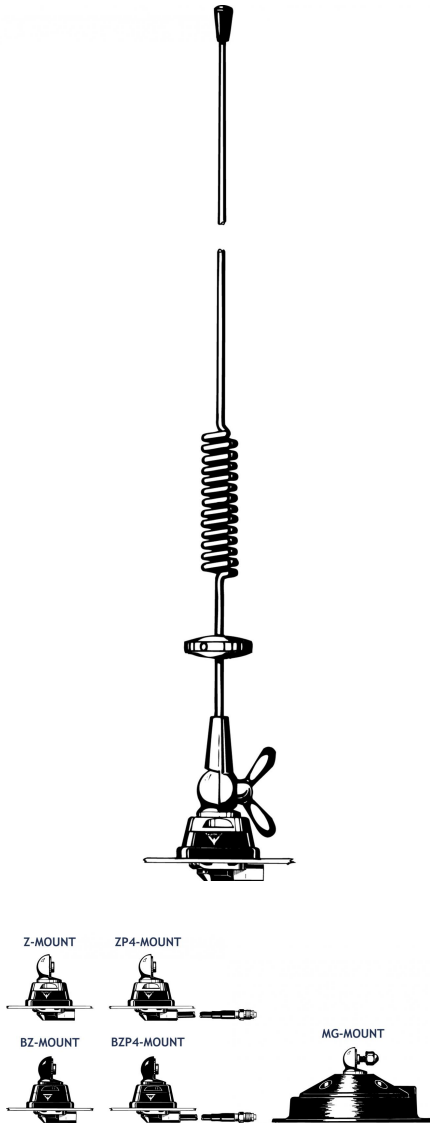


# MU 4-Z/...

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

### DESCRIPTION

- 4 dB mobile antenna series with collinear, stainless steel whip with toggle joint.
- Models with Z-mount or MG-magnetic mount.
- Choice between Z-mount with FME-connection (supplied without cable) or ZP4-mount with factory fitted 4 m cable terminated with FME-connector.
- MG-models provided with FME-connection directly on the mount (without cable).
- Z-type models available in bright or black chromed versions. MG-models available in bright polished only.



Whips from the Z/ZP4 mounts and the MG-mount are **NOT** compatible.

Hat screw option (Z-/ZP4-type models only): By adding a K to the antenna designation the antenna is delivered with hat screw and key instead of wing screw.

### ORDERING DESIGNATIONS

Z-MOUNT WITH FME BRIGHT	PRODUCT NO.	BZ-MOUNT WITH FME BLACK	PRODUCT NO.	[MHZ]
Models for general application - tunable with adjustment disc:				TUNING RANGE
MU 4-Z/s	130001015	MU 4-BZ/s	130000999	380...410
MU 4-Z/f	130000975	MU 4-BZ/f	130001001	406...430
MU 4-Z/l	130000992	MU 4-BZ/l	130000997	420...450
MU 4-Z/h	130000983	MU 4-BZ/h	130001004	440...470
Models for cellular systems - pretuned, without adjustment disc:				FREQUENCY RANGE
MU 4-Z/CEL4	130001002	MU 4-BZ/CEL4	130001010	414 - 430
MU 4-Z/CEL3	130001467	MU 4-BZ/CEL3	130001005	425 - 440
MU 4-Z/CEL2	130001466	MU 4-BZ/CEL2	130001011	440 - 455
MU 4-Z/CEL1	130001003	MU 4-BZ/CEL1	130001000	450 - 470

ZP4-MOUNT WITH 4 M CABLE BRIGHT	PRODUCT NO.	BZP4-MOUNT WITH 4 M CABLE BLACK	PRODUCT NO.	[MHZ]
Models for general application - tunable with adjustment disc:				TUNING RANGE
MU 4-ZP4/s	130001016	MU 4-BZP4/s	130000976	380...410
MU 4-ZP4/f	130000978	MU 4-BZP4/f	130000977	406...430
MU 4-ZP4/l	130000994	MU 4-BZP4/l	130000993	420...450
MU 4-ZP4/h	130000986	MU 4-BZP4/h	130000987	440...470
Models for cellular systems - pretuned, without adjustment disc:				FREQUENCY RANGE
MU 4-ZP4/CEL4	130001007	MU 4-BZP4/CEL4	130000989	414 - 430
MU 4-ZP4/CEL3	130001009	MU 4-BZP4/CEL3	130000991	425 - 440
MU 4-ZP4/CEL2	130001012	MU 4-BZP4/CEL2	130000996	440 - 455
MU 4-ZP4/CEL1	130001006	MU 4-BZP4/CEL1	130000988	450 - 470

MG-MOUNT WITH FME	PRODUCT NO.	[MHZ]
Models for general application - tunable with adjustment disc:		TUNING RANGE
MU 4-MG/s	130000902	380...410
MU 4-MG/f	130000903	406...430
MU 4-MG/l	130000905	420...450
MU 4-MG/h	130000904	440...470
Models for cellular systems - pretuned, without adjustment disc:		FREQUENCY RANGE
MU 4-MG/CEL4	130000955	414 - 430
MU 4-MG/CEL3	130000906	425 - 440
MU 4-MG/CEL2	130001328	440 - 455
MU 4-MG/CEL1	130000906	450 - 470

## SPECIFICATIONS

ELECTRICAL	
MODEL	MU 4-Z/...
ANTENNA TYPE	Collinear stainless steel mobile whip antenna
FREQUENCY	Models within 380 – 470 MHz
IMPEDANCE	Nom. 50 $\Omega$
POLARIZATION	Vertical
GAIN	4 dB (acc. to EIA RS-329-1)
BANDWIDTH	> 15 MHz @ SWR $\leq$ 1.5 > 30 MHz @ SWR < 2.5
SWR	$\leq$ 1.3 @ f. res.
MAX. POWER	100 W
MECHANICAL	
MATERIALS	<b>Whip:</b> Stainless steel and brass, bright polished/chromed or black-chromed <b>Mount:</b> Chromed brass (bright or black) Weather- and shockproof plastics Stainless steel
RECOMMENDED INSTALLATION TORQUE	7.5 $\pm$ 1 Nm
COLOUR	Bright or black (see above)
HEIGHT	Approx. 59 cm (dep. on freq.)
WEIGHT	Z-version: Approx. 230 g ZP4-version: Approx. 370 g MG-version: Approx. 930 g
MOUNTING	$\varnothing$ 21 mm dia. hole (For roof thickness 2 mm up to 7.5 mm mounting hole should be $\varnothing$ 22 mm dia.)
ROOF THICKNESS	Max. 2.0 mm (Models up to 7.5 mm on request)

## INSTALLATION

The antenna whip comprises a  $\frac{1}{4} \lambda$  section, a phase shifting coil, and a  $\frac{1}{2} \lambda$  section. The whip is fastened to the mount by means of our standard ball joint and wing screw system. The adjustable ball joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

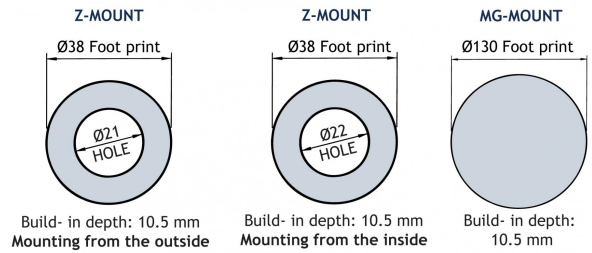
The Z-mount is particularly well suited for mounting on car roofs because of its ability to be installed exclusively with access from the outside. The Z-Mount for roof thickness from 2 mm to 7.5 mm must be mounted from the inside.

However, the antenna can be installed anywhere on the car, as the Z-mount is equally well suited for mounting on e.g. trunk or wing.

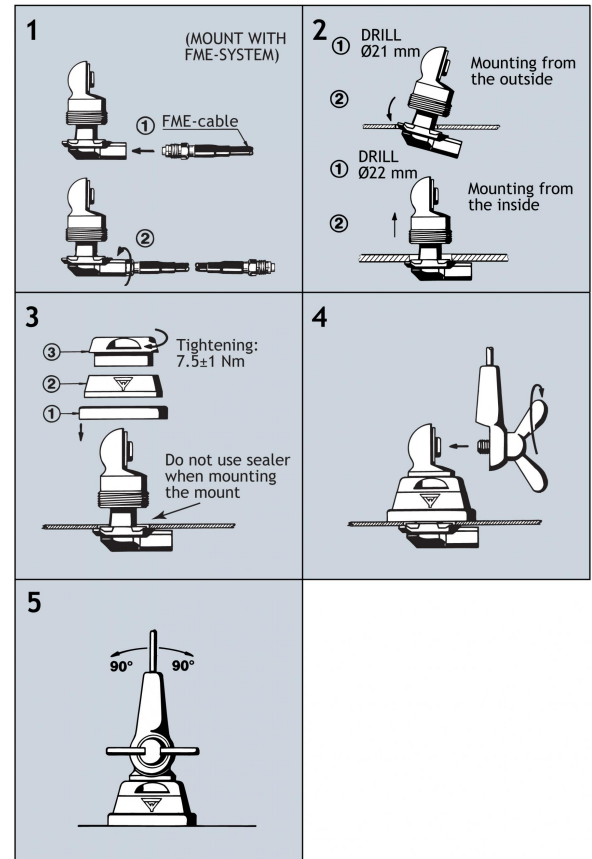
The "MG"-mount antennas are provided with a large-diameter, thoroughly magnetized permanent ring magnet with an extraordinarily high attaching effect. A silicone layer applied to the whole contact surface protects the car roof and ensures maximum friction.

Please note that the whips from the Z/ZP4-mounts and the whips from the MG-mount are not compatible.

## 1. INSTALLATION DIMENSIONS



## 2. INSTALLATION STEPS

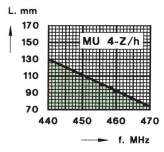
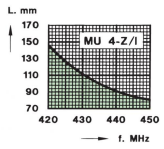
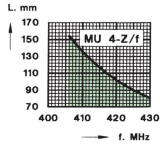
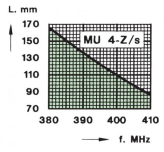


Do not use sealer on rubber gasket or other places.

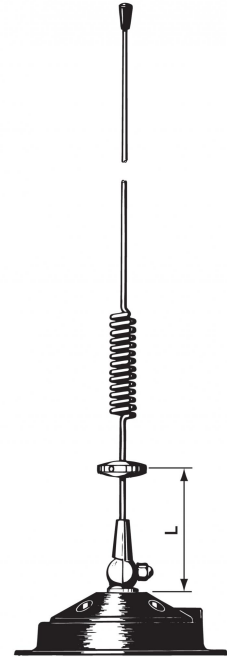
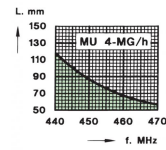
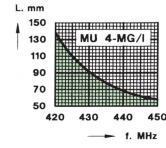
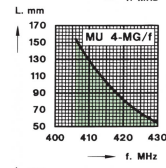
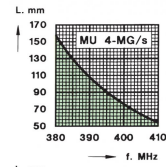
### 3. TUNING

The antenna is delivered factory-tuned and requires no further tuning.

#### Z- and ZP4-models



#### MG-models



#### PLEASE NOTE

For safety reasons:  
When using the MU 4-MG/..., car speed must not exceed 140 km/h.



PROCOM A/S reserve the right to amend specifications without prior notice.  
09/01/15