

0 dB Mobile GlassFix® Antenna for the 450 MHz Band

DESCRIPTION

- Shortened half-wave, mobile antenna for the 450 MHz band using the GlassFix® mounting principle.
- Attractive appearance with encapsulated shortening coil.
- 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 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.
- Easy removable whip for car wash.
- 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 that have heat reflective coating.

ORDERING

Type	Product No.	Frequency
GF 405/s	130000788	380 ... 410 MHz
GF 405/l	130000789	406 ... 440 MHz
GF 405/h	130000790	430 ... 470 MHz

SPECIFICATIONS

Electrical	
Model	GF 405/...
Frequency	450 MHz-band covered by three tunable models
Antenna Type	Shortened ½ λ mobile GlassFix® Antenna
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.5:1 @ f.res.
Maximum Input Power	25 W
Bandwidth	≥ 8 MHz @ VSWR ≤ 2.0 ≥ 15 MHz @ VSWR ≤ 3.0
Gain (EIA RS-329-1)	0 dB
Mechanical	
Materials	Whip: Stainless steel and black-chromed brass 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. 240 mm / 9.45 in.
Weight	Approx. 0.03 kg / 0.07 lb
Mounting	On car windows with silicone glue (52 mm x 47 mm obstruction-free mounting area required)
Glass Thickness	2.5 - 7 mm / 0.10 - 0.28 in.



## FME-SYSTEM ACCESSORIES

FME-CABLES	
TYPE	PRODUCT NO.
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

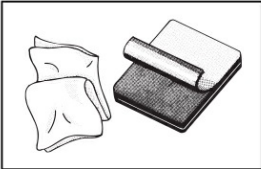
FME-CONNECTORS	
TYPE	PRODUCT NO.
FME(f)-FME(f)	130000583
FME(m)-P(m) (Prolongation)	130000565
FME(m)-N(m)	130000571
FME(m)-FSMA (Female-SMA)	130000578
FME(m)-BNC(m)	130000566
FME(m)-TNC(m)	130000569
FME(m)-UHF(m)	130000572
FME(m)-MUHF(m) (Mini-UHF)	130000573
FME(m)-EMUHF(m) (Elbow-MUHF)	130000582
FME(m)-EBNC(m) (Elbow-BNC)	130000580
FME(m)-ETNC(m) (Elbow-TNC)	130000581
FME(m)-SMA(m)	130000577

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


## 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.

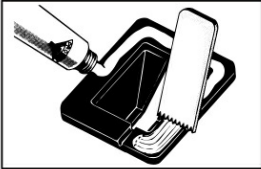
## 2. INSTALLATION




1. Clean both sides of the windshield 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.



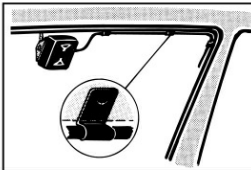
3. Apply glue to the cover.



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 INSTRUCTIONS

- 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«.

### WARNING

### 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.

### ASSEMBLY DETAILS

