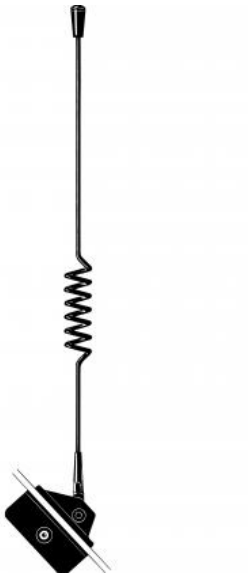
3 dB Mobile GlassFix® Antenna for the 900 MHz Band



DESCRIPTION

- Instant-adhesion procedure ensures fast and reliable fixing.
- colinear, 3 dB mobile antenna for the 900 MHz-band using the GlassFix® mounting principle.
- Mounting on car window glass – no holes required.
- 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.
- 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.

SPECIFICATIONS

Electrical	
Model	GF 904/...
Frequency	900 MHz-band covered by two tunable models
Antenna Type	Collinear mobile GlassFix® antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	< 1.3:1 @ f.res.
Bandwidth	≥ 60 MHz @ VSWR ≤ 1.5
Gain (EIA RS-329-1)	3 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. 330 mm / 12.99 in.
Weight	Approx. 0.075 kg / 0.17 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.

ORDERING

Model	Product No.	Frequency
GF 904/l	130001128	824 ... 894 MHz
GF 904/h	130001125	870 ... 960 MHz

ORDERING NOTE

To select the correct model for a specific CELLULAR network please consult the survey of cellular network frequencies which can be found under USEFUL DATA in our catalogues. This survey also states preferred tuning centre frequencies.

PLEASE NOTE

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

FME-SYSTEM ACCESSORIES

FME-CABLES	
TYPE	LENGTH
1 m FME	1 m
2 m FME	2 m
3 m FME	3 m
4 m FME	4 m
5 m FME	5 m
6 m FME	6 m
4 m FME-white	4 m white
6 m FME-white	6 m white
12 m FME-white	12 m white
18 m FME-white	18 m white

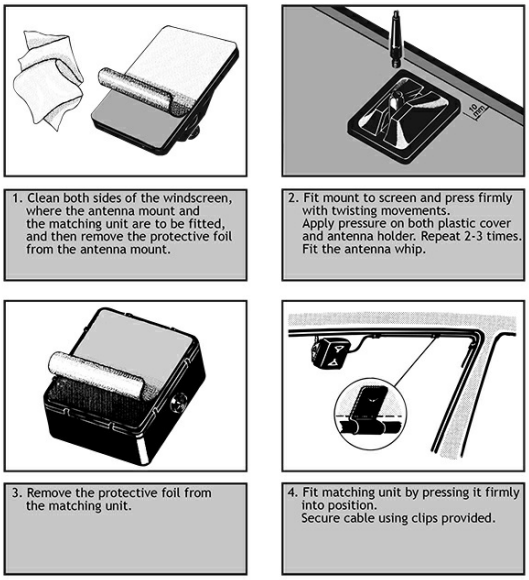
FME-CONNECTORS	
TYPE	CONNECTOR
FME-FME	FME-FME
FME-P	Prolongation
FME-N	N
FME-FSMA	FSMA
FME-BNC	BNC
FME-TNC	TNC
FME-UHF	UHF
FME-MUHF	Mini-UHF
FME-EMUHF	Elbow-MUHF
FME-EBNC	Elbow-BNC
FME-ETNC	Elbow-TNC
FME-SMA	SMA

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 installation surfaces must be dry and clean.

2. INSTALLATION



Do not use sealer on rubber gasket or other places.

3. 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. For duplex operation, the antenna can be off-tuned slightly to favorize the matching on the Rx. Turning the screw clockwise will shift the antenna resonance to a lower frequency and vice versa. The VSWR on the Tx should, however, never exceed 1:1.5.

4. ADHESION ADVICE

- It is essential for a good adhesion result that the surfaces are properly cleaned and dry.
- A high application pressure improves the binding power.
- Ideal application temperature range is +20 °C to +38 °C but may be extended down to +15 °C. When applied, binding strength is maintained between -30 °C and +70 °C.
- Binding power increases considerably with time. To ensure full strength of the assembly it is recommended to keep the whip off the mount for 24 hours.
- To accelerate attainment of full binding power, the joined parts may be heat-treated with a warm-air gun.
  Please Note : Do not heat parts to more than 65 °C and take care not to spoil other nearby car parts.

REINSTALLATION KIT

A reinstallation kit including all necessary parts for transfer of the antenna to another vehicle is available under order No. »GF-RK 900«.

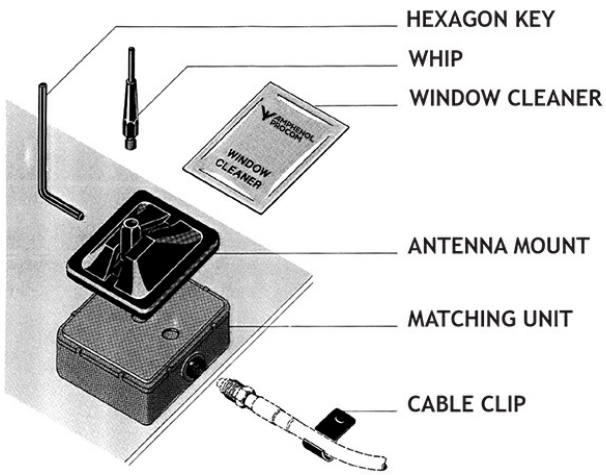
WARNING

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.

ASSEMBLY DETAILS



GLUE OPTION

For the antenna to be delivered with silicone glue to secure the mount using a double-adhesion procedure, add an M to the antenna designation, e.g. GF 904M/h.

