

# WL 320.04

## Cooling column, type 5



### Learning objectives/experiments

- determination of the cooling capacity

### Specification

- [1] additional cooling column for the wet cooling tower WL 320
- [2] cooling column made of transparent plastic
- [3] wet deck surface made of plastic, variably arranged
- [4] cooling column fitted with plates
- [5] sensor to measure the water temperature
- [6] connections to measure the pressure loss with WL 320

### Technical data

Specific surface: variable

Number of plates: 3

Cross-section: 150x150mm

LxWxH: 210x210x960mm

Weight: approx. 7kg

### Scope of delivery

- 1 cooling column type 5
- 1 temperature sensor

### Description

- cooling column contains variable wet deck surfaces
- sensor to measure the water temperature

Cooling columns contain wet deck surfaces. The cooling capacity of a cooling column is determined by the surface of these wet deck surfaces.

WL 320.04 contains divided wet deck surfaces. The cooling column type 5 is placed into WL 320 instead of the column type 1. It is possible to variably arrange the wet deck surfaces. Additionally, plates are fitted into the cooling column. The cooling capacity of both columns is compared.

On top of the cooling column, a nozzle is mounted. The hot water is sprayed at the top of the cooling tower, trickles from the top to the bottom along the wet deck surface and is cooled in the process. The air enters the column from the bottom and flows upwards.

The cooling column is fitted with connections for differential pressure measurement at its inlet and outlet. A temperature sensor measures the water temperature at the plates. The values are processed and indicated in WL 320.

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Required accessories

WL 320            Wet cooling tower