Specification

Antenna AAN FK6
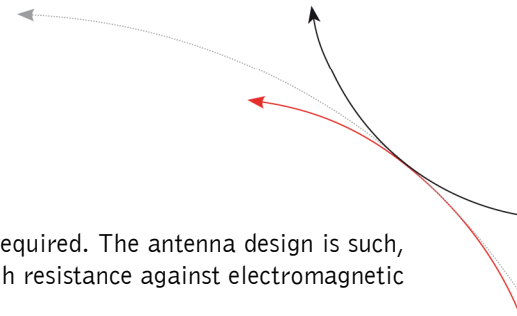
1 Description

This antenna is especially suited for applications, where a large read range is required. The antenna design is such, that homogenous magnetic distortions are faded out. Therefore, a relatively high resistance against electromagnetic noise can be obtained.

When mounting the antenna please take care, that there are no metal parts nearby the antenna because the antenna creates unwanted eddycurrents in these metal structures. In such case, the loss of power due to the eddycurrents may cause a reduction in read range.

Therefore, please observe of the assembly instructions.

The antenna is designed to be operated with the scanner electronics **ARE K1**

The limit of the reading distance according AEG ID test procedure AA/0014/PI is at normal conditions:

ID 100	20 cm
ID 200	35 cm
ID 300	25 cm
ID 400	55 cm
ID 500	75 cm

In reality the reading distance can be reduced considerably by electromagnetic interference. In some applications the reading distance can be reduced considerably by electromagnetic interface. Sources for electromagnetic distortion may be CRT monitors, dual scan displays, electronic motors etc.
Such read range is measured under lab conditions and in statical conditions. If you want to read a moving transponder or if you have to work with a lot of metals or electronic noise around, the read range will be reduced. It is recommended that the transponder stays in the antenna field for a minimum of 300 msec. Shorter read times are possible, but will reduce the reliability of the readings.
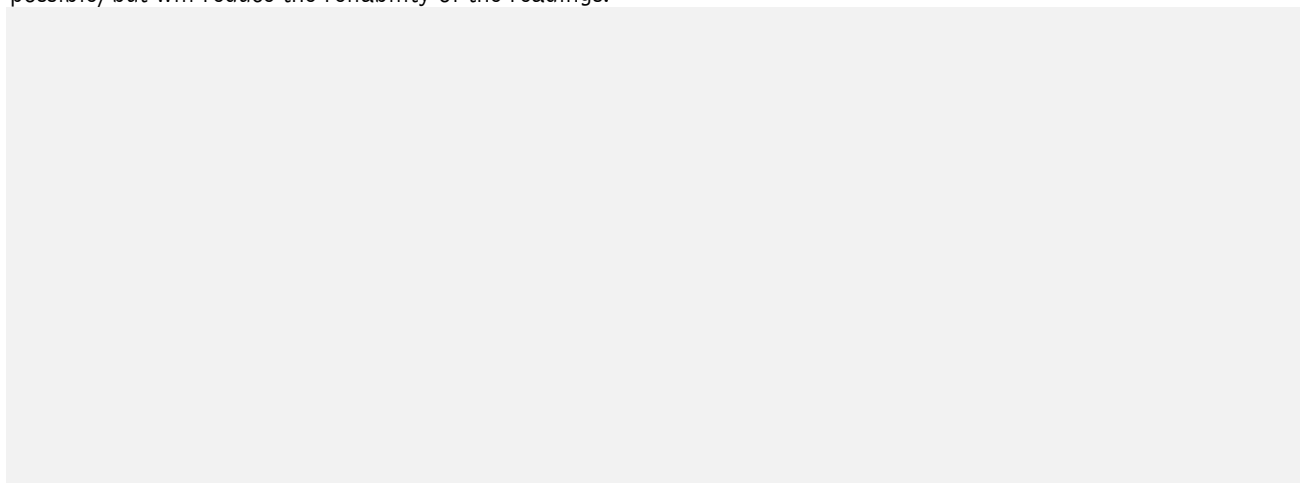
2   Technical data:

Housing:

Material:	hardly inflammable, no silicon content
IP rating:	according to IP65

Operation temperature:

- 20°C ... + 55°C:	< 95% humidity no condensation
... + 70°C:	< 70% humidity no condensation

Operational frequency:

124 ± 2 kHz

Typical current consumption:

of ARE K1 when connected to this antenna: 24 V_{DC} / 0,75 A

Certifications:

together with the ARE K1 the device was qualified according to ETS 300683 and ETS 300330. Please check if this is in compliance with the regulations and laws valid at the place of operation.
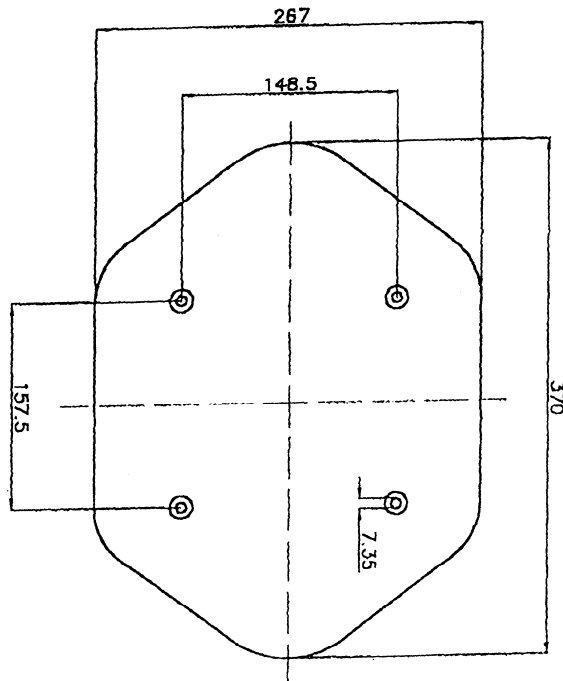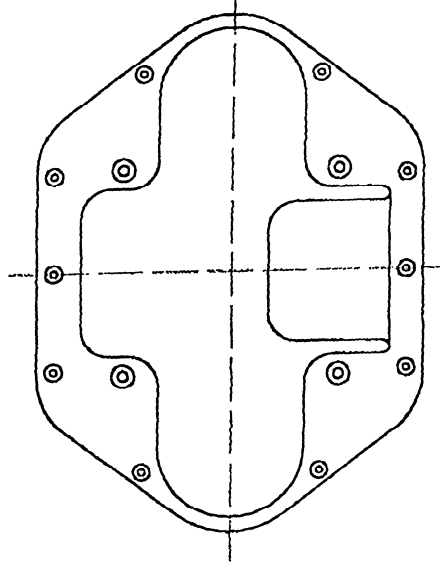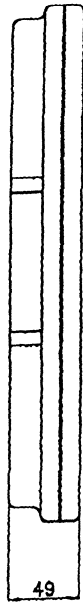
Antenna cable:

A pre-manufactured original AEG ID cable has to be used. Cables of different length are available on enquiry. The read range is defined with the standard cable
of 5 m length.

Weight:

approx. 3 kg

3   Outline dimensions:

49

267

148.5

370

157.5

7.35

4 Warnings and cautions:

When using the original AEG ID antenna suited for that device, the combination of antenna and reader has the German license for operation. Please check, if special license are required at the place of operation.

This reader is an active electrical transmission system and radiates in the frequency range of approximately 124 kHz. When connecting a defect or a not suited reader to the device the radiated power can be higher than 42dBµA/m (measured at 10 m distance). The operator is responsible that people at risk are not endangered by the device.

Do not operate the device with open housing, as otherwise there is a danger, that positions with dangerous voltage can be touched.

Never operate the device with defect antenna cables. The antenna cables may conduct dangerous voltages. When disconnecting an antenna cable please assure that the device is turned off and the cable was grounded for a short time before touching it. Otherwise stored energy of the antenna may cause harm.

Caution! !
Never mount or place the antenna on extended metal parts. Do not bring another antenna very near to the operated antenna (second antenna operated or not). In both cases there is a risk, that the antenna may be destroyed. Such defects are not covered by the warranty. An unusual high current consumption can be a hint for such not allowed configuration.

5 Änderungsprotokoll

Date	Description of change	Version
12.03.98	Neuerstellung / first edition	01
19.03.99	Lesereichweite / reading distance	02
29.03.01	Antennenkabel / antenna cable	03
05.10.06	Adresse	04
02.08.10	Format	05