



Antenna Receiver

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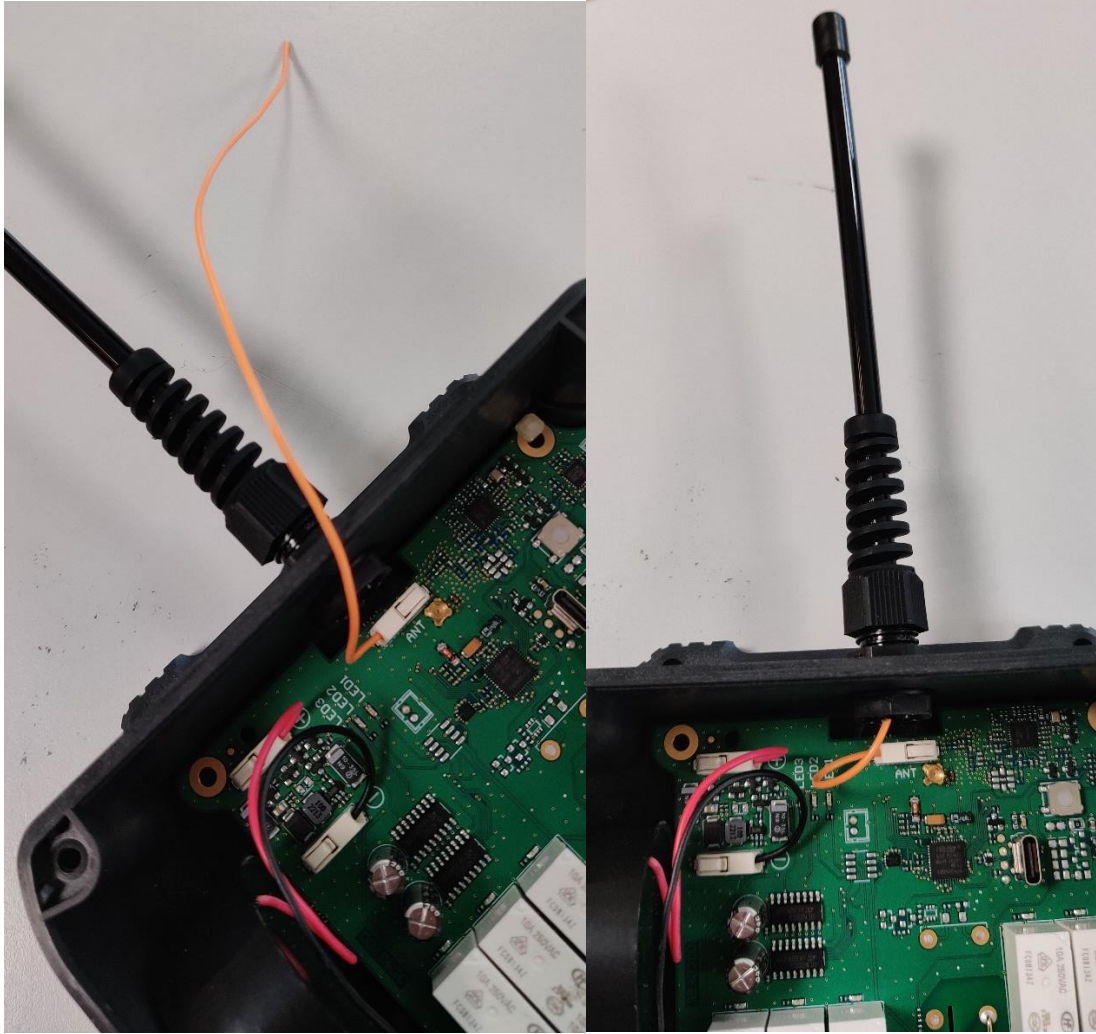
1 ABOUT ANTENNA PRODUCTS

For the receiver product, we have 4 types of antennas. A wire antenna mounted on the base of the product. And in option, is it possible to mount this antenna:

- VUA110AH: Ground plane antenna $\frac{1}{2}$ wave, with BNC connection and 10 meters of cable
- VUA103AM: Magnetic mount antenna $\frac{1}{4}$ wave, with BNC connection and 3 meters of cable
- VUA105AM: Magnetic mount antenna $\frac{1}{4}$ wave, with BNC connection and 3 meters of cable

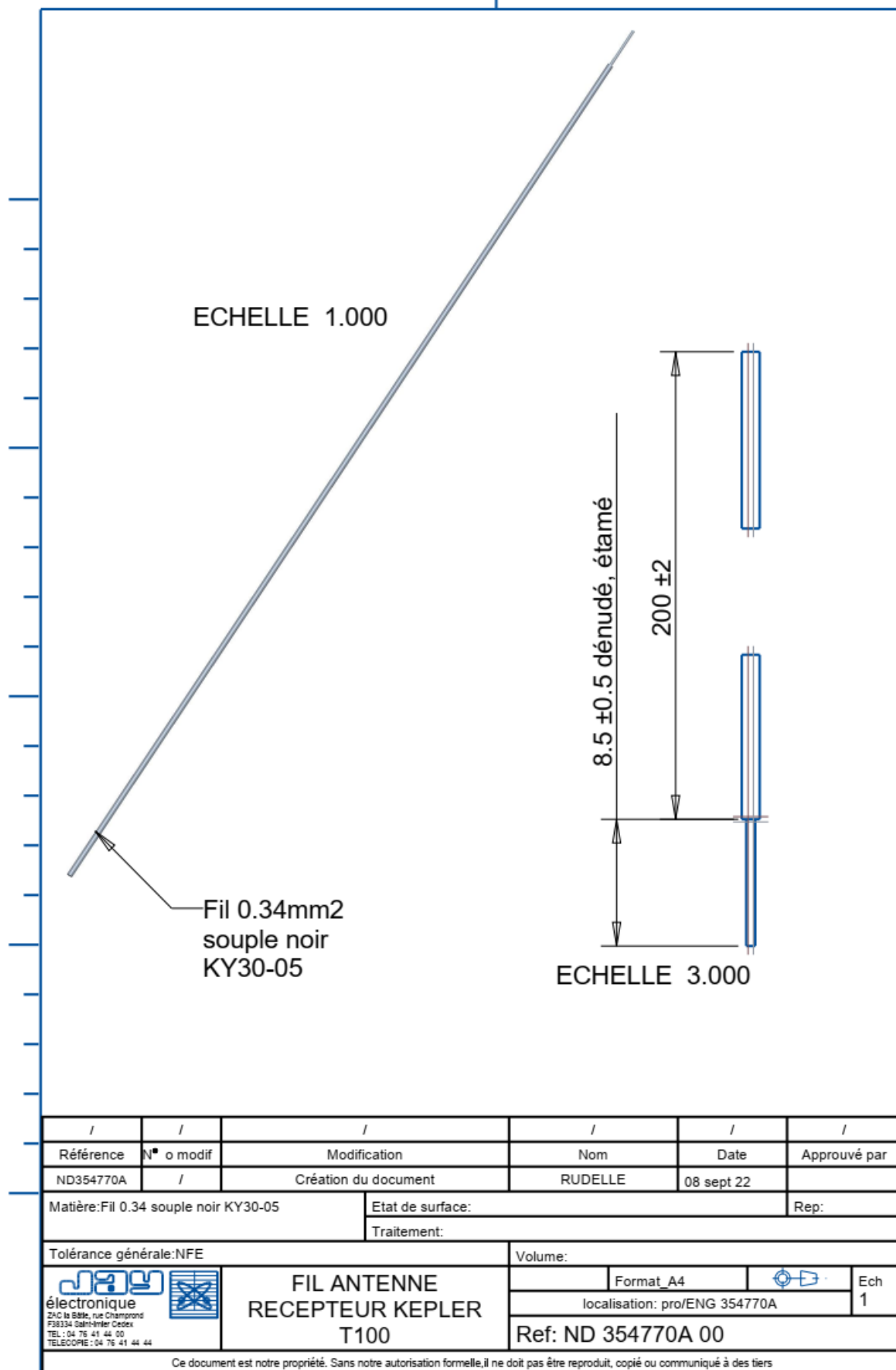
2 WIRE ANTENNA

This antenna is a simple wire in a plastic pipe.



The orange wire is the antenna. This is inserted into the black tube.

Below is the manufacturing plan of the wire antenna



3 VUA110AH ANTENNA

This antenna is a ground plane independent panel mount antenna, with 10 meters of cable.



Rugged design

Flexible whip

Ground plane independent

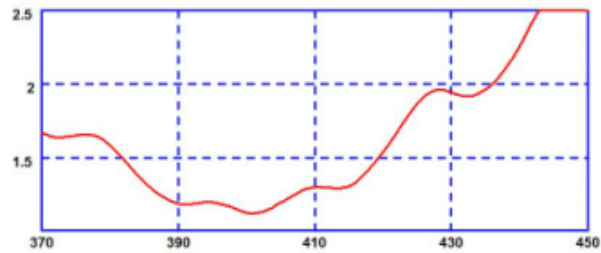
The HM range of antennas are ground plane independent and can therefore be mounted on any surface. The antenna is ideal for motorcycles, ambulances, fire trucks and other vehicles with non-conductive panels but can also be used on any other vehicles or at fixed sites.

The HM antenna range has a rugged design with a flexible nylon whip. The base is moulded in rigid nylon and mounted by way of an M14 mounting bush.

The HM mount (ML10) includes integrated low loss cable which comes in various lengths and with various terminations.

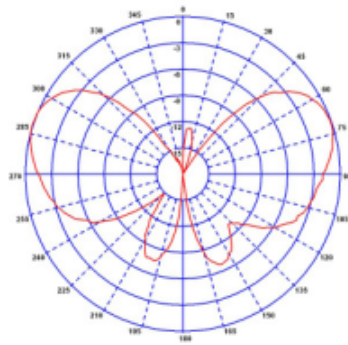


Typical VSWR*

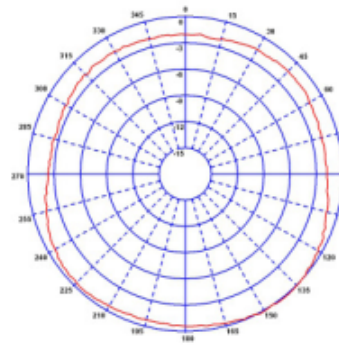


*HM-S1 Measured in free space with 5m (16') of CS23 (RG58 c/u) cable

Typical E-Plane (400MHz)



Typical H-Plane (400MHz)



Part No.						
	HM-TET	HM-S1	HM-S2	HM-433	HM-S4	HM-S5
Electrical Data						
Frequency Range (MHz)	380 - 430	380-400	410-430	433	450-470	806-870
Operational Band	TET	S1	S2	433MHz	S4	S5
Peak Gain: Isotropic			4dBi			
Compared to 1/4 wave			2dB			
Typical VSWR			2:1			
Polarisation			Vertical			
Pattern			Omnidirectional			
Impedance			50Ω			
Max Input Power (W)			10			
Mechanical Data						
Dimensions (mm)	Height	385 (15.2")	420 (16.53")	355 (13.97")	340 (13.38")	332 (13.07")
	Diameter			35 (1.37")		200 (7.87")
Operating Temp (°C)			-30° / +80°C (-22° / 176°F)			
Material			Flexible + Rigid Polyamide			
Colour			Black			
Mounting Data						
Fixing			Panel mount			
Mounting hole size (mm)			15 (0.6")			
Cable Data						
Type			CS23 (RG58 C/U)			
Diameter (mm)			5 (0.2")			
Length (m)			5 (16')			
Termination			Bare end †			

†Other cable lengths and terminations available.

PANORAMA ANTENNAS

Panorama Antennas Ltd
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Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

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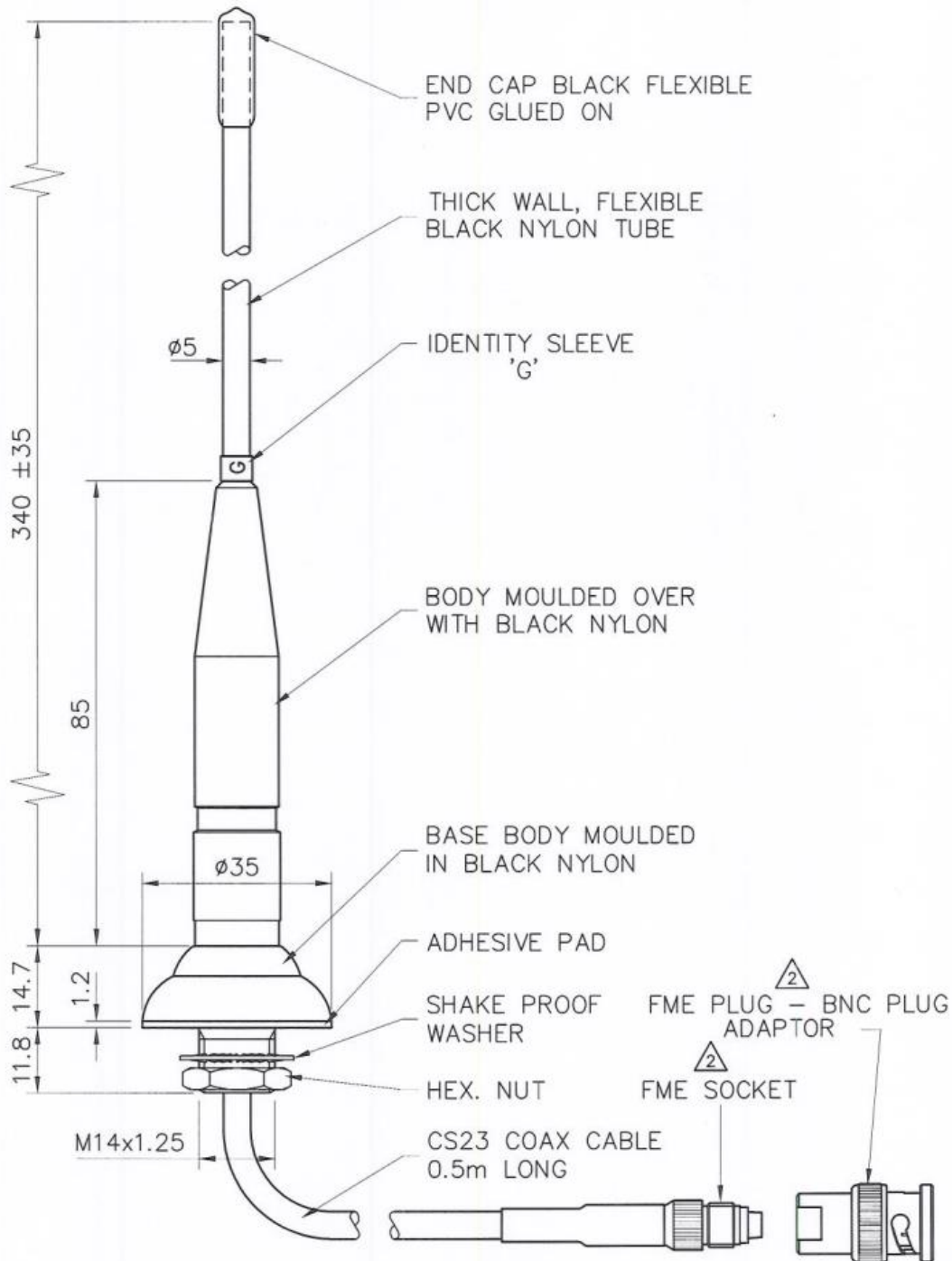


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DRG.
No.

THIS IS A PROPRIETARY ITEM OF PANORAMA ANTENNAS LTD. AND COULD BE
SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. THIS ITEM IS RoHS COMPLIANT.

— DENOTES LATEST
ISSUE CHANGES

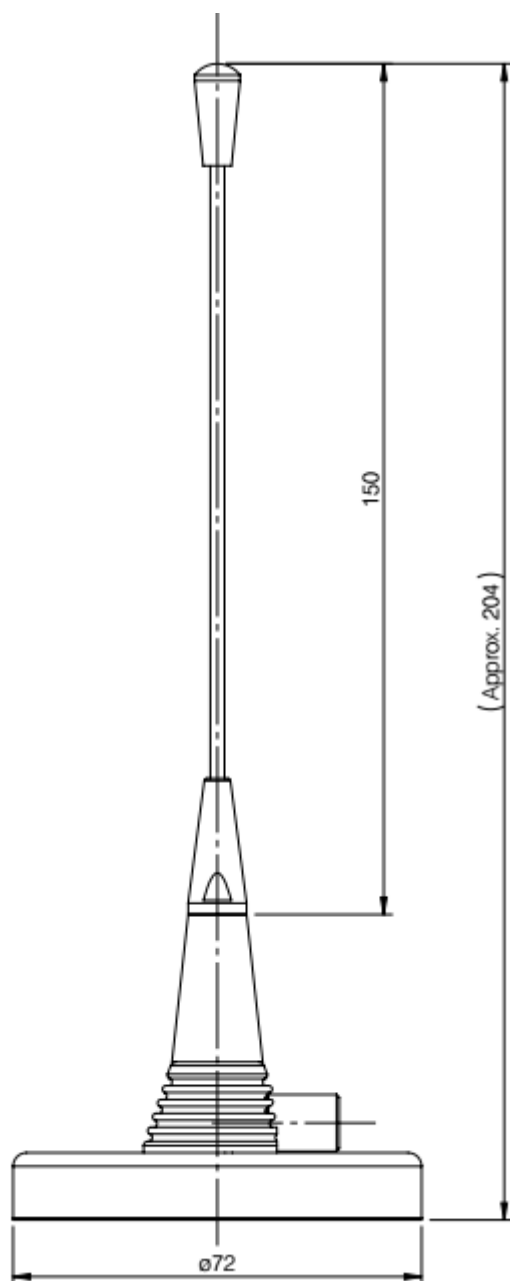


01019	1	30.04.15	K.D.	TOLERANCES UNLESS OTHERWISE STATED	TITLE GPI PANEL MOUNT ANTENNA			
01019	2	08.10.15	KD	0 DEC. PLACE ±0.5 2 DEC. PLACES ±0.1	430-440MHz. 0.5m CS23 COAX			
				1 DEC. PLACE ±0.2 ANGULAR ±1°	+ FME(m)-BNC(m) ADAPTOR			
				MATERIAL	2	DRAWN A.G.	DO.CHECK K.D.	SCALE 1:1
				FINISH				DIMENSIONS IN mm
C/NOTE	ISSUE	DATE	APPROVAL	PANORAMA ANTENNAS				

4 VUA103AM & VUA 105AM ANTENNA

This mobile antenna is a 1/4 with magnetic mount. There are two models with 3- and 5-meters cable.





3D View:



SPECIFICATIONS

Electrical			
Model	MU 1-X/..., MU 1-CX/..., MU 1-XG/..., MU 1-MM/...		
Frequency	Models within 370 - 470 MHz		
Antenna Type	Mobile whip antenna		
Max. Input Power	100 W		
Polarisation	Vertical		
Impedance	50 Ω		
VSWR	≤ 1.2:1 @ f. res.		
Bandwidth	≥ 45 MHz @ VSWR < 1.5 ≥ 50 MHz @ VSWR < 2.0		
Gain (EIA RS-329-1)	0 dB		
MU 1-MM/I	130000850	MM-mount (magnetic) with FME-system	406 - 440 MHz

Utilisation de l'embase MiniMag - "MM"



Une embase magnétique est utilisée pour une installation provisoire lorsqu'il n'est pas souhaitable de percer. Une antenne magnétique peut facilement être utilisée sur plusieurs différents véhicules en changeant d'un véhicule à un autre. L'embase MM est livrée avec un grand aimant circulaire parfaitement magnétisé positionné dans un circuit magnétique performant ce qui crée un effet magnétique important et une protection contre les chocs mécaniques. Une couche de silicone sur la surface de contact protège le toit de la voiture et assure une friction maximale.

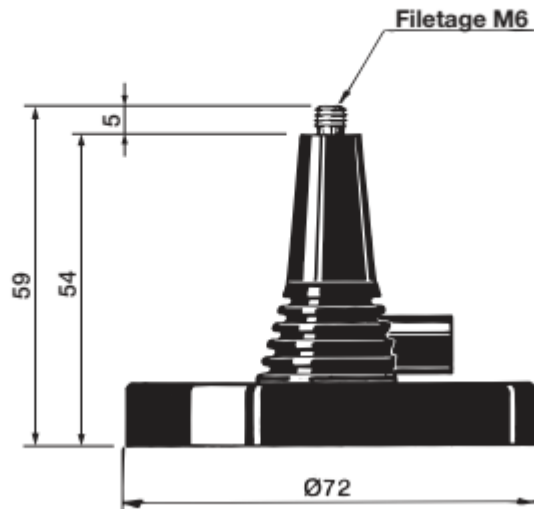
INSTALLATION:

L'embase magnétique doit être installée au milieu du toit ou du coffre pour assurer une couverture omnidirectionnelle optimale.

REGLAGE:

Inférieur à 400 MHz: Utilisez l'abaque pour l'antenne X utilisée et ajustez avec un ROS-mètre.

Supérieur à 400 MHz: Fouets réglés par coupe: Utilisez un ROS-mètre
Fouets réglés avec disque: Utilisez l'abaque fournie avec l'antenne



5 REVISION HISTORY

Revision	Revision Date	Revision Description	By
1	22-04-2023	Initial version	P.Fourey
2			