

26644912	DATA SHEET	
Valid from: 12.10.2018	HITRONIC® HQW-Plus3000	

1. Product Description

Cable designation: A-DQ(ZN)2Y ADSS

Outdoor aerial glass fibre optic cable with multiple stranded loose tubes, non-metallic strength elements, UV-resistance, robust and halogen-free cable sheath

2. Application

For use in outdoor, self-support aerial applications, and industrial environment

Methods of deployment: suspension from poles

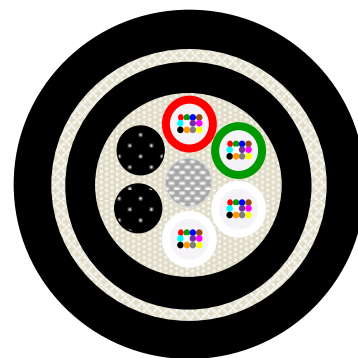
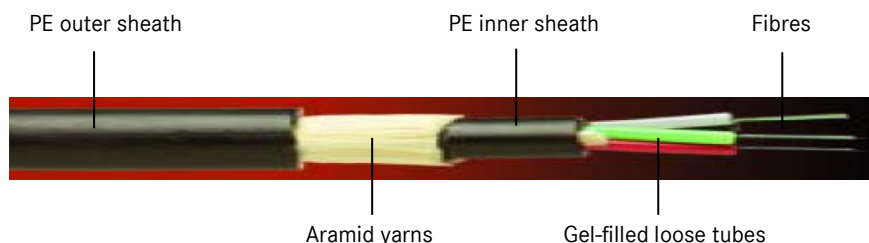
Aerial Installation conditions:

Wind (km/h)	Ice (mm)	Span (m)
100	0	250
0	10	270
0	15	155
60	10	200

NESC Aerial Installation Conditions:

	Span (m)
NESC Light	255
NESC Medium	200

3. Product Design



Cable core	Up to 8 stranded loose tubes with a total of up to 96 glass fibres, a central element, aramid yarns
Cable inner sheath	Polyethylene (PE) outer sheath, halogen-free, UV and water-resistant
Cable outer sheath	Polyethylene (PE) outer sheath, halogen-free, UV and water-resistant
Colour of inner sheath	Black (RAL 9005)
Colour of outer sheath	Black (RAL 9005)
Colour of loose tube	Red, green, subsequent tubes are natural, fillers are black
Identification of fibres	Red, green, blue, yellow, grey, violet, brown, orange, white, pink, black, turquoise
Type of armouring	-

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4. Optical and Physical Properties of Cabled Fibre (and Bare Fibre)

Multimode fibre			50/125 µm	50/125 µm	50/125 µm	62.5/125 µm
			OM4	OM3	OM2	OM1
Attenuation	@ 850 nm	dB/km	≤ 3.5 (2.5)	≤ 3.5 (2.5)	≤ 3.5 (2.5)	≤ 3.5 (3.0)
	@ 1300 nm	dB/km	≤ 1.5 (0.7)	≤ 1.5 (0.7)	≤ 1.5 (0.7)	≤ 1.5 (0.7)
Bandwidth	@ 850 nm	MHz-km	≥ 3500	≥ 1500	≥ 500	≥ 200
	@1300 nm	MHz-km	≥ 500	≥ 500	≥ 500	≥ 500
Numerical aperture			0.2 ± 0.015	0.2 ± 0.015	0.2 ± 0.015	0.275 ± 0.015
Core diameter	µm		50 ±2.0	50 ±2.0	50 ± 2.0	62.5 ± 2.5
Cladding diameter	µm		125 ± 1.0	125 ± 1.0	125 ± 1.0	125 ± 2
Primary coating diameter	µm		242 ± 5	242 ± 5	242 ± 5	245 ± 10
Single-mode fibre			9/125 µm			
(ITU-T G.652.D)						
Attenuation	@ 1310 nm	dB/km	≤ 0.4 (0.35)			
	@ 1550 nm	dB/km	≤ 0.4 (0.21)			
Chromatic dispersion	@ 1310 nm	ps/(nm-km)	≤ 3.0			
	@ 1550 nm	ps/(nm-km)	≤ 18			
Zero dispersion wavelength		Nm	1300 – 1322			
Cut-off wavelength		Nm	≤ 1260			
PMD		ps/km	≤ 0.1			
Mode field diameter		µm	9.0 ± 0.4			
Cladding diameter		µm	125 ± 1			
Primary coating diameter		µm	242 ± 7			

5. Thermal Properties

Operating temperature	-40°C to +70°C
Installation temperature	-5°C to +50°C
Storage temperature	-40°C to +70°C

6. Mechanical Properties

Max. number of fibres		96
Cable outer diameter (mm)		refer to range overview
Cable weight (kg/km)		refer to range overview
Min. bending radius (mm)	static	15 x D
	dynamic	20 x D
Max. tensile strength (N/dm)	EDS	3200
	MAT	8000
Impact (J)		5

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7. Chemical Properties

PE sheath	Non-aging, halogen-free, good stability to acids and alkalis
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8. EU Directives

Not applicable for fibre optic cables

RoHS(2011/65/EU), Restriction of the use of Certain Hazardous Substances.

9. Approvals

- Environmental and mechanical tests comply to EN 187000 and IEC 60794
- Halogen free according to IEC 60754-1

10. Product Range Overview

Article number	Article designation	Fibre type	No. of Fibres	Weight (kg/km)	Outer Ø (mm)
Singlemode					
26644912	HITRONIC® HQA-Plus3200 12E 9/125 OS2	9/125 OS2	12	132	12.8
26644924	HITRONIC® HQA-Plus3200 24E 9/125 OS2	9/125 OS2	24	132	12.8
26644948	HITRONIC® HQA-Plus3200 48E 9/125 OS2	9/125 OS2	48	151	13.7
26644972	HITRONIC® HQA-Plus3200 72E 9/125 OS2	9/125 OS2	72	153	13.7
26644996	HITRONIC® HQA-Plus3200 96E 9/125 OS2	9/125 OS2	96	188	15.3

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