





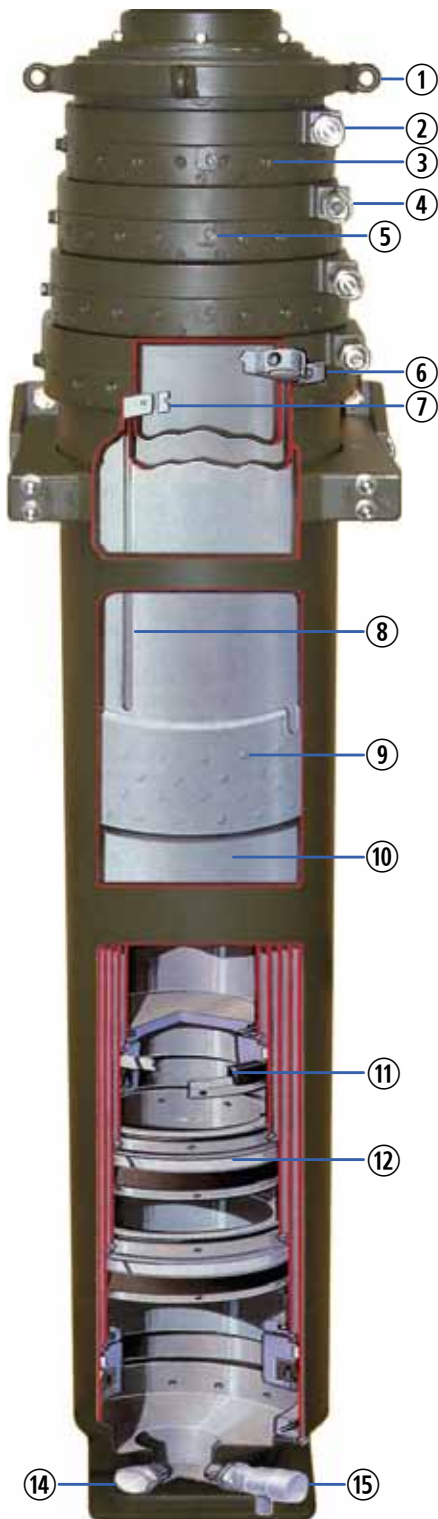
Clark Masts Systems has been designing and manufacturing telescopic and sectional mast systems for more than 50 years and has built up an extensive range of products that are used by civil and military authorities all around the world.

Design, development and testing are fundamental to the success of our organisation. This leaflet details our TM Series aluminium, telescopic masts that are produced to our exacting standards of quality.

The standard range is available from 6 metres to 34 metres. Customised solutions offering variations in retracted and extended heights are available at no extra cost. Clark Masts are used by all of the world's largest system integrators.



- TM Series Masts are made from 6082T6 aircraft grade seamless drawn aluminium tube.
- The base tube diameter is 9" and can have a maximum of 12 sections.
- A full length machined keyway prevents relative rotation of the mast sections allowing the whole mast to be turned easily at the base if required.
- Rotation and non-rotating versions are available using optional bases.
- The TM mast can be vehicle or shelter mounting either externally or internally.
- Bearing surfaces are fitted with nylon and PTFE for smooth and effortless extension.
- Natural rubber seals for reliable operation in the most demanding of climatic conditions.
- Masts approved to MIL STD 810F.
- Plain collar version for lowest collar stack height.
- Heavy duty locking collar clamps for long term unattended deployment.
- Double supertork anti-twist system fitted as standard reducing torsional movement to ± 1.5 degrees.
- Triple supertork anti-twist system fitted as an option reducing torsional movement to ± 0.1 degrees.
- Various top fittings to suit specific requirements.
- Trailer mounted TM models up to 40 metres extended height.



1. Rotating guy collar.
 2. Heavy duty friction locking collars.
 3. Adjustable bearing screws.
 4. Hex nuts for easy section locking.
 5. Easily replaced frangible key protecting mast keyway.
 6. Totally enclosed telescopic section locking system.
 7. Collet Ring.
(Locks sections on full extension)
 8. Machined keyway aligning telescoping sections.
 9. Double Supertork notched locking sections on torsion when mast is fully extended.
 10. High tensile corrosion resistant aluminium alloy tube anodised finish.
 11. Exclusive natural rubber low leak seals.
 12. Teflon bearing rings on each piston.
 13. Optional water drain hole.
 14. Optional mast extension warning switch. (Clark Masts fitted only)
 15. Combined pressure relief and condensate drain valve.
 16. Air inlet.
- *. Powerful low-friction antenna clamp.
(Flange mount optional)

* Not Pictured



Range Table

TM Series

Catalogue Number	Model Number	Retracted Height	Extended Height	Max Headload
6 SECTION MODEL RANGE				
48624	TM60-6	1.70 m	6.00 m	320 kg
48625	TM80-6	2.10 m	8.00 m	300 kg
48626	TM100-6	2.50 m	10.00 m	290 kg
48627	TM120-6	2.90 m	12.00 m	280 kg
48628	TM150-6	3.60 m	15.00 m	270 kg
48629	TM180-6	4.10 m	18.00 m	240 kg
48630	TM210-6	4.70 m	21.00 m	220 kg
48631	TM260-6	5.60 m	26.00 m	180 kg

Catalogue Number	Model Number	Retracted Height	Extended Height	Max Headload
7 SECTION MODEL RANGE				
48633	TM60-7	1.60 m	6.00 m	280 kg
48634	TM80-7	1.90 m	8.00 m	260 kg
48635	TM100-7	2.30 m	10.00 m	250 kg
48636	TM120-7	2.60 m	12.00 m	240 kg
48637	TM150-7	3.20 m	15.00 m	230 kg
48638	TM180-7	3.70 m	18.00 m	200 kg
48639	TM210-7	4.30 m	21.00 m	180 kg
48640	TM260-7	5.10 m	26.00 m	140 kg

8 SECTION MODEL RANGE				
48642	TM60-8	1.54 m	6.00 m	240 kg
48643	TM80-8	1.79 m	8.00 m	210 kg
48644	TM100-8	2.10 m	10.00 m	200 kg
48645	TM120-8	2.30 m	12.00 m	190 kg
48646	TM150-8	2.80 m	15.00 m	180 kg
48647	TM180-8	3.30 m	18.00 m	160 kg
48648	TM210-8	3.90 m	21.00 m	140 kg
48649	TM260-8	4.60 m	26.00 m	115 kg
48650	TM300-8	5.20 m	30.00 m	90 kg

9 SECTION MODEL RANGE				
48651	TM60-9	1.51 m	6.00 m	180 kg
48652	TM80-9	1.74 m	8.00 m	160 kg
48653	TM100-9	2.00 m	10.00 m	150 kg
48654	TM120-9	2.25 m	12.00 m	140 kg
48655	TM150-9	2.65 m	15.00 m	130 kg
48656	TM180-9	3.00 m	18.00 m	120 kg
48657	TM210-9	3.50 m	21.00 m	100 kg
48658	TM260-9	4.10 m	26.00 m	90 kg
48659	TM300-9	4.70 m	30.00 m	80 kg
48660	TM340-9	5.30 m	34.00 m	55 kg

Locking Collars

All TM series masts are supplied and fitted with heavy duty locking collars which allow the user to set up the mast for extended periods of time.

Material Specifications

Mast Sections:

Seamless drawn aluminium 10 SWG ENAW6082T6.

Standard Paint Colour:

White gloss (RAL 9010). All RAL colours are available.

Canvas Covers and Bags:

Cloth-coated polyurethane, Black.

Castings:

Aluminium alloy, gravity die cast using ingots to BS 1490 grade LM6.

Finishes:

Mast sections are anodised and dyed to a choice of colours. The steel fittings are zinc plated and passivated.

Operating Temperatures:

-40°C to +55°.

Air Pressure:

Maximum operating air pressure 30psi 2 Bar.

All TM masts have been tested to MIL STD 810F standards.

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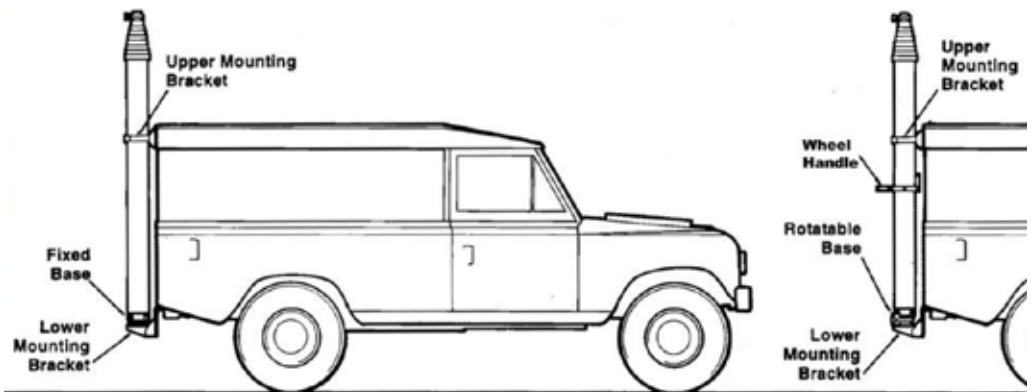


Externally Mounted Mast

TM masts can be mounted on a vertical surface of a van or shelter using upper and lower mounting brackets. The mast can be rotated through 360 degrees and locked in position by clamping the rotatable base when required.

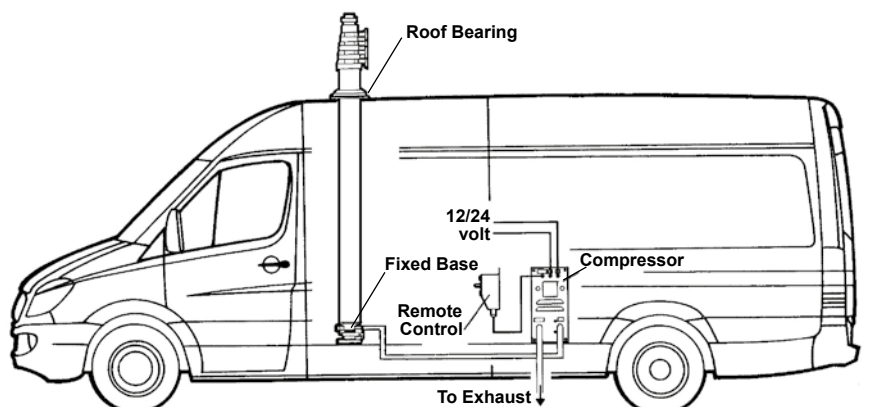
Wheel rotation handles fitted to the mast base tube allow the user to turn the whole mast when using directional headlands.

Upper brackets are fitted with PTFE bearing pads. Brackets are normally supplied in a painted finish in the same colour as the mast.



Internally Mounted Mast

Normally the most popular way of mounting a Clark Mast on a vehicle, the internally mounted mast uses the weatherproof roof bearing to adapt the vehicle roof and allows the mast to be rotated through 360 degrees when fitted with the rotatable base.



The roof bearing consists of a whole outer ring that is bolted to the vehicle roof skin and bearing halves that are clamped around the base tube and then positioned over the fixed ring so any rain or condensation will run off. This roof bearing is fitted with PTFE rings and a weatherproof sealing ring. Roof bearings are supplied in a painted finish in the same colour as the mast.

Accessories

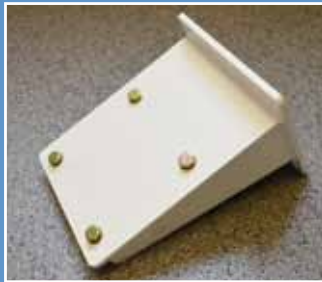
TM Series



UPPER MOUNTING BRACKET

Used to mount the TM mast externally on a vehicle, wall or shelter. Allows the mast to rotate 360° and is fitted with PTFE bearing pads.

Cat. No. 45745 Weight: 7.80 kg



LOWER MOUNTING BRACKET

Used for externally mounting a TM Mast on a vertical surface of a vehicle.

Cat. No. 14546 Weight: 7.60 kg



ROOF BEARING

Used when fitting a TM Mast through the roof of a vehicle. Allows 360° rotation and is fitted with PTFE bearings and a weatherproof ring.

Cat. No. 45787 Weight: 3.50 kg



9" SADDLE CLAMP

Normally used in pairs the saddle clamps provide a mounting for installations where frequent mast removal is required.

Cat. No. 45070 Weight: 6.00 kg



WHEEL HANDLE

This solid aluminium handle is fitted to the 9" base tube of the TM Mast when rotation is required.

Cat. No. 45256 Weight: 2.20 kg



GRADUATED COLLAR

Used for TM Masts requiring bearing references.

Indexed 0 to 360°
Weight: 0.95 kg



SPREADER BAR

Fitted to the top of the mast, the spreader bar is used to secure the external 'Nycoil' cable management system. Designs may vary to suit the application.



LOCKING COLLAR

Clamp collars are used when the mast is to be left unattended for long periods. A separate collar (above right) is required for each telescoping section meaning the retracted height will increase by 25mm per collar.



MODEL 185 COMPRESSOR RANGE

This self contained power pack compressor is an all-in-one system for controlling the extension and retraction of TM Masts when installed in a vehicle. Field versions can be supplied in conjunction with battery packs.

Models available:
12v (Cat. No. 33656),
24v (Cat. No. 33657),
110v (Cat. No. 33683) and 230v
(Cat. No. 33681).



SCAM HANDPUMP

This self-contained, lightweight aluminium handpump will extend any TM Mast quickly without any auxiliary power.

Supplied with 3 metres of hose and bayonet connector.

Cat. No. 29269
Weight: 3.05 kg



CANVAS COVER

The weather resistant material used to make this canvas provides protection when the mast is retracted and not in use.

Available in green and black.

Cat. No. 48902
Weight: 0.30 kg

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**CLARK
MASTSTM**

All details given in this publication are approximate and may be subject to change without notice.

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