Functional Description

The transponders are operated at 125/128 resp. 409 kHz.

The transmitting antenna of the reading unit supplies the transponder with energy by using an alternating field of 125/128 resp. 409 kHz. This induces a voltage within the coil of the transponder, which generates a current that is sufficient power supply for the micro chip.

The system's operability is guaranteed through fluid, gaseous as well as solid material.

However, if mounted directly on or within metal, the transponder's reading distance is influenced and the positioning signal may be distorted.

Read-Write-Transponder (RW)

The Read-Write transponders are equipped with an EEPROM in which the code is stored. The EEPROM may be rewritten up to more than 100,000 times.



Technical Data

	HG G-71325XA	HG G-71325ZA	HG G-71325YA
Function	Antenna (HG No.) 71910, 98767, 98760, 98810, 98820	Antenna 71450Y, 71451Y, 71453Y	Antenna 71450Z, 71451Z, 71453Z
Diameter	ø 14 mm	<-	<-
Length	48 mm	<-	<-
Weight	<20 g	<-	<-
Material	Polyamid, black	<-	Polyamid, blue
Reading time	8 ms	24.5 ms	7.5 ms
Operating temperature	0 to +50° C	<-	<-
Storage temperature	-20 to +70° C	<-	<-
Protection class	IP 67	<-	<-
Reading system, read write	PSK	ASK	ASK
Operating frequency	128 kHz / 64 kHz	125 kHz	409,6 kHz
Useful data	20 Bit	16 Bit	16 Bit
Min. distance between two transponders	1.5-times the antenna width	500 mm	500 mm
Programming device	HG G-81840ZA	<-	<-
Reading distance	Approx. 50 mm, please refer to the data sheets of the individual antennas		

Application Examples from the Automation Industry

- Automated Guided Vehicles (AGV):
- Positioning
- Track Guidance
- Identification



