PI73-TS stainless steel pressure intensifier (topside version)





Version without vent valve

Version with pilot-operated vent valve

- Designed to boost the pressure of any water-based or mineral/synthetic oilbased fluid.
- Boosts inlet pressure up to 7 times without external power. The maximum outlet pressure is 1380 bar.
- When system pressure is achieved, there is minimal consumption of expensive hydraulic fluid.
- External components manufactured from 316 (standard), or from duplex stainless steels; no painting required for hostile environments.
- Two versions with and without a pilot-operated vent valve for the high pressure line.

The PI73-TS Intensifier amplifies the inlet pressure to a higher outlet pressure by a predetermined ratio.

Pressure in the high pressure line can become reduced as a result of a system leak or the use of the stored (pressure) energy. The PI73-TS restores and maintains that pressure in such instances. Check and changeover valves are integrated within the main body of the intensifier as is the pilot-operated vent valve in the versions in which it is incorporated. When the inlet pressure x the ratio = the outlet pressure, then the PI73-TS is in a stalled condition and there is minimal consumption of fluid. The maximum outlet pressure is 1380 bar.

valve, that valve is normally held closed by the input pressure. If the low pressure supply to the intensifier is lost, the integrated vent valve (if fitted) will open and decay the high pressure line to supply (versions are available the decay the pressure to exhaust). **Applications**

With the model incorporating the pilot-operated vent

The PI73-TS was designed principally for applications in

the offshore oil and gas industry where the highest standards of product performance and durability are essential. The PI73-TS's external components are manufactured from 316 stainless steel to withstand hostile environments; it can operate on all water-based glycol fluids or on mineral and synthetic oils.

Material

Manufactured from stainless steel with nitrile seals as standard.

Weight: 11 kgs (PI73-00-TS models without vent valve) or 26 kgs (PI73-02-TS models incorporating vent valve). Fluids

Suitable for use with mineral/synthetic oils and all water-

based fluids such as HW443 and Transagua HT2, plus many others. The fluids used should be to a cleanliness standard of NAS 1638 class 6 or better. Mounting

The pressure intensifier can be mounted vertically or horizontally. System temperature

The PI73-TS has been qualified to operate at temperatures from -10°C to $+80^{\circ}\text{C}$ (Ambient) at pressures up to a maximum of 1380 bar. Safety note

The inlet pressure of the intensifier should be carefully controlled, as the outlet pressure increases by the ratio of the pump in use. For example, if an 8:1 intensifier is being used, a rise in the inlet pressure of 125 bar will immediately increase the outlet pressure by 875 bar. A relief valve set at the maximum pump rating should be

fitted immediately downstream of the pump delivery port.

Go to separate page for standard model specifications

Drawing (PI73-TS-xx-00 model without vent valve)





