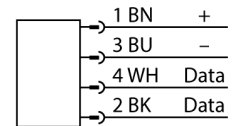


- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-VO

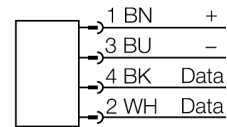
.../S2503 Connectors



.../S2500 Connectors



.../S2501 Connectors



|  |   |
|--|---|
| <b>Type designation</b>                    | TN-Q14-0.15-RS4.47T                         |
| Ident no.                                  | 7030235                                     |
| <b>Remark to product</b>                   | Flat design                                 |
| <b>Electrical data</b>                     | &#x0020;                                    |
| Operating voltage                          | 10...30 VDC                                 |
| DC rated operational current               | ≤ 35 mA                                     |
| inrush current                             | 700 mA For: 1 ms                            |
| Data transfer                              | Inductive coupling                          |
| Technology                                 | HF (13,56 MHz)                              |
| Operating frequency                        | 13.56 MHz                                   |
| Radio communication and protocol standards | ISO 15693                                   |
| Read/Write distance max.                   | 72 mm                                       |
| Output function                            | 4-wire, Read/Write                          |
| Interface                                  | Connection only via Turck system components |
| <b>Mechanical data</b>                     | &#x0020;                                    |
| Mounting conditions                        | Non-flush                                   |
| Ambient temperature                        | -25...+70 °C                                |
| Design                                     | Rectangular,Q14                             |
| Dimensions                                 | 56x 30x 14mm                                |
| Housing material                           | Plastic, PBT-GF30-V0, Yellow                |
| Active area material                       | Plastic, PBT-GF30-V0, yellow                |
| Vibration resistance                       | 55 Hz (1 mm)                                |
| Shock resistance                           | 30 g (11 ms)                                |
| Protection class                           | IP67  |
| Electrical connection                      | Connectors, M12 x 1                         |
| MTTF                                       | 391 years acc. to SN 29500 (Ed. 99) 40 °C   |
| Power-on indication                        | LED,Green                                   |
| <b>Packaging unit</b>                      | 1   |

### Functional principle

The HF read/write heads operating at a frequency of 13.56 MHz form a transmission zone the size of which (0...500 mm) varies, depending on the combination of read/write head and data carrier.

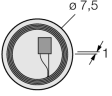
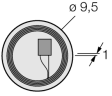


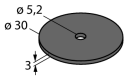
The read/write distances mentioned here only represent standard values measured under laboratory conditions.

The read/write distances of the data carriers for mounting in metal TW-R\*\*-(MF) were determined in metal.

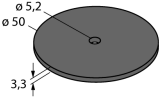
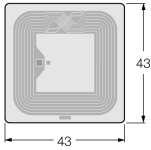
Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal)

Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

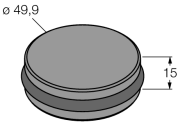
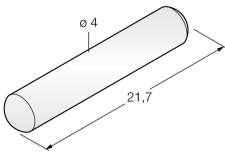
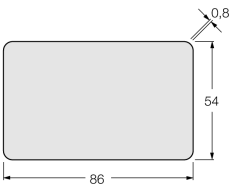
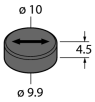
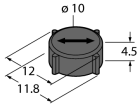
Data carrier

| Dimensions  | Type designation<br><br>Ident - no. | Read-write distance |           | Transfer zone    |                        | Minimum distance between two read-write heads<br><br>[mm] |
|---|-------------------------------------|---------------------|-----------|------------------|------------------------|---|
|   |                                     | Recommend-ed (mm)   | max. [mm] | length max. [mm] | width offset max. [mm] |   |
|    | <b>TW-R7.5-B128</b><br>7030231      | 10                  | 30        | 28               | 14                     | 90  |
|   | <b>TW-R9.5-B128</b><br>7030252      | 11                  | 33        | 31               | 15                     | 90  |
|  | <b>TW-R16-B128</b><br>6900501       | 20                  | 38        | 44               | 22                     | 90  |
|  | <b>TW-R20-B128</b><br>6900502       | 22                  | 40        | 34               | 17                     | 90  |
|   | <b>TW-R20-K2</b><br>6900505         | 17                  | 31        | 32               | 16                     | 90  |
|  | <b>TW-R30-B128</b><br>6900503       | 22                  | 43        | 56               | 28                     | 90  |
|   | <b>TW-R30-K2</b><br>6900506         | 23                  | 42        | 50               | 25                     | 90  |

Data carrier

| Dimensions  | Type designation<br><br>Ident - no.  | Read-write distance   |           | Transfer zone       |                           | Minimum distance between two read-write heads<br><br>[mm] |
|---|--|-----------------------|-----------|---------------------|---------------------------|---|
|   |  | Recommend-<br>ed (mm) | max. [mm] | length<br>max. [mm] | width offset<br>max. [mm] |   |
|    | <b>TW-R50-B128</b><br>6900504<br><b>TW-R50-K2</b><br>6900507                   | 40<br>30              | 72<br>58  | 76<br>76            | 38<br>38                  | 90<br>90  |
|   | <b>TW-L49-46-F-B128</b><br>7030390   | 25                    | 54        | 57                  | 28                        | 90  |
|   | <b>TW-L80-50-P-B128</b><br>7030389   | 25                    | 55        | 71                  | 35                        | 90  |
|  | <b>TW-BS10X1.5-19-B128</b><br>6901380<br><b>TW-BD10X1.5-19-B128</b><br>6901381 | 5<br>14               | 15<br>29  | 21<br>30            | 10<br>15                  | 90<br>90  |
|  | <b>TW-SPP18X1-B128</b><br>6901062  | 10                    | 24        | 34                  | 17                        | 90  |
|  |  |                       |           |                     |                           |   |

Data carrier

| Dimensions  | Type designation<br><br>Ident - no. | Read-write distance |           | Transfer zone    |                        | Minimum distance between two read-write heads<br><br>[mm] |
|---|-------------------------------------|---------------------|-----------|------------------|------------------------|---|
|   |                                     | Recommend-ed (mm)   | max. [mm] | length max. [mm] | width offset max. [mm] |   |
|    | <b>TW-R50-M-B128</b><br>7030209     | 20                  | 36        | 34               | 17                     | 90  |
|   | <b>TW-R50-M-K2</b><br>7030229       | 15                  | 30        | 32               | 16                     | 90  |
|   | <b>TW-R4-22-B128</b><br>7030237     | 10                  | 20        | 32               | 16                     | 90  |
|  | <b>TW-L86-54-C-B128</b><br>6900479  | 20                  | 65        | 98               | 49                     | 90  |
|  | <b>TW-R10-M-B146</b><br>7030545     | 5                   | 14        | 24               | 8                      | 90  |
|  | <b>TW-R12-M-B146</b><br>7030500     | 5                   | 14        | 24               | 8                      | 90  |

**BL**  
**ident**<sup>®</sup>

Read/Write Head

TN-Q14-0.15-RS4.47T

**TURCK**  
Your Global Automation Partner