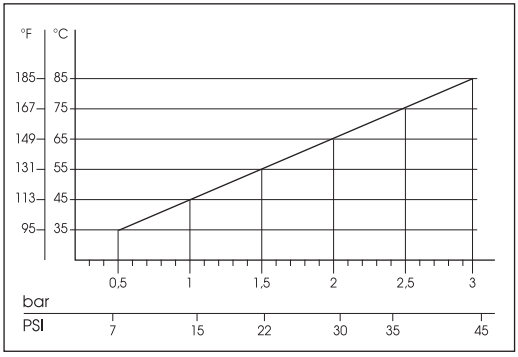
Menu

INSTRUCTIONS AND RECOMMENDATIONS FOR THE INSTALLATION OF *HT SERIES PUMPS*

Rev.1

The pumps for high temperature of the HT series have been designed for use in applications where the water must be pre-heated, such as in car wash, food and pharmaceutical industries.
Maximum temperature of the water through the pump is 85°C (185°F).
In order to obtain maximum performance in terms of duration of seals and valves it is necessary to respect a few simple rules, as follows:

1) In order to avoid damage caused by cavitation, the pump must be fed in pressure.
The higher the inlet pressure, the longer the life of all the wet end of the pump.
When working at 85° C (185°F), the minimum feed pressure measured directly in the inlet port of the pump when It is working, is 3 bar (45 PSI).
The minimum feed pressures according to the different temperatures are:



Naturally if the application allows to feed the pump with 3 bar (45 PSI) even at low temperatures (for example: 45°C - 115°F) the life of the wet end of the pump will be even longer.

2) The plumbing which feeds the pump must be of diameter at least equal to the inlet port. Also follow the suggestions below:
a) Make the plumbing as short and straight as possible, preferably in upwards direction to facilitate the expulsion of eventual air bubbles, naturally if compatible with the requirements of the system.
b) It is always useful to put at the inlet of the pump, a filter with capacity 4 to 5 times the flow of the pump, for example for a 15 l/min. (4 GPM) pump, put filter from 60 – 75 l/min. (16 to 20 GPM). The mesh size suitable for this application is 0,4mm (0,016").
c) It is extremely important to put a pressure switch on the suction port of the pump, and in any case downstream from the filter, so that it can stop the pump should the feed pressure drop by 20% due to the filter clogging or failure of the feed pump etc.

3) Change of oil
We recommend the first oil change after the first 50 hours, with the pump stopped (!!)
And the oil still warm.
This change is not recommended because the oil has lost its properties, but to eliminate the impurities that have got into the oil during the running–in phase.
Which if not removed remains in the oil causing premature wear on the moving parts and the oil seals. The oil can then be changed every 1000 hours.
Please note: if the pump works in ambient with high humidity and with sharp temperature changes, it is possible that condensation appears inside the crankcase, which mixing with the oil can change its properties.
This is easy to see because the oil changes to a white milky colour.
If the pump does not have excessive water leaking from the packings, and the oil becomes milky, the oil has to be changed more frequently.
The percentage of water in the oil must not exceed 20%.
Use mineral oil per the following chart:

CHART OF COMPATIBLE OILS SAE 15W40	
INTERPUMP	X99 ORIGINAL
AGIP	F1 SUPERMOTOR OIL
API	EXTRA PENTA
BP	VISCO 2000
CASTROL	GTX 3
ELF	GT DRIVE
ERG	TECHNO SUPER
ESSO	UNIFLO
IP	SUPER M.O. MULTIGRADE
MOBIL	SUPER M
Q8	FORMULA RALLYE
ROLOIL	SUPERMULTIGRADE
SELENIA	VS MAX
SHELL	HELIX SUPER
TAMOIL	SUPER UNIVERSAL
TEXACO	HAVOLINE PREMIUM
TOTAL	QUARTZ 4000

cod. 32.0022.03 - 03/09 - 500