

The Pure Eco

Optical Fiber Cables

Product Catalogue

PURECO 
THE PURE ECO





Pureco uses only high-quality fibre optical cables sourced directly from the world's biggest and most reliable manufacturers. This enables us to provide our customers with very individual and precise solutions at very attractive prices. Furthermore, the direct sourcing of the products and materials ensures maximum price flexibility compared to other suppliers, which directly benefits our customers.

Our top-equipped laboratory in Austria also assures the quality of the materials. All cables and fibres are produced and tested according to IEC and ITU Standards. Every flammability test for in-house cables is independently carried out by an Austrian institute and confirmed by an EU certificate. This enables us to assure constant quality, which we test and guarantee ourselves.

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I. OPTICAL FIBER G.652.D

- Optical Fibres in this specification meets the requirements of ITU-T G.652.D
- Provides good resistance to maro-bending
- Low attenuation satisfying the operation demand in O-E-S-C-Band

Characteristics of the optical fiber (G.652.D 250µm)

Category	Description	Specification
Geometrical Characteristics	Cladding diameter	125.0 ± 0.7µm
	Cladding non-circularity	≤ 0.7 %
	Core concentricity error	≤ 0.5 µm
	Coating diameter (before color)	245 ± 5µm
	Coating diameter (after color)	250 ± 15µm
	Coating/cladding concentricity error	≤ 12.0µm
Optical Characteristics	Mode field diameter at 1310 nm	9.1 ± 0.4µm
	Point discontinuity	≤ 0.05 dB
	Attenuation at 1310 nm (after cabling)	≤ 0.35 dB/km
	Attenuation at 1550 nm (after cabling)	≤ 0.21 dB/km
	Dispersion in 1285 – 1340 nm	≤ 3.4 ps/(nm·km)
	Dispersion at 1550 nm	≤ 18 ps/(nm·km)
	Zero dispersion wavelength	1300 – 1324 nm
	Zero dispersion slope	≤ 0.092 ps/(nm ² ·km)
	Cable cut-off wavelength	≤ 1260 nm
	Polarization mode dispersion individual fiber	≤ 0.1 ps/√km
	Polarization mode dispersion design link value (M=20, Q=0.01%)	≤ 0.06 ps/√km
Macro-bend loss (10 turns, 30mm radius, 1550nm)	≤ 0.05 dB	
Mechanical Specification	Proof stress level	≥ 100kpsi (0.69 GPa)
	Coating strip force (peak value)	1.3~8.9N
	Fiber curl (Radius)	≥ 4 m

II. OPTICAL FIBER G.657.A1

- Improved bending performance even with small bending angles in mini and micro cables
- Optical Fibres in this specification meets the requirements of ITU-T G.657.A1 Faser

Characteristics of the optical fiber (G.657.A1 250 μ m)

Category	Description	Specification
Geometrical Characteristics	Cladding diameter	125.0 \pm 0.7 μ m
	Cladding non-circularity	\leq 0.7 %
	Core concentricity error	\leq 0.5 μ m
	Coating diameter (before color)	245 \pm 5 μ m
	Coating diameter (after color)	250 \pm 15 μ m
	Coating/cladding concentricity error	\leq 12.0 μ m
Optical Characteristics	Mode field diameter at 1310 nm	8.8 \pm 0.4 μ m
	Point discontinuity	\leq 0.05 dB
	Attenuation at 1310 nm (after cabling)	\leq 0.36 dB/km
	Attenuation at 1550 nm (after cabling)	\leq 0.22 dB/km
	Dispersion in 1285 – 1340 nm	\leq 3.4 ps/(nm·km)
	Dispersion at 1550 nm	\leq 18 ps/(nm·km)
	Zero dispersion wavelength	1300 – 1324 nm
	Zero dispersion slope	\leq 0.092 ps/(nm ² ·km)
	Cable cut-off wavelength	\leq 1260 nm
	Polarization mode dispersion individual fiber	\leq 0.1 ps/ \sqrt km
	Polarization mode dispersion design link value (M=20, Q=0.01%)	\leq 0.06 ps/ \sqrt km
Macro-bend loss (10 turns, 30mm radius, 1550nm)	\leq 0.25 dB	
Mechanical Specification	Proof stress level	\geq 100kpsi (0.69 GPa)
	Coating strip force (peak value)	1.3~8.9N
	Fiber curl (Radius)	\geq 4 m

III. OPTICAL FIBER G.657.A1 SLIM

- Optical Fibre meets the requirements of ITU-T G.657.A1 Faser with reduced Coating from 250µm to 200µm
- Same cladding diameter (125 µm) as 250µm fibers for unconditional compatibility and improved bending performance

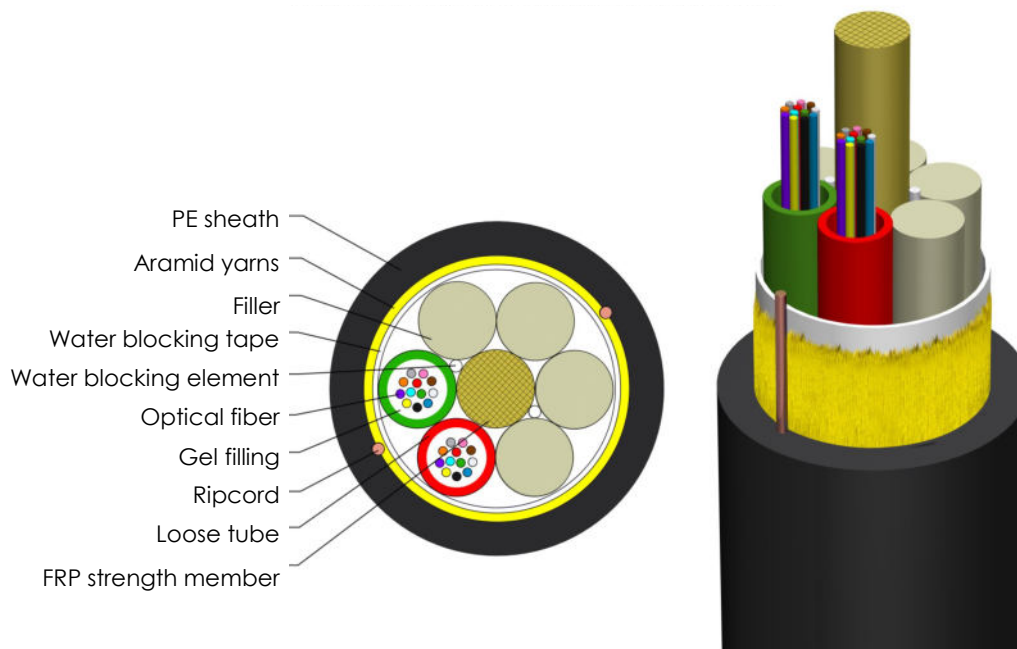
Characteristics of the optical fiber (G.657.A1 200µm)

Category	Description	Specification
Geometrical Characteristics	Cladding diameter	125.0 ± 0.7µm
	Cladding non-circularity	≤ 0.7 %
	Core concentricity error	≤ 0.5 µm
	Coating diameter (before color)	200 ± 5µm
	Coating diameter (after color)	205 ± 5µm
	Coating/cladding concentricity error	≤ 10.0µm
Optical Characteristics	Mode field diameter at 1310 nm	9.0 ± 0.4µm
	Point discontinuity	≤ 0.05 dB
	Attenuation at 1310 nm (after cabling)	≤ 0.36 dB/km
	Attenuation at 1550 nm (after cabling)	≤ 0.22 dB/km
	Dispersion in 1285 – 1340 nm	≤ 3.4 ps/(nm·km)
	Dispersion at 1550 nm	≤ 18 ps/(nm·km)
	Zero dispersion wavelength	1300 – 1324 nm
	Zero dispersion slope	≤ 0.092 ps/(nm ² ·km)
	Cable cut-off wavelength	≤ 1260 nm
	Polarization mode dispersion individual fiber	≤ 0.1 ps/√km
	Polarization mode dispersion design link value (M=20, Q=0.01%)	≤ 0.06 ps/√km
Macro-bend loss (10 turns, 30mm radius, 1550nm)	≤ 0.25 dB	
Mechanical Specification	Proof stress level	≥ 100kpsi (0.69 GPa)
	Coating strip force (peak value)	1.3~8.9N
	Fiber curl (Radius)	≥ 4 m

IV. DUCT CABLE 12-96

- PE sheath
- LWL-Duct cable
- 12 - 96 fibers
- G.652.D fibers with 245µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

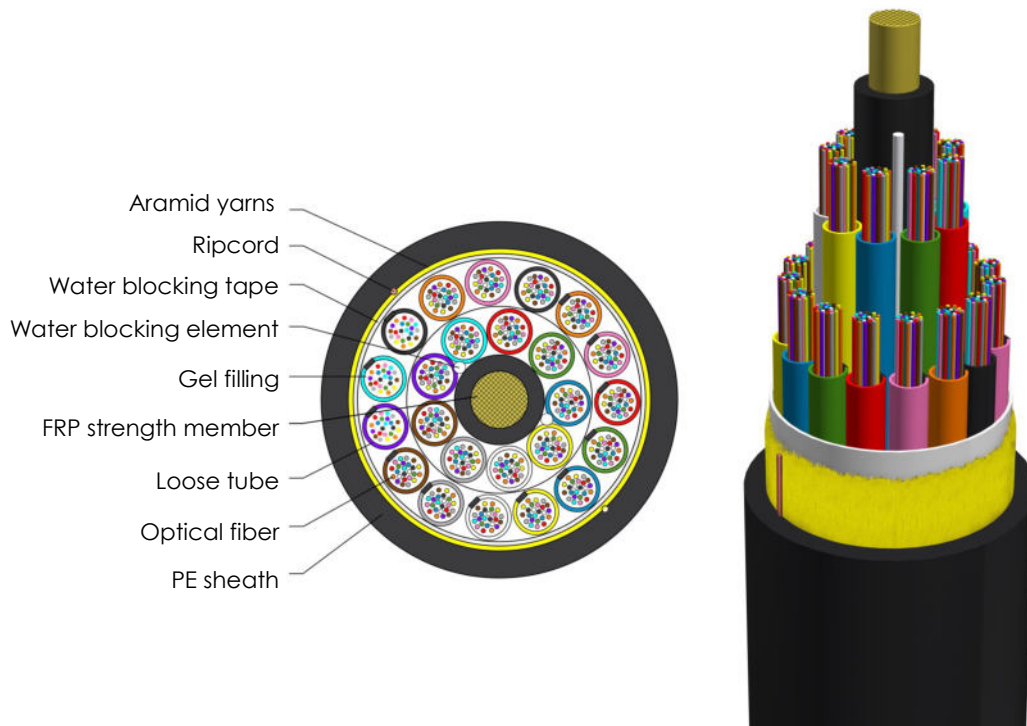
Product details and Product-ID

Type	12	12	24	48	72	96
Design	2x6	3x4	2x12	4x12	6x12	8x12
Outer sheath material	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	9,45	9,45	9,45	9,45	9,45	11,3
Tensile performance in N	2500	2500	2500	2500	2500	2500
Weight of cable in kg	70	75	75	75	75	95
Product-ID	CD5232	CD5233	CD5234	CD5235	CD5236	CD5237

V. DUCT CABLE 144-864

- PE sheath
- LWL-Duct cable
- 144 - 864 fibers
- G.652.D fibers with 245µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

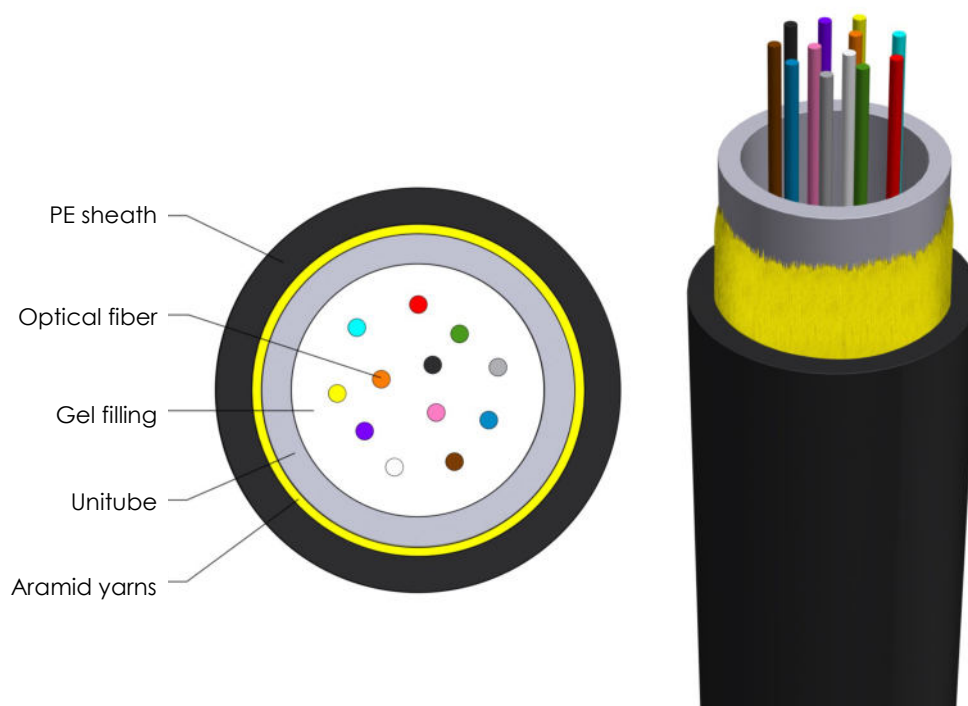
Product details and Product-ID

Type	144	192	288	576	864
Design	12x12	16x12	24x12	24x24	36x24
Outer sheath material	HDPE	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	13,9	14,25	16,2	19,8	23,2
Tensile performance in N	3000	3000	3000	3000	3000
Weight of cable in kg	145	140	180	225	355
Product-ID	CD5238	CD5239	CD5240	CD5241	CD5242

VI. MICRO CABLE „STANDARD“ 4-24

- PE sheath
- Can be blown into proper micro ducts
- 4 - 24 fibers
- G.657.A1 fibers with 245µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

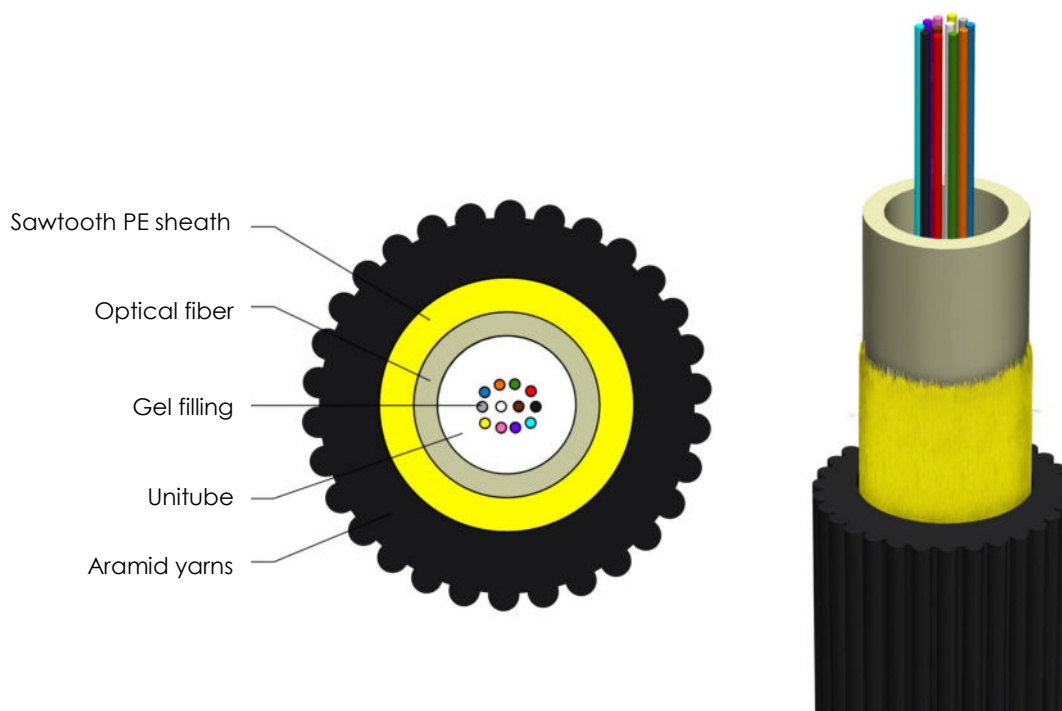
Product details and Product-ID

Type	4	8	12	24
Design	1x4	1x8	1x12	1x24
Outer sheath material	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	2,3	2,3	2,3	2,6
Tensile performance in N	50	50	50	50
Weight of cable in kg	4	4	4	5
Product-ID	CD5101	CD5102	CD5103	CD5104

VII. MICRO CABLE „OPTIMIZED“ 4-24

- Optimized low friction PE sheath with sawtooth design
- Can be blown into proper micro ducts
- 4 - 24 fibers
- G.657.A1 fibers with 245µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

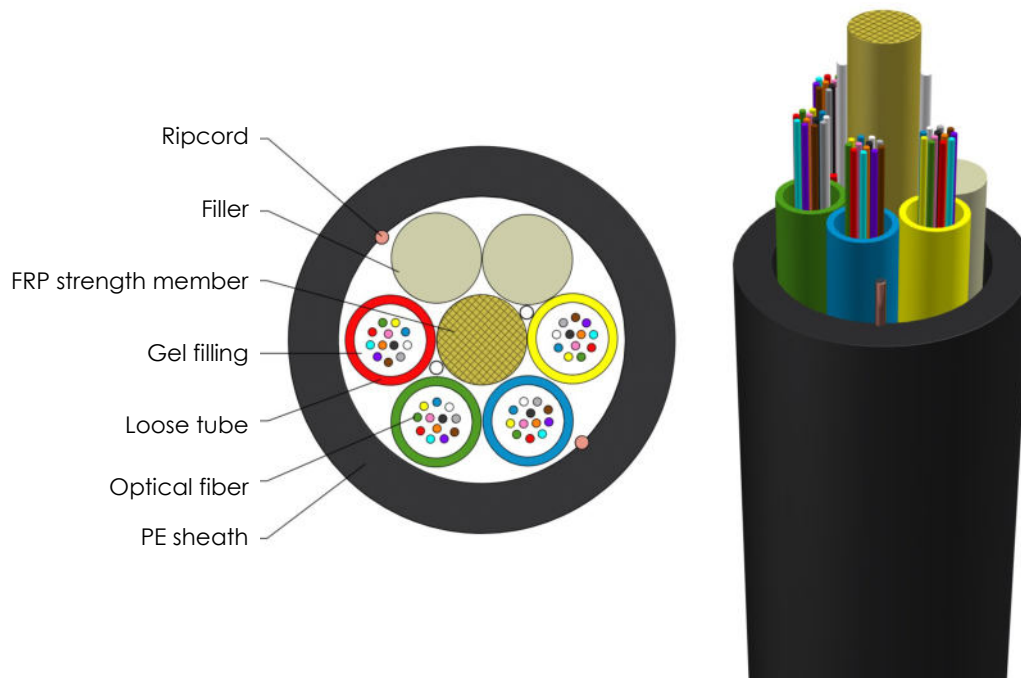
Product details and Product-ID

Type	4	8	12	24
Design	1x4	1x8	1x12	1x24
Outer sheath material	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	2,3	2,3	2,3	2,6
Tensile performance in N	50	50	50	50
Weight of cable in kg	4	4	4	5
Product-ID	CD5101e	CD5102e	CD5103e	CD5104e

VIII. MINI CABLE 48-144

- PE sheath
- Can be blown into proper micro ducts
- 48 - 144 fibers
- G.652.D or G.657.A1 fibers with 245µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

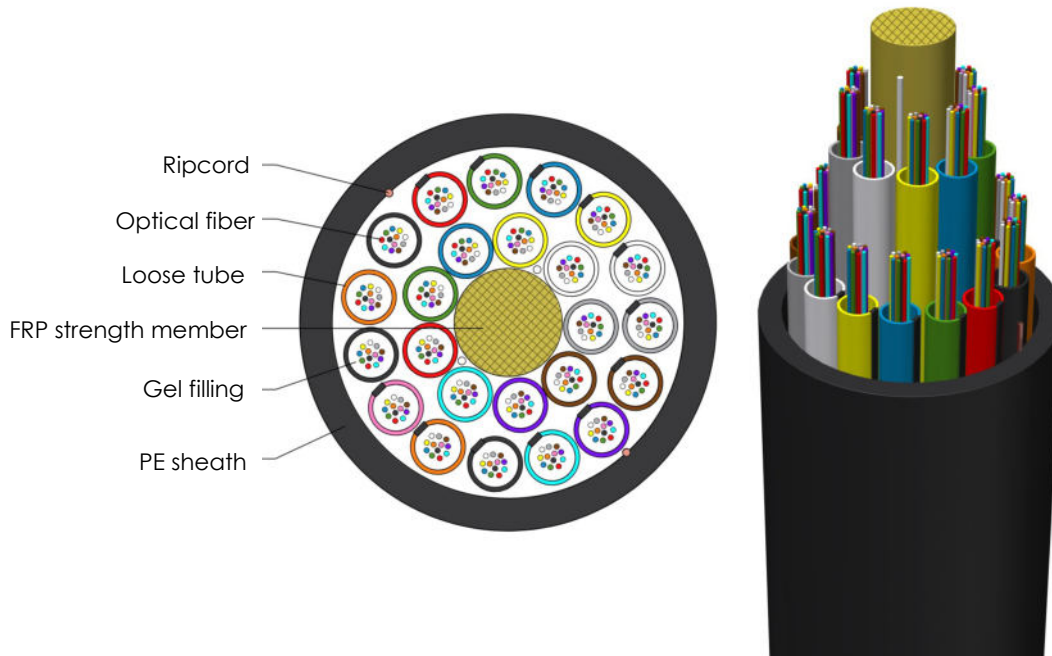
Product details and Product-ID

Type	48	72	96	144
Design	4x12	6x12	8x12	12x12
Outer sheath material	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	5,4	5,4	6,1	7,9
Tensile performance in N	600	600	800	800
Weight of cable in kg	26	26	36	52
Product-ID G.652.D	CD5105	CD5107	CD5109	CD5111
Product-ID G.657.A1	CD5143	CD5145	CD5147	CD5149

IX. MINI CABLE 192-576

- PE Mantel
- Can be blown into proper micro ducts
- 192 - 576 fibers
- G.652.D or G.657.A1 fibers with 245µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

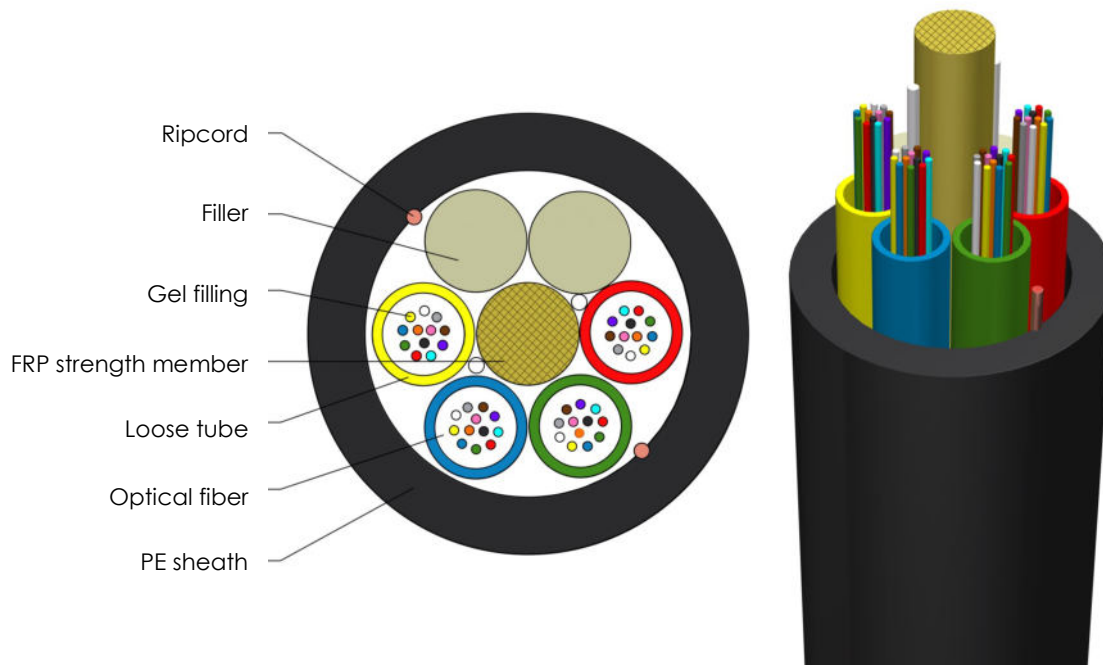
Product details and Product-ID

Type	192	288	432	576
Design	16x12	24x12	18x24	24x24
Outer sheath material	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	7,9	9,3	11,4	13,4
Tensile performance in N	800	1000	1000	1200
Weight of cable in kg	52	80	105	140
Product-ID G.652.D	CD5113	CD5115	CD5155	CD5159
Product-ID G.657.A1	CD5151	CD5153	CD5156	CD5160

X. MINI CABLE SLIM 48-144

- PE Mantel and reduced out diameter
- Can be blown into proper micro ducts
- 48 - 144 fibers
- Reduced diameter due to G.657.A1 fibers with 200µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

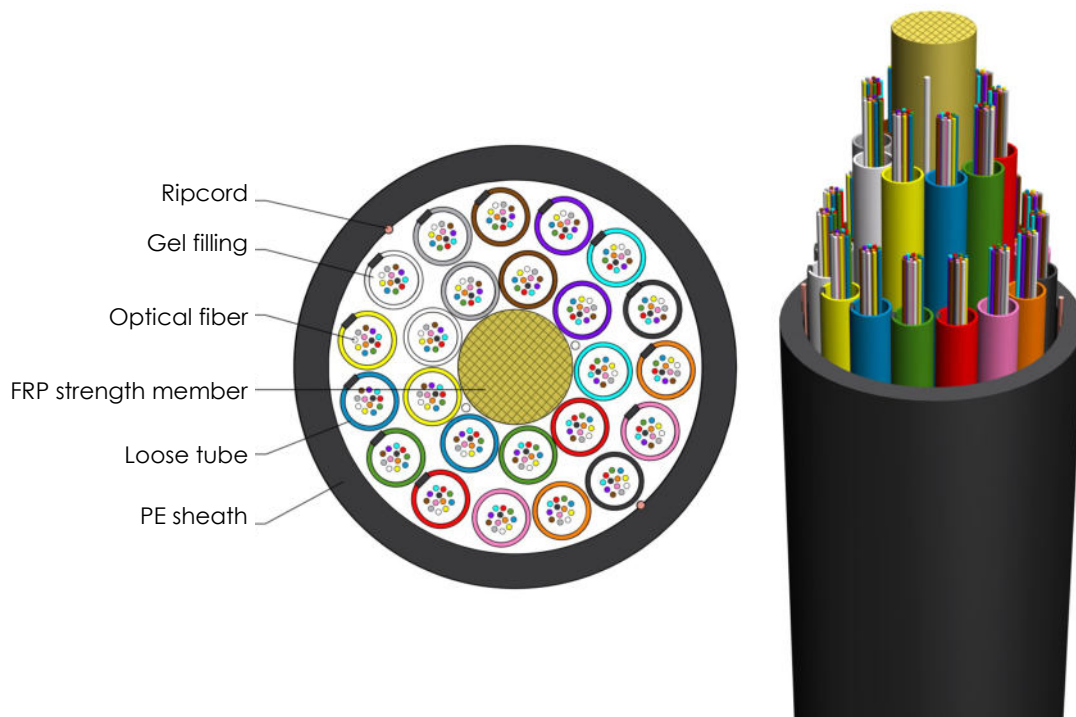
Product details and Product-ID

Type	48	72	96	144
Design	4x12	6x12	8x12	6x24
Outer sheath material	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	4,5	4,5	5,6	6,2
Tensile performance in N	200	200	800	800
Weight of cable in kg	16	16	26	43
Product-ID	CD5106	CD5108	CD5110	CD5112

XI. MINI CABLE SLIM 192-576

- PE Mantel and reduced out diameter
- Can be blown into proper micro ducts
- 192 - 576 fibers
- Reduced diameter due to G.657.A1 fibers with 200µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

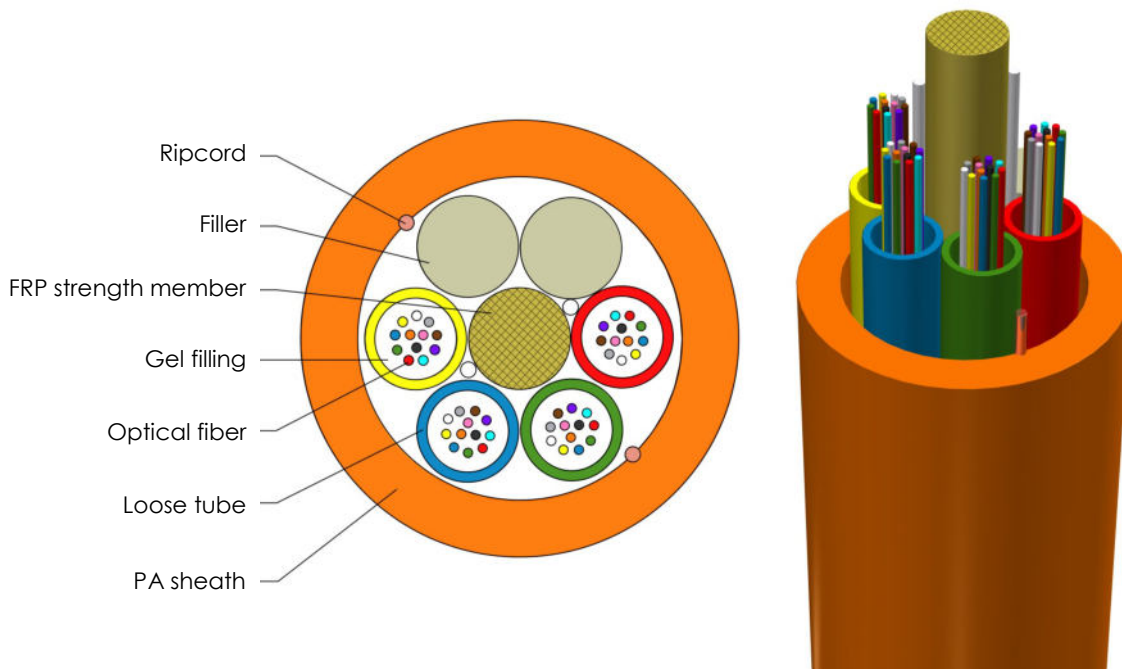
Product details and Product-ID

Type	192	288	432	576
Design	8x24	24x12	18x24	24x24
Outer sheath material	HDPE	HDPE	HDPE	HDPE
Outer diameter in mm	7,2	8,1	9,6	11,3
Tensile performance in N	800	800	800	1200
Weight of cable in kg	48	58	78	110
Product-ID	CD5114	CD5116	CD5157	CD5161

XII. MINI CABLE PA SLIM 48-144

- Improved blowing performance due to low friction PA sheath
- Can be blown into proper micro ducts
- 48 - 144 fibers
- Reduced diameter due to G.657.A1 fibers with 200µm coating

Cross section



Schematic—for reference only; Standard design due to VDE0888; Other color codes and cable types available upon request.

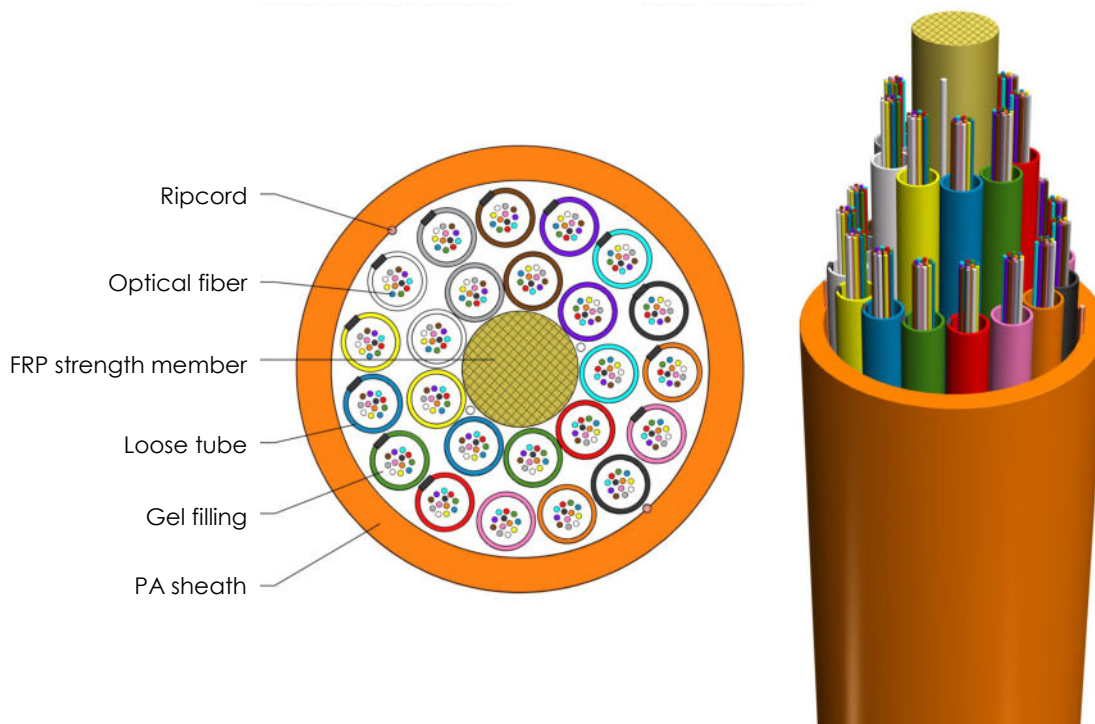
Product details and Product-ID

Type	48	72	96	144
Design	4x12	6x12	8x12	6x24
Outer sheath material	PA Nylon	PA Nylon	PA Nylon	PA Nylon
Outer diameter in mm	4,5	4,5	5,6	6,2
Tensile performance in N	200	200	800	800
Weight of cable in kg	16	16	26	43
Product-ID	CD5144	CD5146	CD5148	CD5150

XIII. MINI CABLE PA SLIM 192-576

- Improved blowing performance due to low friction PA sheath
- Can be blown into proper micro ducts
- 192 - 576 fibers
- Reduced diameter due to G.657.A1 fibers with 200µm coating

Cross section



Schematic—for reference only; Other color codes and cable types available upon request.

Product details and Product-ID

Type	192	288	432	576
Design	8x24	24x12	18x24	24x24
Outer sheath material	PA Nylon	PA Nylon	PA Nylon	PA Nylon
Outer diameter in mm	7,2	8,1	9,6	11,3
Tensile performance in N	800	800	800	1200
Weight of cable in kg	48	58	78	110
Product-ID	CD5152	CD5154	CD5158	CD5162



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