



Open circuit cooling towers

for small-medium installations



PMS K19 SERIES COOLING TOWER

The PMS K19 series cooling tower are built entirely in fibreglass (orthophthalic polyester resin, reinforced with several layers of glass fibre matting) in order to avoid corrosion problems due to the fact that the tower is constantly in contact with water and it is exposed to all kinds of weather.

The structure is self-supporting and strengthened at the points of greatest dynamic and static stress. Moreover, the fibreglass surface is protected by a gelcoat that is resistant to UV rays, hot and cold water and abrasion due to weather and chemicals.

The basin has a sloping bottom with rounded off corners, to enable an easy emptying to simplify its cleaning.

The filling material is made of self-extinguishing PVC with 19 mm flute. Other materials and versions are available.

The multi-blade axial fan (with blades in plastic material reinforced with glass fibre) grants high performances with low electrical power input and low noise levels.

The PMS K19 series includes 7 models, all available with or without water basin, for a range of cooling capacities from approx. 50 kW to 700 kW (indicative values referred to nominal temperatures conditions 40°C in, 30°C out, 24°C wet bulb).



ACCESSORIES AND CONSTRUCTION VARIANTS

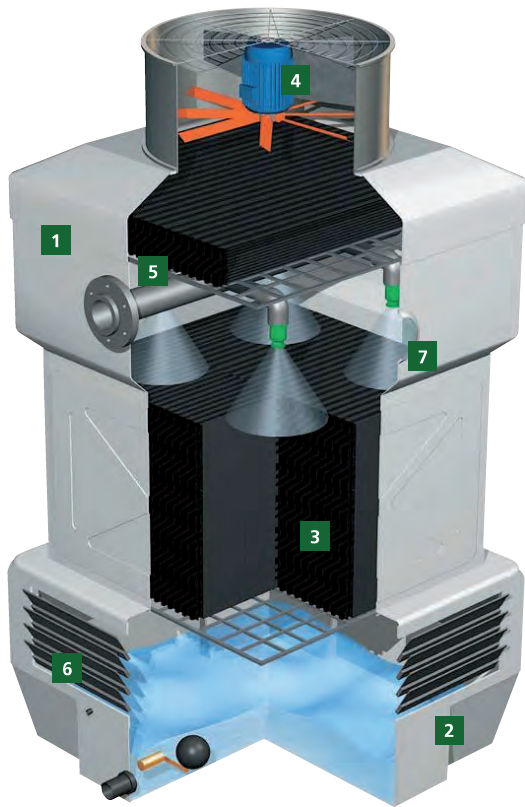
The following accessories and/or construction variants are available for all models on request:

- three-phase heating element with control thermostat
- minimum level cut-out switch
- control panel
- manholes / removable side-walls to allow inspection, easy cleaning and maintenance to the internal components of the cooling tower.



THE PMS K19 SERIES IS ALSO AVAILABLE IN OTHER VERSIONS

- **CW**, for clean water
- **NVP**, for water containing moderate quantities of suspended solids
- **GS**, for water containing high quantities of suspended solids
- **ATT**, for high temperature water
- **K12**, fill pack installed on PMS K12 with certified performances



CONSTRUCTION DETAILS

1 Main casing and top cap

Material:

orthophthalic polyester resin, reinforced with several layers of glass fibre matting.

Characteristics:

- self supporting structure strengthened at the points of greatest dynamic and static stress
- external surface protection with gel-coating resistant to UV rays, cold and hot water, abrasion due to weather and chemicals
- light-weight
- non corroding.

2 Water basin (optional)

Material:

orthophthalic polyester resin, reinforced with several layers of glass fibre matting.

Characteristics:

- external surface protection with gel-coating resistant to UV rays, cold and hot water, abrasion due to weather and chemicals
- internal waterproof protection thanks to an impermeable, water repellent, paraffin containing orthophthalic gelcoat
- sloping bottom with rounded off corners, to enable an easy emptying to simplify its cleaning
- light-weight
- non corroding.

3 Filling material (or heat exchange surface)

Material:

self-extinguishing PVC.

Characteristics:

- 19 mm flute (air/water passage)
- reinforced top layer to better absorb dynamic stress caused by the under pressure sprayed water from the nozzles.

4 Multi-blade axial fan

Material:

motor support: hot dip galvanized steel (after all works), fan blades: plastic material, fan screening grid: stainless steel.

Characteristics:

- high performance, low electrical power input, low noise levels
- directly coupled to the electric motor
- unalterable safety over time thanks to the fan screening grid
- non-corroding.

5 Hot water distribution system

Material:

PN 10 unified PVC, PP, PE pipes, polypropylene nozzles.

Characteristics:

- non-corroding
- uniform and total spraying of the heat exchange filling pack
- MITA exclusive nozzles design, with non-clogging wide passages for a full cone spray.

6 Anti-splash louvers on air intake openings

Material:

fibreglass louver (on request: PP panels in a suitable galvanized steel frame).

Characteristics:

- non corroding
- easy to remove even after many years of use.

7 Visual inspection window

Material:

nylon reinforced with glass fibre

8 Bolts, nuts and washers

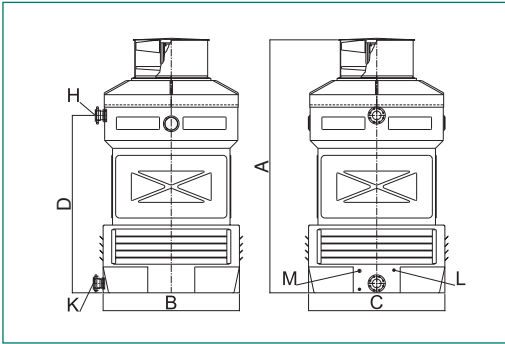
Material:

stainless steel 304.

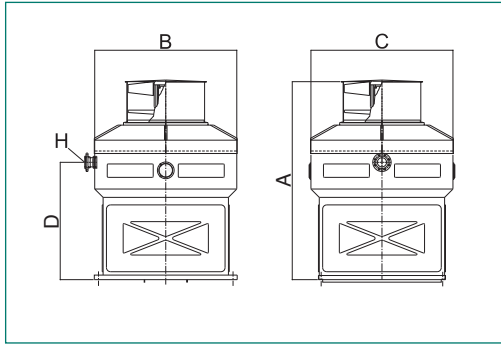
Characteristics:

- non corroding
- easy to remove even after many years of use.

PMS K19 Series with water basin



PMS K19 Series without water basin

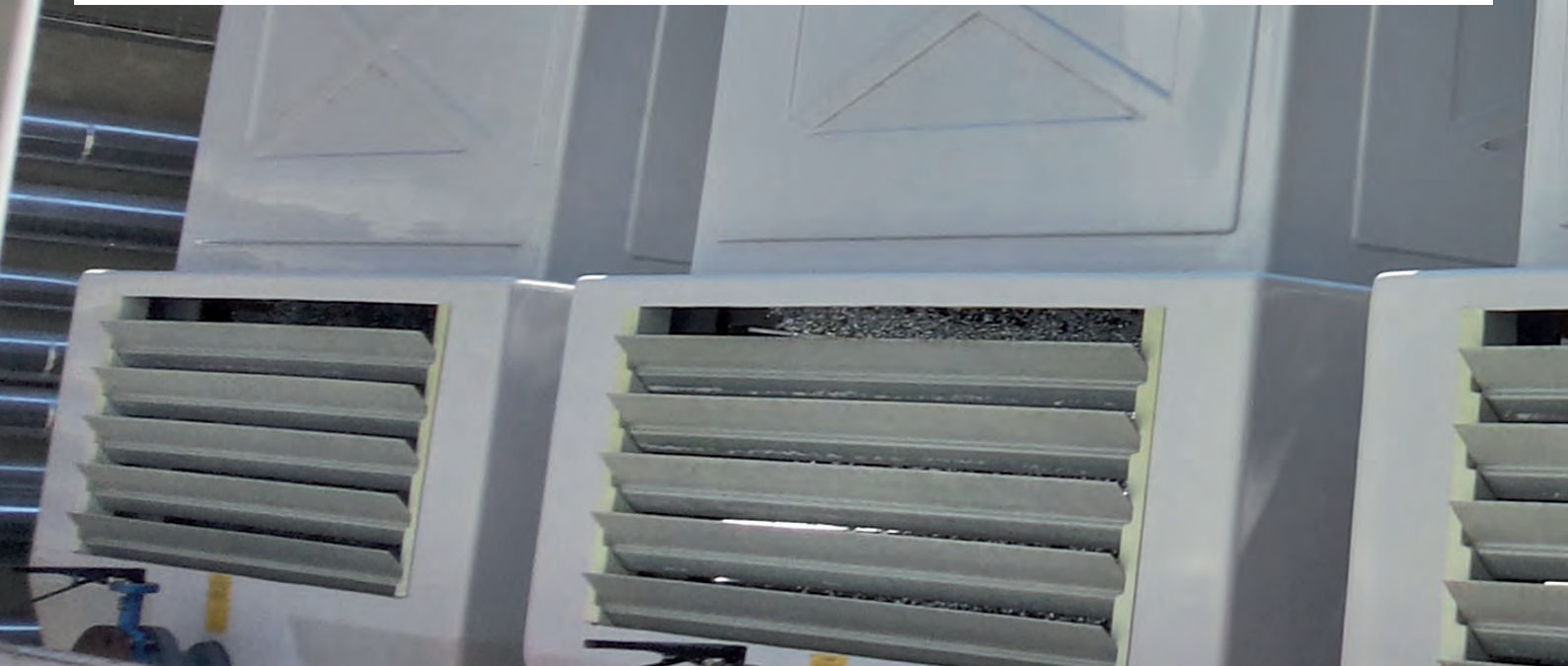


DIMENSIONS AND WEIGHTS

| Model | Dimensions | | | | Water connections | | | | Total nameplate fan motor power kW | Weights | |
|----------------------------|------------|------|------|------|-------------------|------|------|------|---------------------------------------|---------|--------------|
| | A | B | C | D | H | K | L | M | | empty | in operation |
| | mm | mm | mm | mm | Ø in | Ø in | Ø in | Ø in | | kg | kg |
| with water basin | | | | | | | | | | | |
| PMS 6/65 K19 | 2190 | 800 | 800 | 1500 | 2" | 2" | ¾" | ½" | 0,55 | 75 | 180 |
| PMS 9/85 K19 | 2695 | 1000 | 1000 | 1900 | 2 ½" | 2 ½" | ¾" | ½" | 0,75 | 95 | 285 |
| PMS 9/110 K19 | 2870 | 1200 | 1200 | 2000 | 3" | 3" | 1" | ¾" | 1,1 | 170 | 485 |
| PMS 9/130 K19 | 2935 | 1400 | 1400 | 1900 | 4" | 4" | 1" | ¾" | 1,5 | 210 | 780 |
| PMS 10/180 K19 | 3200 | 1740 | 1740 | 2060 | 4" | 4" | 1 ½" | 1" | 2,2 | 410 | 1410 |
| PMS 10/240 K19 | 3515 | 2100 | 1900 | 2240 | 4" | 5" | 1 ½" | 1" | 4 | 525 | 1825 |
| PMS 10/260 K19 | 3530 | 2300 | 2100 | 2250 | 5" | 6" | 1 ½" | 1 ½" | 4 | 580 | 1980 |
| without water basin | | | | | | | | | | | |
| PMS 6/65 K19 | 1670 | 770 | 770 | 990 | 2" | - | - | - | 0,55 | 60 | 80 |
| PMS 9/85 K19 | 2025 | 980 | 980 | 1230 | 2 ½" | - | - | - | 0,75 | 75 | 100 |
| PMS 9/110 K19 | 2240 | 1215 | 1215 | 1385 | 3" | - | - | - | 1,1 | 135 | 185 |
| PMS 9/130 K19 | 2270 | 1370 | 1370 | 1270 | 4" | - | - | - | 1,5 | 165 | 225 |
| PMS 10/180 K19 | 2335 | 1715 | 1715 | 1230 | 4" | - | - | - | 2,2 | 325 | 440 |
| PMS 10/240 K19 | 2485 | 1805 | 2050 | 1235 | 4" | - | - | - | 4 | 430 | 535 |
| PMS 10/260 K19 | 2550 | 2010 | 2210 | 1270 | 5" | - | - | - | 4 | 490 | 600 |

Technical data not binding

For data concerning other versions, please write to: export@mitact.it



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