

HC63 miniBOOSTER



HC63 versions: 9 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)

 $\mathbf{P}_{\text{outlet}}$: $\mathbf{P}_{\text{H}} = (\mathbf{P}_{\text{IN}} - \mathbf{P}_{\text{Return}})$ i (intensification)

Mounting: Inline tube / HP- flange mounting (optional)

Accessories: Pilot- operated dump valve available

A model = no dump valve B model = with dump valve G model = direct proportionally controlled

Description

The HC63 is a high- flow unit which is capable of delivering up to 64.5 I/ min flow on the high- pressure end. Like other miniBOOSTER models, the HC63 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 HC63 is a compact unit weighing only 60.0 kg.

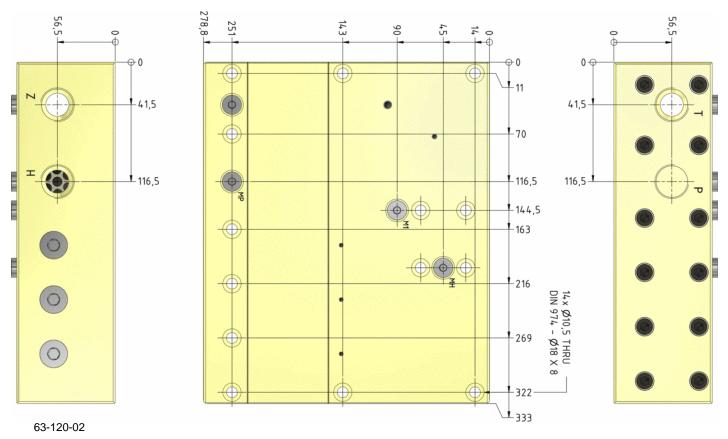
HP flange mounting is optional. Furthermore, it is possible to flange multiple HC63 boosters in order to achieve higher flow.

Flow rates

Intensification factor i	Max. intensified outlet flow I/ min	Max. by- pass pump flow I/ min
1.2	64.5	225.0
1.5	55.5	225.0
2.0	48.0	225.0
2.5	39.0	225.0
3.3	33.0	225.0
4.0	27.0	225.0
4.9	21.0	225.0
6.3	16.5	225.0
8.2	13.5	225.0



Dimensions



Dimension drawing





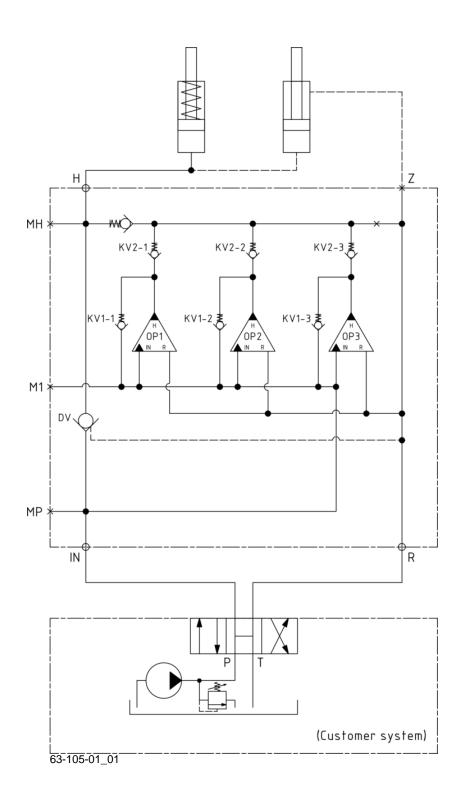
Functions

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



Connection types

Connection	Р/Т	H/Z
1	1" BSPP	1" BSPP

Max. tightening torque

	P/T	H/Z
	1" BSPP	1" BSPP
with steel washer	33.0 da/ Nm	33.0 da/ Nm
with aluminium washer	18.0 da/ Nm	_
with cutting edge	33.0 da/ Nm	33.0 da/ Nm

Max. tightening torque flange mounting

	Mounting bolt	
	M10 8.8	5.0 da/ Nm
Fluids and materials	miniBOOSTER Hydraulics A/ S, Fynsgade 3, DK - 6400 Sønderborg, Tel: + 45 7442 9292 © 2016 COPYRIGHT MINIBOOSTER HYDRAULICS A/ S	ISO 9001 BUREAU VE Certification



Ordering an HC63

Ordering example of an HC63 with i = 4.0, DV incorporated and BSPP connections: HC63 - 4.0 - B - 1

Model	Intensification, i	Dump valve	Connections
HC63	your selection	your selection	your selection
	see flow rate table	A = (no) / A model	1
		B = (yes) / B model	
		G = (proportional) / G model	

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