

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



Pre-assembled installation cables (VIK) are fiber optic cables with connectors on one or both sides, VIKs are manufactured by METZ CONNECT in Blumberg to the highest quality standards in manual individual production processes. In combination with universal cables, they are suitable for mechanically demanding indoor and outdoor use. The VIKs are often used in combination with the OpDAT patch panels. They enable a point-to-point connection of passive and active network components that is quick and easy to install. This considerably reduces the installation time and costs compared an installation that uses with splicing and pigtailed or cabling with individual patchcords.

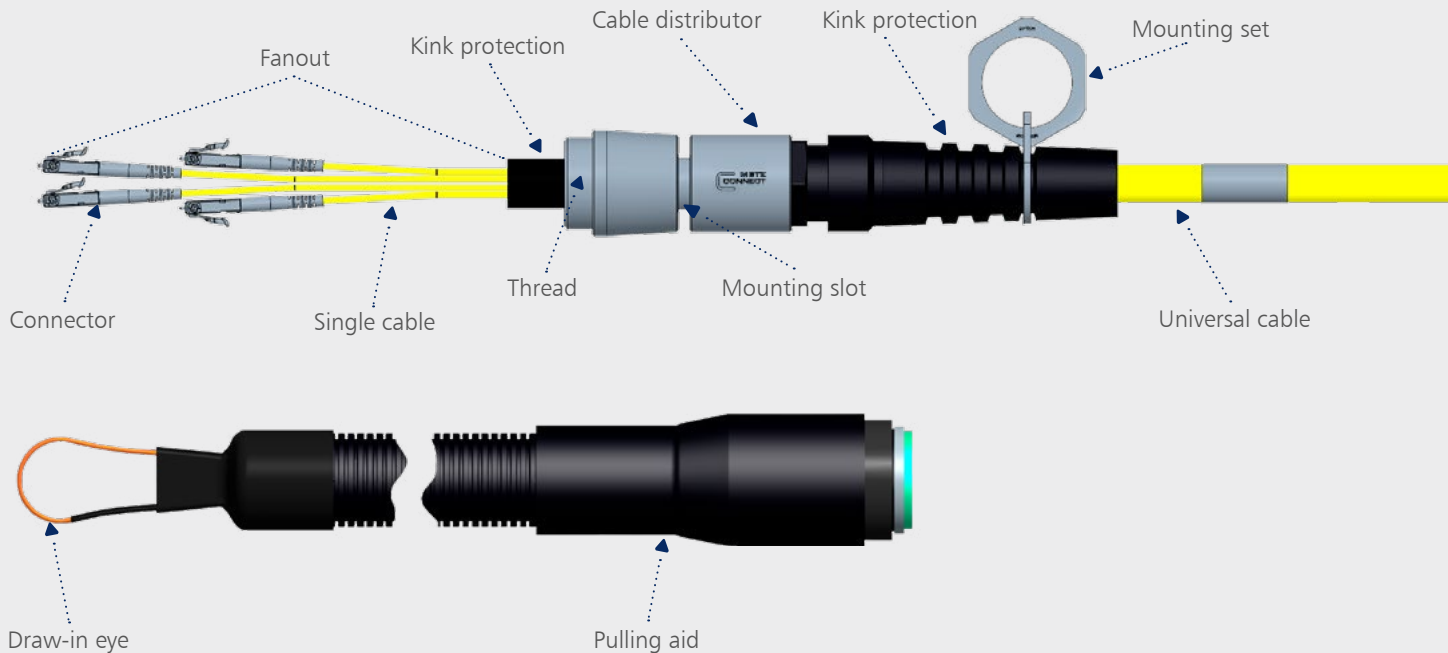
## Features

- > robust cable distributor made of aluminium with screwable or snap-in fastening
- > universal cable for indoor and outdoor use with rodent protection
- > all fiber types are insensitive to bending, number of fibers from 2 to 48
- > assembled with connector types LC, SC, ST E2000 and FC
- > now also available with connectors of quality class **GRADE B**. Particularly low insertion loss values are achieved by selecting and processing the connector ferrules
- > 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

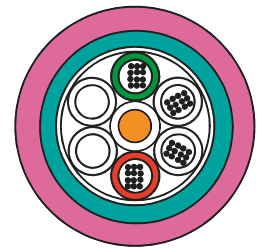
- > Buildings - backbone (floor cabling)
- > Campus - backbone (external cabling)
- > Cabling in data centres
- > Cabling in industrial areas

## Structure



### Universal cable

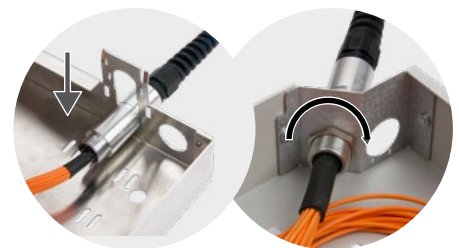
Universal cables have been designed for both indoor and outdoor use. They're cables with gel-filled loose tubes. They're UV-resistant, metal-free, longitudinally watertight, tension-resistant, rodent protected, halogen-free, flame retardant and suitable for both indoor and direct burial (in a suitable sand bed). All fibers included used are resistant to bending.



### Cable distributor

The cable distributors specially designed by METZ CONNECT are handy but very robust elements which fulfil several tasks:

- > protect the highly sensitive fibers both mechanically and thermally in the transition area from the loose tube cable to the individual cables
- > the cable, the individual cables of the fanout and also the fanout protection are caught in or on the cable distributor and strain-relieved
- > can be securely and stably fixed in the housing or distributor with the supplied locknut or by insertion into the fastening groove



## 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 other protection has been defined
- > provides simple mechanical protection during transport and installation

#### Safety net




- > is a space-saving variant with simple mechanical protection
- > provides simple mechanical protection during transport and installation

#### Pulling aid

- > for pulling into cable ducts or cable shafts. It is the most mechanically resilient fanout protection: treadable, available with protection class IP50 or IP67, and easy to dismantle

The bubble wrap and safety net are not suitable for pulling into cable ducts or cable shafts!

## Technical Data

SPECIFICATIONS			UP TO 12 FIBERS	UP TO 24 FIBERS	UP TO 48 FIBERS
					
Cable distributor	Size		S	M	L
	Length		65 mm	65 mm	80 mm
	max. outer diameter		25 mm	30 mm	34 mm
	Type of attachment		Slot or M20	Slot or M25	Slot or M25
	Hole for attachment		20.5 ± 0.2 mm	25.5 ± 0.2 mm	25.5 ± 0.2 mm
Cable	Cable type		U-DQ(ZN)BH		
	Cable structure (bundle x number of fibers)		1 x 4, 1 x 8, 1 x 12	1 x 24	4 x 12
	Outer diameter		7.5 mm	7.5 mm	11.0 mm
	Cable weight		55 kg/km	55 kg/km	130 kg/km
	min. bending radius (installation)		75 mm	75 mm	150 mm
	Fire behaviour		Flame resistance in accordance with IEC 60332-1-2 Halogen free in accordance with IEC 60754-1 Smoke density in accordance with IEC 61034-2		
Fanout	Single cable		2.1 mm, hollow tube		
	Length	$L_{Fmax}$	4F: 680 mm 6F: 800 mm 8F: 1040 mm 12F: 1160 mm	16F: 920 mm 24F: 1040 mm	36F: 1100 mm 48F: 1280 mm
		$L_{Fmin}$			500 mm
		Marking			Numbered, ① = $L_{Fmax}$
	Material and colour of the hollow tubes		I-V(ZN)H, FRNC OS2 = yellow, OM4= purple, OM3= aqua, OM5= lime green		
Pulling aid	max. outer diameter	IP50 IP67	29.5 mm 31.5 mm	37 mm 39 mm	44 mm 46 mm
	max. traction	IP50 IP67	500 N 500 N	500 N 500 N	500 N 500 N
Delivery	Length $L_G$	2 to 100 m 101 to 500 m 501 to 1000 m		Cable ring drum Ø 600 mm drum Ø 710 mm	–
	Length $L_G$	2 to 50 m 51 to 150 m 151 to 500 m	–	–	Cable ring drum Ø 600 mm drum Ø 710 mm

## Technical Data

FIBER TYPES		MULTIMODE			SINGLEMODE
ISO/IEC 11801 / EN 50173		OM3	OM4	OM5	OS2
IEC 60793-2		-10 A1.a.2	-10 A1.a.3	-10 A1.a.4	-50 B1.3 and B_6a
ITU-T				G.651.1	G657.A1, G652.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

CONNECTOR			SC	LC	E2000	ST	FC
IEC			61754-4	61754-20	61754-15	61754-2	91754-13
MM	Insertion loss (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 (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 (random combination) <sup>2</sup>	<b>GRADE B</b> 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

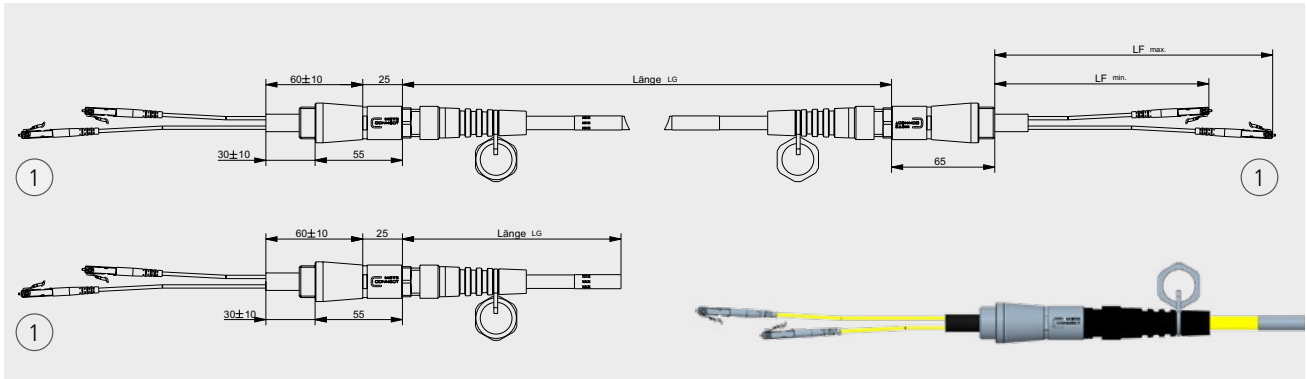
<sup>1</sup> IEC61300-3-4 Method C: Measured value applies to both connectors

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

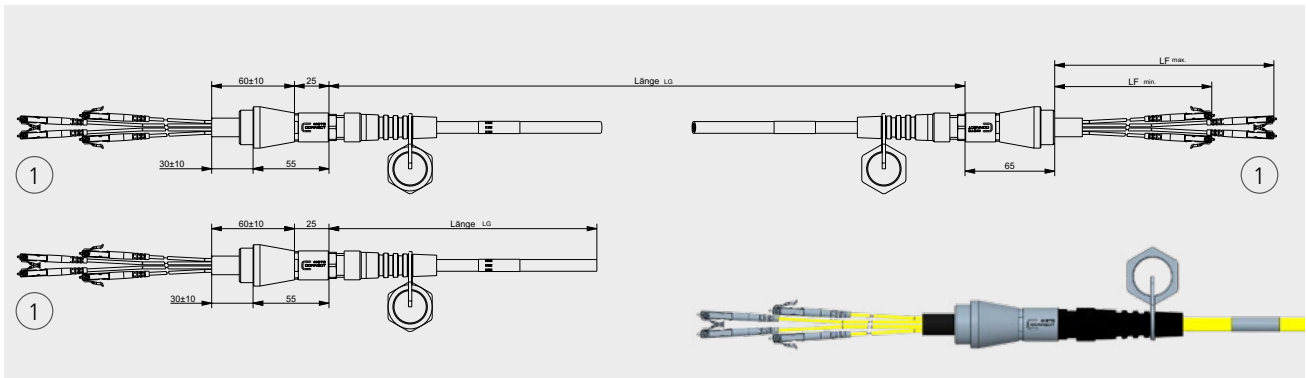
Please note that the insertion loss of the OpDAT VIK consists of the connector and the fiber loss. The latter can be the main part of the insertion loss for long lengths.

## Dimensions

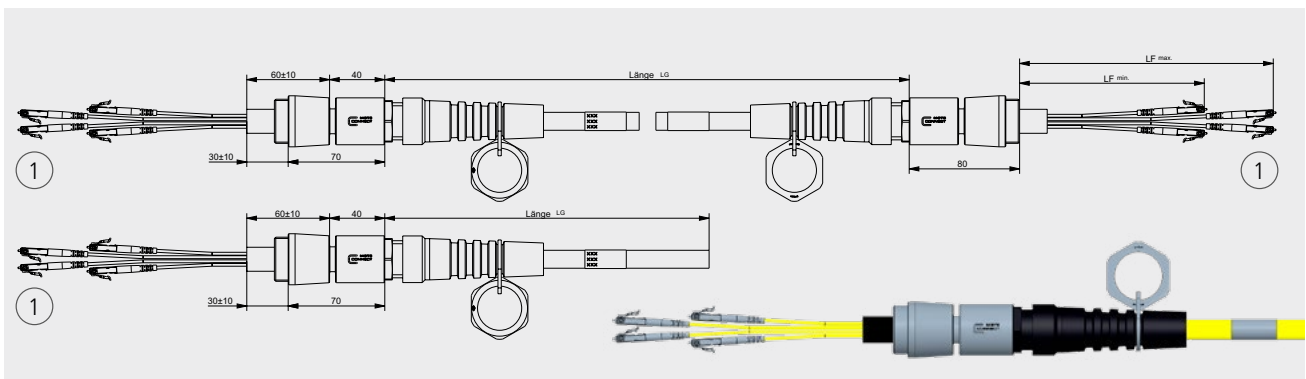
### Cable distributor size S



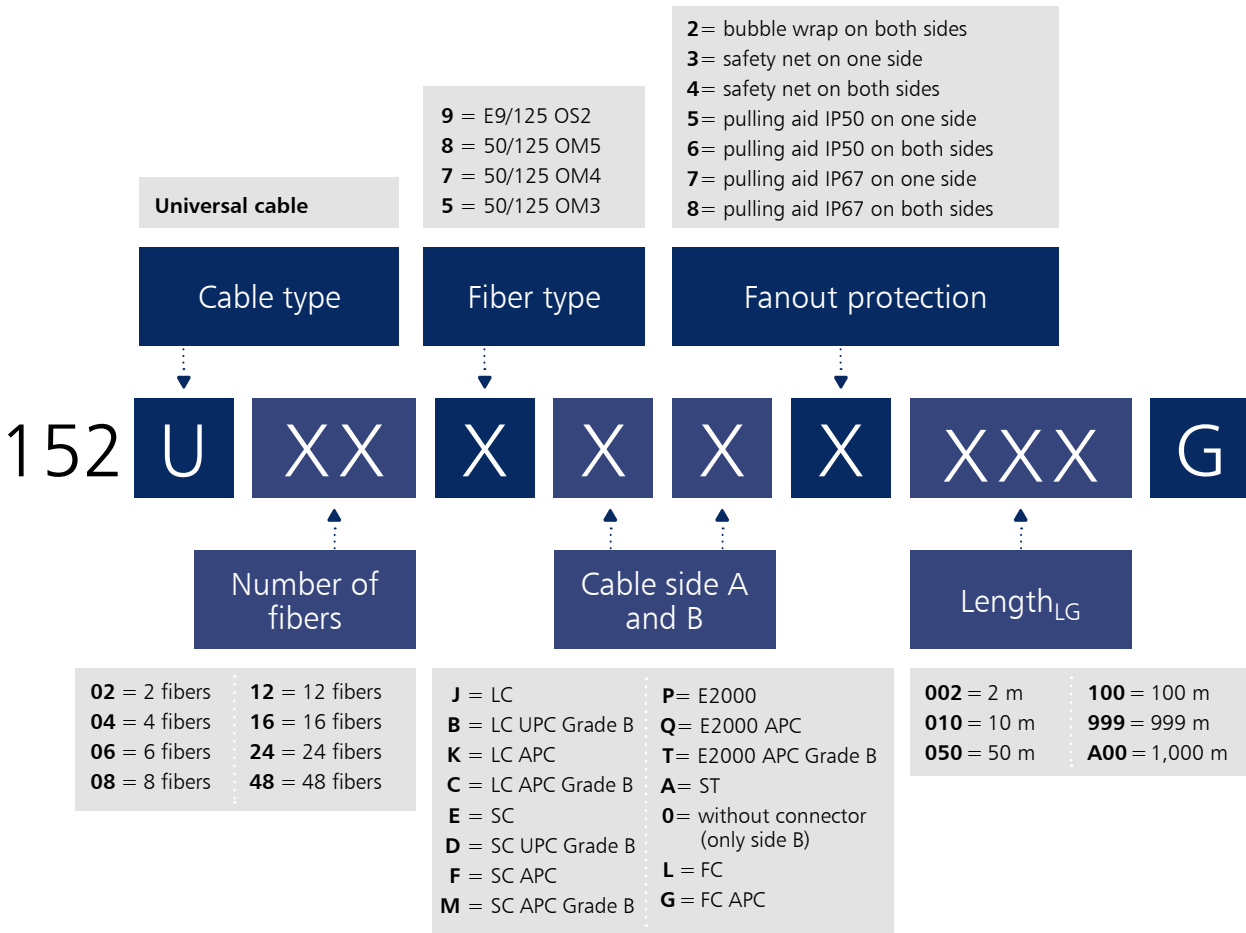
### Cable distributor size M



### Cable distributor size L



## 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

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