

Oil/oil intensifiers

Shown: PID-402



Swing cylinders
Work supports

Linear cylinders

Power sources

► PID series

When hydraulic pressure from an existing power source is limited, Enerpac oil-to-oil intensifiers serve to increase output pressure to satisfy the required application.

■ PID-Series intensifier utilizes low pressure machine hydraulics to power clamping cylinders.



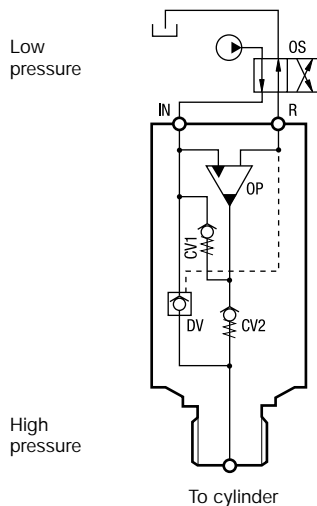
High flow units intensify low inlet oil pressure to high outlet pressure

- Internal bypass valving enables high output flow rates
- Wide range of intensification ratios allows for adapting to various operating pressure requirements
- Compact and self-contained design allows for ease of installation
- Includes dump valve, eliminates the need for an external pilot check valve
- Select fit of all internal components provides long operating life

🔍 Intensifier principle

- When oil is supplied to the inlet (IN) port it flows freely past the check valves (CV) and the dump valve to the cylinder and advances it.
- As the inlet pressure increases the oscillating pump (OP) automatically increases the outlet pressure by the chosen intensification.
- Once the maximum pressure is reached, the pump frequency lowers and balances at the maximum pressure.
- Free flow from the cylinder to tank occurs when the directional control valve is switched to supply the R-port.
- A 10 micron filtration is essential in the supply circuit to ensure trouble free operation (see options).

PID series



📦 Product selection

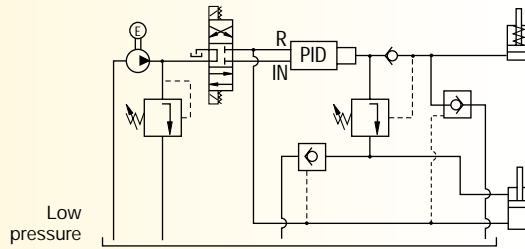
Maximum output pressure	Pressure intensification ratio	Maximum input flow	Maximum output flow	Model number	Inlet pressure range	🏋️
bar		l/min	l/min	with dump valve	min. - max. bar	kg
640	1 : 3,2	15,0	2,5	PID-322	20 - 200	1,2
700	1 : 4,0	14,0	2,0	PID-402	20 - 175	1,2
700	1 : 5,0	14,0	1,6	PID-502	20 - 140	1,2
700	1 : 6,6	13,0	1,3	PID-662	20 - 106	1,2



i System set-up information

With dump valve (PID models)

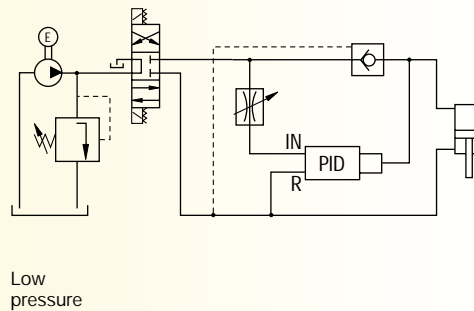
The intensifier with the dump valve is used to achieve high pressure on the advance side of a double-acting cylinder.



With external dump valve

In a circulating system where the pump's oil flow is higher than the maximum inlet oil flow of the intensifier, an external check valve and flow control valve reduces the pump's oil flow.

This application can be set up when machines are equipped with low pressure hydraulics but the pressure to clamp the workpiece must be higher.



Ratio: 1 : 3,2 - 1 : 6,6


Flow: 1,3 - 2,5 l/min


Pressure: 65 - 700 bar


- E** Multiplicadores
- F** Multiplicateurs
- D** Öl-Öl Druckübersetzer



i Options

FL-series, High pressure filters  [109](#)

Directional valves  [88](#)

FZ-series Fittings  [110](#)

PID models with dump valve provide an economical means of relieving pressure from the system.

Can be panel mounted into machine (M24x1,5 thread).

! Important

Do not exceed maximum allowable inlet pressure.

10 micron inlet filtration is essential to ensure trouble-free operation.

A Product dimensions in mm []

PID Serie

