



Advantages:

- ✓ All high pressure valves integrated
- ✓ Oscillating, continuous flow
- ✓ Different flow rates available
- ✓ High pressures reachable
- ✓ Special solutions/further models on request

Description

Function

Hydraulic pressure intensifier (boosters) from Series MP work oscillating and increase a supplied pressure to a higher end pressure, automatically.

The picture on the right shows the basic principle of the pressure booster, consisting of a piston system and the control valve PCV.

The position of the piston triggers a signal to the PCV, which ensures that the piston moves in the required direction. The piston continues the operation until the final pressure is reached. Then the operation will stop and the piston moves just to maintain the end pressure.

Cycle

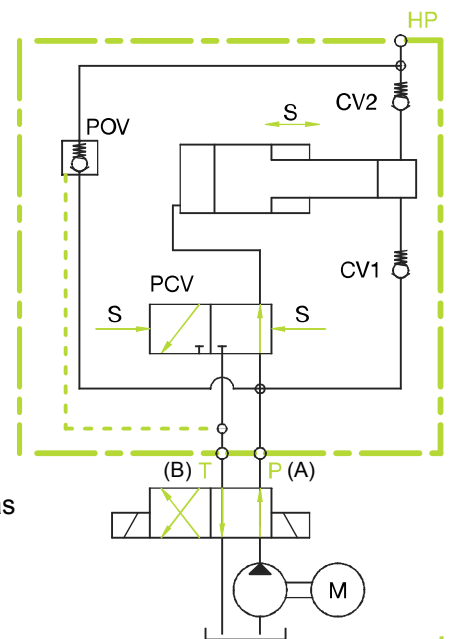
If **P** (A) and **T** (B) and also the shown valve are connected to the pressure intensifier, the oil flows both, through the integrated check valves **CV1** and **CV2**, as well as by the integrated pilot operated check valve (**POV**), to the high pressure side **HP**.

When the system pressure / pump pressure has built up at the high pressure side, the final pressure is generated by the piston movement. In this case the piston operates until the final pressure is reached.

If the pressure is reached, the piston acts only pressure-maintaining or regulating. The piston operates oscillating depending on accumulating oil consumption.

Relieving of the high pressure side is generated by unlocking of the check valve (**POV**), by applying pressure to **(B) T**.

It must be ensured that, the oil at the high pressure side can flow back into the tank.



Further models and special solutions on request!

Application range

- ✓ Hydraulic Clamping Systems
- ✓ Hydraulic Power Systems
- ✓ Static and dynamic test equipment
- ✓ Changing Systems for press automation
- ✓ mechanical engineering
- ✓ Demolition Tools
- ✓ Mobil hydraulic
- ✓ Hydraulic Tools

Technical Data

Housing: GGG40 / steel (also available as stainless steel)
 O-Rings: PU 92 / NBR 70 (only static O-Rings)
 Media: Hydraulic oil und water glycol
 (Water and other media on request)
 Filtration: 10 μ nominal, max. 19/16 acc. ISO 4406

Contact

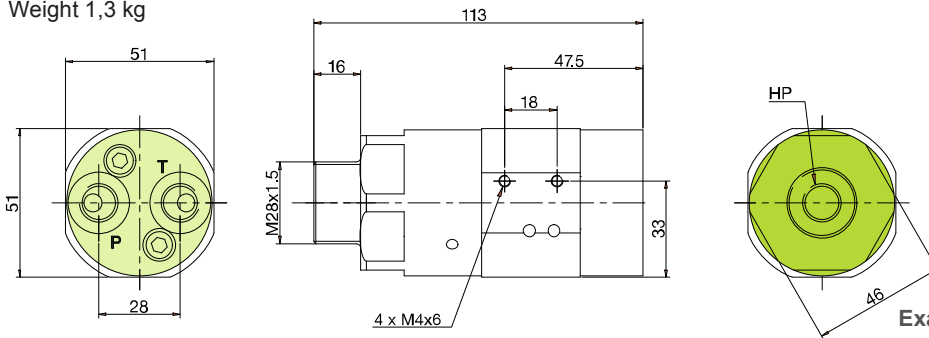
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Max. 800 bar

MP-T-P

Ratio (i)	Max. Inlet flow (LPM / GPM)	Outlet Flow Q1 (LPM / GPM)	Outlet Flow Q2 (LPM / GPM)	Max. Supply Pressure (bar / psi)	Max. Output Pressure (bar / psi)
1,5	8,0 / 2,1	0,8 / 0,21	0,3 / 0,08	200 / 2.900	300 / 4.350
2,0	8,0 / 2,1	0,8 / 0,21	0,2 / 0,08	200 / 2.900	400 / 5.800
3,4	15,0 / 4,0	2,2 / 0,58	0,5 / 0,13	200 / 2.900	680 / 9.860
4,0	14,0 / 3,7	1,8 / 0,47	0,4 / 0,10	200 / 2.900	800 / 11.600
5,0	14,0 / 3,7	1,4 / 0,37	0,3 / 0,08	160 / 2.320	800 / 11.600
7,0	13,0 / 3,4	1,1 / 0,29	0,2 / 0,05	114 / 1.653	800 / 11.600
9,0	13,0 / 3,4	0,7 / 0,19	0,1 / 0,03	89 / 1.290	800 / 11.600

Weight 1,3 kg



Specifying a MP-T *

MP-T - P - - -

	Low pressure	High pressure
G	G1/4"	G1/4"
U	7/16-20 UNF	9/16-18 UNF

Intensification ratio

1,5	2,0	3,4	4,0	5,0	7,0	9,0
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Example

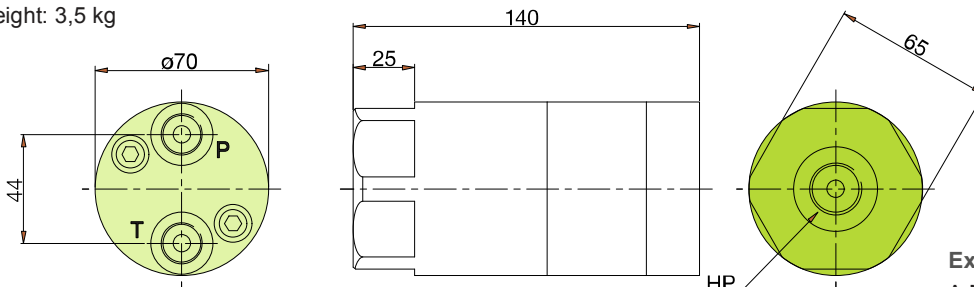
A MP-T-P, with Intensification ratio 5,0:1 and G1/4"
MP-T-P-5,0-G

Max. 800 bar

MP-M

Ratio (i)	Max. Inlet flow (LPM / GPM)	Outlet Flow Q1 (LPM / GPM)	Outlet Flow Q2 (LPM / GPM)	Max. Supply Pressure (bar / psi)	Max. Output Pressure (bar / psi)
1,8	25,0 / 6,6	5,0 / 1,32	1,5 / 0,39	200 / 2.900	360 / 5.220
3,4	35,0 / 9,3	5,0 / 1,32	2,8 / 0,74	200 / 2.900	680 / 9.860
4,0	35,0 / 9,3	4,0 / 1,06	2,4 / 0,63	200 / 2.900	800 / 11.600
5,0	35,0 / 9,3	3,5 / 0,93	1,9 / 0,50	160 / 2.030	800 / 11.600
7,0	35,0 / 9,3	3,0 / 0,80	1,3 / 0,34	114 / 1.450	800 / 11.600

Weight: 3,5 kg



P + T: G 3/8 (3/8" BSP)

HP: G1/2" (1/2" BSP)

Specifying a MP-M *

MP-M - -

Intensification ratio				
1,8	3,4	4,0	5,0	7,0

Example

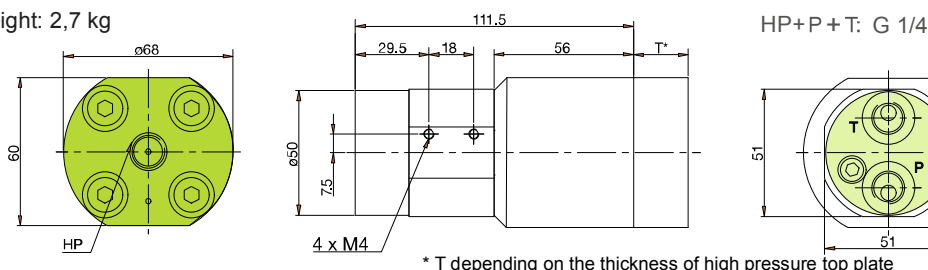
A MP-M with intensification ratio 4,0:1
MP-M-4,0

Max. 2000 bar

MP-2000-P

Ratio (i)	Max. Inlet flow (LPM / GPM)	Outlet Flow Q1 (LPM / GPM)	Outlet Flow Q2 (LPM / GPM)	Max. Supply Pressure (bar / psi)	Max. Output Pressure (bar / psi)
7,0	13,0 / 3,40	1,1 / 0,29	0,2 / 0,05	200 / 2.900	1.400 / 20.300
10,0	12,0 / 3,17	0,7 / 0,18	0,2 / 0,05	200 / 2.900	2.000 / 29.000
13,0	10,0 / 2,64	0,5 / 0,13	0,1 / 0,02	154 / 2.233	2.000 / 29.000
16,0	10,0 / 2,64	0,4 / 0,10	0,1 / 0,02	125 / 1.812	2.000 / 29.000

Weight: 2,7 kg



* T depending on the thickness of high pressure top plate

Specifying a MP-2000-P

MP-2000 - P - -

Intensification ratio			
7,0	10,0	13,0	16,0

Example

A MP-2000 with Ir 7,0:1
MP-2000-P-7,0