

# Tank units for chilled water

## Hydronic systems: HPT



Carbon steel tank and tubes insulated with anti-condensate elastomer

**TESTED**



The HPT units are hydraulic units with buffer tanks designed to reduce the production time of conditioning and cooling systems. They can be equipped with all different kinds of water coolers.

The HPT units are made of:

- carbon steel tank and tubes insulated with anti-condensate elastomer
- Centrifugal single or double pump with a shut-off valve
- Switchboard with possibility to alternate the pumps with every start-up (2 pump version), to start-up the backup pump in case of breakdown (2 pump version), magnetothermic protection, cleaned contact to signalise the distance between the pumps, protection category IP55
- Expansion vessel
- Safety valve
- Deaerator
- Manometer
- Fill-up/drain valve
- Base and self-supporting panels made of galvanized and coated steel sheets, suitable for outdoor installations.

### Available versions

The broad range of pump-tank combinations makes it possible to meet all requirements. Numerous versions are available: with a single or a double pump and with tanks with a capacity of 100, 200, 300, 500, 750, 1000, 1500 and 2500 litres.

### Accessories

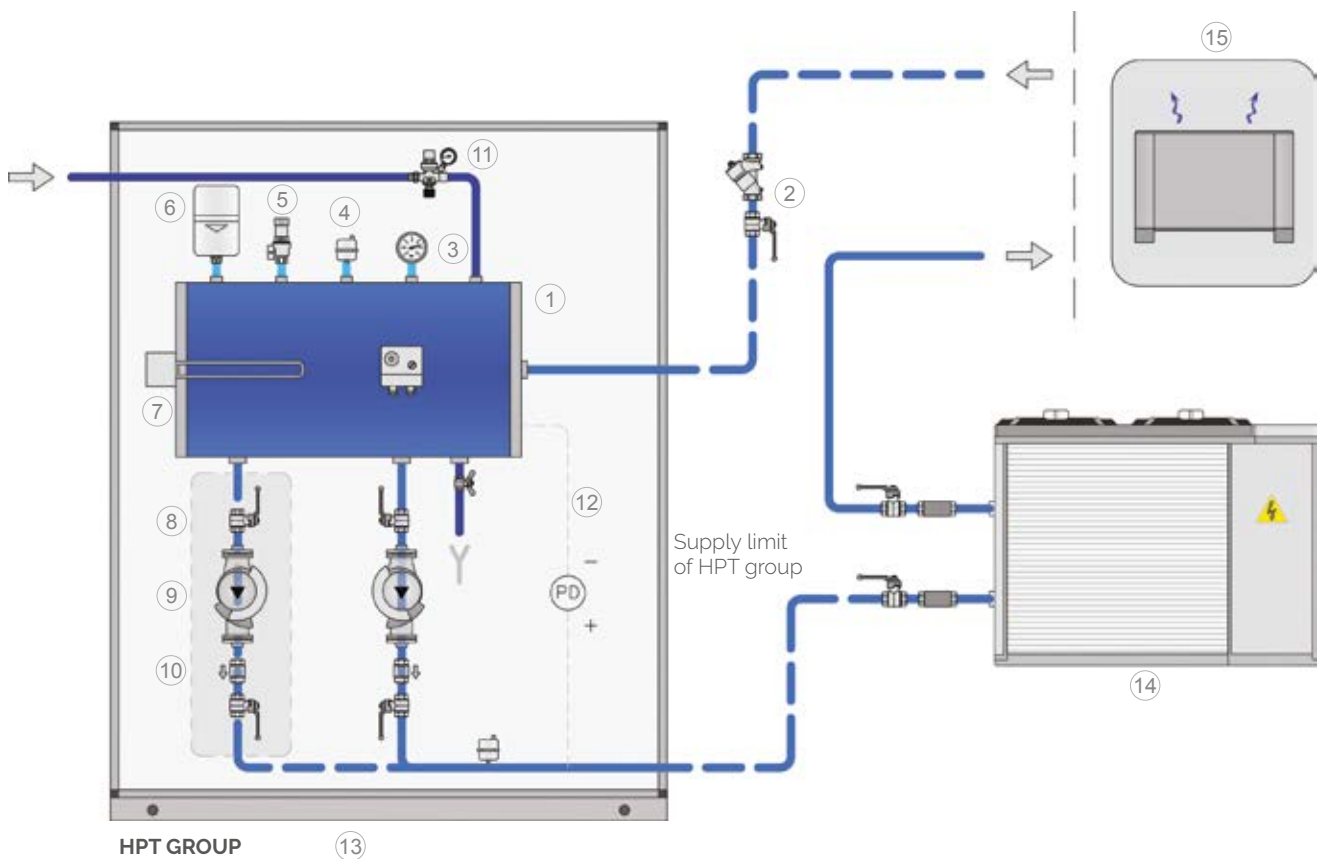
For the accessories list see pag. 104

# HPT hydronic systems

## Layout 1 - STANDARD

**Layout 1 Features:** Hydronic kit, chiller and system connected in series, hence the water flow is constant throughout the plant.

NOTE: All HPT Fiorini standard kit kits are Layout 1



### Legend

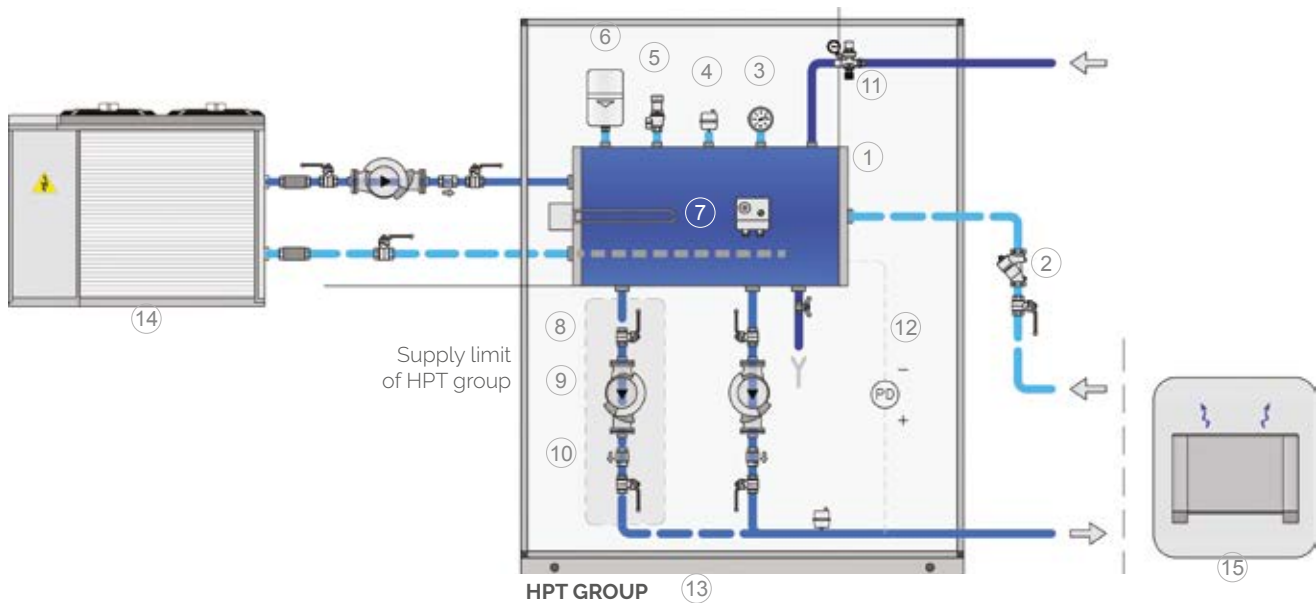
1. Storage tank
2. Y filter. Optional, supplied non-assembled
3. Manometer
4. Deaerator
5. Safety valve
6. Expansion vessel
7. Kit with electric anti-freeze resistance and anti-freeze thermostat (optional)
8. On-off valve
9. Circulator
10. Check valve (only version with 2 pumps)
11. Automatic filling unit
12. Differential pressure switch (optional)
13. Self-supporting wooden structure for outside placement
14. Chiller
15. Device

# HPT hydronic system

## Layout 2 - SPECIAL VERSION

**Layout 2 Features:** Hydronic Kit and Chiller create the primary circuit, Hydronic Kit and Plant create the secondary circuit. Hence, the two circuits have independent flow rates.

NOTE: Pump unit supplied only on one of the two circuits.



### Legend

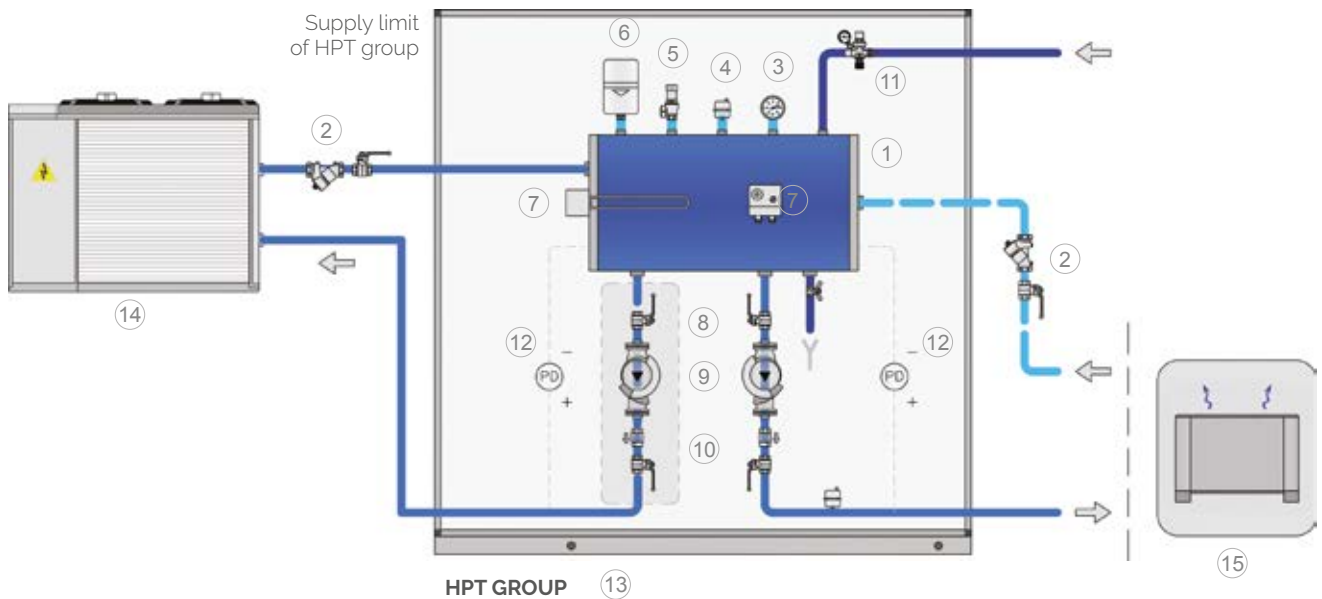
1. Storage tank
2. Y filter. Optional, supplied non-assembled
3. Manometer
4. Deaerator
5. Safety valve
6. Expansion vessel
7. Kit with electric anti-freeze resistance and anti-freeze thermostat (optional)
8. On-off valve
9. Circulator
10. Check valve (only version with 2 pumps)
11. Automatic filling unit
12. Differential pressure switch (optional)
13. Self-supporting wooden structure for outdoor placement
14. Chiller
15. Device

# HPT hydronic system

## Layout 3 - SPECIAL VERSION

**Layout 3 features:** Hydronic Kit and Chiller create the primary circuit, Hydronic Kit and the system create the independent secondary circuit. Then the two circuits have independent flow rates.

NOTE: Pump assembly supplied on both circuits.



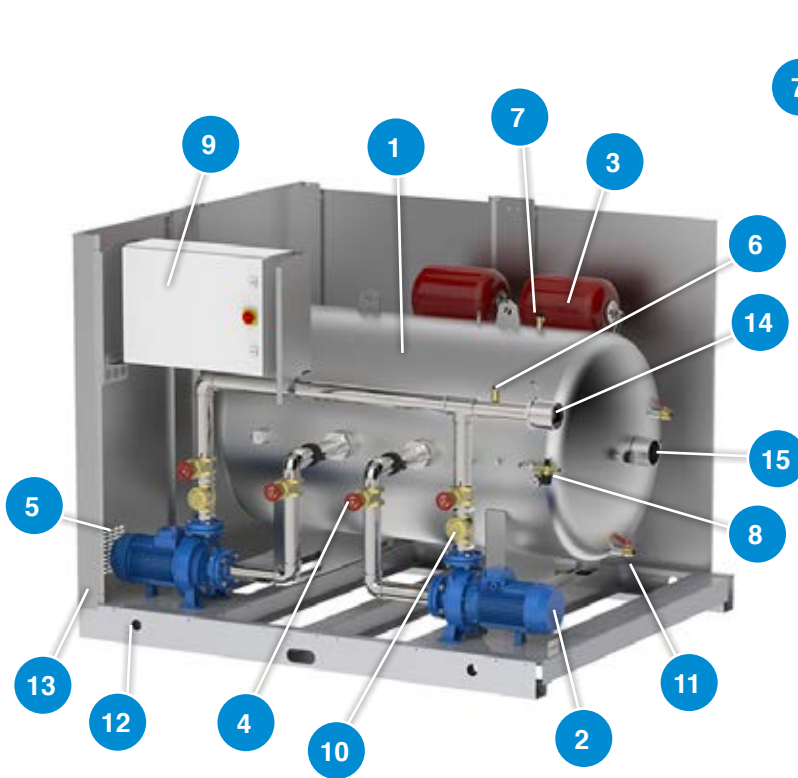
### Legend

1. Storage tank
2. Y filter. Optional, supplied non-assembled
3. Manometer
4. Deaerator
5. Safety valve
6. Expansion vessel
7. Kit with electric anti-freeze resistance and anti-freeze thermostat (optional)
8. On-off valve
9. Circulator
10. Check valve (only version with 2 pumps)
11. Automatic filling unit
12. Differential pressure switch (optional)
13. Self-supporting wooden structure for outside placement
14. Chiller
15. Device

# Hydronic systems

## HPT: components

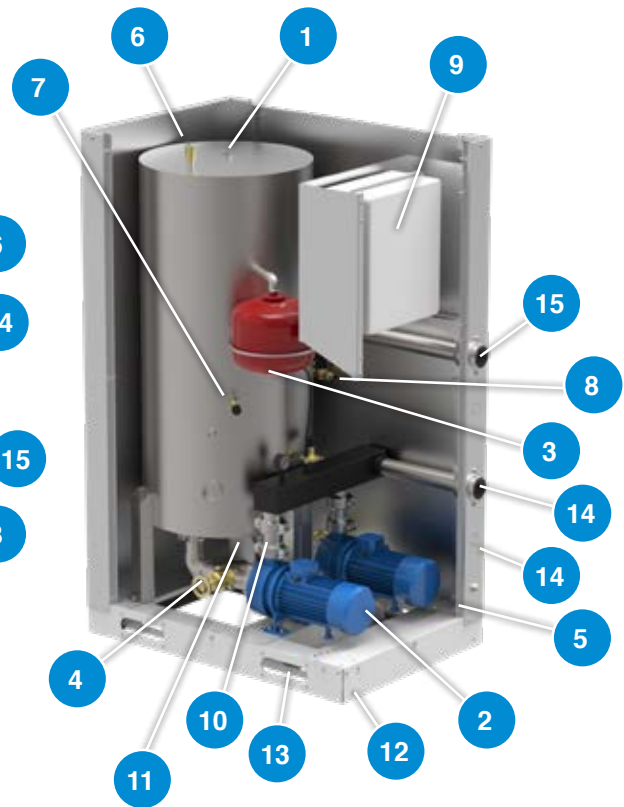
Horizontal HPT



Components

- 1 Tank
- 2 Circulator
- 3 Expansion vessel
- 4 On-off valve
- 5 Automatic ventilation system
- 6 Pressure relief valve
- 7 Safety valve
- 8 Automatic filling unit
- 9 Switchboard
- 10 Control valve (version with 2 pumps)
- 11 Drain
- 12 Anchoring point (4-6 holes m12/ ø14)
- 13 Inlet power grid
- 14 Water outlet
- 15 Water inlet

Vertical HPT



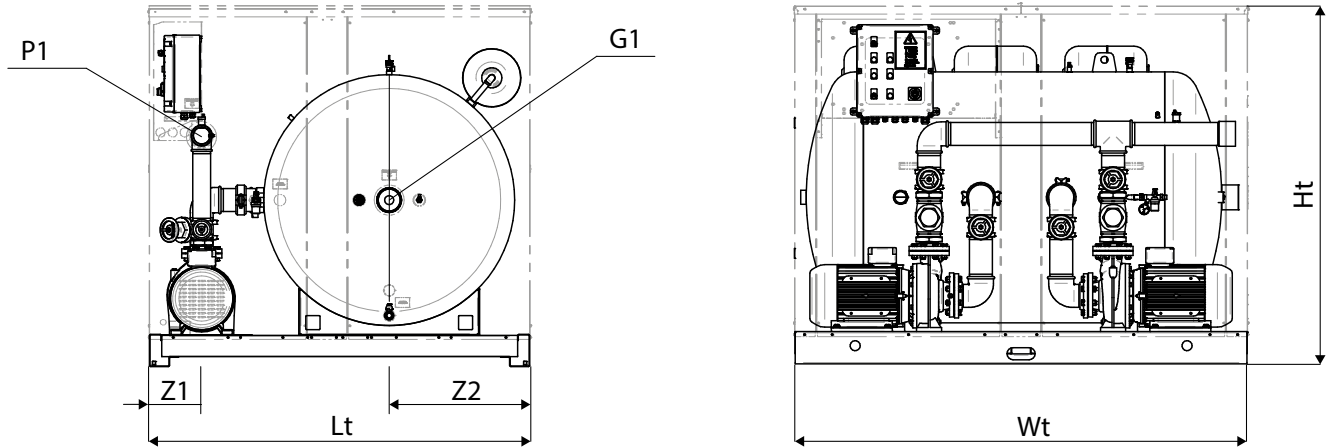
Components

- 1 Tank
- 2 Circulator
- 3 Expansion vessel
- 4 On-off valve
- 5 Automatic ventilation system
- 6 Pressure relief valve
- 7 Safety valve
- 8 Automatic filling unit
- 9 Switchboard
- 10 Control valve (version with 2 pumps)
- 11 Drain
- 12 Inlet power grid
- 13 Jacking points
- 14 Water outlet
- 15 Water inlet

# Hydronic systems

## HPT: dimensions and connections

### Horizontal version



### Horizontal HPT dimensions

Capacity l	Wt mm	Lt mm	Ht mm	P1 mm	G1 mm	Z1 mm	Z2 mm	G1 inch	P1 inch
300	1504	1120	1265	738	490	212	388	2 1/2	2 1/2
500	1504	1120	1265	738	490	212	388	2 1/2	2 1/2
750	2044	1200	1510	940	604	185	440	3"	3"
1000	2044	1200	1510	940	604	185	440	3"	3"
1500	2260	1900	1782	1145	829	262	703	4"	4"
2500	2260	1900	1782	1145	829	262	703	4"	4"

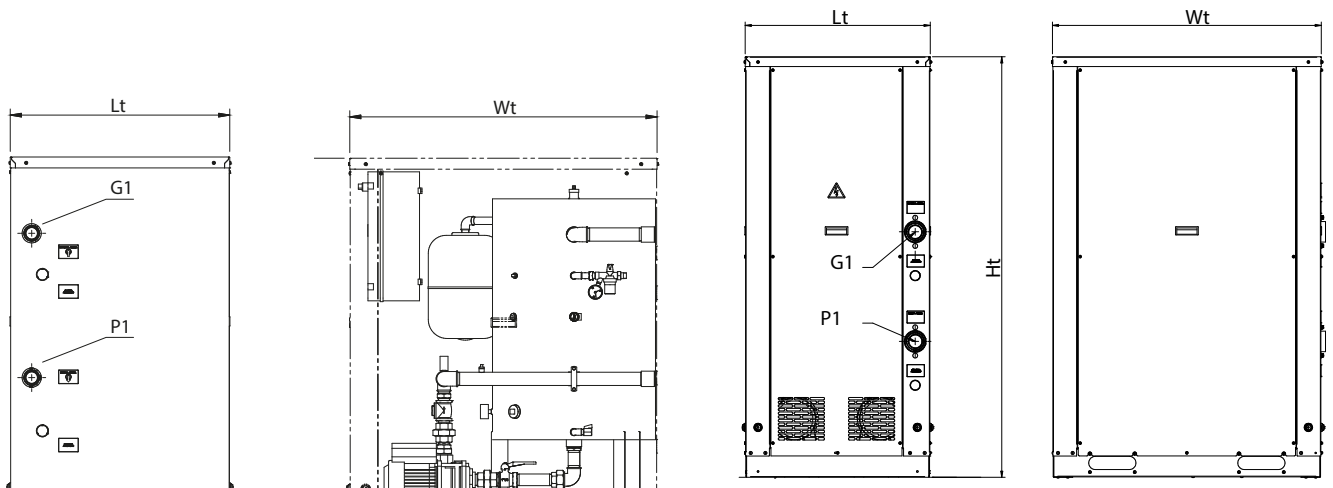
### Couplings legend

<b>G1</b>	From plant
<b>P1</b>	To energy source

### Vertical version

#### HPT 100-200

#### HPT 300



### Vertical HPT dimensions

Capacity l	Wt mm	Lt mm	Ht mm	P1 mm	G1 mm	P1 inch	G1 inch
100	1120	800	1350	546	1002	1 1/2	1 1/2
200	1120	800	1350	546	1072	1 1/2	1 1/2
300	1100	760	1726	558	1008	2 1/2	2 1/2

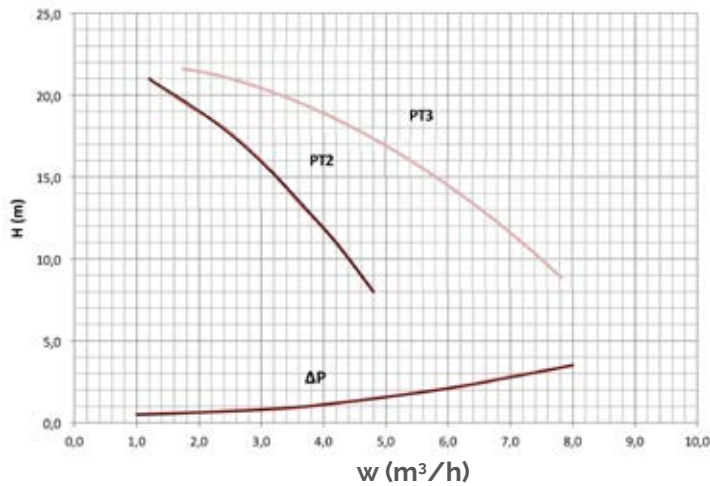
### Couplings legend

<b>G1</b>	From plant
<b>P1</b>	To energy source

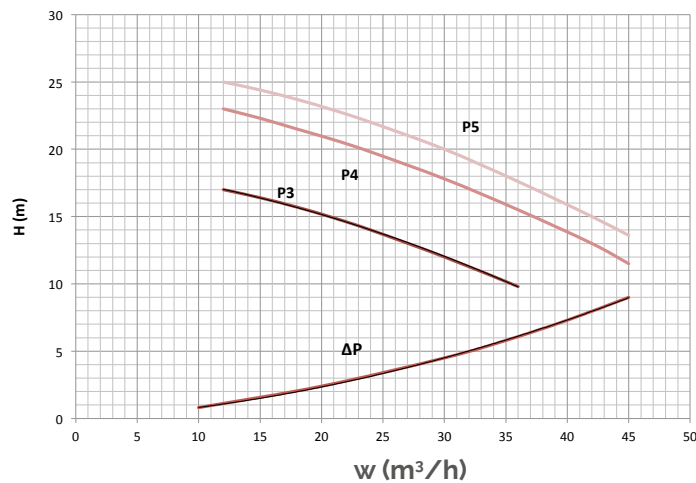
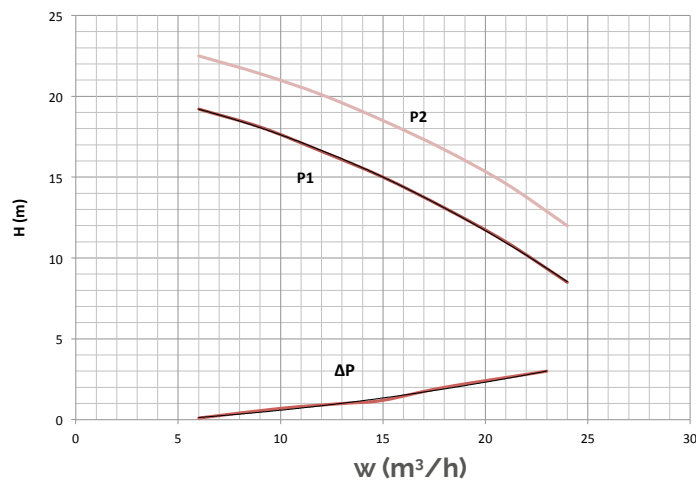
# HPT hydronic systems

## Prevalence and pressure loss curve

HPT-V 100-200



HPT 300-500

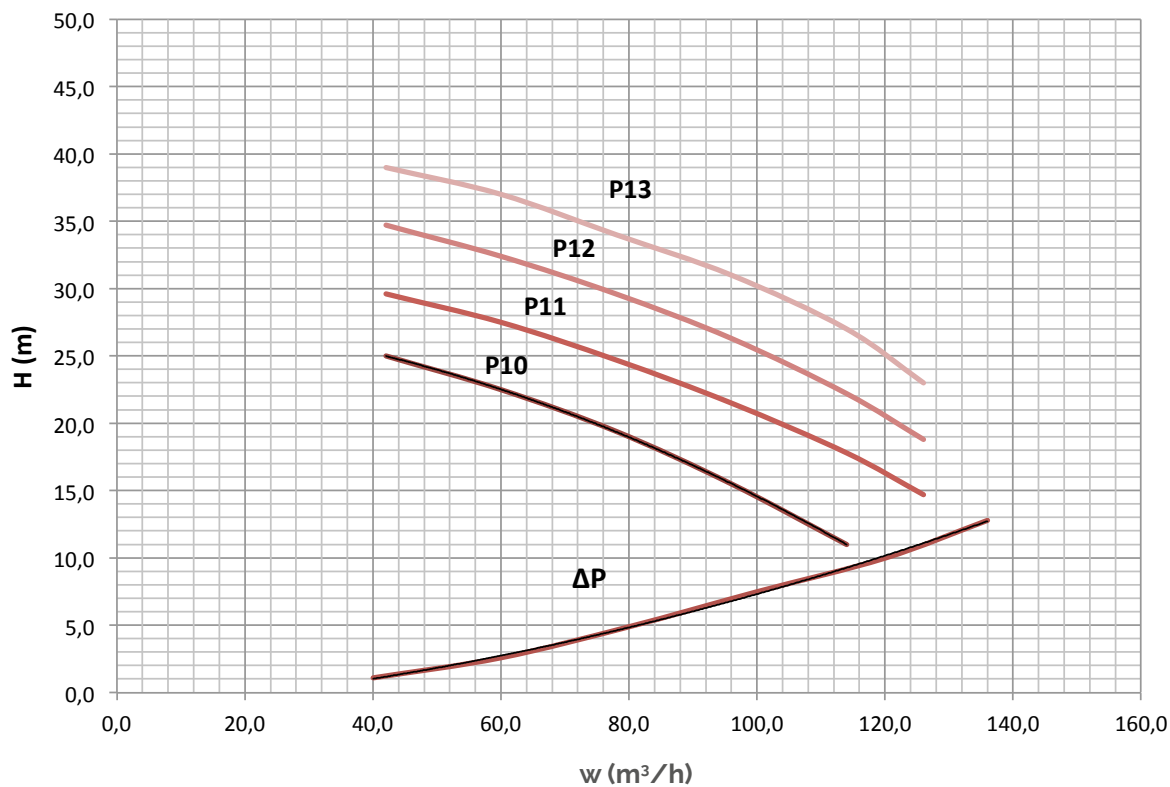
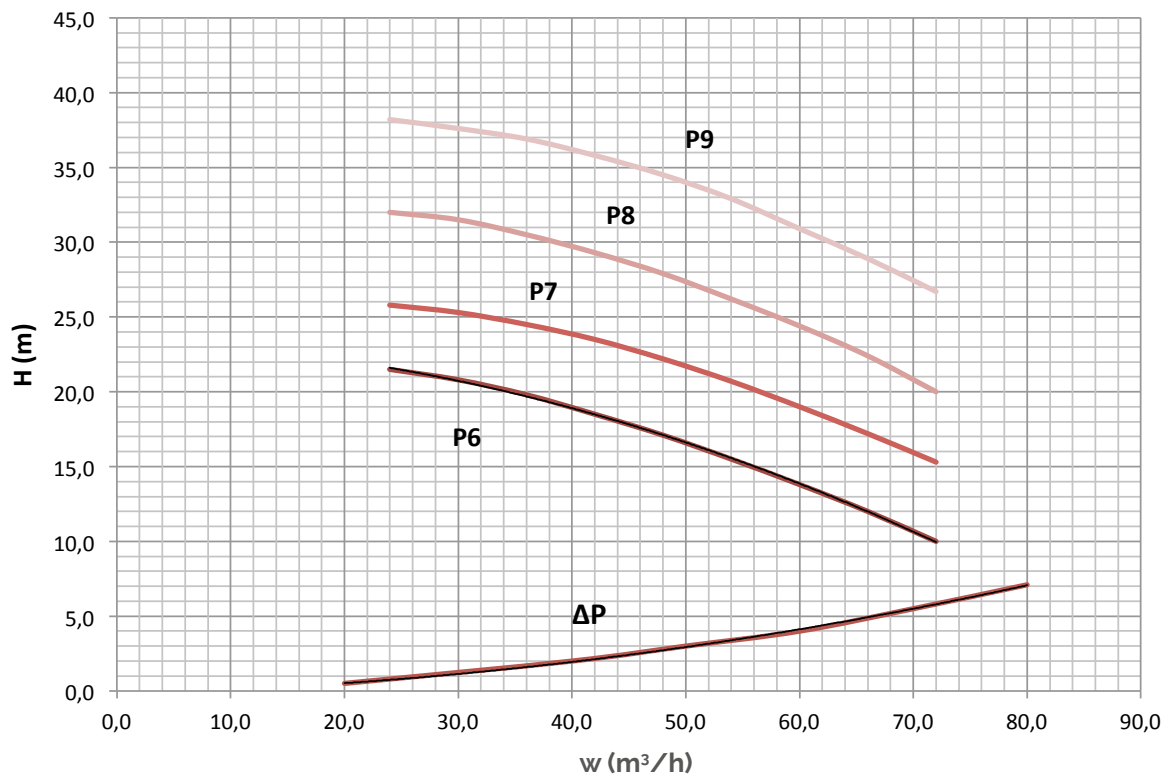


$\Delta P$ : pressure loss of the HPT unit

# HPT hydronic systems

## Prevalence and pressure loss curve

HPT 750-1000



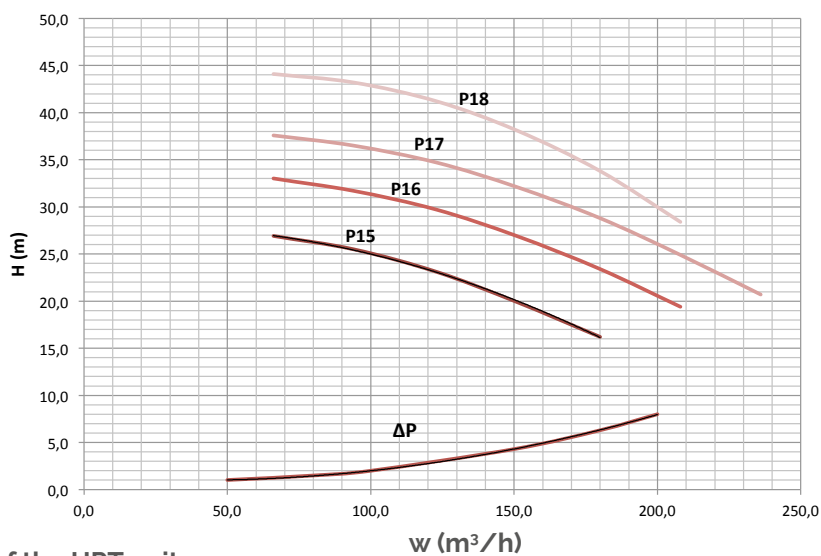
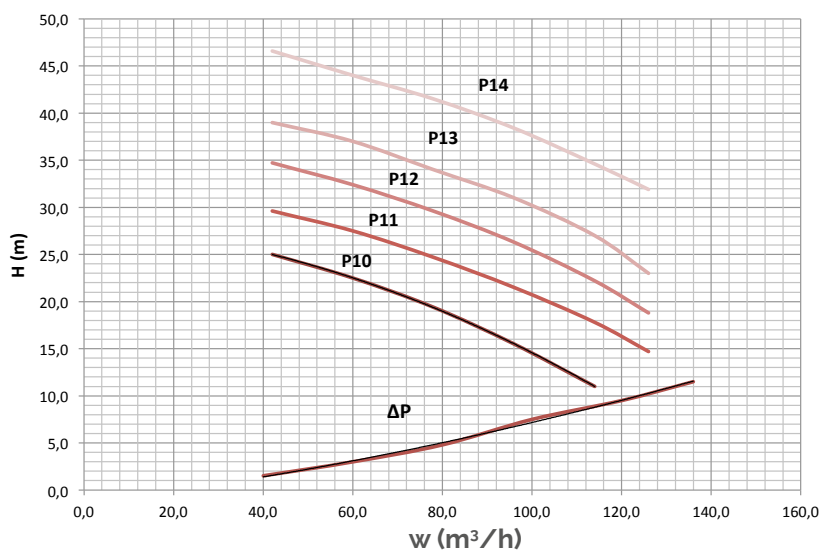
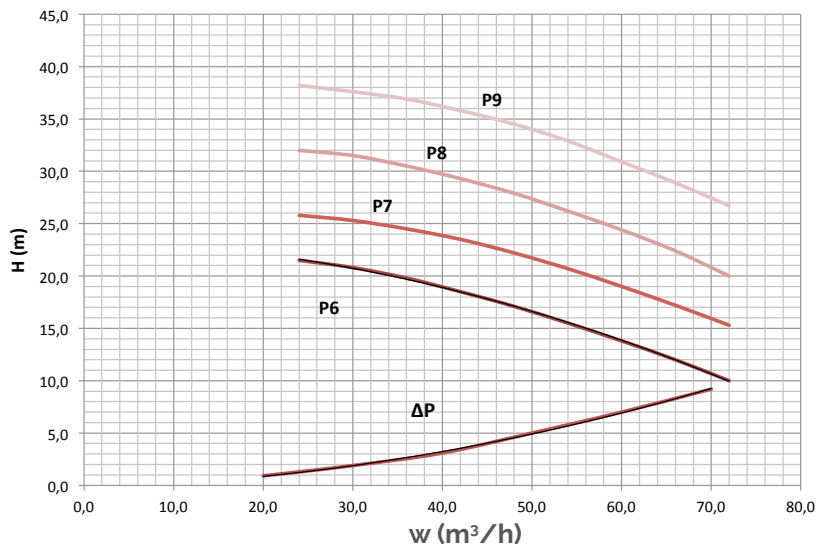
$\Delta P$ : pressure loss of the HPT unit



# HPT hydronic systems

## Prevalence and pressure loss curve

HPT 1500-2500



$\Delta P$ : pressure loss of the HPT unit