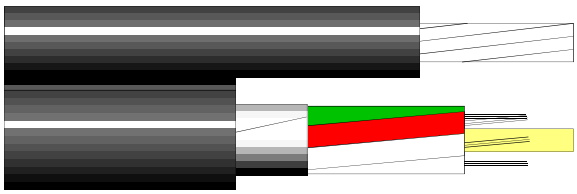
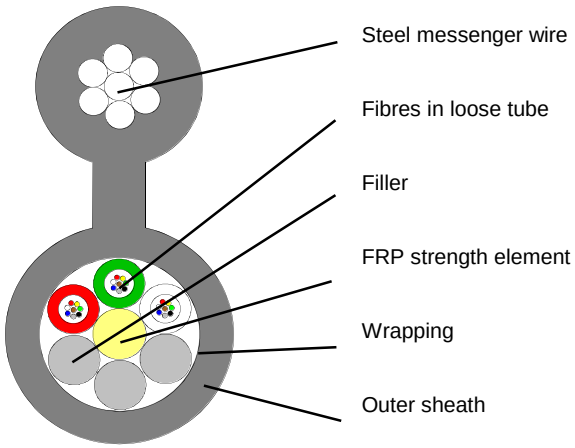


Aerial cable - short span

QXWE-W1.4

Outdoor
Steel messenger wire(10 mm²)
Non-metallic cable core
Loose tube

Optical cable for aerial installation on poles. The outer sheath is made of abrasion resistant polyethylene. The cable has a steel 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 core is non-metallic and can be easily separated from the steel messenger wire to eliminate problems with induced high voltages in termination and splice points. 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	7.8	227
4	4	1+5	2.4	10.7	7.8	227
6	6	1+5	2.4	10.7	7.8	227
8	4	2+4	2.4	10.7	7.8	227
12	4	3+3	2.4	10.7	7.8	227
16	8	2+4	2.4	10.7	7.8	227
24	8	3+3	2.4	10.7	7.8	227
32	8	4+2	2.4	10.7	7.8	227
40	8	5+1	2.4	10.7	7.8	227
48	8	6+0	2.4	10.7	7.8	227
60	12	5+1	3.0	12.5	7.8	264
72	12	6+0	3.0	12.5	7.8	264
96	12	8+0	3.0	14.4	7.8	304
120	12	10+0	3.0	16.3	7.8	349
144	12	12+0	3.0	18.3	7.8	404
240	12	20+0(2-layers)	3.0	19.5	7.8	444

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	30xD / 20xD		
Cable bend (IEC 60794-1-E11)	<0.1dB/ ±5 turn		
Repeated bending (IEC 60794-1-E6)	1000 cycles		

Draka Norsk Kabel

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
693410	G2-9/125 QXWE-0403LV-W1.4	693412	G2-50/125 QXWE-0906W-W1.4	693414	G2-62.5/125 QXWE-0905W-W1.4
693420	G4-9/125 QXWE-0403LV-W1.4	693422	G4-50/125 QXWE-0906W-W1.4	693424	G4-62.5/125 QXWE-0905W-W1.4
693430	G6-9/125 QXWE-0403LV-W1.4	693432	G6-50/125 QXWE-0906W-W1.4	693434	G6-62.5/125 QXWE-0905W-W1.4
693440	G8-9/125 QXWE-0403LV-W1.4	693442	G8-50/125 QXWE-0906W-W1.4	693444	G8-62.5/125 QXWE-0905W-W1.4
693450	G12-9/125 QXWE-0403LV-W1.4	693452	G12-50/125 QXWE-0906W-W1.4	693454	G12-62.5/125 QXWE-0905W-W1.4
693460	G16-9/125 QXWE-0403LV-W1.4	693462	G16-50/125 QXWE-0906W-W1.4	693464	G16-62.5/125 QXWE-0905W-W1.4
693480	G24-9/125 QXWE-0403LV-W1.4	693482	G24-50/125 QXWE-0906W-W1.4	693484	G24-62.5/125 QXWE-0905W-W1.4
691401	G32-9/125 QXWE-0403LV-W1.4	691421	G32-50/125 QXWE-0906W-W1.4	691441	G32-62.5/125 QXWE-0905W-W1.4
691402	G40-9/125 QXWE-0403LV-W1.4	691422	G40-50/125 QXWE-0906W-W1.4	691442	G40-62.5/125 QXWE-0905W-W1.4
691404	G48-9/125 QXWE-0403LV-W1.4	691424	G48-50/125 QXWE-0906W-W1.4	691444	G48-62.5/125 QXWE-0905W-W1.4
*)	G60-9/125 QXWE-0403LV-W1.4	*)	G60-50/125 QXWE-0906W-W1.4	*)	G60-62.5/125 QXWE-0905W-W1.4
*)	G72-9/125 QXWE-0403LV-W1.4	*)	G72-50/125 QXWE-0906W-W1.4	*)	G72-62.5/125 QXWE-0905W-W1.4
*)	G96-9/125 QXWE-0403LV-W1.4	*)	G96-50/125 QXWE-0906W-W1.4	*)	G96-62.5/125 QXWE-0905W-W1.4
*)	G120-9/125 QXWE-0403LV-W1.4	*)	G120-50/125 QXWE-0906W-W1.4	*)	G120-62.5/125 QXWE-0905W-W1.4
*)	G144-9/125 QXWE-0403LV-W1.4	*)	G140-50/125 QXWE-0906W-W1.4	*)	G144-62.5/125 QXWE-0905W-W1.4
*)	G240-9/125 QXWE-0403LV-W1.4	*)	G240-50/125 QXWE-0906W-W1.4	*)	G240-62.5/125 QXWE-0905W-W1.4

*) - Part number will be given on request. On inquiries or orders, please refer to datasheath number: D30qxwe.e11.doc

We reserve the right to alter this specification without notice.

Draka Norsk Kabel