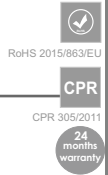


BITNER[®] MINING FO 2 x 2 ÷ 12 .../125



Mining cables

Heavy duty rubber cable for optical signal and data transmission



Technical data:

Thermal parameters:

- Permissible ambient temperature:**
- transportation / storage: -40 °C / 80 °C
- free moving / festoon application: -30 °C / 80 °C

Mechanical parameters:

- Bending radius:** ≥ 125 mm
- Max. continuous load in operation:** 2000 N
- Travelling speed of motor driven festoon cable trolleys:** ≤ 300 m/min

Chemical parameters:

- Resistance to oil:** IEC 60811-404
- Behaviour in case of fire:** IEC 60332-1-2
- Weather resistance:** unrestricted use indoors, outdoors, resistance to ozone, UV and moisture

Regulations of the individual fiber types:

- single-mode optical fiber E9/125 acc. to**
 - ITU-T G.652 D - OS2 *)
 - DIN EN IEC 60793-2-50 / VDE 0888-325
- graded-index 62.5/125 µm multimode fiber acc. to**
 - DIN EN IEC 60793-2-10 A1-OM1 *)
 - IEEE 802.3 Gigabit Ethernet Standard
 - VDE 0888-321
- graded-index 50/125 µm multimode fiber acc. to**
 - DIN EN IEC 60793-2-10 A1-OM2 - OM4 *)
 - ITU-T G.651 / VDE 0888-321

fiber colour codes acc. to ANSI/TIA/EIA 598-A

Design:

Optical fiber element:

- E9 design:**
 - tube 1 - yellow: 12 fiber E9/125
 - tube 2 - red: 12 fiber E9/125
- G62,5 design:**
 - tube 1 - blue: 12 fiber G62,5/125
 - tube 2 - red: 12 fiber G62,5/125
- G50 design:**
 - tube 1 - green: 12 fiber G50/125
 - tube 2 - red: 12 fiber G50/125

combination of fiber types (e.g.: 12G50 + 12G62,5) on request

Synthetic strain relief elements

Jacket: thermoplastic elastomer TPE

Separating tapes

Reinforcement: braid made of high tec multifilament threads, non-hygroscopic and low shrinkage

Outer sheath: heavy duty rubber compound, quality 5GM5 acc. to DIN VDE 0207-21, colour: orange / black, inkjet marking

Application:

This rubber sheathed flexible cable BITfiber[®]MINING with optical fiber elements has been developed for long distance communication network (LDN) e.g. optical PROFIBUS networks with special application requirements on mobile materials handling equipment (Spreader or Bucket Wheel Excavators) or shiftable conveyor belts in surface mining.

Fiber type	Outer diameter min. - max. [mm]	Approximate cable weight [kg/km]
2x6 E9/125	10 - 12	120
2x6 G50/125		
2x6 G62,5/125		
2x12 E9/125		
2x12 G50/125		
2x12 G62,5/125		

*) contain standard values or values at delivery. Attenuation values in the finished cable deviate Cable Factory BITNER reserves the right to modify specifications without prior notification.