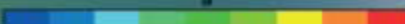


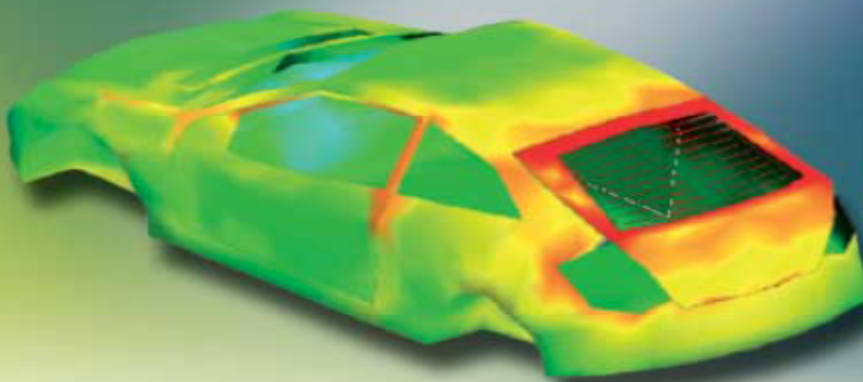
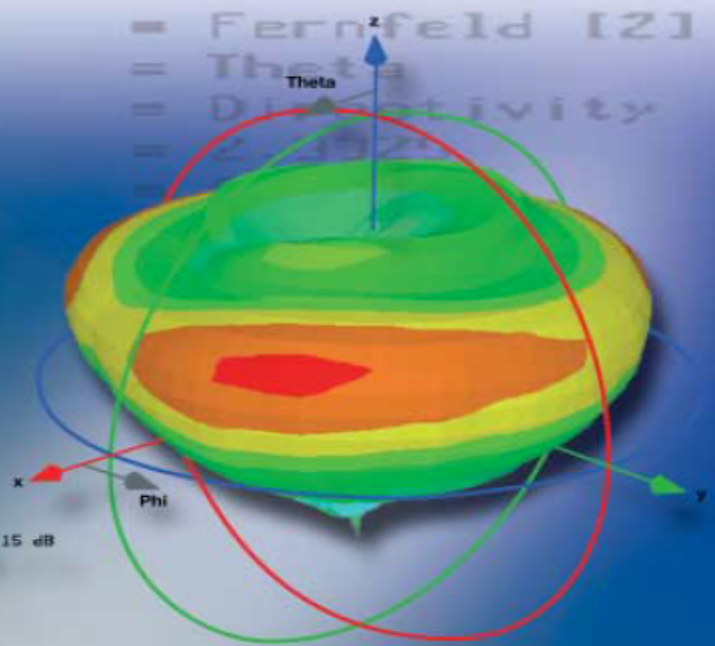
Antennas for Cars and Portables

Catalogue 2020

Monitor
Component
Output
Frequency
Rad. effic.
Tot. effic.
Dir. (Abs)
Dir. (Theta)

= Fernfeld [2]
= Theta
= Directivity
= $\frac{4\pi U_{max}}{P_{rad}}$

-23.5  6.15 dB

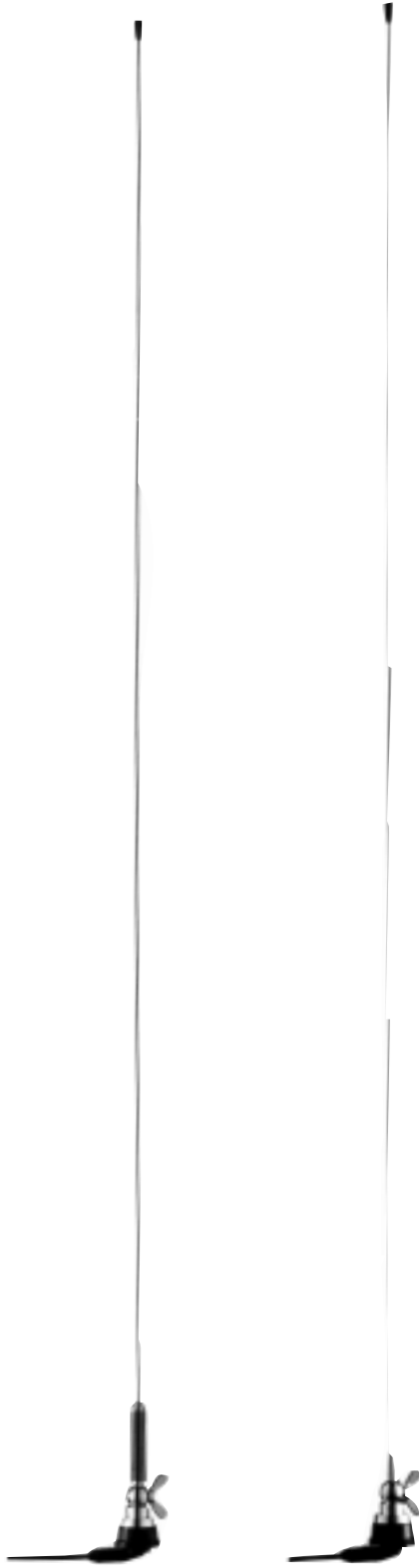


KATHREIN

KATHREIN Schweiz AG

Roof mount antenna 62 ... 300 MHz

KATHREIN



K 50 53 4

K 50 54 4

Type No. K 50 53 4
Ord. No. 510 314

With spring, 62 ... 300 MHz,
0 dB gain (ref. to quarter-wave
whip),
supply length 1285 mm

Type No. K 50 54 4
Ord. No. 510 317

Without spring, 64 ... 300 MHz,
0 dB gain (ref. to quarter-wave
whip),
supply length 1235 mm

Connection

Fixed cable RG 058-PE,
5 meters long, without radio set
connector.

Maximum load

100 W
(at 50 °C ambient temperature)

Tuning

By shortening the whip (please
note mounting instructions).

Mounting

In bore hole (24 mm diameter)
from the external side of the car
body.

Built-in depth

14 mm

Max. diameter at base

38 mm

Material

Whip and spring: Stainless steel.
Swivel-joint parts:
Chromium-plated brass.
Base: Weather resistant plastic.

Contents of delivery

Whip, base with cable, philips
screw.

Accessories

For AM/FM reception (VHF)
the coupler K 62 27 4
(Ord. No. 510 431) is required.

Components

Whip for K 50 53 4
for K 50 54 4

Type No. (Ord. No.)

K 50 47 40 41 (510 300)

K 50 48 40 41 (510 304)

Base

K 50 55 20 31 (510 142)

Swivel-joint elements*

K 66 00 6 (510 154)

Tip protection

K 66 01 9 (510 159)

* butterfly bolt + philips screw + locking washer

Magnet mount antenna

58 ... 300 MHz

KATHREIN

Type No. K 51 16 4 Ord. No. 510 351	58 ... 300 MHz 0 dB gain (ref. to quarter-wave whip), supply length 1380 mm
Connection	Cable RG 058-PE 4 meters long, without radio set connector.
Maximum load	100 W (at 50 °C ambient temperature)
Tuning	By shortening the whip (please note mounting instructions)
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 on test plate.
Max. diameter at base	95 mm
Material	Whip: Stainless steel. Swivel-joint parts: Chromium-plated brass. Magnetic base with shock- resistant plastic housing. Neoprene protection cover for the adhesive surface of the magnetic base.
Contents of delivery	Whip, base, cable, protection cover.
Components	Type No. (Ord. No.)
Whip	K 51 12 40 1 (510 349)
Swivel-joint elements*	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 9 (510 159)

* butterfly nut +bolt + locking washer



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



K 51 16 4

Rear mount antenna 62 ... 300 MHz

KATHREIN



K 50 46 4

K 50 49 4

Type No. K 50 46 4
Ord. No. 510 298

with spring, 62 ... 300 MHz,
0 dB gain (ref. to quarter-wave
whip),
supply length 1275 mm

Type No. K 50 49 4
Ord. No. 510 307

without spring, 64 ... 300 MHz,
0 dB gain (ref. to quarter-wave
whip),
supply length 1225 mm

Connection	M 11 x 1
Maximum load	100 W (at 50 °C ambient temperature)
Tuning	By shortening the whip (please note mounting instructions).
Mounting	In bore hole 12 mm diameter.
Built-in depth	32 mm
Max. diameter at base	38 mm
Material	Whip and spring: Stainless steel. Swivel-joint parts: Chromium-plated brass. Base: Weather resistant plastic.
Contents of delivery	Whip, base, connector.
Accessories	For AM/FM reception (VHF) the coupler K 62 27 4 (Ord. No. 510 431) is required.
Components	Type No. (Ord. No.)
Whip for K 50 46 4	K 50 47 40 41 (510 300)
Whip for K 50 49 4	K 50 48 40 41 (510 304)
Base	K 50 48 40 31 (510 303)
Swivel-joint elements*	K 66 00 6 (510 154)
Tip protection	K 66 01 9 (510 159)
Connector	K 62 05 1 (510 132)

* butterfly bolt + philips screw + locking washer

EuroLine antenna
144 ... 300 MHz

KATHREIN



726 637

Type No. 726 637
Ord. No. 510 280

144 ... 300 MHz
0 dB gain (ref. to quarter-wave whip),
supply length 550 mm

Connection

Minicrimp

Tuning

By shortening the whip (please note mounting instructions).

Maximum load

80 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 parts are black chromium-plated.

Contents of delivery

Whip, base, antenna wrench.

Accessories

For AM/FM reception (VHF) the coupler K 62 27 2 (Ord. No. 510 400) is required.

Components

Type No. (Ord. No.)

Whip

726 131 (510 279)

Base

K 70 77 20 3 (510 006)

Tip protection

K 66 01 9 (510 159)

Antenna wrench

K 66 30 2 (510 161)

EuroLine antenna
406 – 440 MHz

KATHREIN



K 70 77 21

Type No. K 70 77 21
Ord. No. 510 184

406 – 440 MHz,
0 dB gain (ref. to quarter-wave
whip),
length 180 mm

Connection

Minicrimp

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.

EuroLine antenne
440 – 470 MHz

KATHREIN



K 70 77 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
	440 – 470 MHz, 4 dB gain (ref. to quarter-wave whip), low-noise, length 550 mm
Connection	Minicrimp
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.

Roof mount antenna 380 ... 430 MHz

KATHREIN



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.
Components	Type No. (Ord. No.)
Whip	K 70 57 21 04 1 (510 172)
Base	K 50 55 20 31 (510 142)
Swivel-joint elements*	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

KATHREIN



K 70 57 23 9

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.

Components

Whip

Type No. (Ord. No.)

K 70 57 23 04 1 (510 175)

Base

K 50 55 20 31 (510 142)

Swivel-joint elements*

K 66 00 6 (510 154)

Tip protection

K 66 01 4 (510 158)

* butterfly bolt + philips screw + locking washer

Magnet mount antenna

410 – 470 MHz

KATHREIN

- 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	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.



K 71 16 21



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

Multi roof mount antenna AMPS, DoCoMo, GSM 900/1800/1900, UMTS

KATHREIN

NEW

- One antenna only for world-wide application.
- Made for future technologies, UMTS operation included.
- Excellent omni-directional pattern.
- Ultra broadband design with no tuning necessary.

Type No. K 70 55 64

Ord. No. 510 934

Frequency range

AMPS	824 – 896 MHz
DoCoMo	810 – 958MHz
GSM 900	890 – 960 MHz
GSM 1800	1710 – 1880 MHz
GSM 1900	1850 – 1990 MHz
UMTS	1900 – 2170 MHz

typ. 0 dB gain (ref. to quarter-wave whip),
length 89 mm

Connection

Minicrimp

Maximum load

AMPS	3 W
DoCoMo	0.8 W
GSM 900	8 W
GSM 1800	2 W
GSM 1900	2 W
UMTS	2 W

(at 50 °C ambient temperature)

Mounting location

Car roof recommended

Built-in depth

12 mm

Max. diameter at base

32 mm

Material

Weather resistant plastic.

Contents of delivery

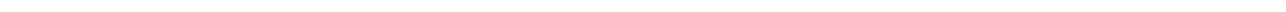
Whip, base, antenna wrench.



K 70 55 64

Antennas for portable radio sets

(68 – 470 MHz)



Miniflex antenna

146 ... 174 MHz

KATHREIN

- **Particularly short and elastic antenna.**



Type No. K 51 39 22 6
Ord. No. 510 363

154 – 165 MHz, TNC connector

Type No. K 51 39 23 9
Ord. No. 510 370

163 – 174 MHz, BNC connector

Impedance

50 Ω

Maximum load

20 W
(at 50 °C ambient temperature)

Polarization

Vertical

Electr. length

$\lambda/4$

Length

Approx. 160 mm

Material

Whip: Elastic metal helix in particularly resistive plastic cover.

Colour

Black

K 51 39 22 6

Multiflex antenna

146 – 174 MHz

KATHREIN

- Particularly short and elastic antenna.

Type No. K 51 32 26 Ord. No. 510 354	TNC connector
Frequency range	146 – 174 MHz
Impedance	50 Ω
Maximum load	20 W (at 50 °C ambient temperature)
Polarization	Vertical
Electr. length	$\lambda/4$
Weight	30 g
Length	420 mm
Material	Elastic whip in particularly resistive plastic cover. Connector: Black chromium- plated brass.
Colour	Black



Miniflex antenna

440 – 470 MHz

KATHREIN



K 71 39 23 2

Type No. K 71 39 23 2
Ord. No. 510 203

440 – 470 MHz
UHF connector,
approx. 20 g,
length 73 mm

Impedance
Maximum load
Polarization
Electr. length
Material

50 Ω
20 W
(at 50 °C ambient temperature)
Vertical
 $\lambda/4$
Whip: Elastic metal helix in particularly resistive plastic cover.
Connector: Black chromium-plated brass.

Miniflex antenna
406 – 428 MHz
440 – 470 MHz

KATHREIN

- Very robust antenna.

Type No. 731 247

Ord. No. 510 218

Type No. 726 556

Ord. No. 510 217

Connector

TNC

Impedance

50 Ω

Electr. length

$\lambda/4$

Maximum load

20 W
(at 50 °C ambient temperature)

Material

Metal helix extrusion-coated.
Connector: Black chromium-plated.



731 247
726 556

Multiflex antenna

400 – 470 MHz

KATHREIN

- Slim and highly elastic antenna.



Type No. K 71 32 26
Ord. No. 510 194

TNC connector

Type No. K 71 32 29
Ord. No. 510 195

BNC connector

Frequency range

400 – 470 MHz

Impedance

50 Ω

Maximum load

20 W
(at 50 °C ambient temperature)

Polarization

Vertical

Electr. length

$\lambda/4$

Weight

35 g

Maximum length

165 mm

Material

Elastic whip in particularly
resistive plastic cover.
Connector: Black chromium-
plated brass.

Colour

Black

Gainflex antenna

406 – 430 MHz

440 – 470 MHz

KATHREIN

- Shortened half-wave antenna.
- Decoupled from the radio set.
- 4 dB Gain.

Type No. K 71 53 21 6 Ord. No. 510 076	406 – 430 MHz, TNC connector, length 330 mm, approx. 55 g, without joint,
Type No. K 71 53 23 6 Ord. No. 510 079	440 – 470 MHz, TNC connector, length 300 mm, approx. 50 g, without joint,
Type No. K 71 53 23 9 Ord. No. 510 081	440 – 470 MHz, BNC connector, length 300 mm, approx. 50 g, without joint,
Impedance	50 Ω
Gain	4 dB (ref. to quarter-wave whip)
Maximum load	20 W (at 50 °C ambient temperature)
Material	Highly elastic, corrosion-proof metal shaft in particularly resistive black plastic cover. Connector: Black chromium- plated brass. Insulant: Polycarbonate.



K 71 53 23 6
