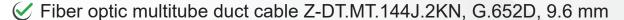


## Fiber optic cables (multitube duct cables)









- Anti-Rodent protection
- Two-layered HDPE jacket (black)
- Reinforced by a thick layer of glass fibers
- Multitube structure
- UV, water resistant
- Resistance to chemical agents
- Resistance to substances occuring in duct systems
- Reinforced by central FRP rod
- Hydrophobic gel in tube
- Optical fibers G.652D
- Ripcords

## **Application:**

- Places exposed to rodent attacks
  Duct systems
  Distribution networks
  Campus networks

Outside the buildings

hnical ata	Product ID	Number of fibers	Number of fibers in tube	Number of tubes/fillers	Diameter [mm]	Jacket thickness [mm]	Weight [kg/km]	
Tec	Z-DT.MT-144J.2KN-12F	144	12	12/0	9.6	1.1	80	

Table 1. Fiber optic duct ZTT cable 144F, multitube, 2kN, G.652D

Mechanical parameters	IEC standard	Z-DT.MT.144J.2KN				
Tensile Strength	IEC 794-1-E1	2000N				
Crush resistance	IEC 794 -1-E3	1500N/100mm				
Impact resistance	IEC 794 -1-E4	20 impacts, 12 Nm				
Repeated bending	IEC 794-1-E6	20 [cycles(15xD)], load 150N				
Torsion resistance	IEC 794-1-E7	10 cycles 180°, load 150N				
UV resistance	ISO 4892/2	<b>✓</b>				
Water penetration resistance	IEC 794-1-F5B	✓				
Abrasion resistance	IEC 794-1-E2	✓				
Temperature cycling test	IEC 794-1-F1	2 thermal cycles in the range of -40°C+70°C				

Table 2. Mechanical parameters of fiber optic duct ZTT cable 144F, multitube, 2kN, G.652D

Number	1	2	3	4	5	6	7	8	9	10	11	12
Colour	Blue	Orange	Green	Brown	Gray	White	Red	Black	Yellow	Violet	Pink	Aquamarine

Table 3. Fiber optic and tubes colour coding

## STRUCTURE OF CABLE

- 1 HDPE jacket
- 2 Fiberglass
- 3 Hydrophobic gel
- 4 Ripcord (x2)
- 5 Central FRP rod
- 6 Optical fibers G.652D.
- 7 Tube with optical fibers



- Storage and transport temperature: -40°C ÷ 70°C
- ▶ Installation temperature: -15°C ÷ 50°C
- Operation temperature: -30°C ÷ 70°C









