



Ident system RFI

TFI Transponder

Part No. 501 05183



- Suitable for read-write units of the RFI ... L120 series

**Disc transponder**

**TFI 03 1101.120/TFI 05 1101.120**

- Low-price disc transponder with fixcode (World TAG)

**High temperature disc transponder**

**TFI 03 1601.120/TFI 05 1601.120**

- Disc transponder with fixcode for temperatures up to 200°C

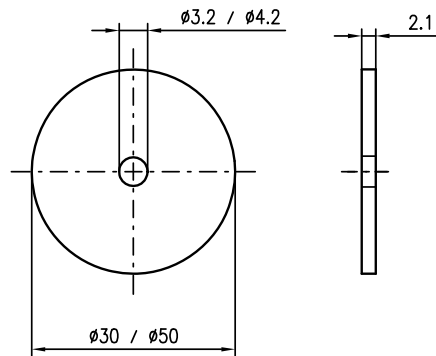
**Spacer for disc transponder**

**TFI 03.../TFI 05...**

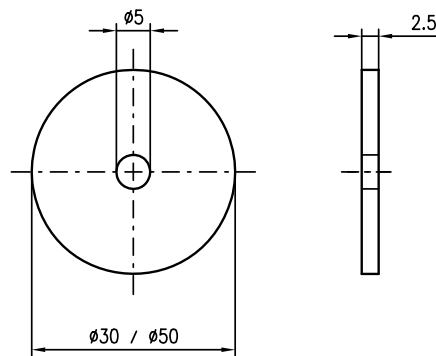
- 12 mm thick spacer for disc transponder Ø 36mm and Ø 56mm

**Dimensioned drawing**

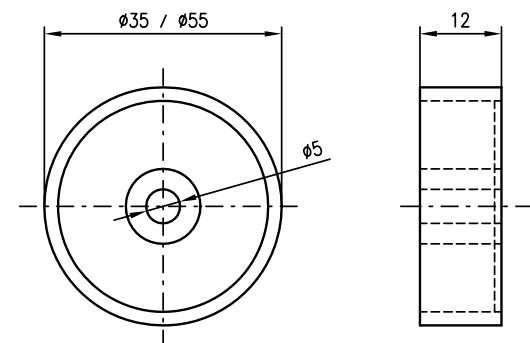
TFI 03 1101.120 / TFI 05 1101.120  
50032396 / 50032395



TFI 03 1601.120 / TFI 05 1601.120  
50039070 / 50039069



Spacer 30 HT / Spacer 50 HT  
50107102 / 50107103



We reserve the right to make changes \* tfi\_01gb.fm



### Specifications

#### Characteristic values

|                    |                             |
|--------------------|-----------------------------|
| Working frequency  | 125 kHz                     |
| Read distance      | see Diagrams                |
| Data carrier speed | max. 0.6 m/s (see Diagrams) |
| Data storage       | see table                   |
| Memory structure   | 1 block                     |
| Memory access      | read only                   |
| Data protocol      | EM4002                      |
| Material           | PC                          |
| Colour             | black, partially printed    |

### Tables

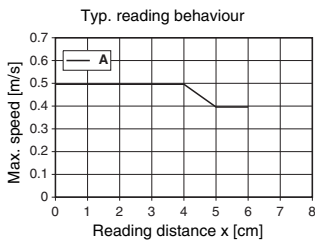
| Meaning            | Bits | Access         |
|--------------------|------|----------------|
| Transponder ID     | 8    | No             |
| User data          | 32   | Yes, read only |
| Header/parity bits | 24   | No             |

| Type                                     | Memory  | Protection class | Dimensions  | Ambient temperature Operation | Storage <sup>1)</sup> | Weight |
|--|---------|------------------|-------------|-------------------------------|-----------------------|--------|
| <b>Disc transponder</b>                  |         |                  |             |                               |                       |        |
| TFI 03 1101.120                          | 64 bits | IP 67            | Ø 30x2.1 mm | -20°C ... +70°C               | -40°C ... +90°C       | 2.8g   |
| TFI 05 1101.120                          | 64 bits | IP 67            | Ø 50x2.1 mm | -20°C ... +70°C               | -40°C ... +90°C       | 4g     |
| <b>High temperature disc transponder</b> |         |                  |             |                               |                       |        |
| TFI 03 1601.120                          | 64 bits | IP 67            | Ø 30x2.5 mm | -20°C ... +85°C               | -20°C ... +200°C      | 3.5g   |
| TFI 05 1601.120                          | 64 bits | IP 67            | Ø 50x2.5 mm | -20°C ... +85°C               | -20°C ... +200°C      | 4.5g   |
| <b>Spacer</b>                            |         |                  |             |                               |                       |        |
| Spacer 30 HT                             | —       | —                | Ø 36x12 mm  | -40°C ... +200°C              | -40°C ... +200°C      | 3g     |
| Spacer 50 HT                             | —       | —                | Ø 56x12 mm  | -40°C ... +200°C              | -40°C ... +200°C      | 4g     |

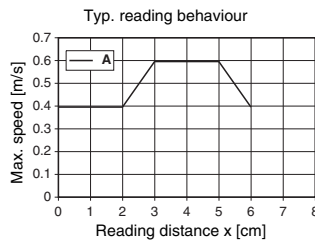
1) 200°C for max. 50h, max. +125°C permanent

### Diagrams

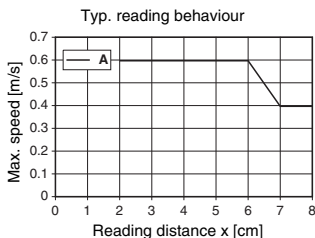
#### TFI 03 1101.120



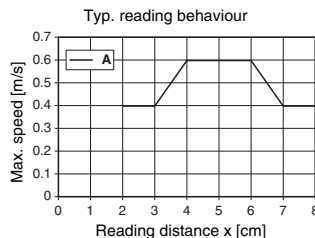
#### TFI 03 1601.120



#### TFI 05 1101.120



#### TFI 05 1601.120



A With reading unit RFI 32 L 120



The values specified may deviate as a result of temperature influences, installation site, read angle, etc.

### Order guide

#### Disc transponder

Ø 30 x 2.1 mm, 32 Bit fixcode  
Ø 50 x 2.1 mm, 32 Bit fixcode

#### High temperature disc transponder

Ø 30 x 2 mm, 32 Bit fixcode  
Ø 50 x 2 mm, 32 Bit fixcode

#### Spacer for disc transponder

Ø 36 mm for TFI 03 11...  
Ø 56 mm for TFI 05 11...

#### Designation

#### Part No.

|                 |           |
|-----------------|-----------|
| TFI 03 1101.120 | 500 32396 |
| TFI 05 1101.120 | 500 32395 |
| TFI 03 1601.120 | 500 39070 |
| TFI 05 1601.120 | 500 39069 |
| Spacer 30 HT    | 501 07102 |
| Spacer 50 HT    | 501 07103 |

### Remarks

The read-only transponders TFI 03 1101.120 and TFI 05 1101.120 are low-price data carriers with fixcode for identification applications in industrial environments.

The high temperature transponders TFI 03 1601.120 and TFI 05 1601.120 are data carriers with fixcode for high temperatures up to 200°C.