

Mobile communication antennas for cars

380 – 470 MHz

(TETRA, Trunking Systems, 70 cm band, NMT 450)

In the following chapter the antennas are listed according to the product families, beginning with:

- Roof mount antennas
- Magnet mount antennas
- Rear mount antennas
- Caravan antennas

Roof mount antenna 380 ... 430 MHz / Car radio AM/FM



K 70 57 21 9

Type No. K 70 57 21 9
Ord. No. 510 173

380 ... 400 MHz: 2 dB gain
406 ... 430 MHz: 4 dB gain
(ref. to quarter-wave whip),
length 600 mm,
Fixed cable RG 058
5 meters long,

Maximum load	50 W (at 50 °C ambient temperature)
Tuning	By moving the tuning disk (note mounting instructions).
Mounting	In bore hole 24 mm diameter.
Built-in depth	14 mm
Max. diameter at base	38 mm
Material	Whip: Stainless steel. Parts of the swivel-joint and tuning disk: Chromium-plated brass. Base: Weather resistant plastic.
Contents of delivery	Whip, base, allen key.
Accessories	For AM/FM reception the coupler K 63 27 23 (Ord. No. 510 258) is required.
Components	Type No. (Ord. No.)
Whip	K 70 57 21 04 1 (510 172)
Base for K 70 57 21 9	K 50 55 20 31 (510 142)
Swivel-joint screw*	K 66 00 6 (510 154)
Tip protection	K 66 01 4 (510 158)

* butterfly bolt + philips screw + locking washer

Roof mount antenna 440 ... 470 MHz / Car radio AM/FM

Type No. K 70 57 23 9 Ord. No. 510 178	440 ... 470 MHz, 4 dB gain (ref. to quarter-wave whip), Fixed cable RG 058, 5 meters long, length 540 mm
Maximum load	50 W (at 50 °C ambient temperature)
Tuning	By moving the tuning disk (note mounting instructions).
Mounting	In bore hole 24 mm diameter.
Built-in depth	14 mm
Max. diameter at base	38 mm
Material	Whip: Stainless steel. Parts of the swivel-joint and tuning disk: Chromium-plated brass. Base: Weather resistant plastic.
Contents of delivery	Whip, base, allen key.
Accessories	For AM/FM reception the coupler K 63 27 23 (Ord. No. 510 258) is required.
Components	Type No. (Ord. No.)
Whip	K 70 57 23 04 1 (510 175)
Base for K 70 57 23 9	K 50 55 20 31 (510 142)
Swivel-joint screw*	K 66 00 6 (510 154)
Tip protection	K 66 01 4 (510 158)

* butterfly bolt + philips screw + locking washer



K 70 57 23 9

EuroLine antenna
380 – 406 MHz / Car radio AM/FM

- Antenna for the digital trunking system TETRA.
- 4 dB gain antenna, also usable as combined whip for 380 – 406 MHz / AM/FM reception.
- 4 dB gain antenna in low-noise version.



K 70 78 22



K 70 77 22

Type No. K 70 77 22 Ord. No. 510 750	380 – 406 MHz, 0 dB gain (ref. to quarter-wave whip), length 193 mm
Type No. K 70 78 22 Ord. No. 510 753	380 – 406 MHz, 4 dB gain (ref. to quarter-wave whip), low wind-noise, length 630 mm
Connection	Minicrimp (male)
Maximum load	50 W (at 50 °C ambient temperature)
Mounting	Into bore hole 18 ⁺¹ mm diameter from the external side of the car body. Into bore hole 14 ... 19 mm diameter from the inner side of the car body.
Built-in depth	13 mm
Max. diameter at base	32 mm
Material	Metal parts are made of brass and stainless steel. All visible metal parts are black chromium-plated.
Contents of delivery	Whip, base, antenna wrench.
Accessories	For AM/FM reception the coupler K 63 27 23 (Ord. No. 510 258) is required.
Components	Type No. (Ord. No.)
Whip for K 70 77 22	K 70 70 22 01 (510 751)
Whip for K 70 78 22	K 70 71 22 01 (510 754)
Base	K 70 77 20 3 (510 006)
Base with 5 mtr cable	K 70 70 20 3 (510 005)
Tip protection	K 66 01 9 (510 159)
Antenna wrench	K 66 30 2 (510 161)

EuroLine antenna

406 – 440 MHz

- 4 dB gain antenna, also usable as combined whip for 406 – 440 MHz / AM/FM reception.
- 4 dB gain antenna in low-noise version.

Type No. K 70 77 21 Ord. No. 510 184	406 – 440 MHz, 0 dB gain (ref. to quarter-wave whip), length 180 mm
Type No. K 70 78 21 Ord. No. 510 756	406 – 440 MHz, 4 dB gain (ref. to quarter-wave whip), low wind-noise, length 590 mm
Connection	Minicrimp (male)
Maximum load	50 W (at 50 °C ambient temperature)
Mounting	Into bore hole 18 ⁺¹ mm diameter from the external side of the car body. Into bore hole 14 ... 19 mm diameter from the inner side of the car body.
Built-in depth	13 mm
Max. diameter at base	32 mm
Material	Metal parts are made of brass and stainless steel. All visible metal parts are black chromium-plated.
Contents of delivery	Whip, base, antenna wrench.
Accessories	For AM/FM reception the coupler K 63 27 23 (Ord. No. 510 258) is required.
Special feature	Whip K 70 70 21 01 is marked with the letter „K“
Components	Type No. (Ord. No.)
Whip for K 70 77 21	K 70 70 21 01 (510 181)
Whip for K 70 78 21	K 70 71 21 01 (510 236)
Base	K 70 77 20 3 (510 006)
Base with 5 mtr cable	K 70 70 20 3 (510 005)
Tip protection	K 66 01 9 (510 159)
Antenna wrench	K 66 30 2 (510 161)



K 70 77 21



K 70 78 21

EuroLine antenna
380 – 410 / 890 – 960 MHz

- **Antenna for the simultaneous operation of a Trunking system (380 – 410 MHz) and a 900 MHz mobile phone.**



506 10001

Type No. 506 10001 Ord. No. 506 10001	380 – 410 / 890 – 960 MHz 0 dB gain (ref. to quarter-wave whip) in both ranges, length 180 mm										
Connection	Minicrimp (male)										
Maximum load	15 W (at 50 °C ambient temperature)										
Mounting	Into bore hole 18 ⁺¹ mm diameter from the external side of the car body. Into bore hole 14 ... 19 mm diameter from the inner side of the car body.										
Built-in depth	13 mm										
Max. diameter at base	32 mm										
Material	Metal parts are made of brass and stainless steel. All visible metal parts are black chromium-plated.										
Contents of delivery	Whip, base, antenna wrench.										
Accessories	For the simultaneous operation of a TETRA/trunking system and a 900 MHz radio set, the diplexer K 63 27 25 (Order-No. 510 029) is required.										
Components	<table border="0"> <tr> <td>Type No.</td> <td>(Ord. No.)</td> </tr> <tr> <td>Whip</td> <td>506 10002 (506 10002)</td> </tr> <tr> <td>Base</td> <td>K 70 77 20 3 (510 006)</td> </tr> <tr> <td>Base with 5 mtr cable</td> <td>K 70 70 20 3 (510 005)</td> </tr> <tr> <td>Antenna wrench</td> <td>K 66 30 2 (510 161)</td> </tr> </table>	Type No.	(Ord. No.)	Whip	506 10002 (506 10002)	Base	K 70 77 20 3 (510 006)	Base with 5 mtr cable	K 70 70 20 3 (510 005)	Antenna wrench	K 66 30 2 (510 161)
Type No.	(Ord. No.)										
Whip	506 10002 (506 10002)										
Base	K 70 77 20 3 (510 006)										
Base with 5 mtr cable	K 70 70 20 3 (510 005)										
Antenna wrench	K 66 30 2 (510 161)										

EuroLine antenna

410 – 430 / 890 – 960 MHz

- Antenna for the simultaneous operation of a 400 MHz radio set and a 900 MHz mobile phone.

Type No. K 70 50 64 Ord. No. 510 773	410 – 430 / 890 – 960 MHz 0 dB gain (ref. to quarter-wave whip) in both ranges, length 180 mm
Connection	Minicrimp (male)
Maximum load	15 W (at 50 °C ambient temperature)
Mounting	Into bore hole 18 ⁺¹ mm diameter from the external side of the car body. Into bore hole 14 ... 19 mm diameter from the inner side of the car body.
Built-in depth	13 mm
Max. diameter at base	32 mm
Material	Metal parts are made of brass and stainless steel. All visible metal parts are black chromium-plated.
Contents of delivery	Whip, base, antenna wrench.
Accessories	For the simultaneous operation of a 400 MHz and a 900 MHz radio set the coupler K 63 27 25 is required (Ord. No. 510 029).
Special feature	Whip 737 637 is marked with the letter „L“
Components	Type No. (Ord. No.)
Whip	737 637 (510 265)
Base	K 70 77 20 3 (510 006)
Base with 5 mtr cable	K 70 70 20 3 (510 005)
Antenna wrench	K 66 30 2 (510 161)



K 70 50 64

EuroLine antenna
440 – 470 MHz / Car radio AM/FM

- Gain antenna, also usable as combined whip for 440 – 470 MHz / AM/FM reception.
- 4 dB gain antenna in low-noise version.



K 70 77 23



K 70 78 23

Type No. K 70 77 23 Ord. No. 510 003	440 – 470 MHz, 0 dB gain (ref. to quarter-wave whip), length 180 mm
Type No. K 70 78 23 Ord. No. 510 001	440 – 470 MHz, 4 dB gain (ref. to quarter-wave whip), low-noise, length 550 mm
Connection	Minicrimp (male)
Maximum load	50 W (at 50 °C ambient temperature)
Mounting	Into bore hole 18 ⁺¹ mm diameter from the external side of the car body. Into bore hole 14 ... 19 mm diameter from the inner side of the car body.
Built-in depth	13 mm
Max. diameter at base	32 mm
Material	Metal parts are made of brass and stainless steel. All visible metal parts are black chromium-plated.
Contents of delivery	Whip, base, antenna wrench.
Accessories	For AM/FM reception the coupler K 63 27 23 (Ord. No. 510 258) is required.
Components	Type No. (Ord. No.)
Whip for K 70 77 23	K 70 70 23 01 (510 109)
Whip for K 70 78 23	K 70 71 23 01 (510 111)
Base	K 70 77 20 3 (510 006)
Base with 5 mtr cable	K 70 70 20 3 (510 005)
Tip protection	K 66 01 9 (510 159)
Antenna wrench	K 66 30 2 (510 161)

Magnet mount antenna

380 – 435 MHz

Type No. K 71 17 21 Ord. No. 510 192	380 – 400 MHz, 2.5 dB gain (ref. to quarter-wave whip), 400 – 435 MHz, 4 dB gain (ref. to quarter-wave whip), length 670 mm
Connection	Cable RG 058-PE, 4 meters long, without radio set connector.
Maximum load	50 W (at 50 °C ambient temperature)
Mounting	By attaching the antenna to a steel surface of at least 1 m ² extension that should be as even as possible. Magnetic adhesive force: Approx. 200 N.
Max. diameter at base	95 mm
Material	Whip: Stainless steel. Swivel-joint parts: Chromium-plated brass. Magnetic base in shock-resistant plastic housing. Neoprene protection cover for the adhesive surface of the magnetic base.
Contents of delivery	Whip, base, cable.
Components	Type No. (Ord. No.)
Whip	K 71 14 21 01 (510 190)
Swivel-joint screw*	K 66 00 3 (510 153)
Protection cover	K 66 01 2 (510 156)
Cable	K 62 24 7 (510 148)
Tip protection	K 66 01 4 (510 158)

* butterfly nut + bolt + locking washer



Use of antenna on stationary vehicle:
The magnet may lift off from vehicle even at slow speed collision.



K 71 17 21

Magnet mount antenna 435 – 470 MHz



K 71 17 23

Type No. K 71 17 23
Ord. No. 510 010

435 – 470 MHz,
4 dB gain (ref. to quarter-wave
whip),
length 610 mm

Connection

Cable RG 058-PE, 4 meters long
without radio set connector.

Maximum load

50 W
(at 50 °C ambient temperature)

Mounting

By attaching the antenna to a
steel surface of at least 1 m²
extension that should be as even
as possible.
Magnetic adhesive force:
Approx. 200 N.

Max. diameter at base

95 mm

Material

Whip: Stainless steel.
Swivel-joint parts:
Chromium-plated brass.
Magnetic base in shock-resistant
plastic housing.
Neoprene protection cover for
the adhesive surface of the
magnetic base.

Contents of delivery

Whip, base, cable.

Components

	Type No.	(Ord. No.)
Whip	K 71 14 23 01	(510 115)
Swivel-joint screw*	K 66 00 3	(510 153)
Protection cover	K 66 01 2	(510 156)
Cable	K 62 24 7	(510 148)
Tip protection	K 66 01 4	(510 158)

* butterfly nut + bolt + locking washer



Use of antenna on stationary vehicle:
The magnet may lift off from vehicle even at slow
speed collision.

Magnet mount antenna 410 – 470 MHz

- Broadband antenna.

Type No. K 71 16 21 Ord. No. 510 009	410 – 470 MHz, 0 dB gain (ref. to quarter-wave whip), length 180 mm
Connection	Fixed cable RG 058-PE, 4 meters long with Minicrimp connector.
Maximum load	50 W (at 50 °C ambient temperature)
Mounting	By attaching it to steel surfaces of at least 0.5 m ² extension that are as even as possible. Magnetic adhesion force: Approx. 100 N.
Max. diameter at base	73 mm
Material	Elastic, corrosion-resistant metal shaft in especially resistant plastic protective cover. Magnetic base in shock-resistant plastic housing with neoprene cover.
Contents of delivery	Whip, base, cable.
Components	Type No. (Ord. No.)
Whip	K 71 16 20 11 (510 114)
Base	K 71 16 20 3 (510 191)
Cable, 4.0 mtr length	K 62 24 10 (510 041)
Protection cover	K 66 01 3 (510 157)



K 71 16 21



Use of antenna on stationary vehicle:
The magnet may lift off from vehicle even at slow speed collision.

Rear mount antenna 450 – 470 MHz / Car radio AM/FM

- Whip also fits on all special antenna bases 400 – 470 MHz.
- High gain.



K 70 83 23 20 1

Type No. K 70 83 23 20 1	450 – 470 MHz, 6 dB gain (ref. to quarter-wave whip), low-noise, length 880 mm
Ord. No. 510 118	
Connection	M11 x 1
Maximum load	25 W (at 50 °C ambient temperature)
Mounting	Into bore hole 12 mm diameter. A bendable section allows the levelling out of inclinations up to 20°.
Built-in depth	32 mm (connector included)
Max. diameter at base	35 mm
Material	Whip: Stainless steel and brass, black chromium-plated. Base: Weather resistant plastic.
Contents of delivery	Whip, antenna wrench.
Accessories	For AM/FM reception also the coupler K 63 27 23 (Ord. No. 510 258) is required.
Exceptional features	The whip K 70 83 23 20 1 fits on any special base of the frequency range 400 – 470 MHz (see also page 51).
Accessories	Type No. (Ord. No.)
Whip	K 70 83 23 20 1 (510 118)
Base	K 70 81 23 03 (510 188)
Connector M11 x 1	K 62 05 1 (510 132)
Tip protection	K 66 01 9 (510 159)
Antenna wrench	K 66 30 1 (510 160)

Special antenna bases

400 – 470 MHz

These antenna bases are suitable for the whip K 70 83 23 20 1 (Ord. No. 510 118).

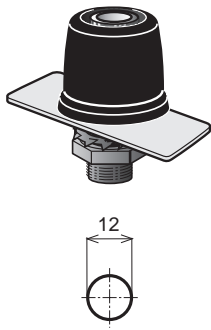
Manufacturer	Model	Type No.	(Ord. No.)
Audi 80	Sedan 8/86 – 11/94	K 70 81 23 03²⁾	(510 188)
Audi 80 Avant	Station wagon 6/92 – 1/96	728 184²⁾	(510 025)
Audi 80 B 4	Convertible from 3/91	K 70 81 23 03²⁾	(510 188)
Audi 100	Sedan 9/82 – 6/94	K 70 81 23 03²⁾	(510 188)
Audi 100 Avant	Station wagon 12/90 – 6/94	K 70 81 23 03²⁾	(510 188)
Audi A 4	Sedan from 11/94	K 70 81 23 03²⁾	(510 188)
Audi A 6	Sedan from 6/94	K 70 81 23 03²⁾	(510 188)
BMW E 23	7 Series up to 9/86	K 70 81 23 03²⁾	(510 188) or 724 712²⁾ (510 015)
BMW E 24	6 Series	K 70 81 23 03²⁾	(510 188) or 724 712²⁾ (510 015)
BMW E 28	5 Series up to 2/88	K 70 81 23 03²⁾	(510 188) or 724 712²⁾ (510 015)
BMW E 30	3 Series Sedan 11/82 – 12/90	K 70 81 23 03²⁾	(510 188) or 724 712²⁾ (510 015)
BMW E 30/C	3 Series cabrio	K 70 81 23 03²⁾	(510 188)
BMW E 31	8 Series from `90	725 040²⁾	(510 014)
BMW E 32	7 Series 9/86 – 6/94	725 040¹⁾	(510 014)
BMW E 34	5 Series 2/88 – 11/95	732 701¹⁾	(510 139)
BMW E 34/2	5 Series touring 9/91 – 2/97	733 838¹⁾	(510 222)
BMW E 36/C	Convertible 4/93 – 3/00	K 70 81 23 03²⁾	(510 188)
BMW E 36/2	3 Series coupé 1/92 – 3/99	K 70 81 23 03²⁾	(510 188) or 724 712²⁾ (510 015)
BMW E 36/3	3 Series touring 6/95 – 9/99	733 838¹⁾	(510 222)
BMW E 36/4	3 Series Sedan 12/90 – 4/98	K 70 81 23 03²⁾	(510 188) or 724 712²⁾ (510 015)
BMW E 38	7 Series from 7/94	736 222¹⁾	(510 248)
BMW E 39	5 Series from 12/95	736 222¹⁾	(510 248)
Ford Mondeo	Notchback from 1/93 – 8/00	728 184²⁾	(510 025)
Ford Mondeo	Fastback 2/93 – 8/00	728 184²⁾	(510 025)
Ford Mondeo	Station wagon 2/93 – 8/00	728 184²⁾	(510 025)
Ford Scorpio	Sedan 4/85 – 1/95	K 70 81 23 03²⁾	(510 188)
Ford Scorpio	Station wagon 9/91 – 1/95	728 184²⁾	(510 025)
Mercedes W 124	200 – 500 Sedan 1/85 – 6/95	725 080¹⁾	(510 017)
Mercedes C 124	200 – 300 Coupé 1/85 – 5/96	725 086¹⁾	(510 018)
Mercedes A 124	200 – 300 Convertible 1/85 – 5/96	732 307¹⁾	(510 019)
Mercedes S 124	200 – 300 model T 9/85 – 5/96	725 188¹⁾	(510 020)
Mercedes W 140	S class Sedan 5/91 – 10/98	728 947¹⁾	(510 022)
Mercedes C 140	S class Coupé from 10/92	731 324¹⁾	(510 023)
Mercedes R 129	SL Convertible from 9/89	726 436¹⁾	(510 024)
Mercedes W 201	Model 190 11/82 – 5/93	725 084¹⁾	(510 016)
Mercedes W 202	C class 6/93 – 5/00	731 326¹⁾	(510 219)
Mercedes W 126	S class Sedan 10/79 – 5/91	725 082¹⁾	(510 021)
Mercedes S 123	Model T	725 188¹⁾	(510 020)
Mercedes W 210	E class ab 7/95	736 836¹⁾	(510 254)
Opel Vectra A	Notchback 6/88 – 9/95	728 184²⁾	(510 025)
Opel Vectra A	Fastback 3/89 – 9/95	728 184²⁾	(510 025)
Opel Vectra B	from 9/95	K 70 81 23 03²⁾	(510 188)
Opel Omega A	Sedan 9/86 – 3/94	728 184²⁾	(510 025)
Opel Omega A	Station wagon 9/86 – 3/94	728 184²⁾	(510 025)
Opel Calibra	from 3/90	728 184¹⁾	(510 025)
Opel Astra A	Fastback 9/91 – 2/98	728 184¹⁾	(510 025)
Opel Astra A	Notchback 9/91 – 2/98	K 70 81 23 03²⁾	(510 188)
Opel Astra A	Convertible 3/93 – 2/98	725 082²⁾	(510 021)
Opel Senator B	Sedan	730 896²⁾	(510 026)
VW Passat III	Sedan 2/88 – 7/96	726 930²⁾	(510 027)
Vehicles	with mounting surfaces that are inclined at approx. 45	728 184²⁾	(510 025)

1) for mounting into the factory-produced bore hole, without subsequent work. 2) if there is no bore hole.

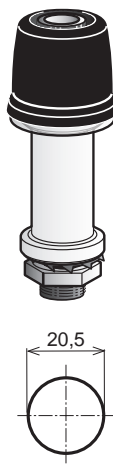
Special antenna bases 400 – 470 MHz

Connector M11 x 1

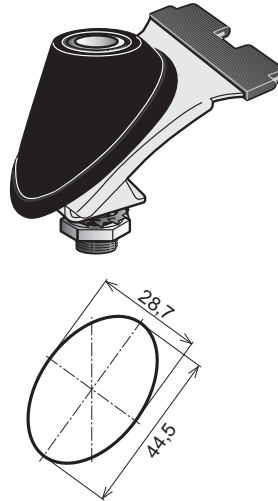
724 712 (510 015)



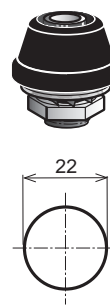
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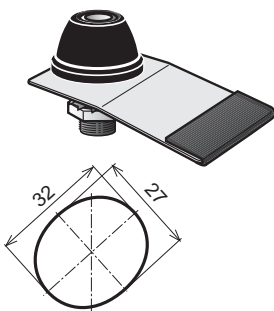
725 080 (510 017)



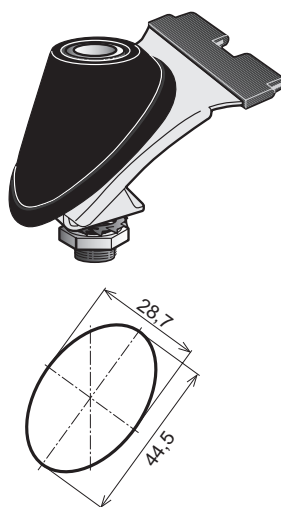
725 082 (510 021)



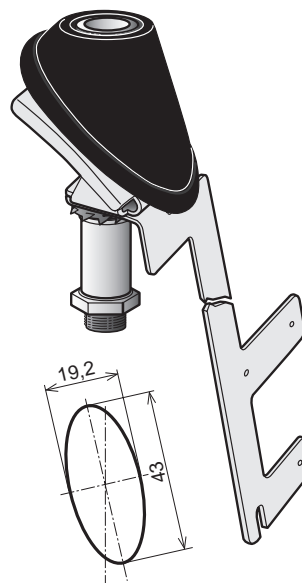
725 084 (510 016)



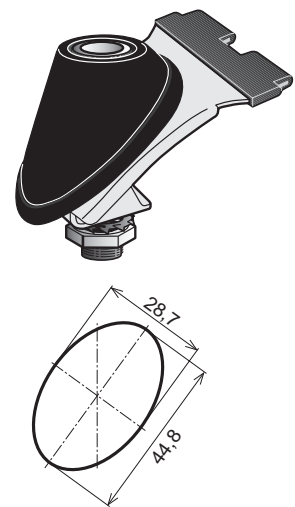
725 086 (510 018)



725 188 (510 020)



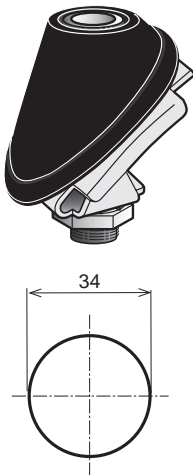
726 436 (510 024)



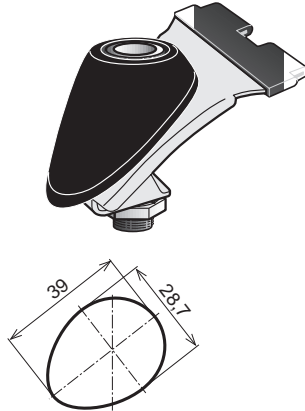
Special antenna bases 400 – 470 MHz

Connector M11 x 1

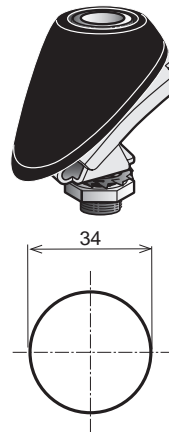
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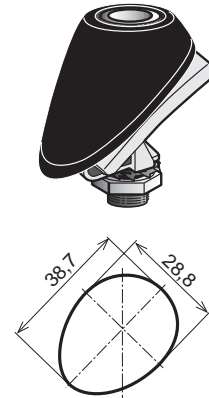
728 947 (510 022)



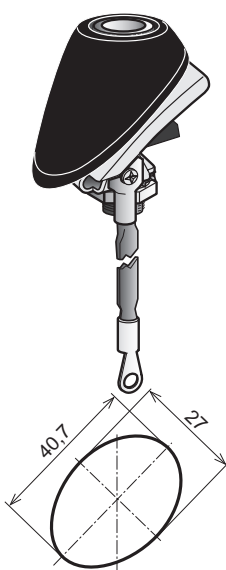
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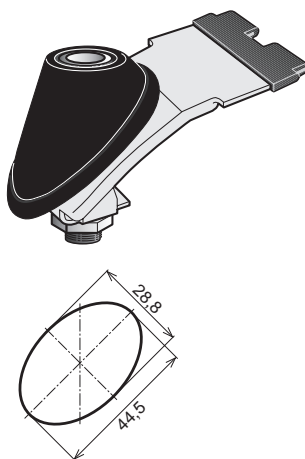
731 324 (510 023)



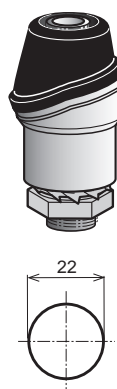
731 326 (510 219)



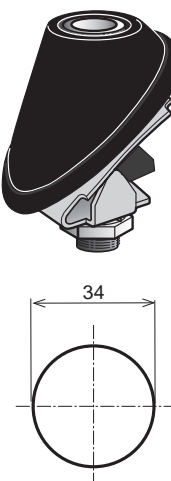
732 307 (510 019)



732 701 (510 139)



733 838 (510 222)

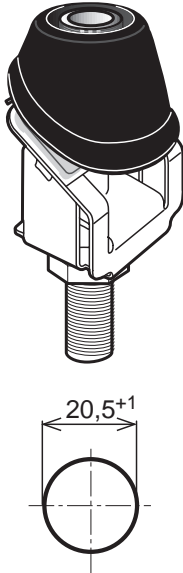


Special antenna bases

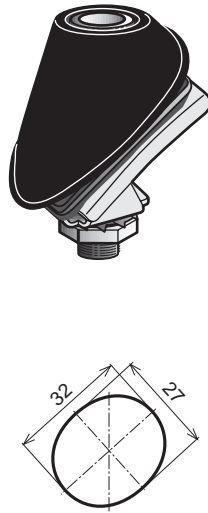
400 – 470 MHz

Connector M11 x 1

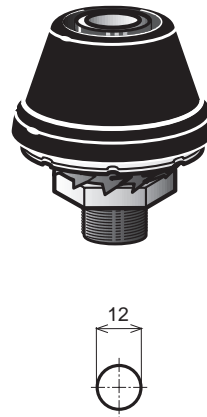
736 222 (510 248)



736 836 (510 254)



K 70 81 23 03 (510 188)



Caravan antenna

410 – 430 MHz

- Omnidirectional antenna for mobile operation.
- No electrical counterpoise required.
- Suitable for plastic and sandwich construction roofs.

Type No. 736 786 Ord. No. 510 250	410 – 430 MHz, 0 dB gain (ref. to half-wave dipole), length 410 mm
Connection	Minicrimp (male)
Impedance	50 Ω
Polarization	Vertical
Weight	260 g
Mounting	Into bore hole 12 mm diameter on roofs up to 40 mm thickness or 17 mm diameter when moun- ting kit for roofs 40 – 60 mm is used (see accessories).
Max. diameter at base	36 mm
Material	Brass whip in a protection tube of white fiberglass laminate. Antenna base of weather resistant aluminium.
Grounding	All metal parts of the antenna and the inner conductor are grounded.
Contents of delivery	Whip including base (without grommet/without cable)
Exceptional features	The antenna can also be used on boats.
Accessories	K 66 10 0 (Ord. No. 510 821) mounting kit for roofs of 40 – 60 mm.



736 786

Caravan antenna 450 – 470 MHz

- Omnidirectional antenna for mobile operation.
- No electrical counterpoise required.
- Suitable for and sandwich construction roofs.



736 785

Type No. 736 785 Ord. No. 510 249	450 – 470 MHz, 0 dB gain (ref. to half-wave dipole), length 370 mm
Connection	Minicrimp (male)
Impedance	50 Ω
Polarization	Vertical
Weight	260 g
Mounting	Into bore hole 12 mm diameter on roofs up to 40 mm thickness or 17 mm diameter when moun- ting kit for roofs 40 – 60 mm is used (see accessories).
Max. diameter at base	36 mm
Material	Brass whip in a protection tube of white fiberglass laminate. Antenna base of weather- resistant aluminium.
Grounding	All metal parts of the antenna and the inner conductor are grounded.
Contents of delivery	Whip including base (without grommet/without cable)
Exceptional features	The antenna can also be used on boats.
Accessories	K 66 10 0 (Ord. No. 510 821) mounting kit for roofs of 40 – 60 mm.