

## Collinear 4 dB Mobile Antenna for the 450 MHz Band

### DESCRIPTION

- Encapsulated phasing coil.
- Black-chromed, stainless steel whip.
- Choice between general purpose tunable models.
- Stainless steel X-mount with M6-thread whip-fastening system.
- Simple mounting exclusively with access from the outside.
- Models available with X-mount (oblong) and CX-mount (circular).
- Choice between two connection principles:
  - X-mount: FME-connection (supplied without cable).
  - XP4-mount: Permanently attached 4 m cable terminated with FME-connector.
 All whips are compatible with all mounts.



### SPECIFICATIONS

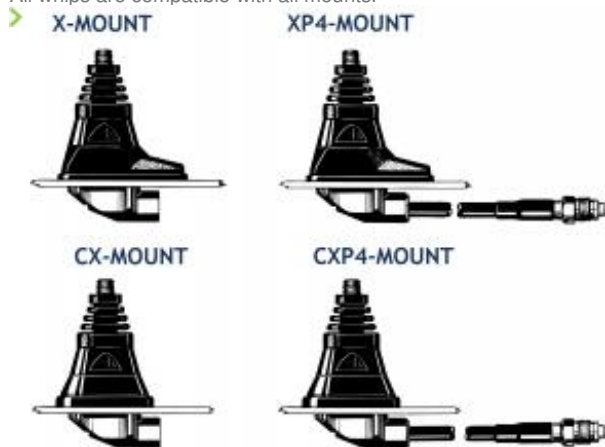
Electrical	
Model	MU 11-X/...
Frequency	450 MHz-band covered by four models
Antenna Type	Collinear stainless steel whip mobile antenna
Max. Input Power	100 W
Polarisation	Vertical
Impedance	50 Ω
Gain (EIA RS-329-1)	4 dB
Mechanical	
Materials	Whip: Black-chromed stainless steel and brass Durable plastics Mount: Black-chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	4 +/- 1 Nm
Colour	Black
Height	60 mm / 2.36 in.
Weight	X-version: Approx. 160 g XP4-version: Approx. 300 g
Mounting	18 mm dia. hole
Environmental	
Ingress Protection	IPX5

## ORDERING

Type	Product No.	Description	Frequency
MU 11-CX/f	130000796	CX-mount (circular)with FME	406...430 MHz
MU 11-CXP4/f	130000798	CXP4-mount (circular)with 4 m cable andFME-connector	406...430 MHz
MU 11-CX/h	130000800	CX-mount (circular)with FME	440...470 MHz
MU 11-CXP4/h	130000802	CXP4-mount (circular)with 4 m cable andFME-connector	440...470 MHz
MU 11-CX/l	130001483	CX-mount (circular)with FME	420...450 MHz
MU 11-CXP4/l	130000805	CXP4-mount (circular)with 4 m cable andFME-connector	420...450 MHz
MU 11-CX/CEL1	130001484	CX-mount (circular)with FME	450 - 470 MHz
MU 11-CXP4/CEL1	130000808	CXP4-mount (circular)with 4 m cable andFME-connector	450 - 470 MHz
MU 11-CXP4/CEL4	130000811	CXP4-mount (circular)with 4 m cable andFME-connector	414 - 430 MHz
MU 11-CXP4/CEL2	130000815	CXP4-mount (circular)with 4 m cable andFME-connector	440 - 455 MHz
MU 11-CX/s	130000814	CX-mount (circular)with FME	380...410 MHz
MU 11-CXP4/s	130000817	CXP4-mount (circular)with 4 m cable andFME-connector	380...410 MHz
MU 11-CX/CEL4	130001487	CX-mount (circular)with FME	414 - 430 MHz
MU 11-CX/CEL3	130001486	CX-mount (circular)with FME	425 - 440 MHz
MU 11-X/f	130000795	X-mount (oblong)with FME	406...430 MHz
MU 11-XP4/f	130000797	XP4-mount (oblong)with 4 m cable andFME-connector	406...430 MHz
MU 11-X/h	130000799	X-mount (oblong)with FME	440...470 MHz
MU 11-XP4/h	130000801	XP4-mount (oblong)with 4 m cable andFME-connector	440...470 MHz
MU 11-X/l	130000803	X-mount (oblong)with FME	420...450 MHz
MU 11-XP4/l	130000804	XP4-mount (oblong)with 4 m cable andFME-connector	420...450 MHz
MU 11-X/CEL1	130000806	X-mount (oblong)with FME	450 - 470 MHz
MU 11-XP4/CEL1	130000807	XP4-mount (oblong)with 4 m cable andFME-connector	450 - 470 MHz
MU 11-XP4/CEL4	130000809	XP4-mount (oblong)with 4 m cable andFME-connector	414 - 430 MHz
MU 11-XP4/CEL2	130000810	XP4-mount (oblong)with 4 m cable andFME-connector	440 - 455 MHz
MU 11-X/s	130000813	X-mount (oblong)with FME	380...410 MHz
MU 11-XP4/s	130000816	XP4-mount (oblong)with 4 m cable andFME-connector	380...410 MHz
MU 11-X/CEL4	130000818	X-mount (oblong)with FME	414 - 430 MHz
MU 11-X/CEL3	130000819	X-mount (oblong)with FME	425 - 440 MHz
MU 11-CX/CEL2	130001485	CX-mount (circular)with FME	440 - 455 MHz
MU 11-CXP4/CEL3	130000812	CXP4-mount (circular)with 4 m cable andFME-connector	425 - 440 MHz
MU 11-X/CEL2	130001478	X-mount (oblong)with FME	440 - 455 MHz
MU 11-XP4/CEL3	130001482	XP4-mount (oblong)with 4 m cable andFME-connector	425 - 440 MHz

**ADDITIONAL DATA**

All whips are compatible with all mounts.



**INSTALLATION**

This antenna can be mounted anywhere on the car, however, roof top mounting is always recommended.

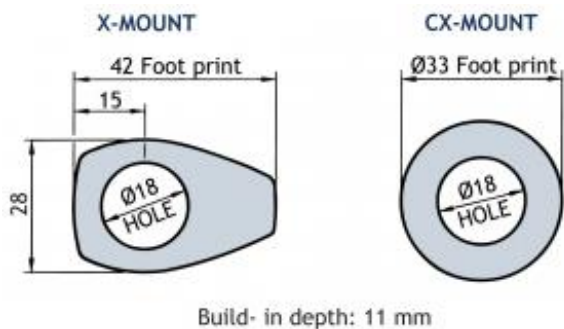
The oblong X-mount can be mounted on the often very narrow strip on the rear wing between the trunk lid and the side of the car.

Mounting can take place exclusively with access from the outside when drilling an 18 mm dia. hole. Mounting can take place from the inside by drilling a 14 mm dia. hole. When mounting in a 14 mm dia. hole, remove the bottom plastic ring of the packing gasket with a sharp cutter.

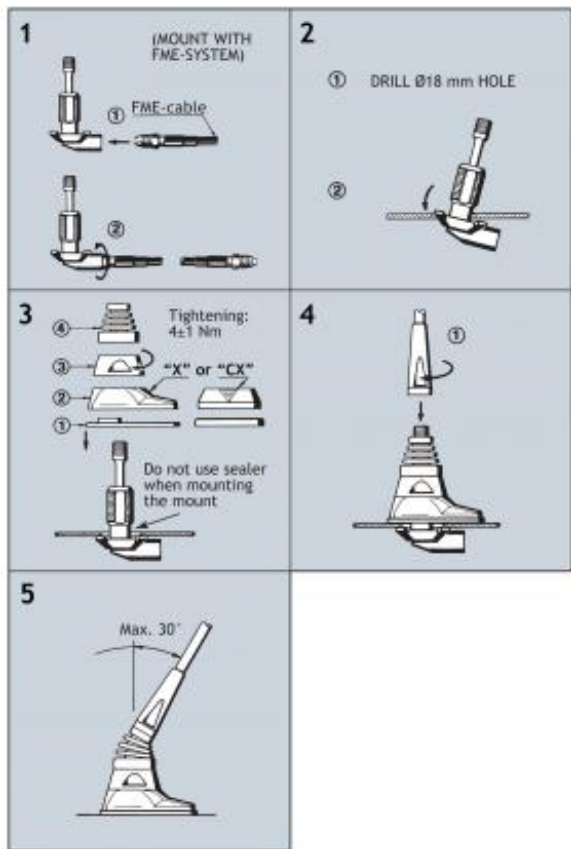
When cleaning the car in car-washing machines, remove the whip using a spanner, size 9 mm. After wash, refit the whip and tighten it lightly with the spanner.

As the mounts are internally equipped with a bendable section, the antennas can always be adjusted to an upright position independent of the tilt angle of the installation spot

**1. INSTALLATION DIMENSIONS**



**2. INSTALLATION STEPS**



Do not use sealer on rubber gasket or other places.

### 3. TUNING

The tunable models are tuned to the desired frequency within the indicated tuning range by positioning the adjustment disc according to the diagrams below.

