

Data sheet:

## Duplex plastic fiber optic, cable reel 500m



Article no.: 81500

**EUR 778.00**\*Net price for  
commercial users

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### Galvanic isolation made easy

The use of plastic fiber optic cable results in fully isolated connections of serial terminal devices. Thanks to the patented fiber optic connection they are quicker to install than any copper cable.

## Properties

### Function:

- Duplex cable for bi-directional data transfer
- 100% protection against interfering radiation
- Electrical isolation
- Lightning protection

### Qualities:

- 980µm PMMA graded-index fibers
- Faster to install than any copper cable thanks to the patented fiber optic connection of the W&T interfaces

♥ Wish for something!  
Your suggestions for improvement and additions

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## Worth knowing

Transmitting data over a fiber optic cable offers two decisive advantages over copper-based transmission:

- 100% galvanic isolation:  
No conducting connection between the terminal devices. This eliminates the problem of ground shift.
- No EMC problems:  
Since there is no direct electrical connection, and therefore no current flow, fiber optics transmission cannot be affected by radiated noise, nor can the system itself generate electromagnetic noise.

The drawbacks to glass fiber optic cable are in the complicated, cumbersome and therefore expensive assembly of the transmission medium. The use of plastic fiber optic cable results in fully isolated connections of serial terminal devices.

For shorter runs, assembly involves no more than using a sharp knife to cut the fiber optic cable and insert the end of the cable into the automatically locking fiber optic cable terminal on the terminal device:

- Cut fiber optic cable at as close to a right angle as possible

- Trim the two lines of the duplex cable to about 2cm from each other
- Insert fiber optic cable into the patented receptacle of the W&T interface.
- Connect interface to serial terminal device
- Finished.

For frequent cable assembly operations or when longer transmission distances are involved, we also recommend use of a special [cutting tool](#), which provides outstanding cut quality with little effort.

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## Technical data


|                        |   |
|------------------------|---|
| Medium:                | PMMA step-index fiber                         |
| Core diameter:         | 980µm   |
| Attenuation:           | typ. 0.14dB/m @650nm                          |
| min. bending radius:   | 25mm  |
| Dimensions:            | 4.4mm x 2.2mm                                 |
| Weight:                | approx. 8g/m                                  |
| Operating temperature: | -55..+85°C                                    |
| Scope of delivery:     | 500m duplex plastic fiber optic cable on reel |

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## Accessories

\*Net unit price for commercial users

### FO-Accessories

|  |       |         |   |
|--|-------|---------|---|
| Cutting tool for plastic fiber optic cable<br>(This article cannot be ordered as a sample. So that you can assess the cut quality we will be glad to provide you on request with an optical fiber cable which has been trimmed using the cutting tool. ) | 81600 | 438.00€ |  |
|--|-------|---------|---|

|   |       |         |   |
|---|-------|---------|---|
| Replacement cutter for cutting tool 81600<br>(Unfortunately, this article cannot be ordered as a sample.) | 81602 | 168.00€ |  |
|---|-------|---------|---|

\* Our offering is intended only for commercial users. We will be happy to refer private end customers to trading partners through whom our products can be purchased.



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