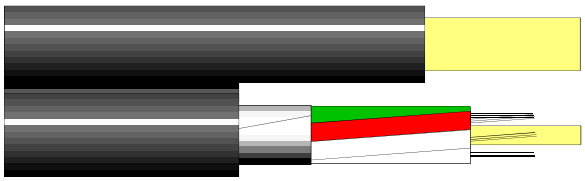
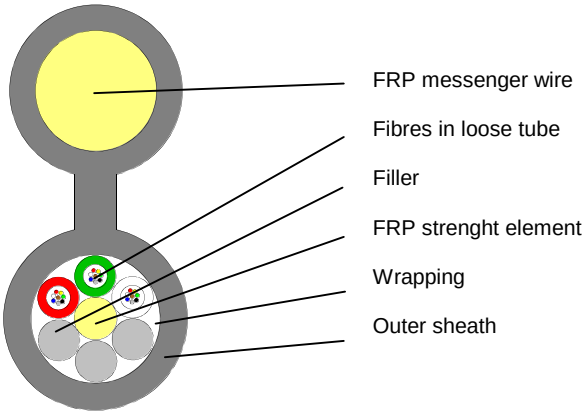


Aerial cable - short span

QXWE-D7.0

Outdoor
FRP messenger wire (7.0 mm)
Non-metallic
Loose tube

Optical cable for aerial installation on poles. The outer sheath is made of abrasion resistant polyethylene. The cable has a non-metallic FRP messenger wire suitable for up to 250 m span lengths. Span length is dependent on ice load, wind load and installation sag. The figure-8 construction allows easy installation with cable grips attached to the messenger wire. The cable core is completely jelly filled to prevent moisture penetration. The cable is completely non-metallic to eliminate any problem with induced electrical currents.The fibres are protected in jelly filled loose tubes stranded around a central strength member to ensure optimum performance and long life. Each fibre and loose tube is colour coded for easy identification during splicing and termination. The outer sheath is marked to show fibre type and cable type.



Weight and dimensions

Number of fibres	Number of fibres in each tube	Number of tubes + fillers	Loose tube diameter (mm)	Cable core outer diameter (mm)	Messenger wire outer diameter (mm)	Weight (kg/km)
2	2	1+5	2.4	10.7	10.0	225
4	4	1+5	2.4	10.7	10.0	225
6	6	1+5	2.4	10.7	10.0	225
8	4	2+4	2.4	10.7	10.0	225
12	4	3+3	2.4	10.7	10.0	225
16	8	2+4	2.4	10.7	10.0	225
24	8	3+3	2.4	10.7	10.0	225
32	8	4+2	2.4	10.7	10.0	225
40	8	5+1	2.4	10.7	10.0	225
48	8	6+0	2.4	10.7	10.0	225
60	12	5+1	3.0	12.5	10.0	260
72	12	6+0	3.0	12.5	10.0	260
96	12	8+0	3.0	14.4	10.0	300
120	12	10+0	3.0	16.3	10.0	344
144	12	12+0	3.0	18.3	10.0	400
240	12	20+0(2-layers)	3.0	19.5	10.0	440

Other fibre counts are available on request.

Cable properties

Tensile strength (IEC 60794-1-E1)		**Temperature window**	
Max tensile load during installation	9000 N	Operation	-40°C to +60°C
Max tensile load during operation	9000 N	Installation	-15°C to +60°C
		Storage	-40°C to +70°C
Crush (IEC 60794-1-E3)	3000 N/10cm	**Water tightness** (IEC 60794-1-F5)	< 3 m/24 hours
Impact (IEC 60794-1-E4)	1 impacts, 50J		
Torsion, cable core (IEC 60794-1-E7)	± 1 turn/1m		
Cable bending			
Minimum bending diameter	700/20 x D_{cc}		
Cable bend (IEC 60794-1-E11)	<0.1dB/ ± 5 turn		
Repeated bending (IEC 60794-1-F5)	1000 cycles		

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Optical fibres

Fibre type	9/125 ITU-T G652	50/125 ITU-T G651	62.5/125 FDDI
Core diameter	8.3 µm (typical)	50 ± 3.0 µm	62.5 ± 3.0 µm
Mode field diameter	1300 nm 9.3 ± 0.5 µm 1550 nm 10.5 ± 1.0 µm		
Cladding diameter	125 ± 1.0 µm	125 ± 2.0 µm	125 ± 2.0 µm
Primary coating diameter (nominal)	250 µm	250 µm	250 µm
Attenuation			
850 nm		≤ 2.7 dB/km	≤ 3.2 dB/km
1300 nm	≤ 0.40 dB/km	≤ 0.9 dB/km	≤ 0.9 dB/km
1550 nm	≤ 0.25 dB/km		
Bandwidth			
850 nm		>200 MHz·km	>200 MHz·km
1300 nm		>600 MHz·km	>500 MHz·km
Dispersion			
1285-1330 nm	< 3.5 ps/nm·km		
1550 nm	< 18 ps/nm·km		
Numerical aperture	0.13 (typical)	0.200 ± 0.015	0.275 ± 0.015
Minimum permanent bending diameter	50 mm	50 mm	50 mm

Other fibre types and qualities are available on request. Rev: 09/97

Ordering information

9/125 fibre		50/125 fibre		62.5/125 fibre	
Part no.	Cable code	Part no.	Cable code	Part no.	Cable code
693510	G2-9/125 QXWE-0403LV-D7.0	693512	G2-50/125 QXWE-0906W-D7.0	693514	G2-62.5/125 QXWE-0905W-D7.0
693520	G4-9/125 QXWE-0403LV-D7.0	693522	G4-50/125 QXWE-0906W-D7.0	693524	G4-62.5/125 QXWE-0905W-D7.0
693530	G6-9/125 QXWE-0403LV-D7.0	693532	G6-50/125 QXWE-0906W-D7.0	693534	G6-62.5/125 QXWE-0905W-D7.0
693540	G8-9/125 QXWE-0403LV-D7.0	693542	G8-50/125 QXWE-0906W-D7.0	693544	G8-62.5/125 QXWE-0905W-D7.0
693550	G12-9/125 QXWE-0403LV-D7.0	693552	G12-50/125 QXWE-0906W-D7.0	693554	G12-62.5/125 QXWE-0905W-D7.0
693560	G16-9/125 QXWE-0403LV-D7.0	693562	G16-50/125 QXWE-0906W-D7.0	693564	G16-62.5/125 QXWE-0905W-D7.0
693580	G24-9/125 QXWE-0403LV-D7.0	693582	G24-50/125 QXWE-0906W-D7.0	693584	G24-62.5/125 QXWE-0905W-D7.0
691501	G32-9/125 QXWE-0403LV-D7.0	691521	G32-50/125 QXWE-0906W-D7.0	691541	G32-62.5/125 QXWE-0905W-D7.0
691502	G40-9/125 QXWE-0403LV-D7.0	691522	G40-50/125 QXWE-0906W-D7.0	691542	G40-62.5/125 QXWE-0905W-D7.0
691504	G48-9/125 QXWE-0403LV-D7.0	691524	G48-50/125 QXWE-0906W-D7.0	691544	G48-62.5/125 QXWE-0905W-D7.0
*)	G60-9/125 QXWE-0403LV-D7.0	*)	G60-50/125 QXWE-0906W-D7.0	*)	G60-62.5/125 QXWE-0905W-D7.0
*)	G72-9/125 QXWE-0403LV-D7.0	*)	G72-50/125 QXWE-0906W-D7.0	*)	G72-62.5/125 QXWE-0905W-D7.0
*)	G96-9/125 QXWE-0403LV-D7.0	*)	G96-50/125 QXWE-0906W-D7.0	*)	G96-62.5/125 QXWE-0905W-D7.0
*)	G120-9/125 QXWE-0403LV-D7.0	*)	G120-50/125 QXWE-0906W-D7.0	*)	G120-62.5/125 QXWE-0905W-D7.0
*)	G144-9/125 QXWE-0403LV-D7.0	*)	G140-50/125 QXWE-0906W-D7.0	*)	G144-62.5/125 QXWE-0905W-D7.0
*)	G240-9/125 QXWE-0403LV-D7.0	*)	G240-50/125 QXWE-0906W-D7.0	*)	G240-62.5/125 QXWE-0905W-D7.0

*) - Part number will be given on request. On inquiries or orders, please refer to datasheath number: D31qxwe.e08.doc

We reserve the right to alter this specification without notice.

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