ScanWill pressure intensifiers

up to 4000 bar, with- and without holding valve

Advantages:

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

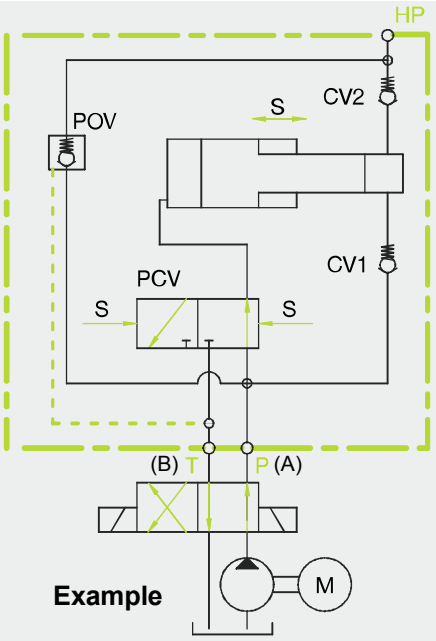
Description

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.



Other models and special solutions on request!

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 pre ssure 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.

The pressure on the high pressure side is relieved by unlocking the valve **(POV)** by applying pressure to **(B) T**. Here it must be ensured that the oil on the high pressure side can flow back into the tank.

Models overview

MP-T

In-Line connection
End pressure:
20-800 bar

Application:
Universal, with frontal and lateral mounting.

2. Page

MP-S

In-Line connection
End pressure:
20-800 bar

Application:
Universal for little available space.

3. Page

MP-M

In-Line connection
End pressure:
20-800 bar

Application:
Universal for high volume flow.

4. Page

MP-C

Cetop DO3 / NG6
End pressure:
20-500 bar
Application:
For Cetop NG6 Manifold-/ Sandwich plate mounting.

5. Page

MP-F

Flange-on mounting
End pressure:
20-700 bar
Application:
For Flange- on/plate mount.
No connection threads.

6. Page

MP-2000

In-Line connection
End pressure:
800-3000 bar

Application:
For high outlet pressures suitable.

7. Page

MPL-1400-4000

In-Line connection
End pressure:
800-4000 bar

Application:
For high outlet pressures and volume flows.

8. Page

MP-T

Universal intensifier with sideway and frontal fastening.

Features:

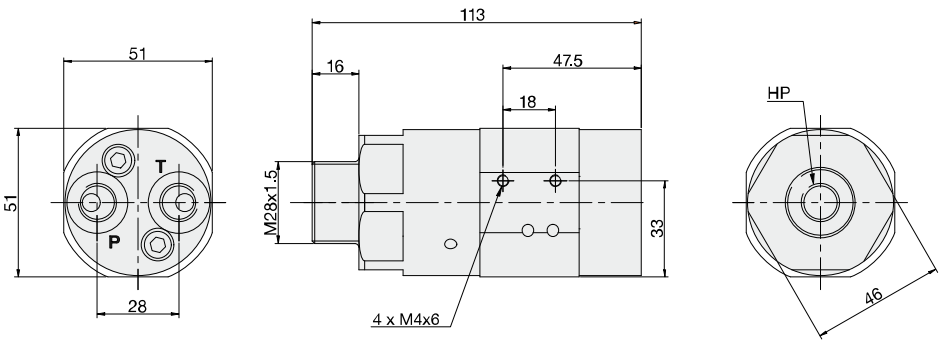
- In-line intensifier
- Outlet pressure: 20 - 800 bar / 290 - 11,600 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

Attention:

Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

Up to 800 bar

Ratio (I)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
1,5	15,0 / 4,0	2,8 / 0,21	200 / 2.900	300 / 4.350
2,0	15,0 / 4,0	2,8 / 0,21	200 / 2.900	400 / 5.800
2,8	8,0 / 2,1	0,8 / 0,21	200 / 2.900	560/ 8.100
3,4	15,0 / 4,0	2,2 / 0,58	200 / 2.900	680 / 9.860
4,0	14,0 / 3,7	1,8 / 0,47	200 / 2.900	800 / 11.600
5,0	14,0 / 3,7	1,4 / 0,37	160 / 2.320	800 / 11.600
7,0	13,0 / 3,4	1,1 / 0,29	114 / 1.653	800 / 11.600
9,0	13,0 / 3,4	0,7 / 0,19	89 / 1.290	800 / 11.600



All Connecting Threads G1/4

Specifying a MP-T *

MP-T - - -

POV (yes/no)
P= integrated
S= no POV

Low pressure	High pressure
G	G1/4“ G1/4

Pressure ratio
Acc. Chart

Example
MP-T-P, ratio 5,0:1
MP-T-P-5,0-G

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MP-S

Universal and compact intensifier without sideway fastening.

Features:

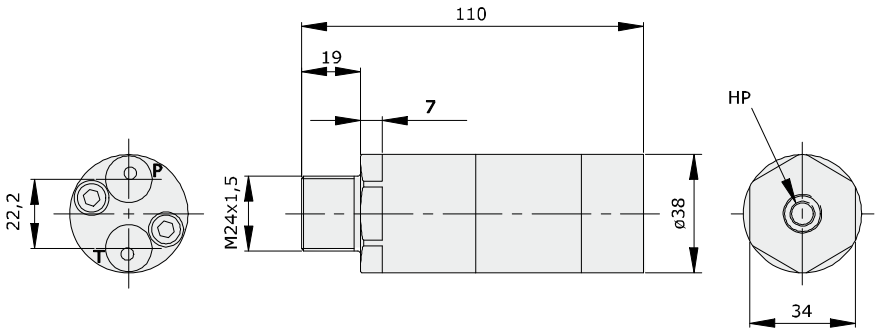
- In-line intensifier
- Outlet pressure: 20 - 800 bar / 290 - 11,600 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated
- Compact design

Attention:

Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

Up to 800 bar

Ratio (l)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
1,5	15,0 / 4,0	2,8 / 0,21	200 / 2.900	300 / 4.350
2,0	15,0 / 4,0	2,8 / 0,21	200 / 2.900	400 / 5.800
2,8	8,0 / 2,1	0,8 / 0,21	200 / 2.900	560/ 8.100
3,4	15,0 / 4,0	2,2 / 0,58	200 / 2.900	680 / 9.860
4,0	14,0 / 3,7	1,8 / 0,47	200 / 2.900	800 / 11.600
5,0	14,0 / 3,7	1,4 / 0,37	160 / 2.320	800 / 11.600
7,0	13,0 / 3,4	1,1 / 0,29	114 / 1.653	800 / 11.600
9,0	13,0 / 3,4	0,7 / 0,19	89 / 1.290	800 / 11.600



P & T Connections: 1/8" BSP

HP-Connection: 1/4" BSP

Specifying a MP-S *

MP-S - - -

POV (yes/no)	Low pressure	High pressure
P= integrated	G	G1/4“ G1/4
S= no POV		

Pressure ratio
Acc. Chart

Example
MP-S-P, ratio 5,0:1
MP-S-P-5,0-G

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MP-M

Universal intensifier for high volume flow without fastening.

Features:

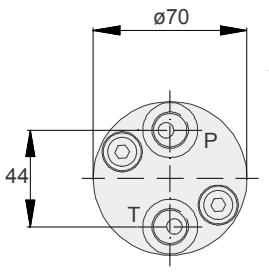
- In-line intensifier
- Outlet pressure: 20 - 800 bar / 290 - 11,600 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated
- Compact design

Attention:

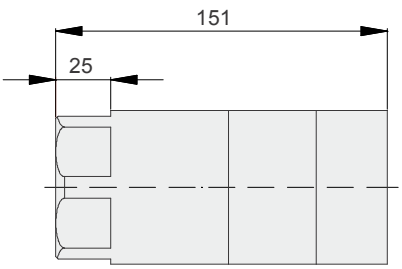
Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

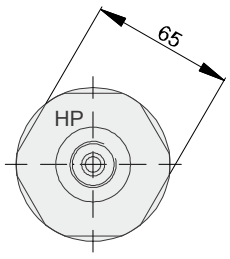
Up to 800 bar

Ratio (I)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
1,8	25,0 / 6,6	5,0 / 1,32	200 / 2.900	360 / 5.220
2,1	25,0 / 6,6	5,0 / 1,32	200 / 2.900	420 / 6.090
2,6	35,0 / 9,3	5,0 / 1,32	200 / 2.900	520 / 7.540
3,4	35,0 / 9,3	5,0 / 1,32	200 / 2.900	680 / 9.860
4,0	35,0 / 9,3	4,0 / 1,06	200 / 2.900	800 / 11.600
5,0	35,0 / 9,3	3,5 / 0,93	160 / 2.320	800 / 11.600
7,0	35,0 / 9,3	3,0 / 0,80	114 / 1.653	800 / 11.600



P & T Connections: G 3/8





HP Connection: G 1/2

Specifying a MP-M *

MP-M - - -

POV (yes/no)
P= integrated
S= no POV

Low pressure	High pressure
G	G3/8 G1/2

Pressure ratio
Acc. Chart

Example
MP-M-P, ratio 5,0:1
MP-M-P-5,0-G

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MP-C

Pressure intensifier with CETOP / NG6 connection for (intermediate) plate mounting.

Features:

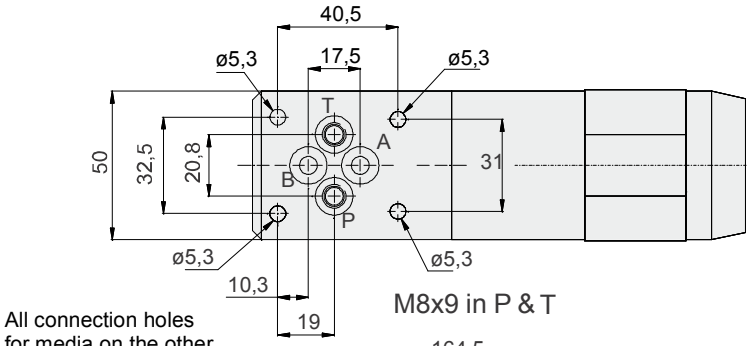
- Cetop DO3 / NG6 intensifier
- Outlet pressure: 20 - 500 bar / 290 - 7.250 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

Attention:

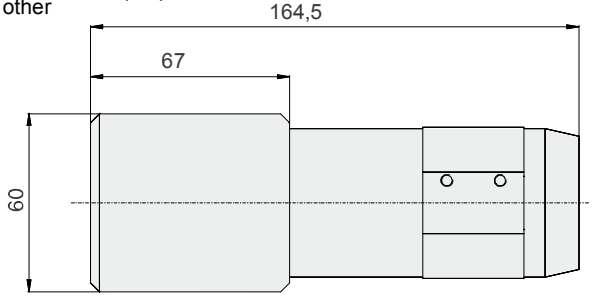
Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

Up to 500 bar

Ratio (I)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
1,5	8,0 / 2,1	2,8 / 0,65	200 / 2.900	300 / 4.350
2,0	8,0 / 2,1	2,8 / 0,65	200 / 2.900	400 / 5.800
2,8	8,0 / 2,1	2,8 / 0,65	178 / 2.589	500 / 7.250
3,4	15,0 / 4,0	2,2 / 0,58	147 / 2.132	500 / 7.250
4,0	14,0 / 3,7	1,8 / 0,47	125 / 1.812	500 / 7.250
5,0	14,0 / 3,7	1,4 / 0,37	100 / 1.450	500 / 7.250
7,0	13,0 / 3,4	1,1 / 0,29	71 / 1.036	500 / 7.250
9,0	13,0 / 3,4	0,7 / 0,19	56 / 806	500 / 7.250



All connection holes for media on the other side max. Ø6.



Specifying a MP-C *

MP-C - -

POV (yes/no)
P= integrated
S= no POV

Pressure ratio
Acc. Chart

Example
MP-C-P, ratio 5,0:1
MP-C-P-5,0

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MP-F

Pressure intensifier with flange connection for surface mounting.

Features:

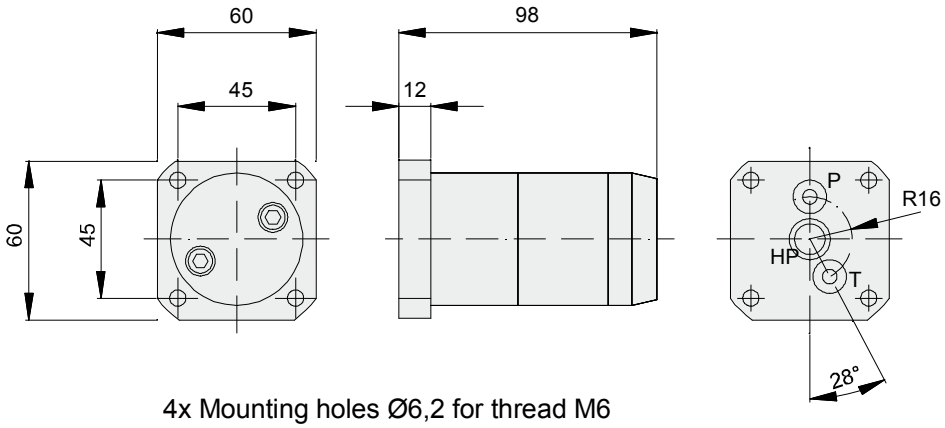
- Intensifier with flange connection
- Outlet pressure: 20 - 700 bar / 290 - 10.150 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

Attention:

Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

Up to 700 bar

Ratio (I)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
1,5	15,0 / 4,0	2,8 / 0,65	200 / 2.900	300 / 4.350
2,0	15,0 / 4,0	2,8 / 0,65	200 / 2.900	400 / 5.800
2,8	8,0 / 2,1	2,8 / 0,65	200 / 2.900	560 / 8.120
3,4	15,0 / 4,0	2,2 / 0,58	200 / 2.900	680 / 9.860
4,0	14,0 / 3,7	1,8 / 0,47	175 / 2.538	700 / 10.150
5,0	14,0 / 3,7	1,4 / 0,37	140 / 2.030	700 / 10.150
7,0	13,0 / 3,4	1,1 / 0,29	100 / 1.455	700 / 10.150
9,0	13,0 / 3,4	0,7 / 0,19	78 / 1.288	700 / 10.150



4x Mounting holes Ø6,2 for thread M6

All connection bores for media on the opposite side max. Ø5.5.

Specifying a MP-F *

MP-F - -

POV (yes/no)
P= integrated
S= no POV

Pressure ratio
Acc. Chart

Example

MP-F-P, ratio 5,0:1
MP-F-P-5,0

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MP-2000

High pressure intensifier with threaded connection for pressures up to 3000 bar and lateral mounting.

Features:

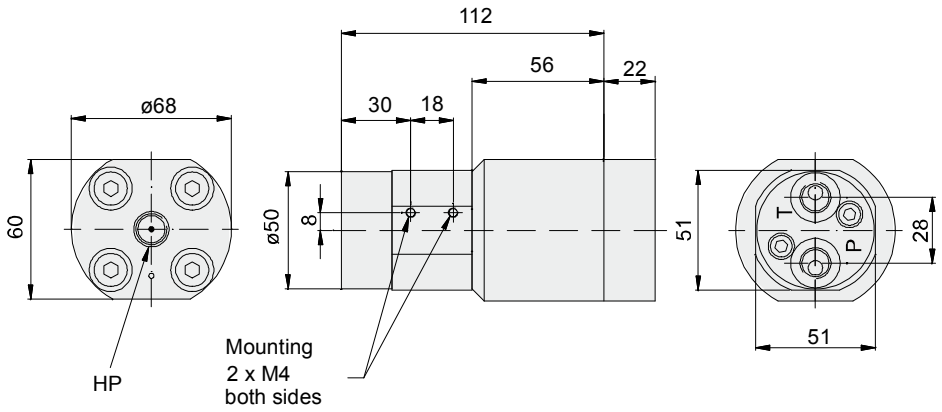
- In-Line pressure intensifier
- Outlet pressure: 320 - 3000 bar / 290 - 43.500 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

Attention:

Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

Up to 3000 bar

Ratio (I)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
7,0	13,0 / 3,4	1,1 / 0,29	200 / 2.900	1400/ 20.300
10,0	12,0 / 3,2	0,7 / 0,18	200 / 2.900	2000/ 29.000
13,0	10,0 / 2,6	0,5 / 0,13	200 / 2.900	2600 / 37.700
16,0	10,0 / 2,6	0,4 / 0,10	188 / 2.711	3000 / 43.500



HP, P, T Connections = G1/2

HP = High pressure
P = Inlet pressure
T = Tank connection

Specifying a MP-2000 *

MP-2000 - ___ -

POV (yes/no)
P= integrated
S= no POV

Pressure ratio
Acc. Chart

Example
MP-2000-P, ratio 10,0:1
MP-2000-P-10,0

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MPL 1400, 2000, 4000

High pressure and volume flow intensifier
for pressures up to 4000 bar without mounting holes.

Features:

- In-Line pressure intensifier
- Outlet pressure 800 - 4000 bar / 11.600 - 58.000 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

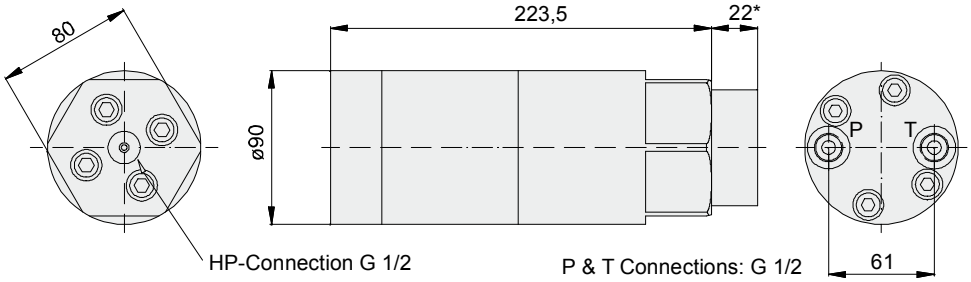
Attention:

Depending on the application, the pressure intensifier can also be use with or without releasable check valve (POV).
Without a POV, for example in single-acting systems, it can make sense if there is no separate pressure connection for unlocking available (T).

Up to 4000 bar

Ratio (I)	Max. Inlet Flow (LPM / GPM)	Outlet Flow (LPM / GPM)	Max. Inlet Pressure (LPM / GPM)	Outlet Pressure (Bar / Psi)
7,0	50,0 / 13,2	8,0 / 2,1	200 / 2.900	1400/ 20.300
10,0	30,0 / 7,9	5,0 / 1,3	200 / 2.900	2000/ 29.000
14,0	30,0 / 7,9	4,6 / 1,1	200 / 2.900	2800/ 40.600
20,0	30,0 / 7,9	4,0 / 1,0	200 / 2.900	4000 / 58.000

MPL-1400



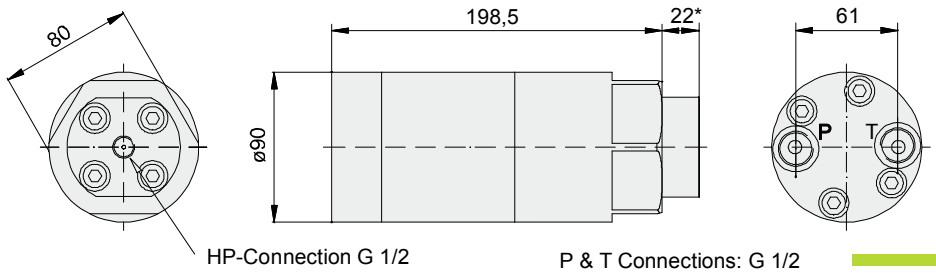
Specifying a MPL- *

MPL - ___ - ___ - G

POV (yes/no)
P= integrated
S= no POV

Pressure ratio
Acc. Chart

MPL-2000-4000



*= Adapter plate only required if the thread is different!

Example
MPL-P, ratio 4,0:1
MPL-P-4,0-G

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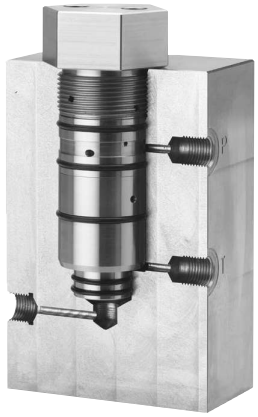
Diverse Sonderanwendungen

MPI

The MPI pressure intensifier is a screw-in pressure intensifier for drilled channels.



Features:

- Screw-in pressure intensifier
- Ausgangsdruck: 20 - 800 bar / 290 - 11.600 psi
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated
- Elegant integration into hydraulic systems

SIS-34

The SIS-34 pressure intensifier is a complete unit for local pressure increase.

Features:

- Compact Unit
- Simple mounting
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

MP-T-P7.0-R

The pressure intensifier is a special solution for integration in rotary units.

Features:

- Particularly suitable for rotary applications
- Thread connections
- Different pressure ratios
- Oscillating, with constant flow during the pressure build-up
- All high pressure valves integrated

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