1. Product Description

Cable designation: A-DQ(ZN)B2Y(SR)2Y

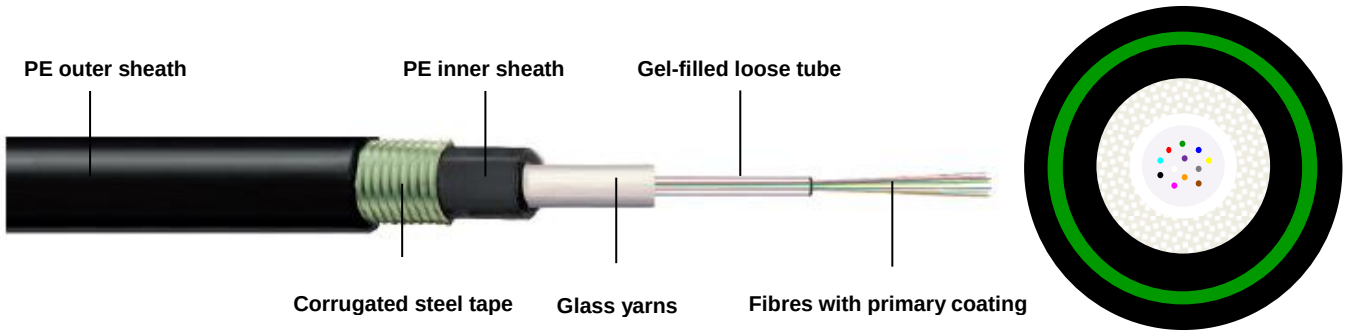
Outdoor glass fibre optic cable with corrugated steel tape armour, central loose tube, non-metallic strength elements, longitudinally and laterally watertight, excellent rodent protection, robust and halogen-free cable sheath

2. Application

For use in outdoor, direct burial, campus backbone, WAN applications, and industrial environment

Methods of deployment: empty plastic pipes, ducts and trays or direct burial

3. Product Design



Cable core	Central gel-filled loose tube with up to 24 glass fibres, water-blocking reinforced glass yarns, and an inner sheath
Cable inner sheath	Polyethylene (PE) inner 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	Natural
Identification of fibres	Red, green, blue, yellow, grey, violet, brown, orange, white, pink, black, turquoise
Type of armouring	Corrugated steel tape

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		12	24
Cable outer diameter (mm)		9.6 ± 0.3	12.6 ± 0.3
Cable weight (kg/km)		95	135
Min. bending radius (mm)	static	15 x D	15 x D
	dynamic	20 x D	20 x D
Max. tensile strength (N)	long-term	3000	3000
	short-term	5000	5000
Max. crush resistance (N/dm)		5000	5000

7. Chemical Properties

PE sheath	Non-aging, halogen-free, good stability to acids and alkalis

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	Outer Ø (mm)
Multimode				
27920304	HITRONIC® HQW-Plus3000 4G 50/125 OM3	50/125 OM3	4	9.6
27920308	HITRONIC® HQW-Plus3000 8G 50/125 OM3	50/125 OM3	8	9.6
27920312	HITRONIC® HQW-Plus3000 12G 50/125 OM3	50/125 OM3	12	9.6
27920324	HITRONIC® HQW-Plus3000 24G 50/125 OM3	50/125 OM3	24	12.6
27920204	HITRONIC® HQW-Plus3000 4G 50/125 OM2	50/125 OM2	4	9.6
27920208	HITRONIC® HQW-Plus3000 8G 50/125 OM2	50/125 OM2	8	9.6
27920212	HITRONIC® HQW-Plus3000 12G 50/125 OM2	50/125 OM2	12	9.6
27920224	HITRONIC® HQW-Plus3000 24G 50/125 OM2	50/125 OM2	24	12.6
27920104	HITRONIC® HQW-Plus3000 4G 62.5/125 OM1	62.5/125 OM1	4	9.6
27920108	HITRONIC® HQW-Plus3000 8G 62.5/125 OM1	62.5/125 OM1	8	9.6
27920112	HITRONIC® HQW-Plus3000 12G 62.5/125 OM1	62.5/125 OM1	12	9.6
27920124	HITRONIC® HQW-Plus3000 24G 62.5/125 OM1	62.5/125 OM1	24	12.6
Single-mode				
27920904	HITRONIC® HQW-Plus3000 4E 9/125 OS2	9/125 OS2	4	9.6
27920908	HITRONIC® HQW-Plus3000 8E 9/125 OS2	9/125 OS2	8	9.6
27920912	HITRONIC® HQW-Plus3000 12E 9/125 OS2	9/125 OS2	12	9.6
27920924	HITRONIC® HQW-Plus3000 24E 9/125 OS2	9/125 OS2	24	12.6