HC5 miniBOOSTER

HC5 versions: 11 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}: $P_H = (P_{IN} – P_{Return}) i$ (intensification)

Mounting: Inline tube

Accessories: Pilot- operated dumpvalves incorporated
High Pressure in two directions

Description

The HC5 is a double- acting miniBOOSTER incorporating two separate intensification circuits. As the function diagram indicates, changing the position of the control valve CV switches intensification from one circuit to another.

It is ideal for use in applications where high pressure is required in separate activation steps such as double- acting cylinders, combination cutter spreader tools, etc. Like the HC2, the HC5 is a compact unit weighing only 3.0 kg.

Flow Rates

Intensification factor i	Max. outlet flow l/ min	Max. inlet flow l/ min
1.2	1.2	8.0
1.5	1.0	8.0
2.0	2.0	12.0
2.8	2.2	13.0
3.2	2.5	15.0
4.0	2.0	14.0
5.0	1.6	14.0
6.6	1.3	13.0
9.0	0.9	13.0
13.0	0.6	12.0
20.0	0.3	12.0

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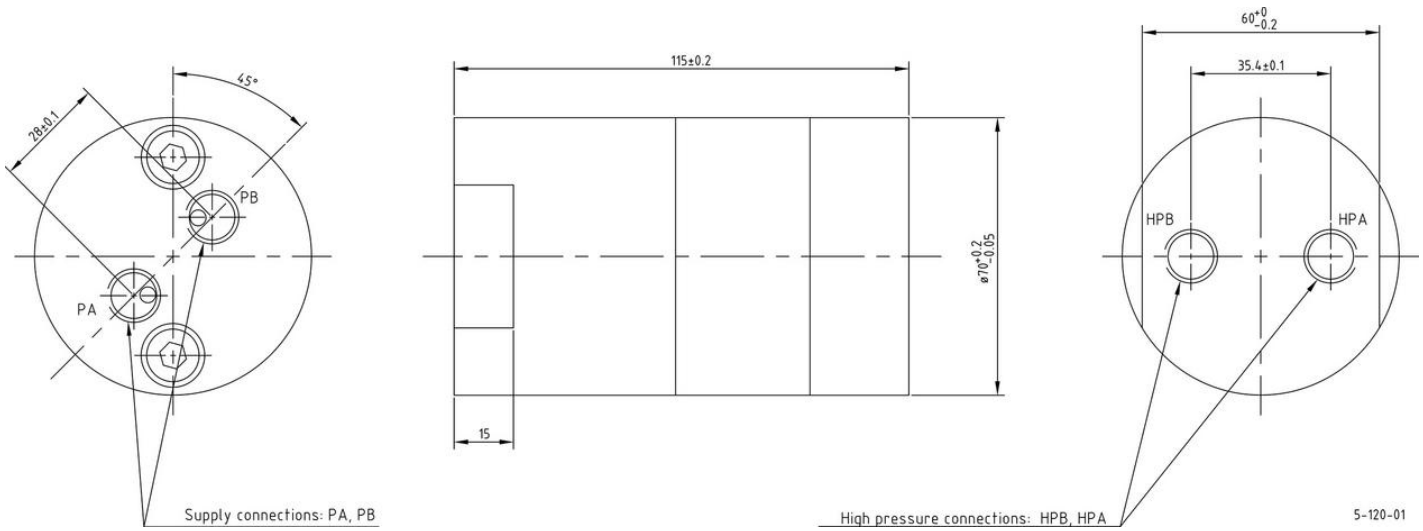
Dimensions

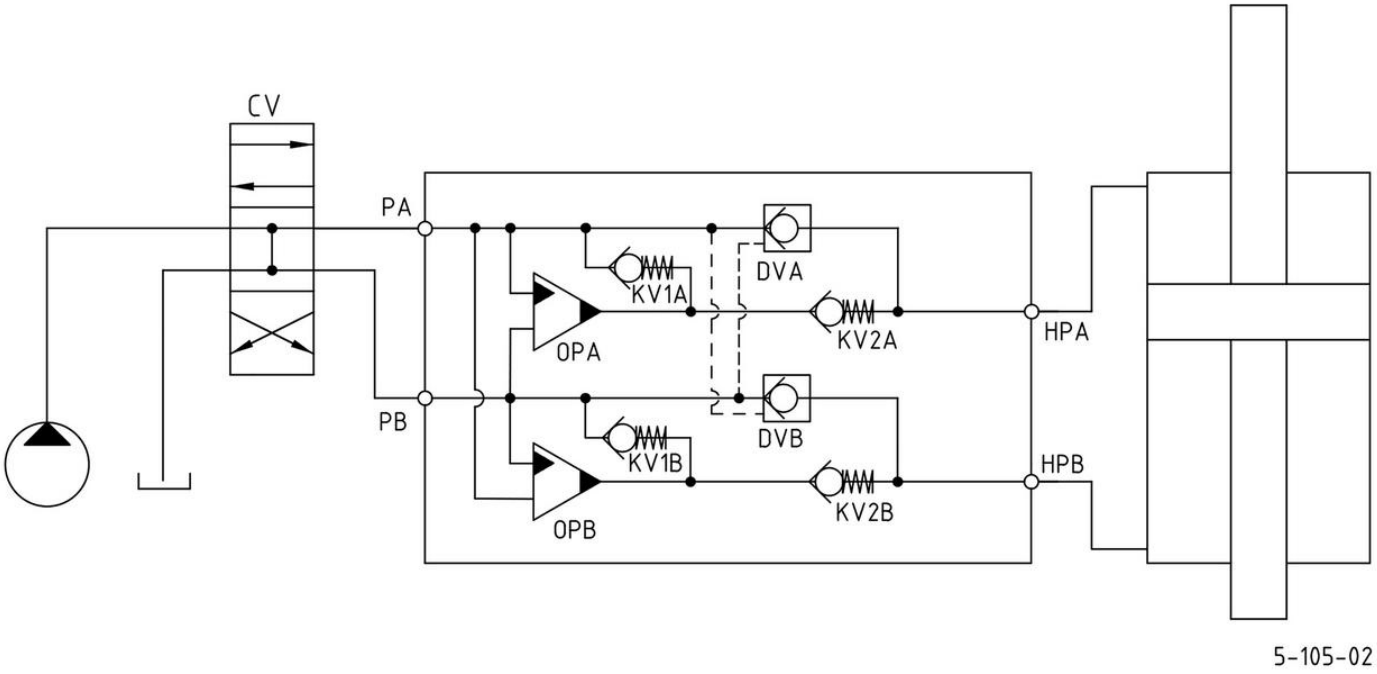


Functions

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 KV1, 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 unit OP. 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 OP valve will automatically operate to maintain the end pressure.

Function Diagram



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Connection types

Connection	IN / R	H
1	1/4" BSPP	1/4" BSPP
2	7/16-18 UNF	9/16-18 UNF

Max. tightening torque BSPP

	IN / R	H
	1/4" BSPP	1/4" BSPP
with steel washer	4.0 da Nm	4.0 da Nm
with aluminium washer	3.0 da Nm	–
with cutting edge	4.0 da Nm	4.0 da N

Max. tightening torque UNF

	IN / R	H
	7/16-18" UNF	9/16-18" UNF
with o- ring	2.0 da/ Nm	3.5 da/ Nm

Fluids and materials

Please see: General specifications

Ordering an HC5

Ordering example of an HC5 with iA = 4.0 and iB = 5.0, and BSPP connections: HC5 - 4.0 - 5.0 - 1

Model	*Intensification, iA*	*Intensification, iB*	*Connections*
HC5	your selection...	your selection...	your selection...
	see flow rate table	see flow rate table	1
			2

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