

# Product information – OpDAT VIK with breakout cable (pre-assembled installation cables)



Pre-assembled installation cables (VIK) are fiber optic cables fitted with connectors on one or both sides, which are manufactured by METZ CONNECT in Blumberg to the highest quality standards in manual individual production processes. In combination with breakout cables (BO), they are suitable for indoor and outdoor use. The VIKs are often used in combination with the OpDAT patch panels (type PF, PA, fix, slide). They enable a point-to-point connection that is quick and easy to install. This considerably reduces the installation time and costs compared with an installation that uses with splicing and pigtails or cabling with individual patchcords.

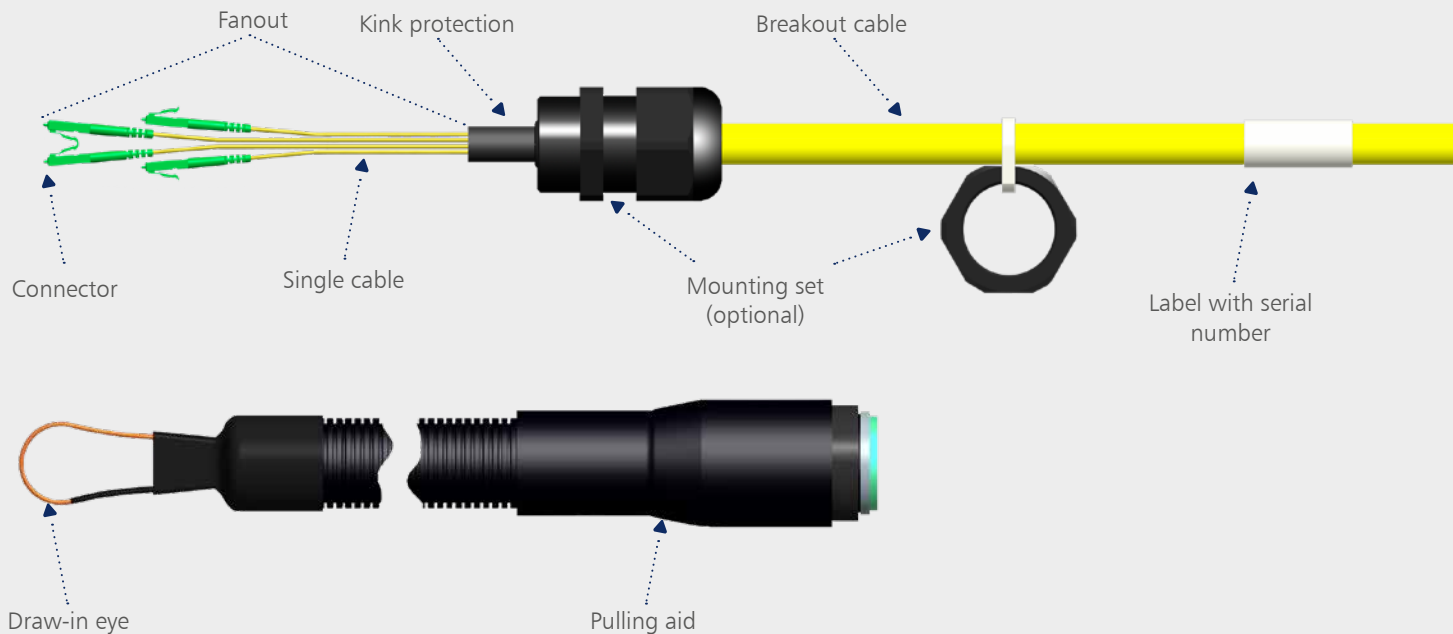
## Features

- > all fiber types are resistant to bending, number of fibers from 2 to 24
- > now also available with connectors of quality class **GRADE B**. Particularly low insertion loss values are achieved by selecting and processing the connector ferrules
- > assembled with plug connector types LC, SC, ST, E2000 and FC
- > available as cable ring or on wooden reel (depending on length and cable type)
- > with or without pulling aid
- > 100 % insertion loss and return loss test, measurement report enclosed

## Application

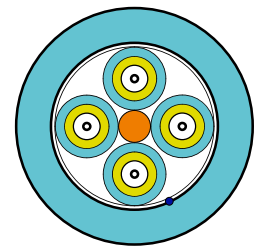
- > Buildings - backbone (floor cabling)
- > Fiber-to-the-desk
- > Cabling in data centres

## Structure



### Breakout cable

Breakout cables are designed for universal cabling systems. They consist of individual cables ( $\varnothing 2.0$  mm) in a common cable sheath. The individual cables are arranged symmetrically around a central element so that the cable always has a round cross-section. The cables are UV-resistant, flame retardant, halogen- and metal-free, water- and moisture-resistant. They are primarily intended for indoor installation in pipes and cable ducts, but can also be used for shorter distances outdoors. All glass fibers used are resistant to bending.



### Mounting set

The mounting set is available as an option and is used to securely fix the VIK, e.g. in a patch panel. When ordering the VIK with pulling aid, the screw connection is included in the scope of delivery.



## Structure



### Fanout

The fanout is always cascaded, i.e. the individual fanout cables are assembled with connectors so that the shortest length is approx. 50 cm.

### Fanout protection variants

#### Bubble wrap

- > is always provided as fanout protection if no pulling aid has been ordered. All fanout cables are the same length (approx. 0.8 m)
- > provides simple mechanical protection during transport and installation
- > It is not suitable for pulling into cable ducts or cable shafts!

#### Pulling aid


- > is used for pulling into cable ducts or cable shafts. It is the most mechanically resilient fanout protection: treadable, available with protection class IP50, and easy to dismantle

## Technical Data

| SPECIFICATIONS |                                    |              | UP TO 4 FIBERS  | UP TO 12 FIBERS   | UP TO 24 FIBERS                              |
|----------------|------------------------------------|--------------|---|---|--|
| Cable          | Cable type                         |              | I-V(ZN)HH<br>Color: OS2 = yellow, OM3= aqua, OM4= violet, OM5= lime green   |   |  |
|                | Cable structure (number of fibers) |              | 4   | 12  | 24   |
|                | Outer diameter                     |              | 7.5 mm  | 12.5 mm   | 14.5 mm                                      |
|                | Cable weight                       |              | 60 kg/km  | 160 kg/km   | 210 kg/km                                    |
|                | min. bending radius installation   |              | 75 mm   | 150 mm  | 175 mm                                       |
|                | min. bending radius operation      |              | 130 mm  | 250 mm  | 280 mm                                       |
|                | Fire behaviour                     |              | Flame retardant in accordance with IEC 60332-1<br>Halogen free in accordance with IEC 60754-1<br>Smoke density in accordance with IEC 61034-2 |   |  |
| Attachment     | Type of attachment                 |              | M20   | M25   | M25  |
|                | Hole for attachment                |              | 20.5 ± 0.2 mm   | 25.5 ± 0.2 mm   | 25.5 ± 0.2 mm                                |
| Fanout         | Single cable                       |              | 2.0 mm, fixed core  |   |  |
|                | Length                             | $L_{Fmax}$   | 680 mm  | 6 fibers: 620 mm<br>8 fibers: 680 mm<br>12 fibers: 800 mm | 16 fibers: 920 mm<br>24 fibers: 1160 mm      |
|                |                                    | $L_{Fmin}$   | 500 mm  | 500 mm  | 500 mm                                       |
|                | Marking                            |              | Numbered, ① = $L_{Fmax}$  |   |  |
| Pulling aid    | max. outer diameter                |              | 29.5 mm   | 37 mm   | 37 mm  |
| Delivery       | Length $L_G$                       | 1 to 40 m    |   |   | Cable ring<br>drum Ø 600 mm<br>drum Ø 710 mm |
|                |                                    | 41 to 500 m  |   |   |  |
|                |                                    | 501 to 650 m |   |   |  |

## Technical Data

| FIBER TYPES              |                 | MULTIMODE            |                      |                      | SINGLEMODE                   |
|--------------------------|-----------------|----------------------|----------------------|----------------------|------------------------------|
| ISO/IEC 11801 / EN 50173 |                 | OM3                  | OM4                  | OM5                  | OS2                          |
| IEC                      |                 | 60793-2-10<br>A1.a.2 | 60793-2-10<br>A1.a.3 | 60793-2-10<br>A1.a.4 | 60793-2-50<br>B.1.3 and B_6a |
| ITU-T                    |                 |                      |                      | G.651.1              | G.657.A1 and G.652.D         |
| Damping                  | 850 nm          | ≤ 3.0 dB/km          | ≤ 3.0 dB/km          | ≤ 2.5 dB/km          | -                            |
|                          | 953 nm          | -                    | -                    | ≤ 1.8 dB/km          | -                            |
|                          | 1300 nm         | ≤ 1.0 dB/km          | ≤ 1.0 dB/km          | ≤ 0.7 dB/km          | -                            |
|                          | 1310 to 1625 nm | -                    | -                    | -                    | ≤ 0.38 dB/km                 |

| CONNECTORS    |   |  | SC      | LC       | E2000    | ST      | FC       |
|---------------|---|--|---------|----------|----------|---------|----------|
| IEC           |   |  | 61754-4 | 61754-20 | 61754-15 | 61754-2 | 61754-13 |
| MM            | Insertion loss<br>(against master) <sup>1</sup>     | max.   | 0.4 dB  | 0.4 dB   | 0.4 dB   | 0.4 dB  | -        |
|               |   | typical  | 0.2 dB  | 0.2 dB   | 0.2 dB   | 0.2 dB  | -        |
|               | Return loss   | PC polishing   | > 35 dB | > 35 dB  | > 35 dB  | > 35 dB | -        |
| SM            | Insertion loss<br>(against master) <sup>2</sup>     | max.   | 0.3 dB  | 0.3 dB   | 0.3 dB   | 0.4 dB  | 0.4 dB   |
|               |   | typical  | 0.15 dB | 0.15 dB  | 0.15 dB  | 0.2 dB  | 0.2 dB   |
|               | Insertion loss<br>(random combination) <sup>2</sup> | max.  | 0.25 dB | 0.25 dB  | 0.25 dB  | -       | -        |
|               |   | typical  | 0.15 dB | 0.15 dB  | 0.15 dB  | -       | -        |
|               | Return loss   | UPC polishing  | > 50 dB | > 50 dB  | > 50 dB  | > 50 dB | > 50 dB  |
| APC polishing |   | > 65 dB  | > 65 dB | > 65 dB  | -        | > 65 dB |          |

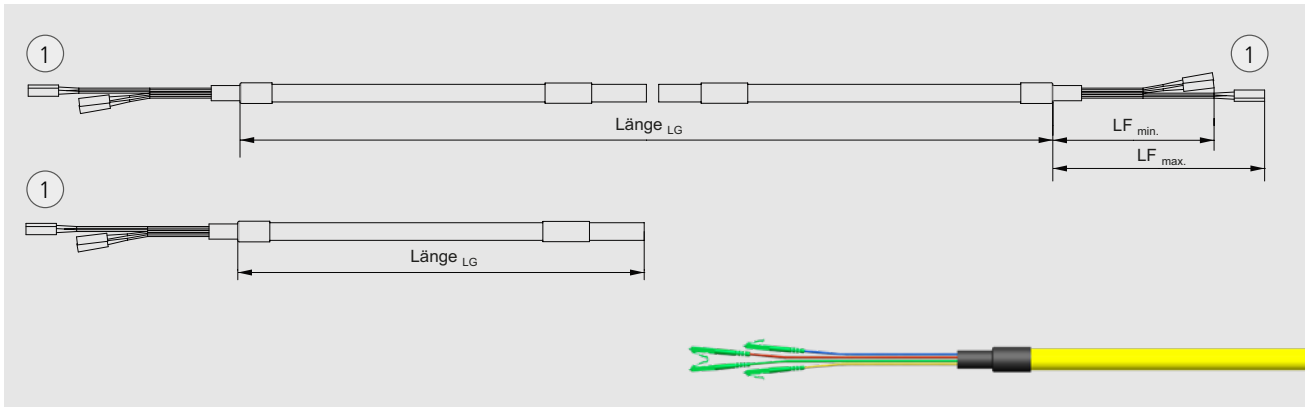
<sup>1</sup> IEC61300-3-4 Method C: Measured value applies to both connectors

<sup>2</sup> IEC61300-3-4 Method B: Measured value applies to the individual connector

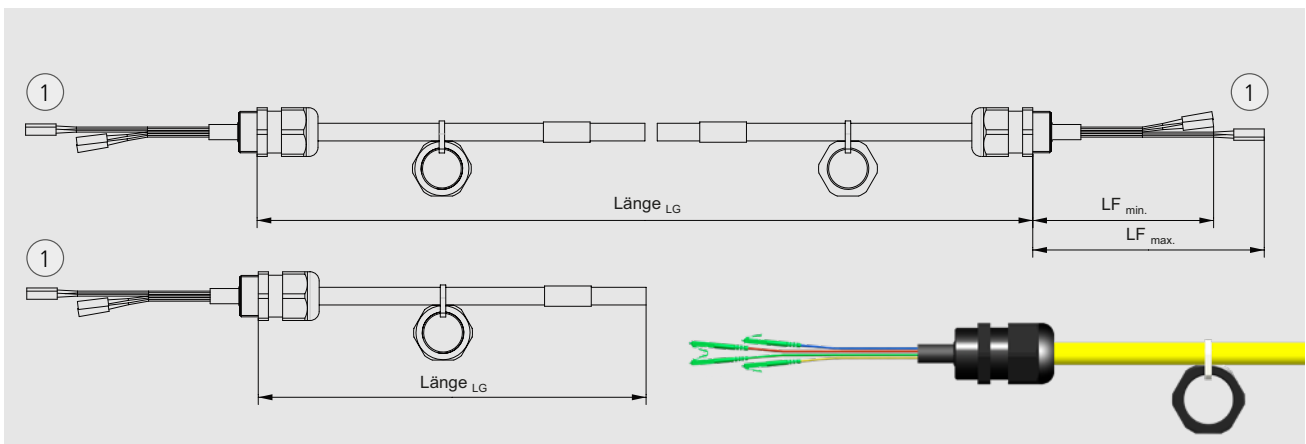
Please note that the insertion loss of the OpDAT VIK consists of the connector and the fiber loss. The latter can be the main part of the insertion loss for long lengths.

## Dimensions

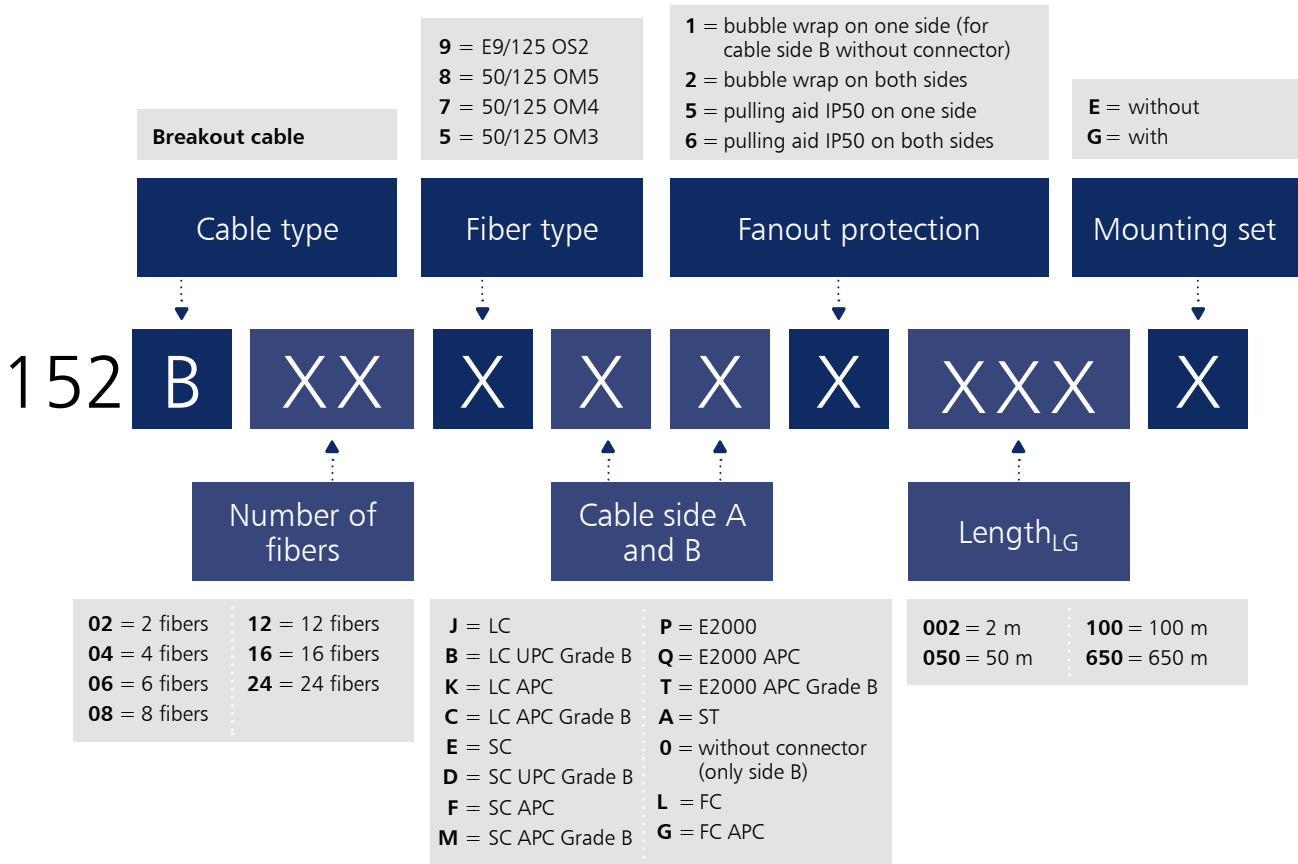
without mounting set



with mounting set



## Ordering information



### Please note!

The VIKs are specially manufactured according to your wishes. Exchange or returns are therefore excluded. Not all possible combinations are technically feasible. Simply use our cable configurator, which you can find on our homepage at :

[www.metz-connect.com/configurator](http://www.metz-connect.com/configurator)

Here you will find all the available variants.





We realize ideas

### **METZ CONNECT GmbH**

Im Tal 2  
78176 Blumberg  
Germany

Phone +49 7702 533-0  
Fax +49 7702 533-189

info@metz-connect.com  
www.metz-connect.com

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### **METZ CONNECT USA Inc.**

200 Tornillo Way  
Tinton Falls, NJ 07712  
USA

Phone +1 732 389 1300  
Fax +1 732 389 9066

### **METZ CONNECT France SAS**

28, Rue Schweighaeuser  
67000 Strasbourg  
France

Phone +33 3886 170 73  
Fax +33 3886 194 73

### **METZ CONNECT AUSTRIA GmbH**

c/o German chamber of commerce  
in Austria

Schwarzenbergplatz 5, Top 3/1  
1030 Vienna

Austria

Phone +43 1 227 12 64  
Fax +43 1 227 12 66

### **METZ CONNECT Zhongshan Ltd.**

Ping Chang Road  
Ping Pu Industrial Park  
Sanxiang Town  
Zhongshan City, 528463  
Guangdong Province  
China

Phone +86 760 86365 055  
Fax +86 760 86365 050

### **METZ CONNECT Asia Pacific Ltd.**

Suite 1803, 18/F  
Chinachem Hollywood Centre,  
1 Hollywood Road, Central  
Hong Kong

Phone +852 26 027 300  
Fax +852 27 257 522

