2 dB Mobile GlassFix® Antenna for the 450 MHz Band



DESCRIPTION

- Colinear, 2 dB mobile antenna for the 450 MHz band using the GlassFix® mounting principle.
- Mounting on car window glass – no holes required.
- Double-adhesion procedure ensures fast and reliable fixing.
- Internal matching unit feeds external antenna through window glass.
- Half-wave collinear design – no ground plane required.
- High positioning gives performance equal to conventionally mounted car roof antenna.
- FME FastCabling system (cable to be ordered separately).
- Simple tuning procedure by means of tuning screw on matching unit.
- Easily removable whip for cleaning in car-washing machine
- Swivel joint for 180° angle adjustment.
- If removal of antenna installation is necessary, a quick dismantling procedure leaves no trace of the installation.

NOTE

GF antennas are not suitable for car models with windows having heat reflective coating.

ORDERING

Model	Product No.	Frequency
GF 402/s	Replaced by GF 404/s (130000786)	380 ... 410 MHz
GF 402/l	130001885	406 ... 440 MHz
GF 402/h	130000781	430 ... 470 MHz
Accessories FME-Cables		
1 m FME(f)	130000437	
2 m FME(f)	130000447	
3 m FME(f)	130000457	
4 m FME(f)	130000466	
5 m FME(f)	130000474	
6 m FME(f)	130000483	
4 m FME-white(f)	110000064	
6 m FME-white(f)	110000066	
12 m FME-white(f)	110000068	
18 m FME-white(f)	110000069	
Accessories FME-Connectors		
FME(f)-FME(f)	130000583	
FME(m)-P(m) (Prolongation)	130000565	
FME(m)-N(m)	130000571	
FME(m)-FSMA (Female-SMA)	130000578	
FME(m)-BNC(m)	130000566	
FME(m)-TNC(m)	130000569	
FME(m)-UHF(m)	130000572	
FME(m)-MUHF(m) (Mini-UHF)	130000573	
FME(m)-EMUHF(m) (Elbow-MUHF)	130000582	
FME(m)-EBNC(m) (Elbow-BNC)	130000580	
FME(m)-ETNC(m) (Elbow-TNC)	130000581	
FME(m)-SMA(m)	130000577	

FME-SYSTEM ACCESSORIES - NOTE

For further information about other types of FME-cables and FME-connectors, please compare the cable and connector data sheets under accessories.

SPECIFICATIONS

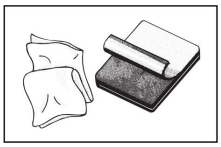
Electrical	
Model	GF 402/...
Frequency	450 MHz-band covered by two tunable models
Antenna Type	Collinear mobile GlassFix® antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.3 @ f.res.
Bandwidth	≥ 8 MHz @ VSWR ≤ 2.0 ≥ 15 MHz @ VSWR ≤ 3.0
Gain (EIA RS-329-1)	2 dB

Mechanical	
Materials	Whip: Black-chromed stainless steel Mount and indoor unit: Weather- and shockproof plastics, Corrosion-safe and corrosion-protected metals
Cable	FME-cable to be ordered separately
Colour	Black
Height	Approx. 580 mm / 22.83 in.
Weight	Approx. 0.09 kg / 0.20 lb
Mounting	On car windows with silicone glue 52 x 47 mm / 2.05 x 1.85 in. obstruction-free mounting area required
Glass Thickness	2.5 - 7 mm / 0.10 - 0.28 in.

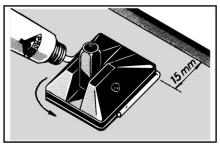
1. BEFORE INSTALLATION

- When selecting mounting location take into consideration: positions of back view mirror, wiper blade paths and defogger wires (when mounting on rear window). The driver's view should not be obstructed.
- Max. allowed curvature of the glass surface on the mounting spot is 2 mm deflection per 100 mm length.
- Environmental- and car temperature must be above 15° C at installation, and surfaces to be glued must be dry and clean.

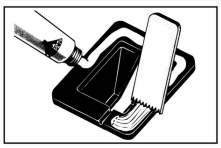
2. INSTALLATION



1. Clean both sides of the windscreen where the antenna mount and the matching unit are to be fitted and then remove the protective foil from the antenna mount.



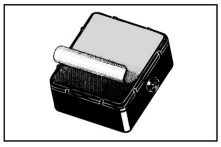
2. Fit mount to screen and press firmly. Apply glue along the edge between mount and glass.



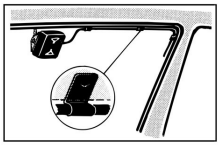
3. Apply glue to the cover.



4. Fit the cover and press down firmly. After 2 - 24 hours the whip can be fitted.



5. Remove the protective foil on the matching unit.



6. Fit matching unit by pressing it firmly into position. Secure cable using clips provided.

Do not use sealer on rubber gasket or other places.

3. AFTER INSTALLATION

Allow the silicone gluings to dry off 2 hours at a temperature above 15° C. To ensure full strength of the glue, it is recommended to keep the whip off the mount for 24 hours.

4. TUNING INSTALLATION

- Insert a forward/reflection-type wattmeter between the transmitter and the antenna.
- Key the transmitter and observe the forward and the reflected power.
- Adjust the tuning screw on the matching unit until minimum returned power is obtained.

REINSTALLATION KIT

A reinstallation kit including all necessary parts for transfer of the antenna to another vehicle is available under order No. »GF-RK«.

WARING

SAFETY PRECAUTIONS

Antennas mounted on the windscreen may cause relatively high field strengths in the passenger cabin and near the dashboard.

1. To prevent health hazard due to RF radiation, persons must not be closer than 30 cm to the antenna whip (transmitter output power to the matching unit: 20 W). (DIN 57 848).

2. The RF signals at the dashboard may cause interference in the car's electronic equipment such as broadcast radio, computer automatics, braking systems, electronic ignition, relays etc. Some cars are more susceptible to disturbances than others. It is the responsibility of the installer to carry out a thorough check of the proper functioning under any conditions of such circuits before finishing installation.

The enclosed silicone adhesive contains acetic acid and fungicides. Keep out of reach of children and dispose properly.

ASSEMBY DETAILS

