

# Steel-armoured multi-fiber loose tube cables – simplex and TWINTUBE



Simplex - up to 12 fibers



TWINTUBE - up to 24 fibers

## Design

Cable design	1 – 2 multi-fiber loose tubes, jelly-filled with 2 – 12 fibers
Strain relief	Aramid yarn / glass-roving
Rodent protection	steel-armoured
Jacket material	PE
Jacket colour	black

## Properties

- Steel-armoured outdoor cable
- Rodent-protected (steel-armoured)
- High chemical resistance against acids and alkalis
- Halogen free and non-corrosive fire gases
- Longitudinal and transversal watertight cable

## Applications

- For outdoor installations and in mechanically unprotected environments
- As data cable in distribution networks
- For installations directly in the ground

According to IEC 60794-1-2

## Ordering information

12-.../W(ZN)YAY-...80  
24-.../W(ZNG)YAY-...125  
Please see page 155

## Steel-armoured multi-fiber loose tube cables – simplex and TWINTUBE

Specification	Simplex	TWINTUBE		
Jacket material	LDPE	LDPE	mm	
Jacket Ø	8.0	12.5	mm	
Fiber quantity up to	12	24		
Multi-fiber loose tube Ø	standard	standard		
Approx. weight	70	152	kg/km	

Mechanical properties					
Tensile strength	during installation	1000	3000	N	IEC 60794-1-2 E1
	in service	500	1500	N	
Min. bend radius	during installation	120	190*	mm	IEC 60794-1-2 E11
	in service	80	125*	mm	
Crush resistance	short-term	400	800*	N/cm	IEC 60794-1-2 E3
	long-term	200	400*	N/cm	
Impact resistance	W <sub>p</sub> = 4.41 J	50		impacts	IEC 60794-1-2 E4
	W <sub>p</sub> = 15 J		3	impacts	
Repeated bending	r = 80 mm, weight = 2.5 kg	5000		cycles	IEC 60794-1-2 E6
Water penetration	h = 1 m, 24 h, p < 3 m		p		IEC 60794-1-2 F5B

\* refers to the flat side of the cable

Thermal properties					
Temperature range	during installation	-10 to +50	-10 to +50	°C	IEC 60794-1-2 F1
	in service	-40 to +70	-20 to +70	°C	
	in storage	-40 to +70	-40 to +70	°C	

Specification for singlemode at 1550 nm, for multimode at 1300 nm

Combustion properties				
Fire load	1.78	3.51	MJ/m	
2002/95/EC (RoHS)	compliant			

p = passed