

RFID Transponder

IPC03-20P

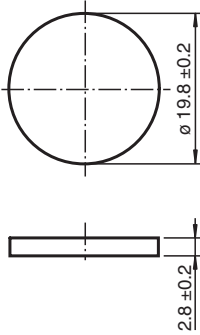


- Battery-free data carrier
- 32 bit fixcode
- 928 bits memory available
- Readable and writable from both sides
- Potted housing
- Degree of protection IP67 / IP68 / IP69K

Data carrier



Dimensions



Technical Data

General specifications

Operating frequency	125 kHz
Transfer rate	2 kBit/s

Memory

Chip Type	EM4450 Titan (EM Microelectronic)
EEPROM	928 Bit
Read cycles	unlimited
Write cycles	> 100000
Data retention period	10 years at 55 °C (131 °F)

Directive conformity

Radio equipment	
Directive 2014/53/EU	EN 300330
RoHS	
Directive 2011/65/EU (RoHS)	IEC/EN 63000

Standard conformity

Degree of protection	EN 60529
RFID	ISO/IEC 18000-2

Ambient conditions

Ambient temperature	-20 ... 85 °C (-4 ... 185 °F)
Storage temperature	-20 ... 85 °C (-4 ... 185 °F)

Mechanical specifications

Release date: 2024-07-10 Date of issue: 2024-07-10 Filename: 199450_eng.pdf

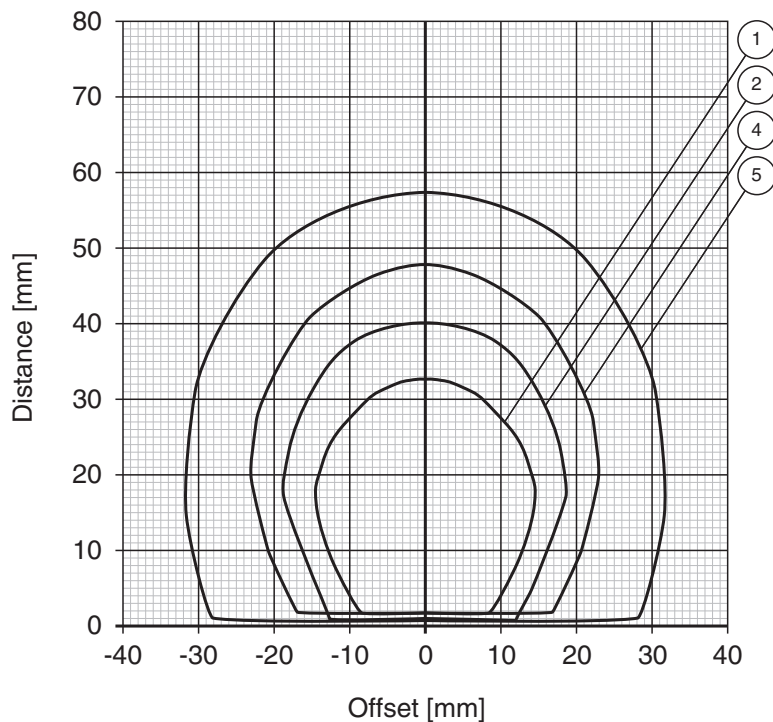
Technical Data

Degree of protection	IP67 / IP68 / IP69k
Material	
Housing	PC (Polycarbonate)
Encapsulation compound	Epoxy
Installation	
On metal	yes
In air	yes
Dimensions	
Height	2.8 mm
Height tolerance	± 0.2 mm
Diameter	19.8 mm
Diameter tolerance	± 0.2 mm
Construction type	Cylindrical

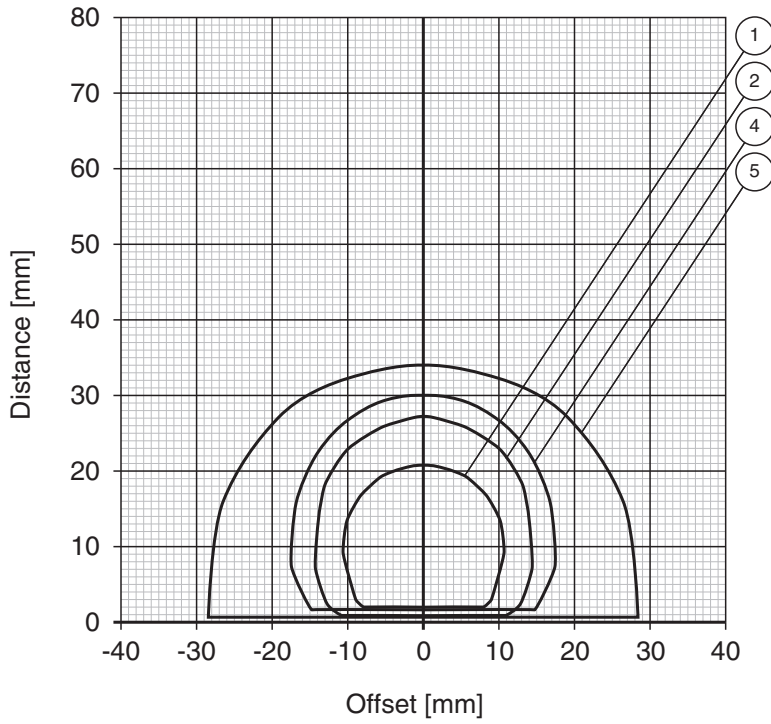
Application

The transponder can be read and written from either side.

Reading range in air IPC03-20..

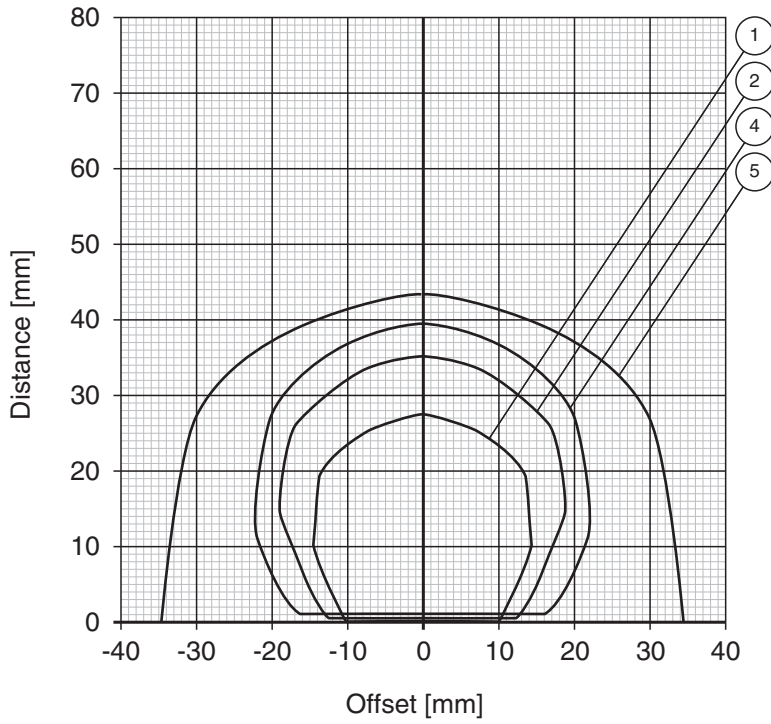


Writing range in air IPC03-20..



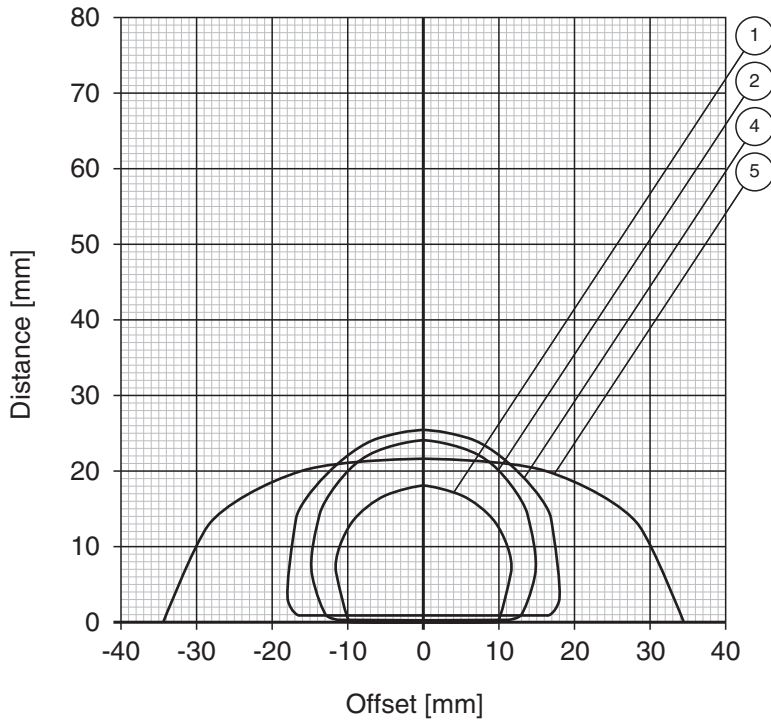
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Reading range on aluminium IPC03-20..



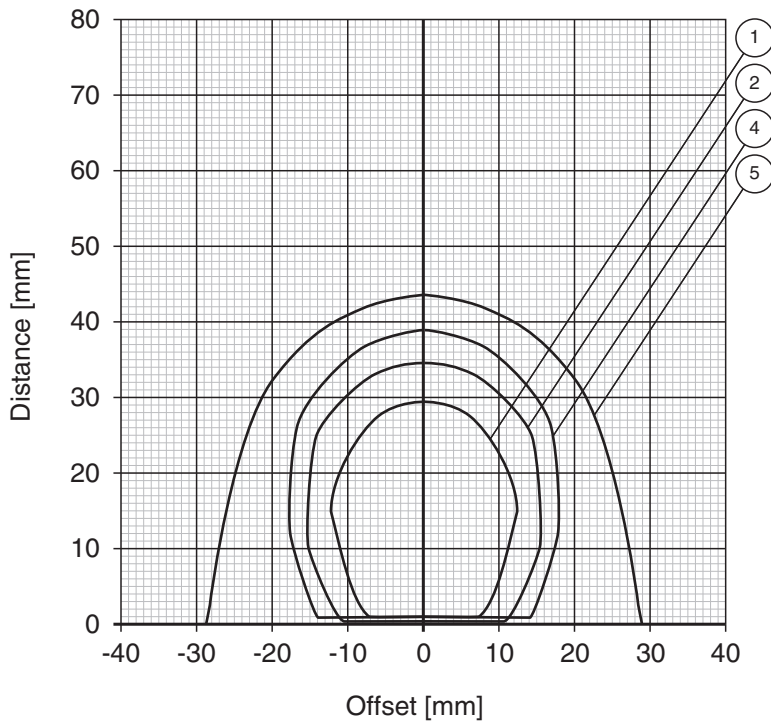
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Write distance on aluminium IPC03-20..



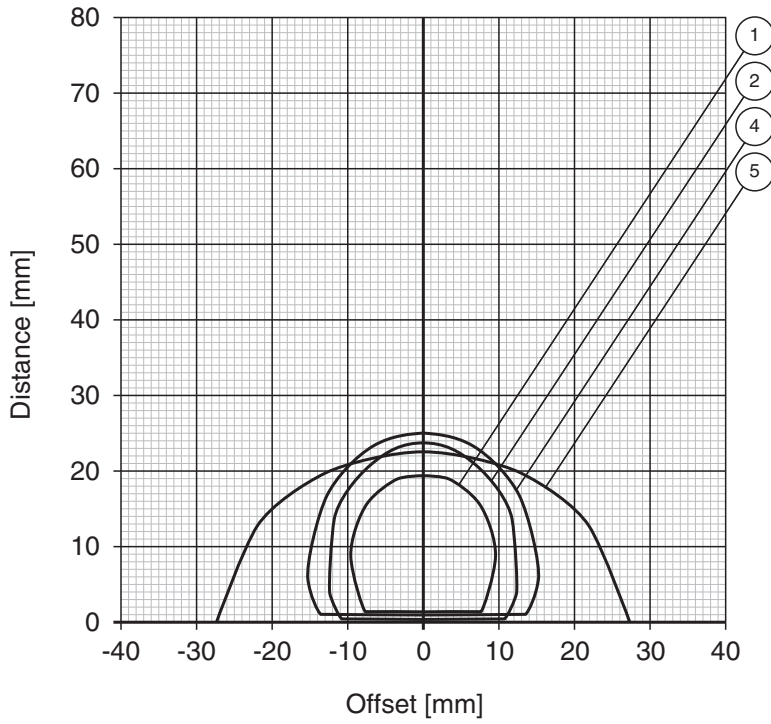
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Reading range on steel IPC03-20..



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Writing range on steel IPC03-20..



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|---------------|-------------|--------------|--------------|
| ① IPH-18GM-V1 | ③ IPH-F61 | ⑤ IPH-FP-V1 | ⑦ IPT1-FP-V1 |
| ② IPH-30GM-V1 | ④ IPH-L2-V1 | ⑥ IPH-F15-V1 | |