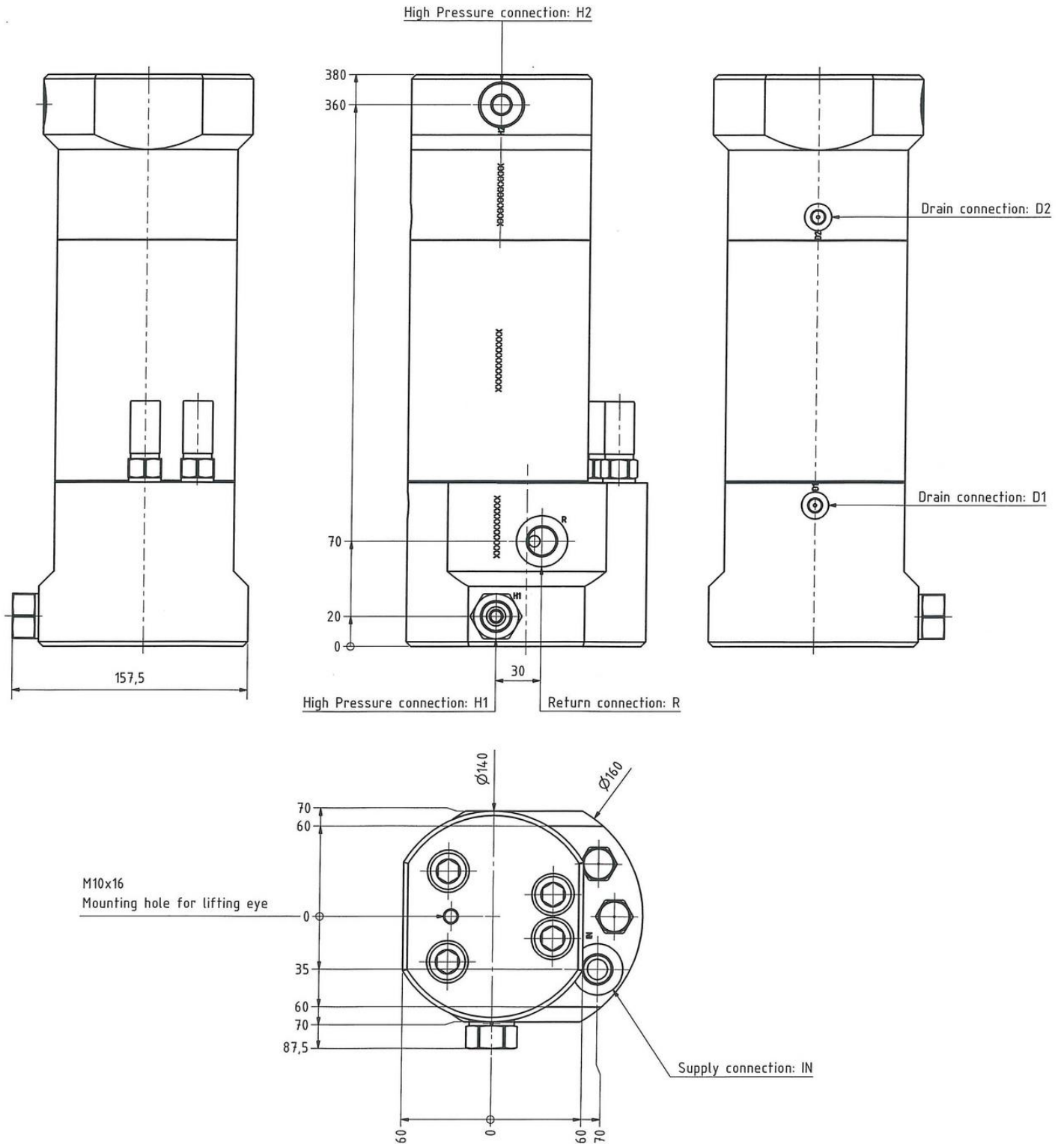
Description

The HC6DW is a high flow dual- acting stainless steel 316 L unit which is capable of delivering up to 33.3 l/ min flow on the high- pressure end. Like other miniBOOSTER models, the HC6DW 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 HC6DW is a compact unit weighing 34.8 kg.

Flow rates

Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
1.5	33.3	50.0
1.8	27.5	50.0
2.0	25.0	50.0
2.2	22.5	50.0
2.5	20.0	50.0
3.0	16.5	50.0
3.3	15.0	50.0
4.0	12.5	50.0
4.9	10.0	50.0
6.3	8.0	50.0
8.2	6.0	50.0
11.1	4.5	50.0
13.2	3.5	50.0
16.0	3.0	50.0

Dimensions



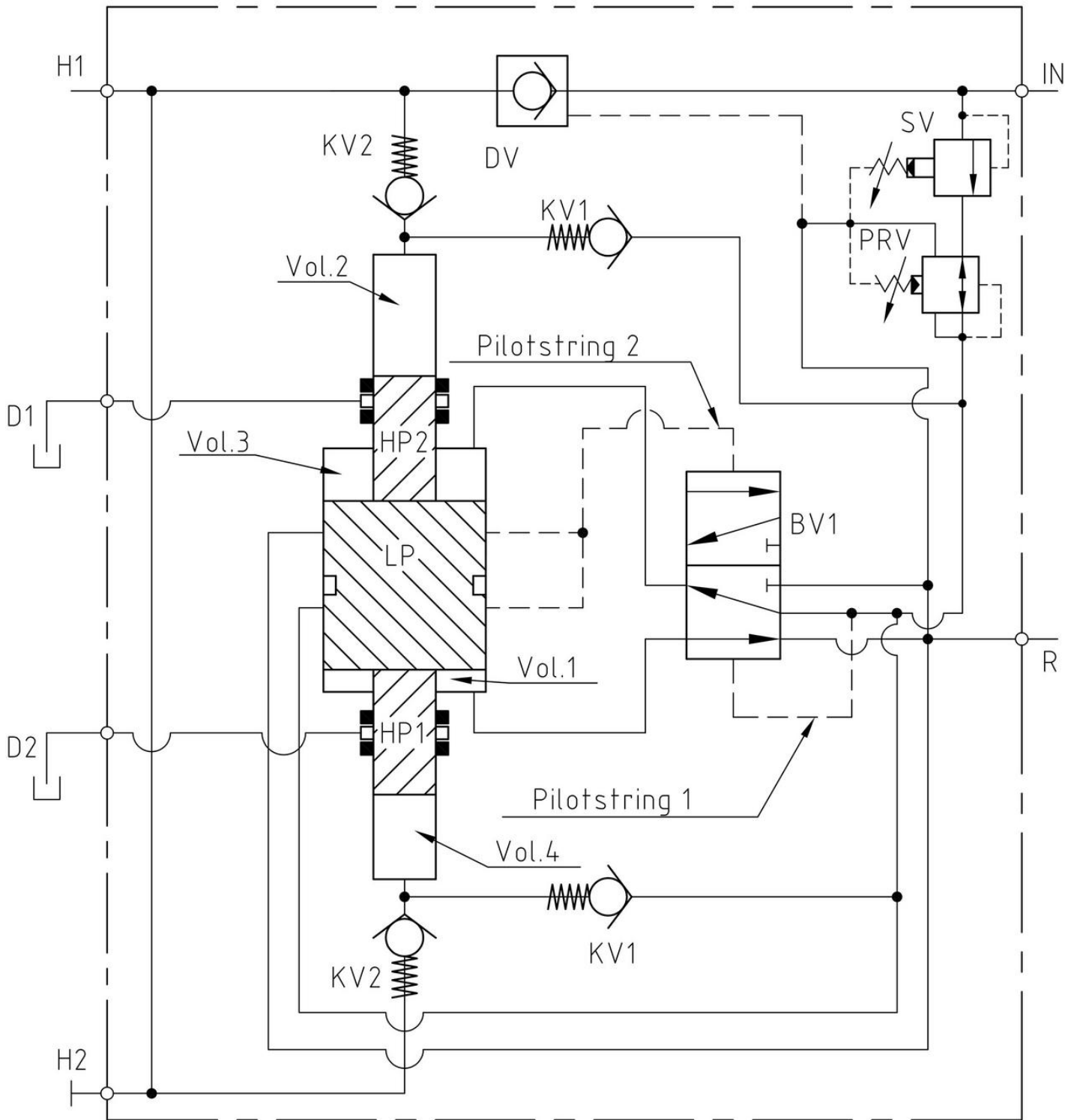
6DW-122-07

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 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 units OP1 and OP2 by turns. The unit will automatically stall when end pressure on the high- pressure side H is reached. If a pressure drop on the high- pressure side exists 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



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Connection types

Connection	IN / R
1	1/2" BSPP

Max. tightening torque BSPP

IN / R	IN / R
with stainless steel washer	13.0 da/ Nm

High- pressure adapters

Ordering Code	Male connection 1	Female connection 2	Tightening torque
6DW-816	M30 x 1.5	1/2" BSPP	250 Nm
6DW-817	M30 x 1.5	13/16-16 UNF	250 Nm
6DW-815	M30 x 1.5	Plug	250 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 HC6DW

HC6DW-: with Bypass Valve (BPV) without Sequence Valve & Pressure Reducing Valve

HC6DWA-: with Bypass Valve (BPV) with Sequence Valve & Pressure Reducing Valve

HC6DWB-: without Bypass Valve (BPV) without Sequence Valve & Pressure Reducing Valve

Ordering example of an HC6DW with $i = 4.0$, DV incorporated, BSPP connections and H- PUR dynamic seals:

HC6DW - 4.0 - B - 1HH for media $< 5 \text{ cSt (mm}^2/\text{s)}$ tested in water and mounted with H- PUR dynamic seals

HC6DW - 4.0 - B - 1SHH for media $> 5 \text{ cSt (mm}^2/\text{s)}$ tested in hydraulic oil and mounted with H- PUR dynamic seals

Model	Intensification, i	Dump valve	Connections	Dynamic seals
HC6DW	- your selection... see flow rate table	- your selection... A = (no) / A model B = (yes) / B model	- your selection... 1	your selection... HH PP EE