

PMS PMD

Non-corroding cooling towers

PMS Series
PMD





■ PMS - PMD series cooling towers

The PMS and PMD cooling towers 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 20 mm wide flute, particularly suitable for industrial applications. In case of applications with very clean water, the tower version with 12 mm flute fill pack is also 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 – PMD series includes 17 basic models, all available with or without water basin, for a range of cooling capacities from approx. 18 kW to 860 kW (indicative nominal values referred to a 5 °C temperature range).

■ Special versions

For all basic models the following special versions are available:

- **ATT** - for high temperature water, with max peaks of 80 °C
- **N** - for water containing low quantities of suspended solids
- **N-ATT** - for high temperature water (with max peaks of 80 °C) containing low quantities of suspended solids
- **GS** - for water containing large quantities of suspended solids.

■ 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
- two-speed motor with graduated thermostat, automatic cascade control panel, or control system with frequency inverter
- manhole for easy inspection and access to the internal components.

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:

- 20 mm wide flute (air/water passage), particularly suitable for industrial applications
- 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 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 louvers (on request: PVC 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.

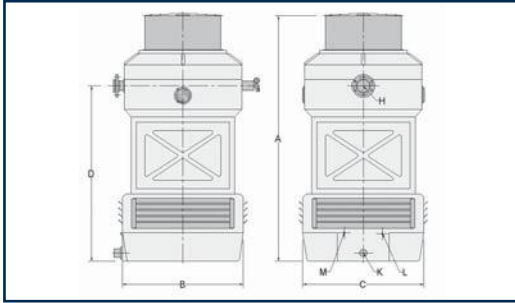
Characteristics:

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

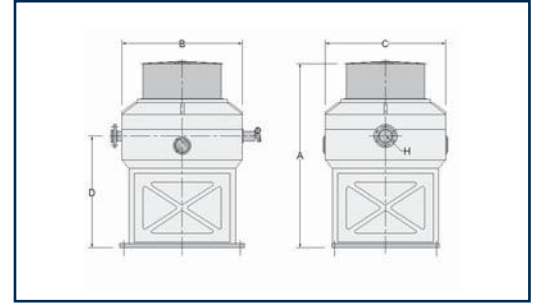


DIMENSIONS AND WEIGHTS

PMS series with water basin

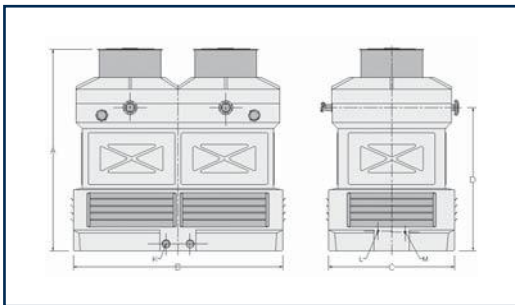


PMS series without water basin

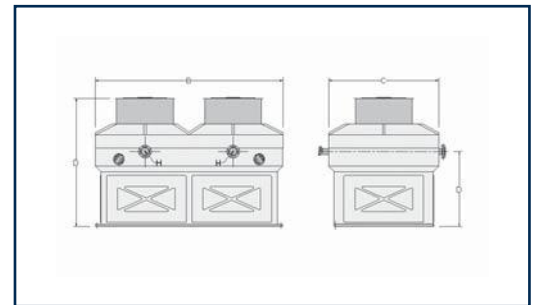


TYPE	DIMENSIONS				WATER CONNECTIONS				Water basin volume m³	WEIGHTS	
	A	B	C	D	H Ø	K Ø	L Ø	M Ø		empty	in operation
	mm	mm	mm	mm	in	in	in	in		kg	kg
with water basin											
PMS 6/65	2110	800	800	1510	2"	2"	3/4"	1/2"	0,1	75	180
PMS 6/85	2595	1000	1000	1940	2 1/2"	2 1/2"	3/4"	1/2"	0,23	85	215
PMS 9/85	2595	1000	1000	1940	2 1/2"	2 1/2"	3/4"	1/2"	0,23	95	285
PMS 6/110	2800	1200	1200	2050	3"	3"	1"	3/4"	0,28	155	470
PMS 9/110	2800	1200	1200	2050	3"	3"	1"	3/4"	0,28	170	485
PMS 6/130	2860	1400	1400	2040	4"	4"	1"	3/4"	0,57	195	755
PMS 9/130	2860	1400	1400	2040	4"	4"	1"	3/4"	0,57	210	780
PMS 8/180	3140	1740	1740	2285	4"	4"	1 1/4"	1"	0,77	380	1380
PMS 10/180	3140	1740	1740	2285	4"	4"	1 1/4"	1"	0,77	410	1410
PMS 8/240	3380	2100	1900	2400	4"	5"	1 1/4"	1 1/4"	1,11	500	1800
PMS 10/240	3380	2100	1900	2400	4"	5"	1 1/4"	1 1/4"	1,11	525	1825
PMS 8/260	3450	2300	2100	2400	5"	6"	1 1/2"	1 1/2"	1,36	555	1955
PMS 10/260	3450	2300	2100	2400	5"	6"	1 1/2"	1 1/2"	1,36	580	1980
without water basin											
PMS 6/65	1560	770	770	960	2"	-	-	-	-	60	80
PMS 6/85	1895	980	980	1240	2 1/2"	-	-	-	-	65	90
PMS 9/85	1895	980	980	1240	2 1/2"	-	-	-	-	75	100
PMS 6/110	2140	1215	1215	1395	3"	-	-	-	-	120	170
PMS 9/110	2140	1215	1215	1395	3"	-	-	-	-	135	185
PMS 6/130	2080	1360	1360	1260	4"	-	-	-	-	150	210
PMS 9/130	2080	1360	1360	1260	4"	-	-	-	-	165	225
PMS 8/180	2275	1710	1710	1425	4"	-	-	-	-	295	410
PMS 10/180	2275	1710	1710	1425	4"	-	-	-	-	325	440
PMS 8/240	2330	2010	1810	1355	4"	-	-	-	-	405	510
PMS 10/240	2330	2010	1810	1355	4"	-	-	-	-	430	535
PMS 8/260	2400	2210	2010	1355	5"	-	-	-	-	465	575
PMS 10/260	2400	2210	2010	1355	5"	-	-	-	-	490	600

PMD series with water basin



PMD series without water basin



TYPE	DIMENSIONS				WATER CONNECTIONS				Water basin volume m³	WEIGHTS	
	A	B	C	D	H Ø	K Ø	L Ø	M Ø		empty	in operation
	mm	mm	mm	mm	in	in	in	in		kg	kg
with water basin											
PMD 8/280	3390	2700	2100	2400	2 x 4"	2 x 4"	1 1/4"	1"	1,5	600	2050
PMD 10/280	3390	2700	2100	2400	2 x 4"	2 x 4"	1 1/4"	1"	1,5	630	2130
PMD 8/360	3380	3500	2100	2400	2 x 4"	2 x 5"	1 1/4"	1"	2	810	2820
PMD 10/360	3380	3500	2100	2400	2 x 4"	2 x 5"	1 1/4"	1"	2	850	2900
without water basin											
PMD 8/280	2340	2710	2110	1360	2 x 4"	-	-	-	-	475	655
PMD 10/280	2340	2710	2110	1360	2 x 4"	-	-	-	-	505	685
PMD 8/360	2330	3410	2000	1360	2 x 4"	-	-	-	-	660	910
PMD 10/360	2330	3410	2000	1360	2 x 4"	-	-	-	-	700	950

Technical data not binding - please contact MITA Technical Dept. for full details.



Via Antonio M. Fontana, 1
Tel. +39 0382.67.599
www.mita-tech.it

I - 27010 Siziano (PV)
Fax +39 0382.617.640
e-mail: info@mita-tech.it

