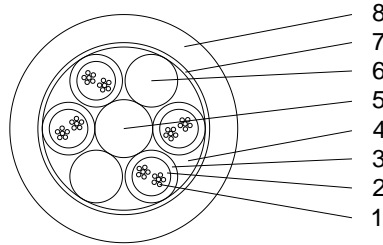


OUTDOOR MICRO DUCT CABLE QXXE MICRO



1. Optical fibres	2. Jelly filling	3. Tube	4. Dry core
5. FRP rod	6. Filler	7. Rip cord	8. Sheath

Application	Non-metallic optical fibre cable for microduct installation by blowing	
Construction	Optical fibres	Coloured single-mode fibres according to the ITU-T G.652.D. Ring-marking applied on fibres in 24F tube.
	Secondary coating	Jelly filled loose tubes made of thermoplastic polyester.
	Fillers	Plastic fillers when applicable.
	Central strength member	Glass fibre reinforced plastic (FRP). When applicable coated with PE to increase the diameter.
	Cable core stranding	The secondary coating tubes and fillers (when needed) are SZ-stranded around the central strength member. and 288F and 432F cables are stranded in two layers.
	Water blocking	Dry water blocking elements are applied to the cable core.
	Rip cord Outer sheath	A non-metallic rip cord is applied under the sheath. UV resistant black polyethylene compound (HDPE). Nominal sheath thickness is 0,5 mm.
	Sheath marking	Marking printed on the sheath at one meter interval: Nestor Cables - cable type - lot number - year of manufacture - length marking
Standard references	Cable properties	IEC 60794-5-10
	Test methods	IEC 60794-1-2x
	Halogen free	IEC 60754-2
	Reaction to fire	EN50575:2014+A1:2016 class Fca



Maximum cabled fibre attenuation					
Wavelength	1310	1383	1550	1625	nm
Attenuation	0,36	0,36	0,22	0,24	dB/km

Nominal dimensions							
Fibres		Diameter [mm]			Weight [kg/km]	Minimum bending radius [mm]	
Count	Grouping	CSM (FRP)	Loose tube	Cable	Cable	Dynamic	Static
24	2x12	1,6	1,5	5,6	24	120	80
48	4x12	1,6	1,5	5,6	25	120	80
72	6x12	1,6	1,5	5,6	25	120	80
96	8x12	2,3	1,5	6,4	36	130	120
144	12x12	4,2/2,3	1,5	8,1	54	170	120
192	8x24	3,2/2,1	2,0	8,1	51	160	120
288	24x12	3,0/2,1	1,5	9,9	76	200	120
432	18x24	2,1	2,0	11,0	89	220	120

Cable core lay up			
Fibres	Tubes	Fillers	Colour of the tubes
24	2	4	white, red
48	4	2	white, red, yellow, green
72	6	0	white, red, yellow, green, blue, grey
96	8	0	white, red, yellow, green, blue, grey, brown, black
144	12	0	white, red, yellow, green, blue, grey, brown, black, violet, turquoise, orange, pink
192	8	0	white, red, yellow, green, blue, grey, brown, black
288	24	0	Bottom layer: white, red, yellow, green, blue, grey, brown, black, violet Top layer: turquoise, orange, pink, white/black, red/black, yellow/black, green/black, blue/black, grey/black, brown/black, black/white, violet/black, turquoise/black, orange/black, pink/black
432	18	0	Bottom layer: white, red, yellow, green, blue, grey Top layer: brown, black, violet, turquoise, orange, pink, white/black, red/black, yellow/black, green/black, blue/black, grey/black
Colour of the fillers			black or natural
Colour of the fibres 12F tube			white, red, yellow, green, blue, grey, brown, black, violet, turquoise, orange, pink
Colour of the fibres 24F tube			Fibres 1–12: white, red, yellow, green, blue, grey, brown, black, violet, turquoise, orange, pink Fibres 13-24, ring marking applied: white/black, red/black, yellow/black, green/black, blue/black, grey/black, brown/black, clear/black, violet/black, turquoise/black, orange/black, pink/black
Colour coding standard			Telenor full

Cable characteristics			
Max. tension		12 – 72F	96 – 432F
	Operation, fibre elongation $\leq 0,05\%$.	250 N	250 N
	Installation, fibre elongation $\leq 0,33\%$.	750 N	1000 N
Crush strength	Operation: With 100 mm plate, no change ($\geq 0,05$ dB) in attenuation during test.	500 N	
	Installation: With 100 mm plate, no change ($\geq 0,05$ dB) in attenuation after the test.	1000 N	
Impact	- Impact head diameter 50 mm, radius 300 mm	1 J, one impact	
Bending radius	- During installation (dynamic)	20 x Diameter	
	- Final installation (static)	50 x CSM (FRP) diameter	
Torsion	- Number of turns	± 1 , (length 1000 mm)	
Temperature range	- Operation	-40 to +70 °C	
	- Installation	-15 to +60 °C	
	- Storage, transport	-40 to +70 °C	
Water penetration		< 3 m, 24 h	
Reaction to fire	- EN50575:2014+A1:2016	Fca	

©Nestor Cables Ltd. 2020.

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the prior written consent of Nestor Cables Ltd. The information is believed to be correct at the time of issue. Nestor Cables Ltd. reserves the right to amend this specification without notice. This specification is not contractually valid unless specifically authorized by Nestor Cables Ltd.