

# RFID Transponder

## IPC03-54-T8

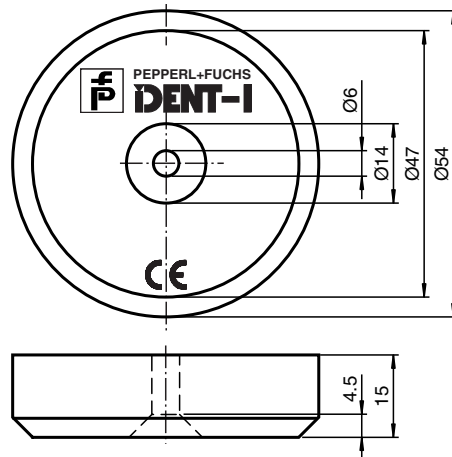


- Battery-free data carrier
- 32 bit fixcode
- 928 bits memory available
- Readable and writable from both sides
- With extended temperature range up to 120 °C (248 °F)
- Degree of protection IP67
- Mounting holes for simple installation

Data carrier



### Dimensions



### Technical Data

#### General specifications

|                     |                                   |
|---------------------|-----------------------------------|
| Operating frequency | 125 kHz                           |
| Transfer rate       | 2 kBit/s                          |
| Distance            | distance tables, see introduction |

#### 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 |
|----------------------|----------|

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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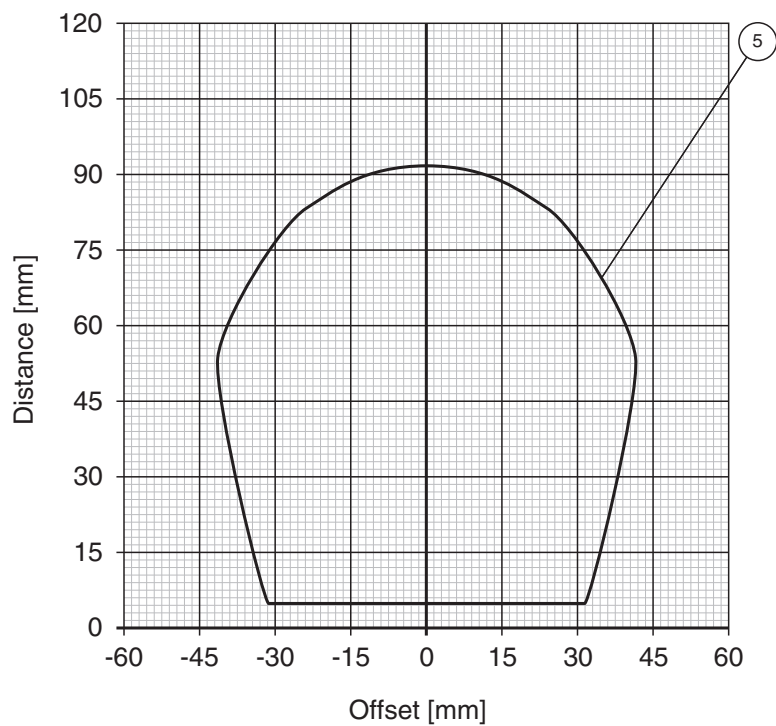
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Technical Data

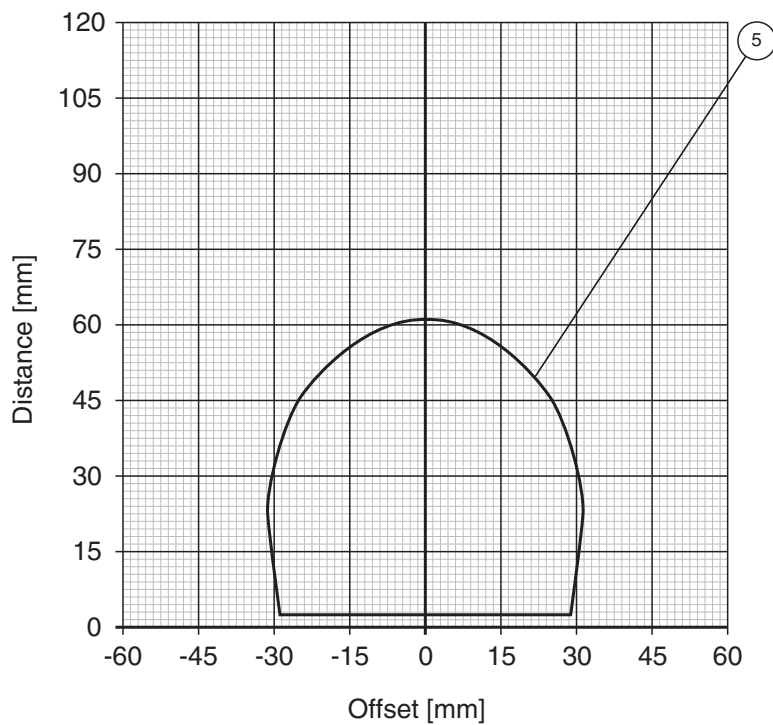
|                           |                                 |                                 |
|---------------------------|---------------------------------|---------------------------------|
| RFID                      | ISO/IEC 18000-2                 |                                 |
| Ambient conditions        |                                 |                                 |
| Ambient temperature       | -40 ... 120 °C (-40 ... 248 °F) |                                 |
| Storage temperature       |                                 | -40 ... 120 °C (-40 ... 248 °F) |
| Mechanical specifications |                                 |                                 |
| Housing height            |                                 | 15 mm                           |
| Housing diameter          | 54 mm                           |                                 |
| Degree of protection      |                                 | IP67 according to EN 60529      |
| Material                  |                                 |                                 |
| Housing                   |                                 | Polyurethane (PUR)              |
| Installation              |                                 |                                 |
| On metal                  |                                 | yes                             |
| In air                    | yes                             |                                 |
| Construction type         |                                 | Cylindrical                     |

Reading range in air IPC03-54T8



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Reading range on steel IPC03-54T8



- |               |             |              |              |
|---------------|-------------|--------------|--------------|
| 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 |              |

## Application

The transponder can be read and written from either side.

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