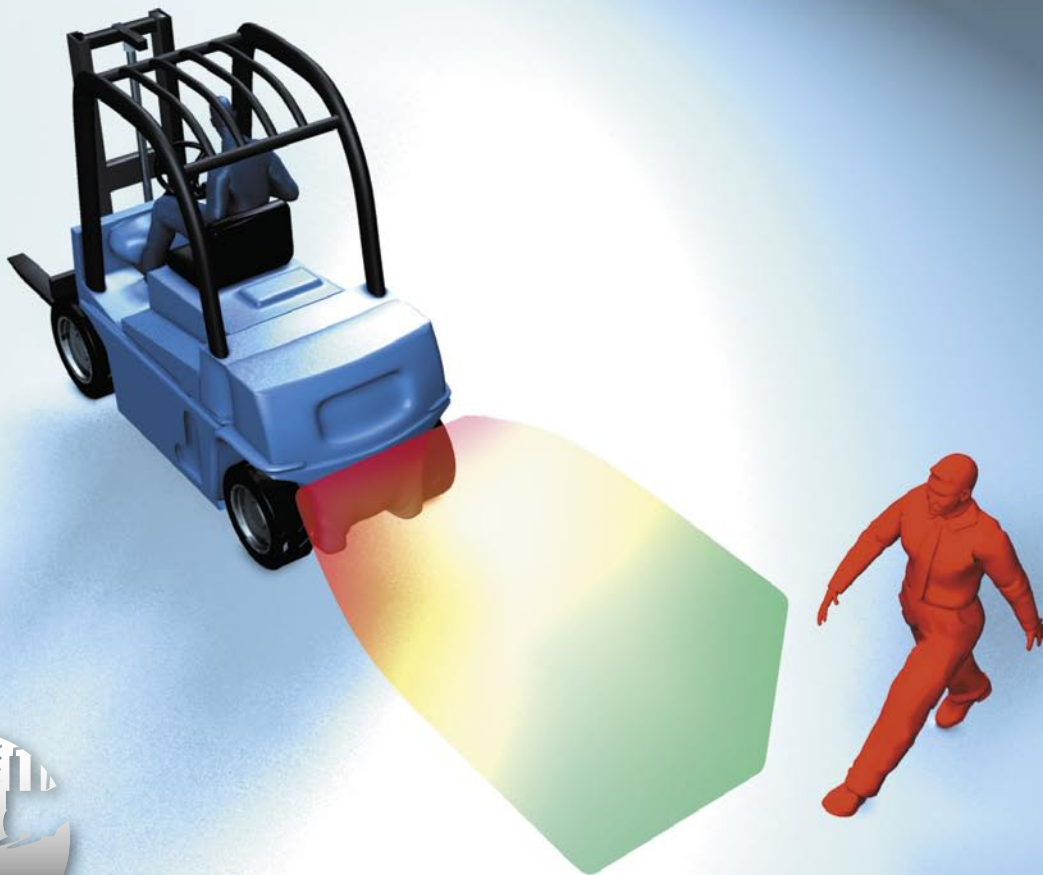
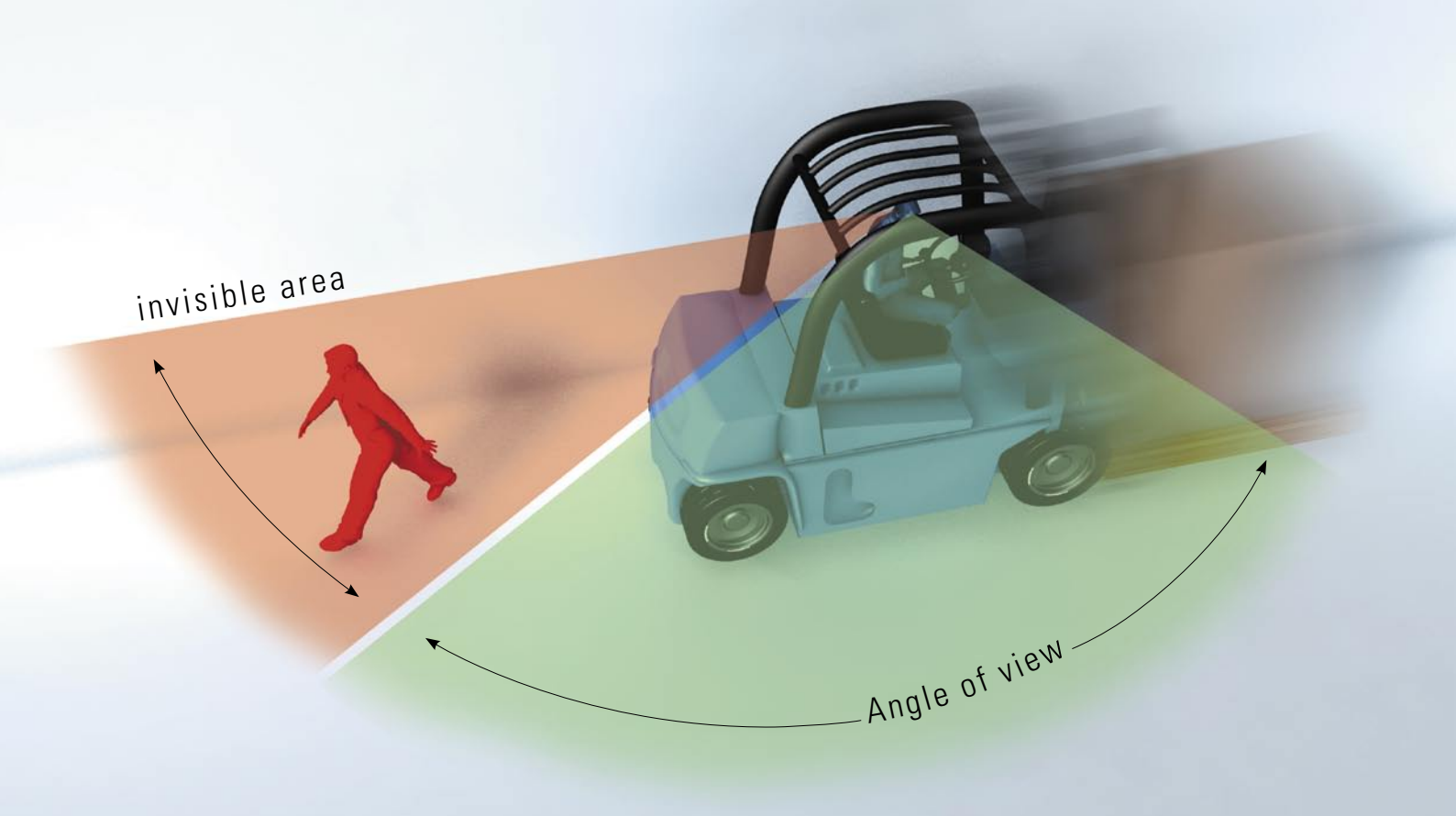


Rear space warning system

RRW-107



Work protection



Rear space warning system

RRW-107

Advantages:

- active collision warning
- adjustable surveillance areas
- three zone surveillance
- 3 dimensional area surveillance
- sharp contour surveillance areas



System

The rear space warning system RRW-107 consists of two ultra-sonic units, each of which has six integrated ultra-sonic sensors, a central control unit, an optical and acoustic signal transmitter and also all necessary connecting leads.

The rear space warning system RRW-107 is customer specific and can be extended by additional

- sensor clusters
- camera unit
- vehicle braking
- Smart alarm for active warning of an endangered person
- Drive direction or speed sensor

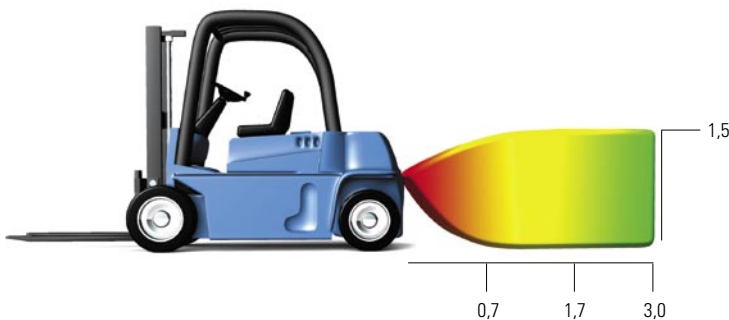




Area of use

For all free driving electrical, diesel and gas forklifts to prevent accidents when reversing. The forklift driver is warned optically and accoustically regarding potential collisions with objects and/or persons. Damage to goods, forklifts and injury to persons can thus be prevented. The rear space warning system RRW-107 is designed for vehicle widths from 0.9 to 2.5 m which operate indoors or outdoors. Special solutions for wider vehicles are also possible.

The rear warning system RRW-107 can also be used in a fixed position to measure load heights at underpasses or gate heights to prevent too high loads attempting to enter a gate. Or to show that on the other side of the gate, a forklift is approaching the gate.



Function

The rear space warning system RRW-107 is activated on every reverse movement. If desired, it can be activated as of speeds of, say more than 2.5 km/hr in order to avoid "false alarms" when operating in tight areas. The surveillance areas cover the whole vehicle width and are programmed on a customer-specific basis. The whole area behind a forklift is covered, to a height of ca. 20 cms above floor height (dependent on fitting space on vehicle).

On detection of an object, an optical and accoustic warning is given to the driver. If required, an automatic speed reducer or even a vehicle stop can be fitted if this is possible on the vehicle in question.



Technical Data

Dimensions (LxWxH)	
Control unit:	160 x 98 x 55 mm
Ultra-sound unit:	124 x 86 x 68 mm
Transmitter:	32 x 28 x 116 mm
Housing material:	Control unit: aluminium Ultra-sound unit: neopren Transmitter: plastic
Rated voltage:	+ 12 ... 24 V DC optional: DC/DC or AC/DC transformer
Power consumption:	max. 400 mA
Surveillance zones:	
Zone length:	Zone 1: 1,15 - 3,15 m (opt. max. 9,0 m) Zone 2: 0,85 - 2,85 m Zone 3: 0,55 - 2,55 m
Zone width:	Space from ultra-sound units: 0,9 - 3,0 m Standard width: 0,9 m
Zone height:	1,4 m
Operating temperature:	-25°C - +60°C
Humidity:	5 - 95 %
Protection type:	Control unit IP 69, ultra-sound unit IP 67, transmitter IP 32
Vehicle requirements:	reverse drive signal +12 or +24 VDC
Optional:	drive direction sensor BWV-107
Optional equipment:	Smart alarm system Camera system CCD-107 Additional Ultra-sound units
Norms:	DIN 75031: Marshalling Warning Systems EMC Guideline 95/54/EEC
Fitting:	Fitting of components and programming of the control area and commissioning is carried out individually dependent on vehicle type and nature of the application by trained, expert and authorised service technicians.
Note:	The rear space warning system is maintenance-free. A regular check by qualified personnel is, however, recommended.