



# FIBRE OPTIC CABLING SOLUTIONS

CABLES AND CONNECTING HARDWARE  
FOR ALL REQUIREMENTS

PRODUCT OVERVIEW

# FIBRE OPTIC CABLES AND CONNECTING HARDWARE

## FO data cables

Our cables are available  
in **DIFFERENT**  
**EUROCLASSES.**

## Connecting hardware

### FO Indoor cables



Simplex / I-V(ZN)H - 2.0 mm / 2.8 mm - 1 fibre



Zipcord / I-V(ZN)H - 1.8 mm / 2.0 mm / 2.8 mm - 2 fibres



Duplex / I-V(ZN)HH - 2.0 mm / 2.8 mm - 2 fibres



FTTH / I-M(ZN)H - 2.2 mm - 4 fibres



FTTH STB / I-V(ZN)H - 2.8 mm - 4 fibres

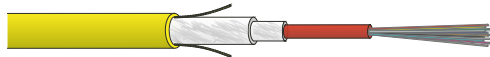


ZGGFR / J-B(ZN)BH - 5.9 mm - up to 12 fibres

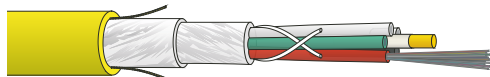


szGGFR / J-B(ZN)BH - 5.9 - 15.8 mm - up to 144 fibres

### FO Universal cables



DLTS ZGGFR / U-BQ(ZN)BH - 4 up to 24 fibres



DLTS wbGGFR / U-BQ(ZN)BH - 24 up to 144 fibres



ZGGFR / U-DQ(ZN)BH - 4 up to 24 fibres



wbGGFR / U-DQ(ZN)BH - 24 up to 144 fibres



ZGGFR Easy Blow / U-DQ(ZN)BH - 4 up to 24 fibres



wbGGFR Easy Blow / U-DQ(ZN)BH - 12 up to 288 fibres



ZGGFR Safety / U-DQ(ZN)BH - 4 up to 12 fibres



wbGGFR Safety / U-DQ(ZN)BH - 24 up to 60 fibres

### FO Outdoor cables



ZGGT HP / A-DQ(ZN)B2Y HighP - 4 up to 24 fibres



wbGGT HP / A-DQ(ZN)B2Y - 12 up to 288 fibres



wbGGT HP / A-DQ(ZN)B2Y - 180 up to 576 fibres



wbKT HP / A-DQ(ZN)B2Y - 12 up to 144 fibres



ZwbKWT BL / A-DQ(ZN)(SR)2Y - 4 up to 24 fibres



wbKWT HP / A-DQ(ZN)(SR)2Y - 24 up to 144 fibres



ZKT Micro / A-DQ(ZN)2Y - 4 up to 24 fibres



wbKT Micro / A-DQ(ZN)2Y - 12 up to 144 fibres



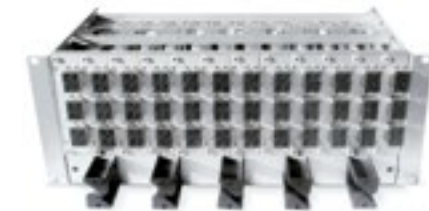
ZT S-Micro / A-D2Y - 4 up to 24 fibres



wbKT S-Micro / A-DQ(ZN)2Y - 24 up to 288 fibres



Breakout boxes and splice boxes,  
extractable or telescopic, 1 and 2 U,  
all current FO connector types



Fibre optic subracks, 3U/4U,  
with slide-in modules (cassettes),  
all current FO connector types



Distribution boxes, wall mounted,  
different sizes and assemblies



Fibre optic adapters / couplers

## Patch cables and pigtails

## Terminated connectors

## Fibre optic trunks



SCD ...



ST ...



LSH ...



LCD - also available with LCD Uniboot and changeable polarity



FC/PC ...



MTP® ...



SC/APC ...



Pigtails



LC  
IEC 61754-20



LCD Uniboot for round cables  
IEC 61754-20



SC and SC/APC  
IEC 61754-4



LSH and LSH/APC  
IEC 61754-15



FC/PC and FC/APC  
IEC 61754-13



MPO (MTP®)  
IEC 61754-7



Pre-assembled trunk cable with crush-resistant hose protection



Pre-assembled trunk cable with textile hose protection



Breakout assembly



Fanout cable - MPO on 6x LCD

Pre-assembled FO cables are delivered with measurement report. These trunks can be terminated in fibre optic breakout boxes.

Connector type	IL [dB] typical	IL [dB] maximal	RL [dB] typical	RL [dB] maximal	Grade IEC 61755
MM	0.15	0.3	35	30	better than Bm2m
SM	0.12	0.25	55	50	better than B2
SM/APC	0.12	0.25	70	65	better than B1
MT-RJ	0.5	0.75	25	20	better than Cm2m
MTP/MPO MM	0.15	0.3	25	20	better than Bm2m
MTP/MPO SM	0.1	0.25	65	60	better than C1

All connectors are tested with our simplex, duplex and mini-zipecord cables as well as with our pigtails. MTP® is a registered brand name of US Conec.

# SELECTION GUIDE FOR OPTICAL FIBRES

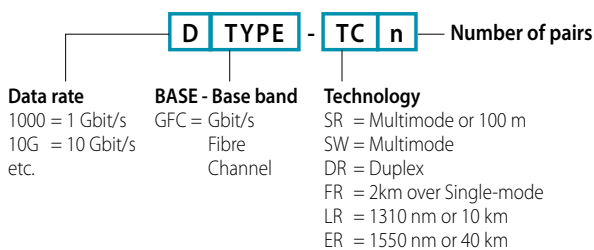
The Datwyler product range consists of different types of optical fibre.

The following overview lists the most important criteria which will help you select the type of fibre that meets your specific requirements.

Fibre type		Single-mode fibres E9/125	Multimode fibres G50/125 bend optimized		
		SMF E9/125 bend optimized (BLO)	MMF G50/125	MMF G50/125	MMF G50/125
Fibre properties	<b>Standard</b>	<b>G.652.D G.657.A1</b>	<b>OM3</b>	<b>OM4</b>	<b>OM5</b>
	Maximum attenuation dB/km 850 nm (installed)		2.7	2.5	2.4
	Maximum attenuation dB/km 1300 nm/1310 nm (installed)	0.34	0.7	0.7	0.6
	Maximum attenuation dB/km 1383 nm (installed)	0.34			
	Maximum attenuation dB/km 1550 nm (installed)	0.21			
	Maximum attenuation dB/km 1625 nm (installed)	0.23			
Maximum PMD ps/√km (installed)	0.10				
Transmission	LED 850/1300 nm (typically 100 Mbit/s)				
	VCSEL 850 nm (1 GbE-50 GbE)		•	•	•
	Laser 1280-1625 nm	•			
	CWDM / DWDM systems	•			
Application	Fiber-to-the-Desk tertiary cabling (typically 1 GbE)		•	•	•
	Campus / Backbone / Data Centre (typically 10 GbE)	•	•	•	•
	WAN / National backbone	•			
	City / Access network	•			
	Fiber-to-the-Home	•			
Ethernet / Fibre channel protocols *	<b>Link length in meter</b>				
	1000BASE-SX IEEE 802.3z		1000	1100	
	10GBASE-SR/SW IEEE 802.3ae		300	550	
	16GFC-SW		100	125	125
	32GFC-SW		70	100	100
	64GFC-SW		70	100	100
	40GBASE-SR4 + 100GBASE-SR10 IEEE 802.3ba		100	150	150
	100GBASE-SR4 IEEE 802.3bm + 100GBASE-SR2-BiDi		70	100	100
	128GFC-SW4		70	100	100
	200GBASE-SR4 IEEE 802.3cd + 400GBASE-SR16		70	100	100
	256GFC-SW4		70	100	100
	400GBASE-SR16 IEEE 802.3bs		70	100	100
	400GBASE-SR8 IEEE 802.3cm				100
	400GBASE-SR4.2 IEEE 802.3cm		70	100	150
	100GBASE-DR, 128GFC-PSM4, 200GBASE-DR4 + 400GBASE-DR4	500			
	40GBASE-FR, 50GBASE-FR, 128GFC-CWDM4, 200GBASE-FR4 + 400GBASE-FR8	2,000			
	40GBASE-LR4 + 200GBASE-LR4 + 400GBASE-LR8	10,000			
	100GBASE-ER4 IEEE802.3ba	40,000			
	40GBASE-ER4 IEEE802.3bm	40,000			

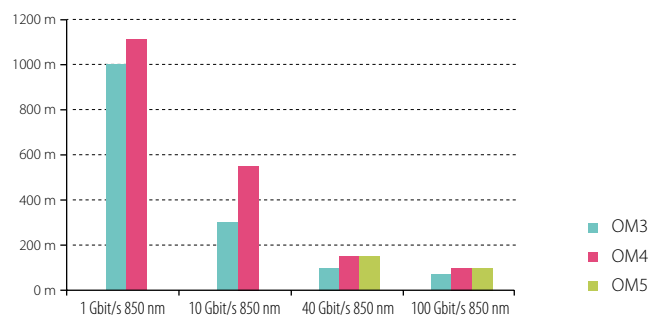
In the relevant cabling standards OM1 and OM2 fibres are only listed in the informative annex. Datwyler recommends to install cables with at least OM3 fibres in new networks.

## \* Ethernet / Fibre channel protocol code



## Link lengths

Not only the fibre type and quality determine the achievable link length. The achievable lengths significantly depend on the transceiver type and quality. For the connectors a maximum attenuation of only 1.0 dB is often permitted when using high bit-rate protocols.



Here you will find your personal contact. Or via:

[www.ITinfra.datwyler.com](http://www.ITinfra.datwyler.com)



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