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01	SME-7803	1349						

# Reference Reflector for Parabolic Antenna

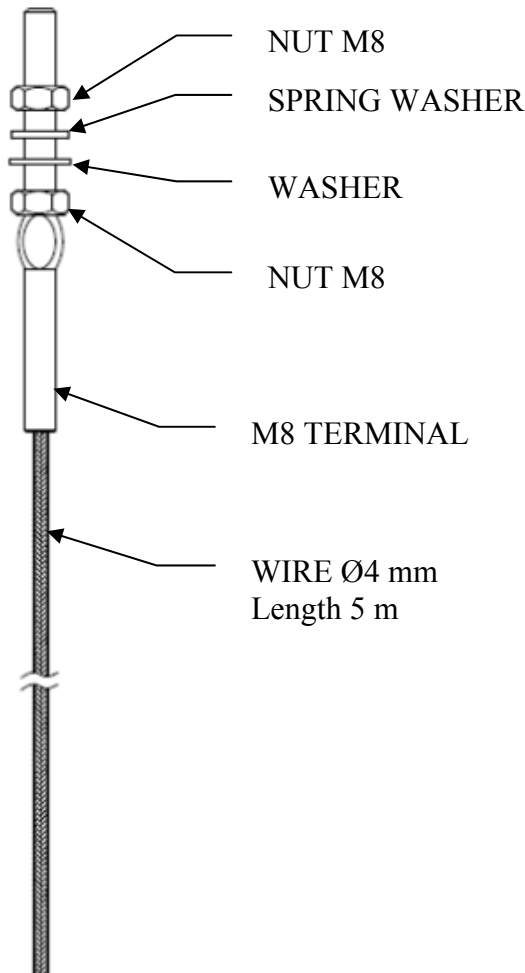
## 1 Function

The Reference Reflector (RR) shall be installed under the antenna, hanging in a wire fixed to the Parabolic Antenna. The RR will introduce an echo that can be used for Proof Test (test of high level alarm).

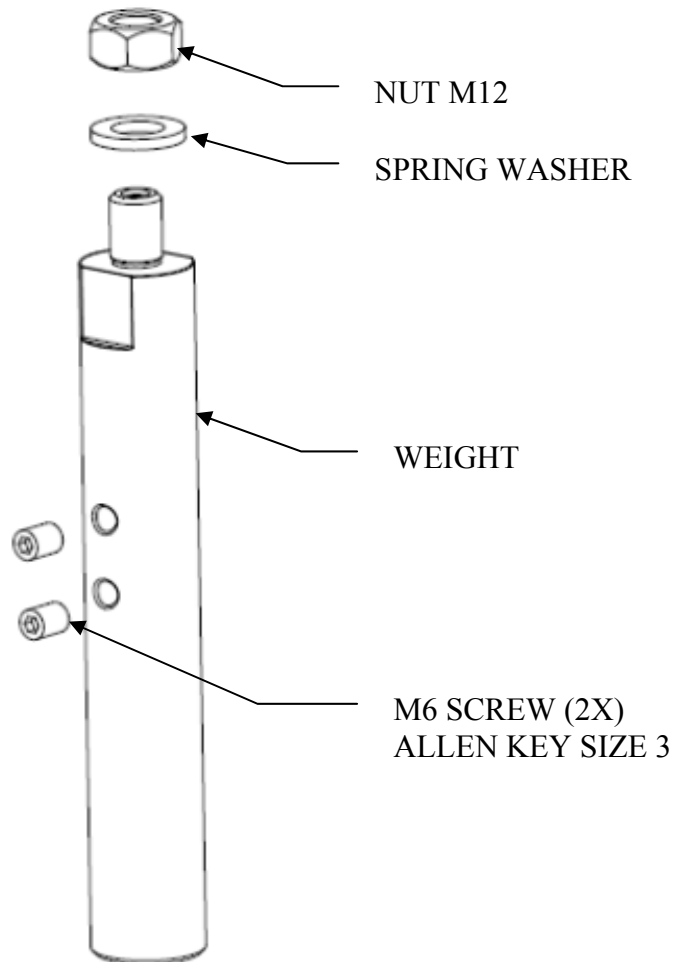
## 2 Reference reflector kit Parabolic Antenna

Below all parts in the kit are specified. Make sure that the Reference reflector kit is complete.

### Wire Assy



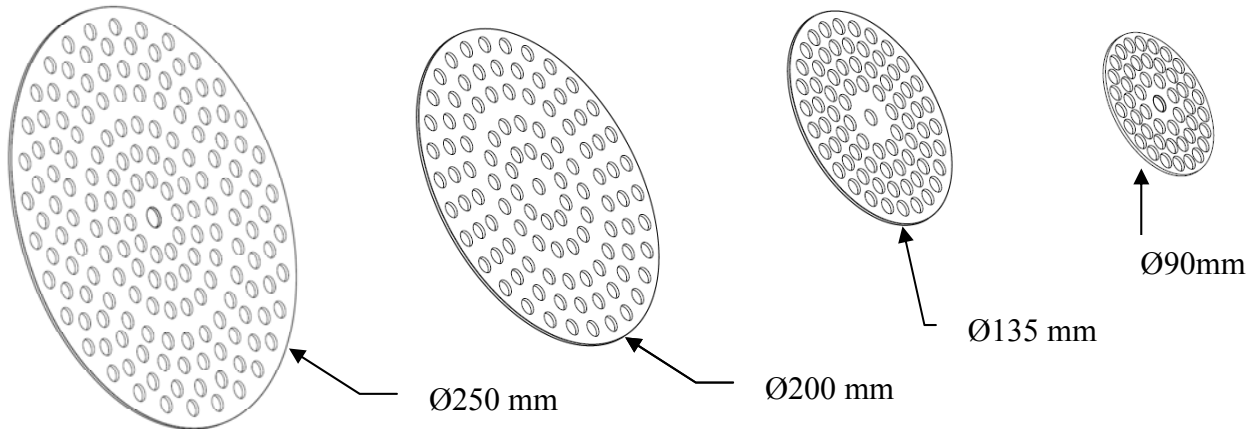
### Weight Assy



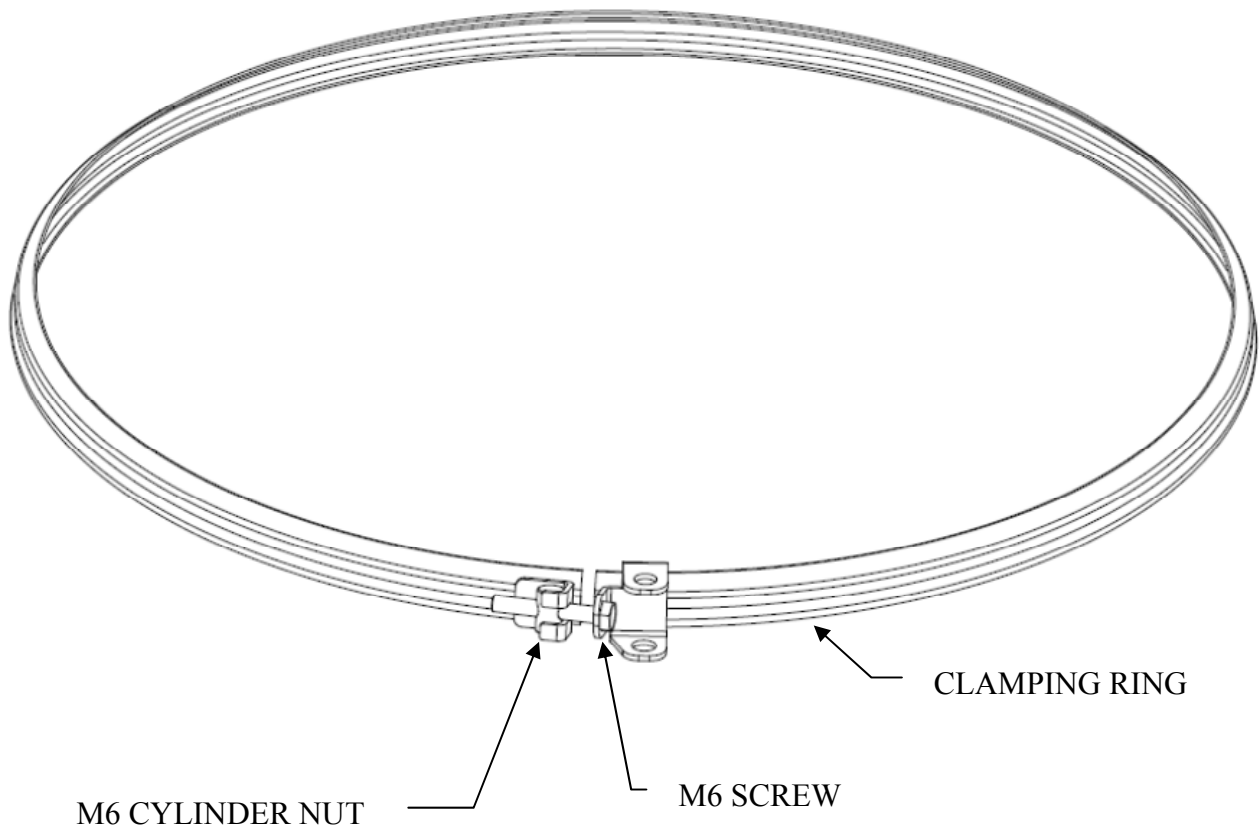
ISSUED BY EMe-BL	WEEK 1310	DOC. TYPE 2	PRODUCT CODE 5900	TITLE <b>MECHANICAL INSTALLATION DWG RR FOR PARABOLIC ANTENNA</b>			
APPROVED BY EMe-MH	WEEK 1313	FILE MSWord					
<b>ROSEMOUNT®</b> <b>Tank Gauging</b>				DOC NO. <b>D7000001-610</b>		ISSUE <b>01</b>	PAGE <b>1/8</b>
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### Reference Reflector

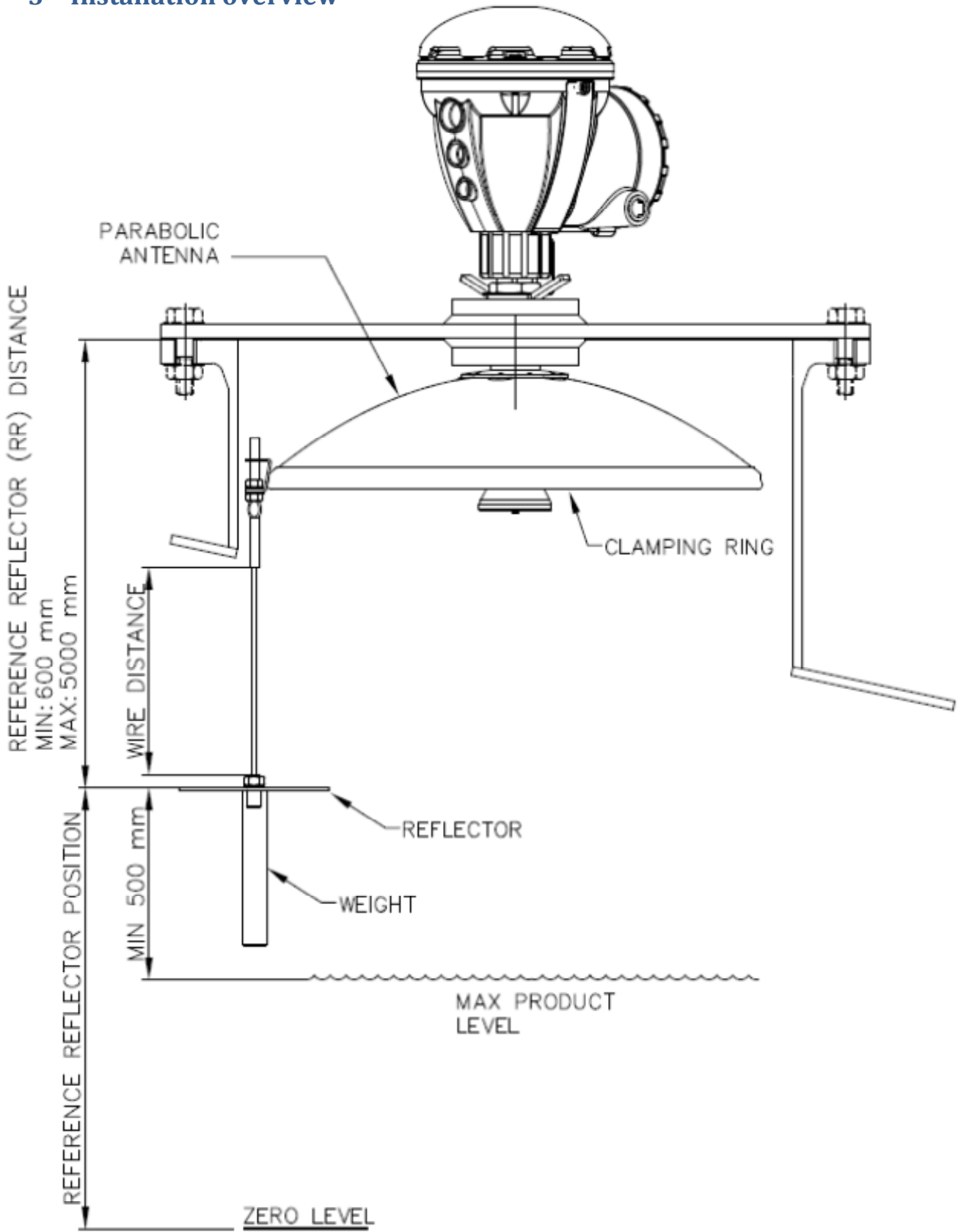


### Ring Clamping Assy



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### 3 Installation overview



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## 4 Installation instruction

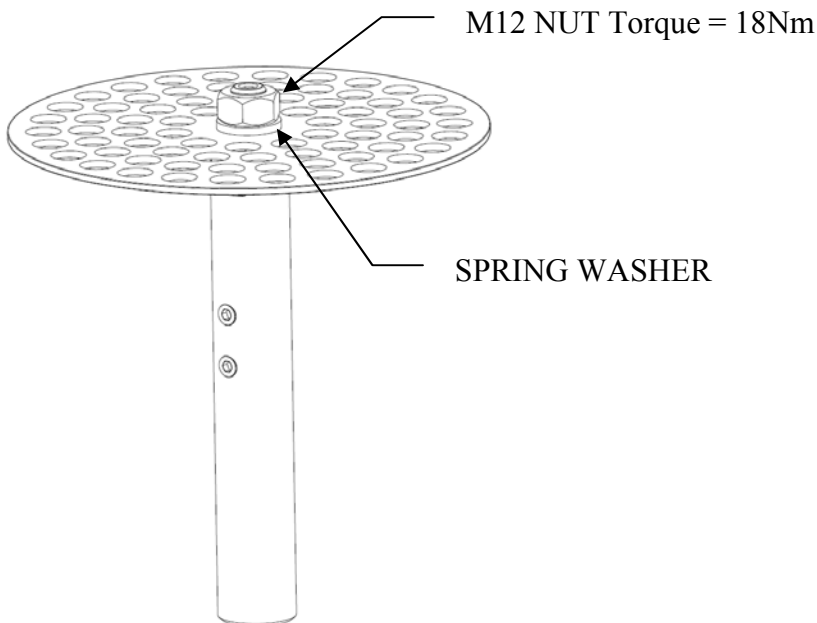
4.1 Define the Reference Reflector Position (RR Position) and calculate the Reference Reflector Distance (RR Distance), see installation overview.

4.2 Choose right size of reflector

There are four reflectors to choose from. The reflector to select depends upon the RR Distance.

	Reflector Diameter Ø
$0.6 \leq \text{RR Distance} < 2 \text{ m}$	250 mm
$2 \leq \text{RR Distance} < 3 \text{ m}$	200 mm
$3 \leq \text{RR Distance} < 4 \text{ m}$	135 mm
$4 \leq \text{RR Distance} \leq 5 \text{ m}$	90 mm

4.3 Assemble the reflector



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#### 4.4 Calculate Wire distance

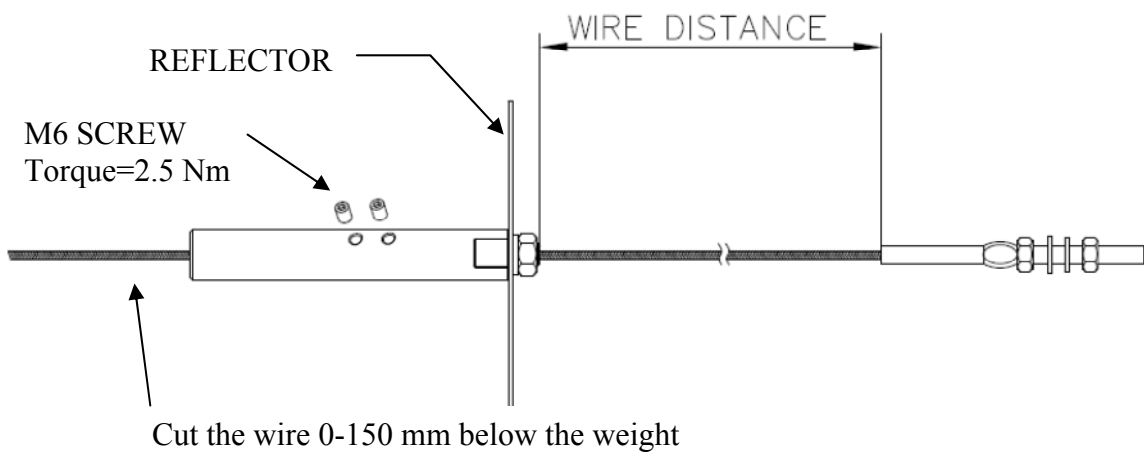
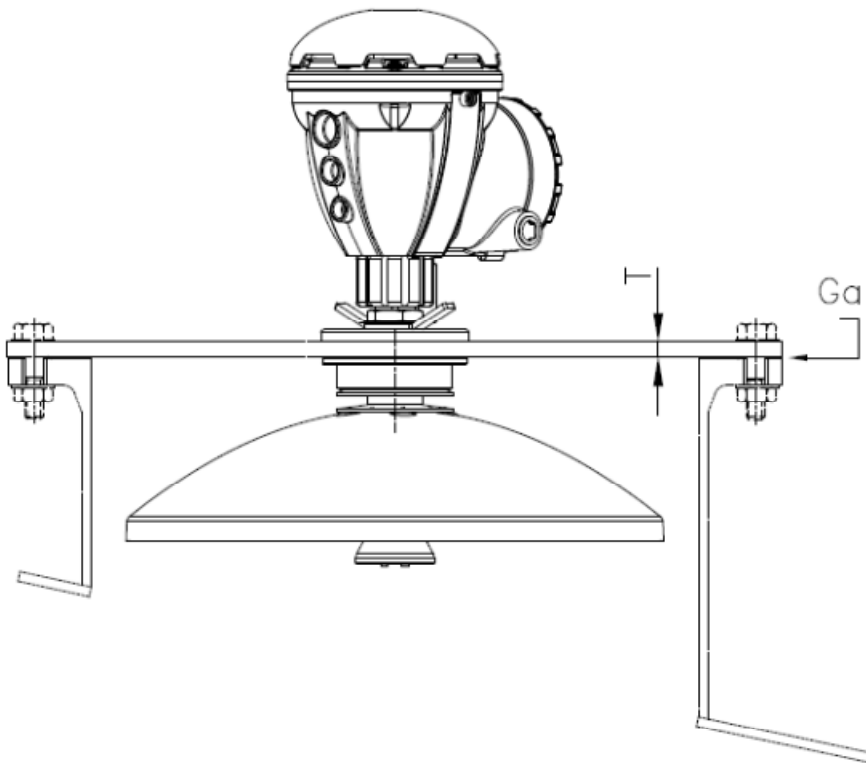
CAUTION: Handle the wire and assembly with care to avoid permanent bends on the wire.

The instruction below requires a horizontally mounted Parabolic Antenna.

**Clamped connection:**

Find out thickness of flange (T) and thickness of flange gasket (Ga).  
 Wire distance = Reference Reflector Distance <sup>1)</sup> + Ga + T - 243 mm.

1) See illustration in Installation overview on page 3



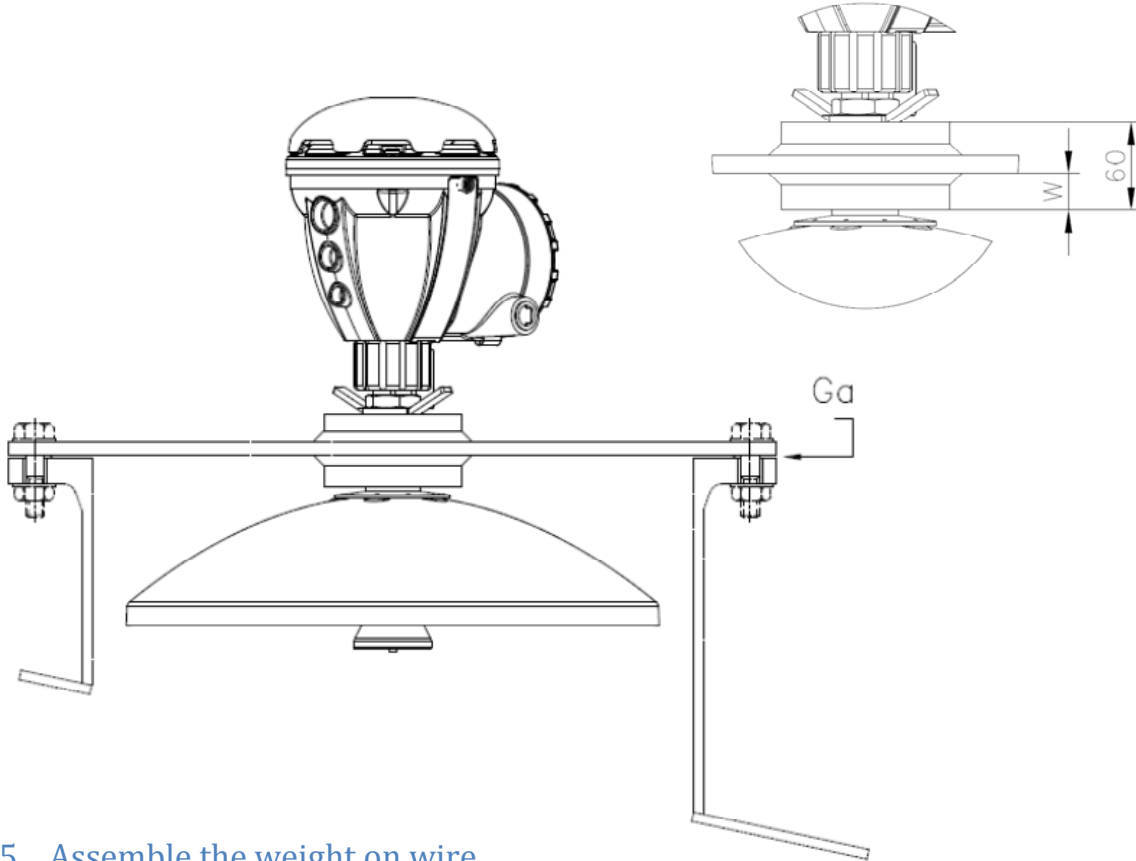
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**Welded connection:**

Find out distance (W) and thickness of flange gasket (Ga).

Wire distance = Reference Reflector Distance<sup>2)</sup> + Ga - W - 194 mm.

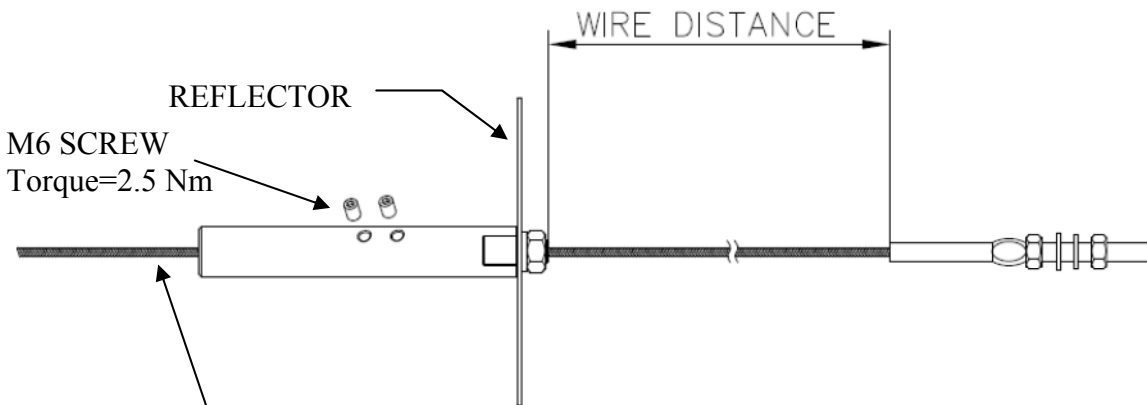
2) See illustration in Installation overview on page 3



**4.5 Assemble the weight on wire**

Before cutting the wire, feed the wire through the hole in the weight. Position the weight to get the correct wire length. Tighten the two screws.

**4.6 Cut the wire**

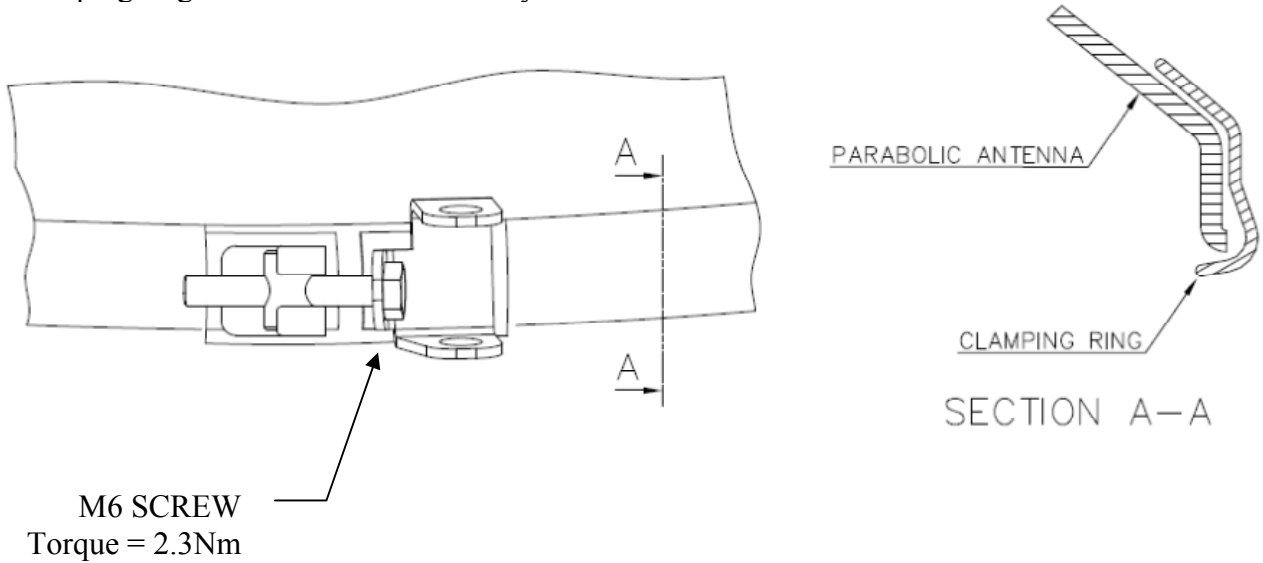


Cut the wire 0-150 mm below the weight

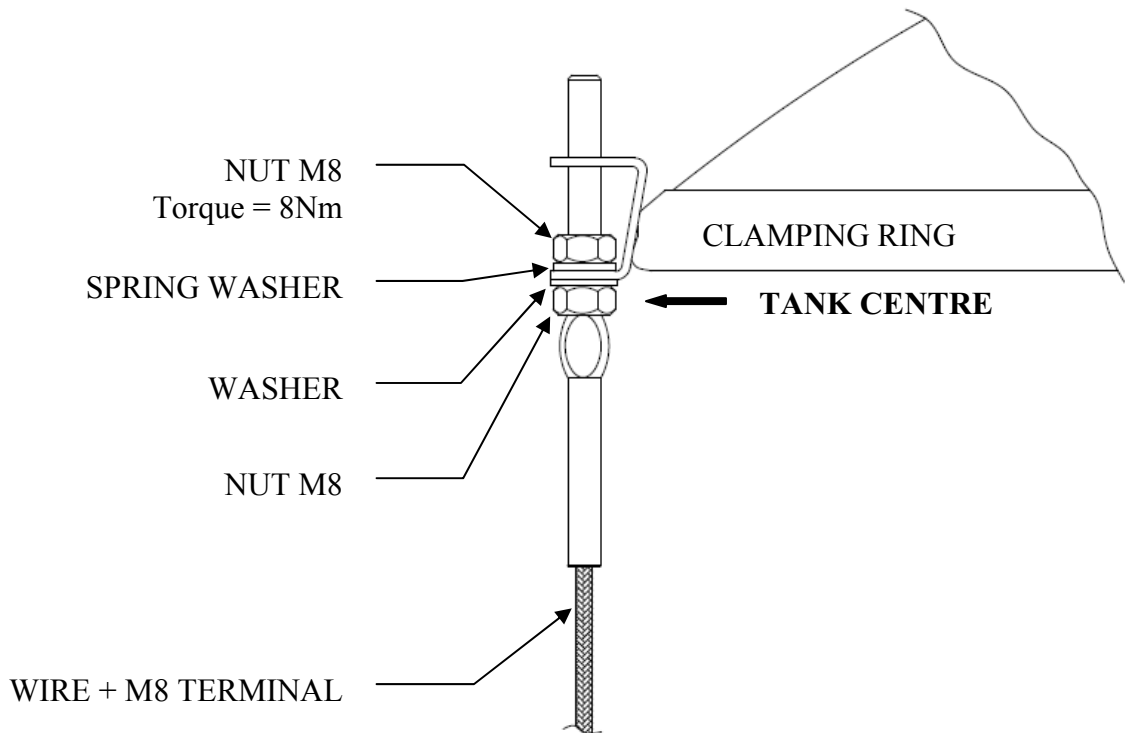
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#### 4.7 Assemble the Clamping Ring on the Parabolic Antenna

The Clamping ring shall be mounted in a way that the reflector kit is directed towards the tank centre.

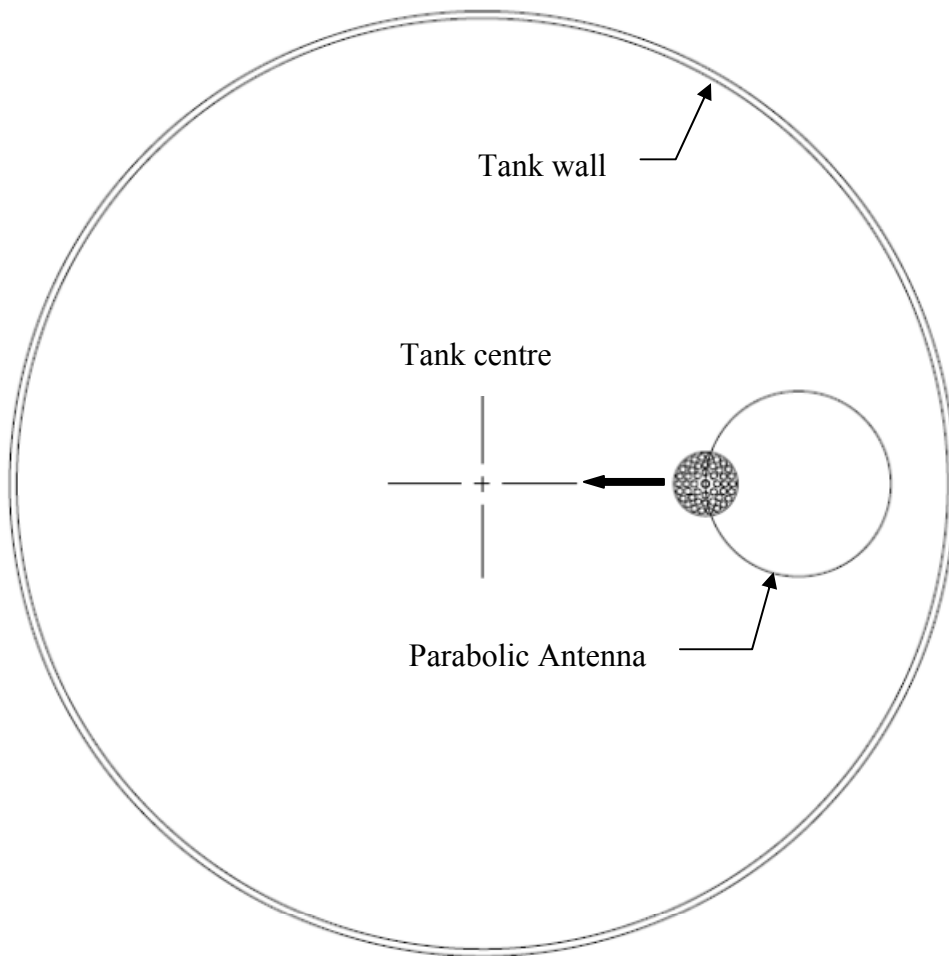


#### 4.8 Assemble the M8 terminal on the Clamping Ring



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**View of Tank, Parabolic Antenna and Reference Reflector from above.**



**4.9 Finalization of the mechanical installation**

**CAUTION:** Lower the weight and reflector carefully into the tank by feeding the wire to its full length.