

## FINNED TUBE HEAT EXCHANGER



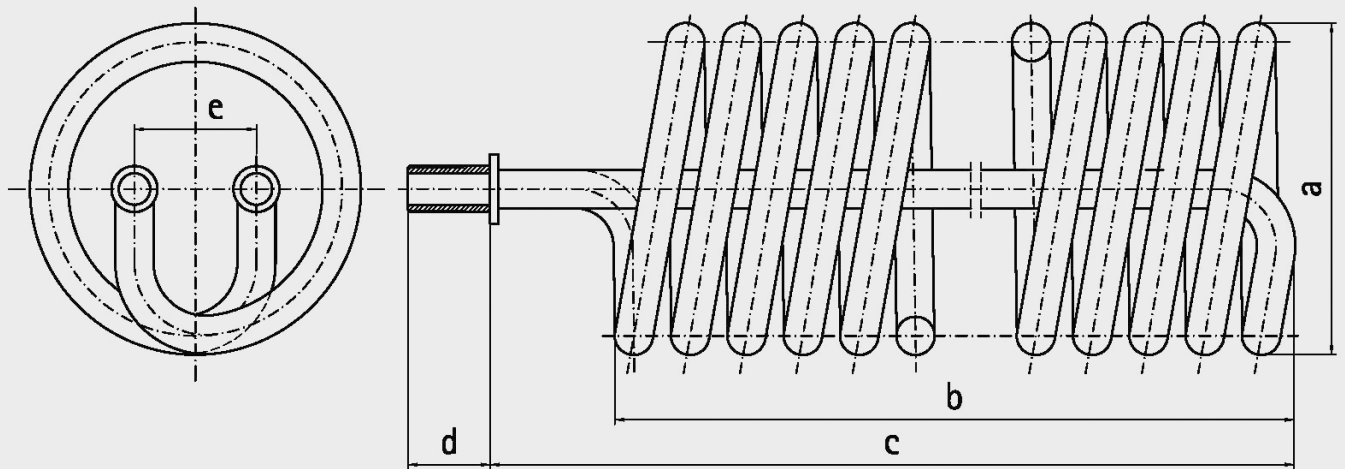
### WT finned tube heat exchanger

A spirally coiled finned tube heat exchanger made of a copper finned tube with medium high ribs, tin-plated exterior incl. screw connection. The pipe connections are hard-soldered to the pipe ends.

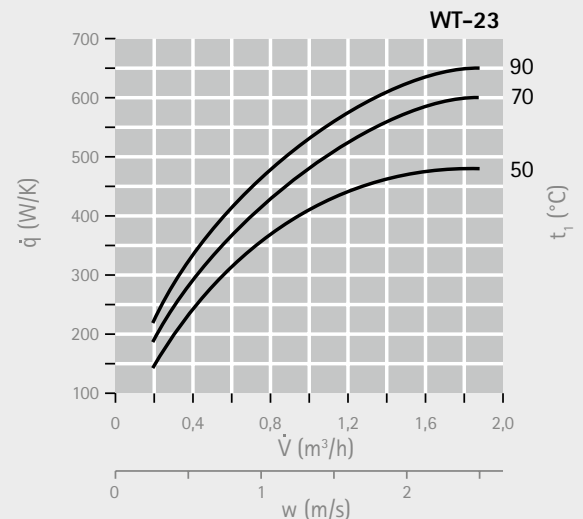
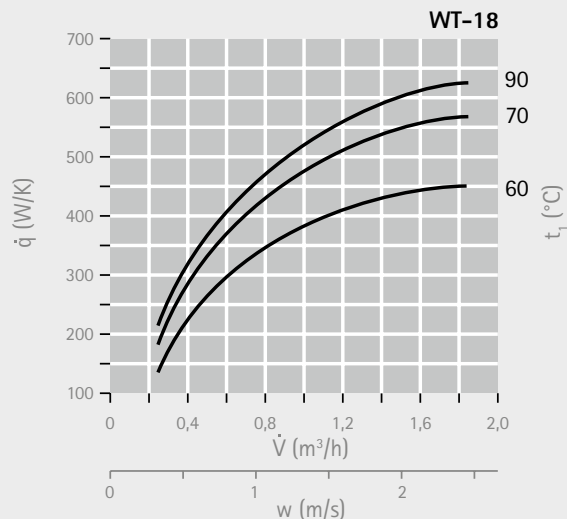
Please note: An insulating set (electrical separation) is imperative for use with hot water tanks. Failure to do so results in reduction of the warranty period for the tank to 1 year.

### Specifications

Type	WT 18	WT 23	WT 26	WT 32	WT 36	WT 45	WT 55
Item no.	1610043	1610044	1610045	1610046	1610047	1610048	1610049
Max. operating pressure	10 bar						
Max. operating temperature	130 °C (170 °C for a short time)						
Surface area	1.8 m <sup>2</sup>	2.3 m <sup>2</sup>	2.6 m <sup>2</sup>	3.2 m <sup>2</sup>	3.6 m <sup>2</sup>	4.5 m <sup>2</sup>	5.5 m <sup>2</sup>
Volume	1.4 l	1.8 l	2.1 l	2.4 l	2.8 l	3.6 l	4.2 l
Weight	6.8 kg	8.6 kg	9.8 kg	11.7 kg	14.0 kg	17.2 kg	19.8 kg
a	171	171	191	190	190	191	190
b	~400	~500	~500	~500	~600	~630	~780
c	470	570	570	560	660	700	850
d	¾" x 50	¾" x 50	¾" x 50	1" x 55	1" x 55	1" x 55	1" x 55
e	70	70	70	90	90	90	90
Surface treatment	Tin-plated						
Use	PSN 500-5000				PSN 1000-5000		



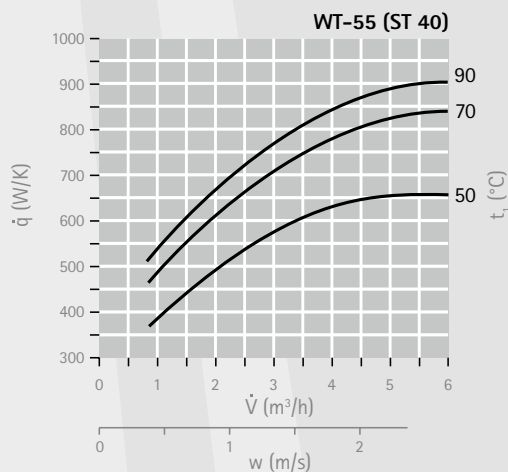
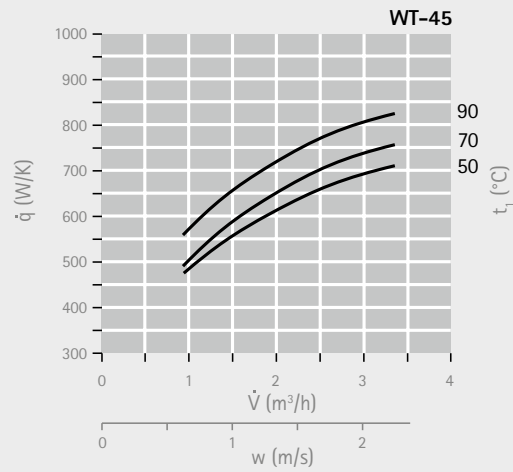
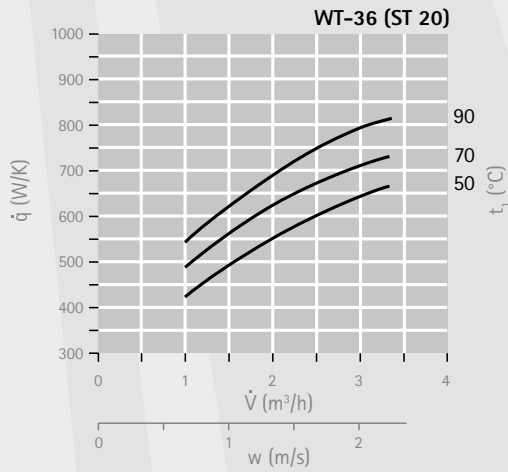
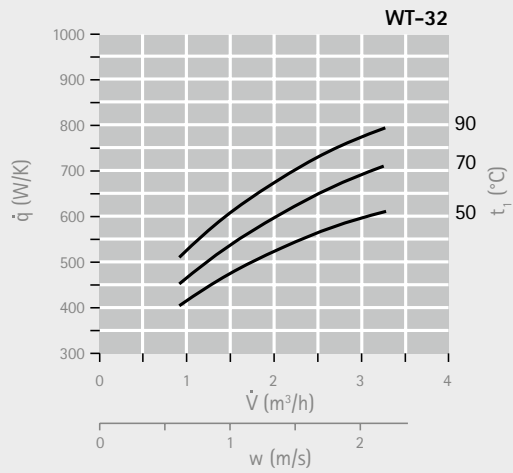
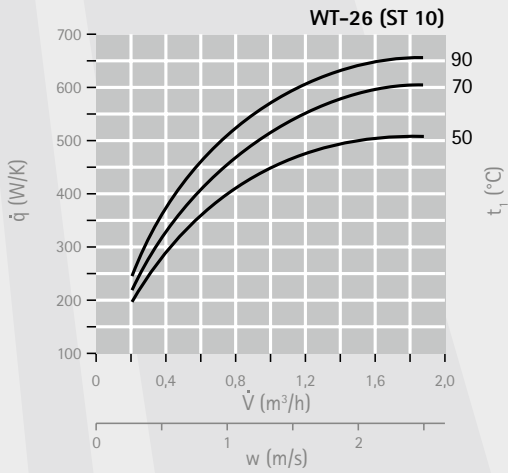
### Finned tube heat exchanger performance curves



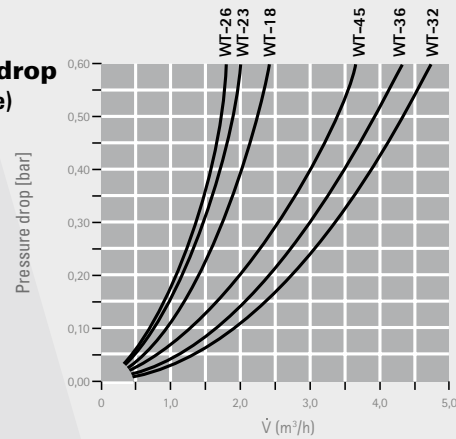
# TANK ACCESSORIES

## FINNED TUBE HEAT EXCHANGER

### Finned tube heat exchanger performance curves (contd.)



### Pressure drop (water in pipe)



### Performance and pressure drop

<b>Q</b> [W]	Output to be transferred
<b>q</b> [W/K]	Output per 1 K temperature difference
<b>t1</b> [°C]	Heating water on entry
<b>ts</b> [°C]	Tank temperature
<b>V</b> [m³/s]	Heating water volumetric flow
<b>w</b> [m/s]	Heating water velocity (should not be greater than 1.8 m/s if possible)
<b>Δp</b> [bar]	Pressure drop on the heating water side

### Formula for calculation: $Q = f1 \times q \times x (t1 - ts)$

f1 = Factor for frost protection: 0.85 (for 40% antifreeze content)

