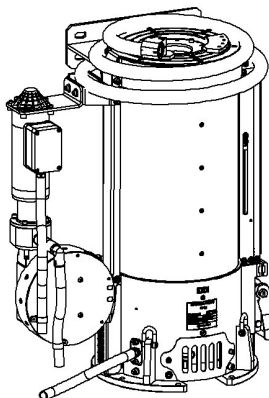


Mast Extended



Mast Retracted

General Description

The LMT 283/2-0.75 is a 2 metre composite telescopic mast designed for supporting top loads up to 40kg. The mast is usually embedded inside a vehicle/Shelter and is raised and lowered fully automatically by a 24V/DC electrical motor. The LMT 283/2-0.75 has a short collapsed height enabling the mast to fit within the shelter or vehicle when fully retracted. The main features of the mast are:

- Self-supported and remote controlled by PC
- Heavy duty
- Fast deployment
- Easy periodic maintenance, without dismounting top load
- Outstanding resistance to the most demanding environments
- Safe and reliable
- Secured only by ground plate– No wall mount needed

Construction

For best compromise between weight and rigidity, mast sections are manufactured using high quality carbon fibre reinforced epoxy resin composite material which provides both lightness and high mechanical resistance.

Composite tubes are produced in-house by filament winding process and can be tailor designed to meet the customer requirements.

All metallic parts are protected against corrosion.

Sections are deployed by a lifting winch and a belt system. The belt is fully hidden inside mast for complete environmental protection.

A control box manages end-travel limits and communication with the remote PC. This control box is usually installed on the mast itself, but might be secured on the vehicle wall upon request. Operation can also be performed using a handheld remote control or manually with a crank.

Safety

Safety is controlled by an electronic control box connected to the electrical drive. End-travel limits secure mast operation in normal conditions. A display shows the number of mast cycles and informs about preventive maintenance.

A mechanical fuse, located on lifting winch transmission arm, is used as a back-up of all electronic safety controls.

A DC/DC converter is integrated to deliver a continuous 24V/DC current, independently from the 18-32V/DC on-board feeding according to MIL-STD-1275D.

Mechanical Specification

Applicable standard: MIL-STD-810-F

Max. Headload*	40kg, 0.5m ²
Headload Interface	Flange
Number of mast sections	4
Number of operators	1 (remote controlled from PC)
Deployment time	<1 minute
Max. wind speed*: (according to TIA/EIA-222-F standard)	
Deployment / retraction:	50km/h
Operation:	50km/h
Survival:	100km/h
Pointing accuracy at operational wind*	±0.7°
Max. angular deviation in flexion	±0.2°
Max. angular deviation in torsion	

* depending on headload specification

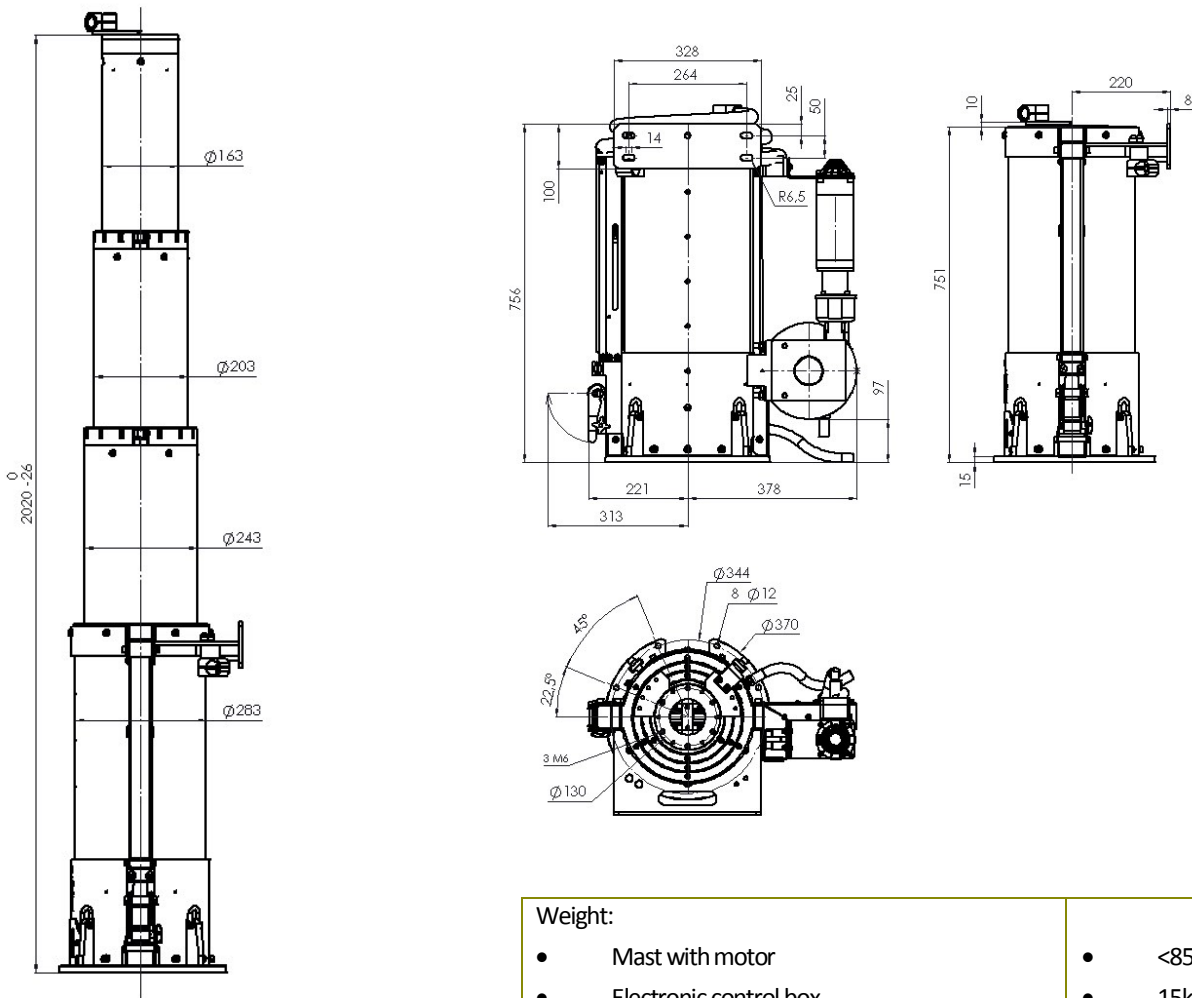
Temperature range for operation	-32°C to +55°C
Temperature range for storage	-40°C to +71°C
Relative Humidity	95% at 40°C
Ice in operation and transport	3mm at -10°C
High Pressure water jet	80 bar at 1.5m
Power consumption:	
• during deployment	20A max.
• start current	50A max.
• during retraction	15A max.
• mast stopped, control box ON	<500mA (6.5A in low T°)

Also:

Sand and Dust, Altitude, Sinusoidal vibrations, sun radiation, Salt fog, mechanical shocks, EMC, lightning, fluids contamination, moisture...

Full specification and qualification procedures are available upon request.

Weights and Dimensions



Dimensions in mm

Weight:

- Mast with motor
- Electronic control box

- <85kg
- 15kg