

N05a: Universal stranded loose tube cable

kabeck
kabel

5000N universal stranded loose tube cable with up to 216 fibres, glass yarn reinforcement and FireBur sheath.

VDE: U-DQ(ZN)BH



Application and Installation

Universal indoor/outdoor cable for LAN, MAN and WAN backbones

Directly installation in the ground

Rodent protection, effective in many cases

Standards

ISO 11801 2. Edition, IEC 60794-2, EN 50 173-1

Flame resistance

LSHF (FRNC): IEC 60332-1-2; IEC 60754-2; IEC 61034

Options

As standard this cable is provided with 12 fibres per tube, as an option other lower fibre counts are possible

Construction

Central strength member:	Ø2.5 mm FRP rod
Loose tube:	Ø2.3 mm jelly filled loose tubes, with 12 fibres each, up to 18 tubes in two layers, for lay-up refer to B04
Water blocking:	The core is water blocked using swell able tape and tread
Wrapping:	Polyester nonwoven
Reinforcement:	Layer of glass fibre yarns as reinforcement and rodent protection
Ripcord:	Polyester ripcord for easy slitting of the sheath
Sheath:	1.5 mm FireBur sheath, standard colour blue, halogen free, flame retardant, thermoplastic sheathing compound acc. to EN 50290-2-27, UV stabilised

Physical properties

Attribute	IEC 60794-1-2 Method	Limits						
Fibre count	-	72	96	120	216			
Nominal diameter [mm]	-	11.0	13.0	14.0	15.5			
Nominal weight [kg/km]	-	130	165	200	240			
Short term tensile strength (some days) [N]	E1	>5000						
Permanent tensile strength [N]	E1	>3500						
Crush (compressive strength) [N/100 mm]	E3	3000						
Impact [J]	E4	20						
Torsion	E7	5 cycles ± 1 turn						
Kink	E10	The cables do not form a kink when a loop is drawn together to a diameter 12 times the cable nominal diameter						
Minimum bending radius [mm]	E11	150	180	200	220			
Temperature range	F1	Installation		-40 °C to 70 °C				
		Operation *)		-40 °C to 70 °C				
		Storage		-40 °C to 70 °C				
Water penetration	F5	No water on free end						
Heat of combustion [MJ/km] [kWh/m]	-	2000	2700	3500	4000			
		0.56	0.75	0.97	1.11			

*) The cables will operate without any attenuation variation (≤ 0.05 dB) in the temperature interval -30°C to $+60^{\circ}\text{C}$.

The cables will operate with a maximum attenuation variation of 0.1dB/km in the temperature interval -40°C to $+70^{\circ}\text{C}$.