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7

## Fiber Optic Cables

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# Internal Cable

## 2 to 12 Fibers

### Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Flame-resistant thermoplastic/0.900 mm

**Strength Member** Aramid yarns

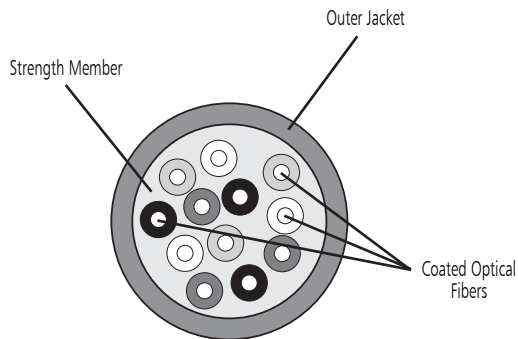
**Outer Jacket** Flame-resistant thermoplastic

### Cable Characteristics

**Optical Attenuation (Typical Value) (dB/km)**  
 Single-mode (@1310/1300nm) 0.36/0.25  
 Multimode (@850/1300nm) 3.0/1.0

**Minimum Bandwidth (MHz-km @850/1300nm)**  
 Multimode 50  $\mu$ m 400/600  
 Multimode 62.5  $\mu$ m 160/400

**Operating Temperature Range (°C)**  
 Single-mode 0 to +65  
 Multimode 50  $\mu$ m 0 to +60  
 Multimode 62.5  $\mu$ m -20 to +65



Part No.	No. of Fibers	Outer Diameter (mm)	Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Installation Tensile (N)	Max. Long-Term Tensile (N)
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### Single-mode

7 to 9 $\mu$ m Core • 125 $\mu$ m Clad						
700001	2	5.4	31	55	100	-
700002	4	5.9	36	55	100	-
700003	6	6.3	41	65	140	-
700004	8	6.7	47	65	140	-
700005	10	7.1	51	75	170	-
700006	12	7.6	57	75	170	-

### Multimode

50 $\mu$ m Core • 125 $\mu$ m Clad						
700007	2	4.9	25	50	100	-
700008	4	5.3	29	50	100	-
700009	6	5.7	33	60	130	-
700010	8	6.1	37	60	130	-
700011	10	6.5	42	70	170	-
700012	12	7.0	47	70	170	-
62.5 $\mu$ m Core • 125 $\mu$ m Clad						
700013	2	4.9	25	50	150	40
700014	4	5.3	29	50	150	40
700015	6	5.7	33	60	150	40
700016	8	6.1	37	60	150	40
700017	10	6.5	42	70	150	40
700018	12	7.0	47	70	250	60

# Internal Cable

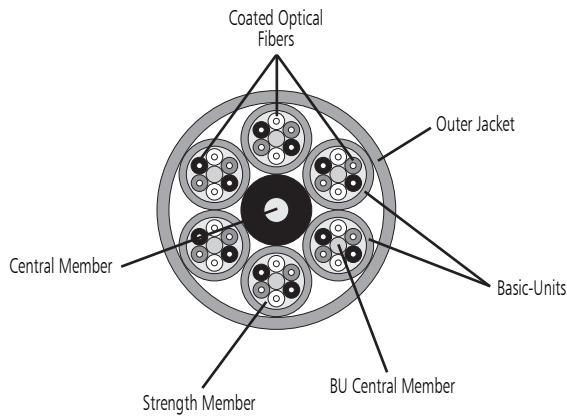
## 18 to 36 Fibers

### Cable Construction

<b>Optical Fibers</b>	18 to 36 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type
<b>Fiber Coating - Material/Diameter</b>	
Primary	Acrylate/0.250 mm
Secondary	Flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit</b>	
Fibers per Unit	6
Coating Material	Flame-resistant thermoplastic
Diameter	4.5 mm
Strength Member	Aramid yarns
<b>Outer Jacket</b>	Flame-resistant thermoplastic

### Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.25
Multimode (@850/1300nm)	3.0/1.0
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	160/400
<b>Operating Temperature Range (°C)</b>	0 to +60



Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)		Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Jacketed	Unjacketed			

### Single-mode

7 to 9 μm Core • 125 μm Clad							
700019	18	3	13.7	10.3	155	140	500
700020	24	4	14.5	11.2	178	140	500
700021	30	5	15.7	12.5	206	160	750
700022	36	6	17.1	13.9	255	160	750

### Multimode

50 or 62.5 μm Core • 125 μm Clad							
700023	18	3	13.7	10.3	155	140	500
700024	24	4	14.5	11.2	178	140	500
700025	30	5	15.7	12.5	206	160	750
700026	36	6	17.1	13.9	255	160	750

BU = Basic-Unit

# Internal Cable

48 to 72 Fibers

## Cable Construction

**Optical Fibers** 48 to 72 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

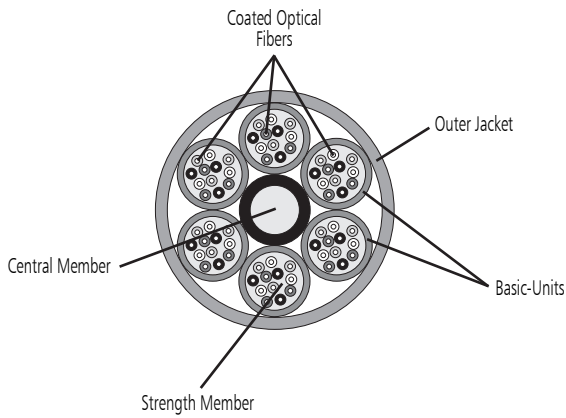
**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Flame-resistant thermoplastic/0.900 mm

**Basic-Unit**  
 Fibers per Unit 12  
 Coating Material Flame-resistant thermoplastic  
 Diameter 6.0 mm  
 Strength Member Aramid yarns

**Outer Jacket** Flame-resistant thermoplastic

## Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.25
Multimode (@850/1300nm)	3.0/1.0
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	160/400
<b>Operating Temperature Range (°C)</b>	0 to +60



Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)		Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Jacketed	Unjacketed			

### Single-mode

7 to 9 μm Core • 125 μm Clad							
700027	48	4	17.9	14.7	256	200	1300
700028	60	5	19.6	16.4	308	200	1300
700029	72	6	21.4	18.2	368	200	1300

### Multimode

50 or 62.5 μm Core • 125 μm Clad							
700030	48	4	17.9	14.7	256	200	1300
700031	60	5	19.6	16.4	308	200	1300
700032	72	6	21.4	18.2	368	200	1300

BU = Basic-Unit

# Internal/External Cable

2 to 12 Fibers

Tight Buffered Fibers

## Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Colored flame-resistant thermoplastic/0.900 mm

**Strength Member** Aramid yarns

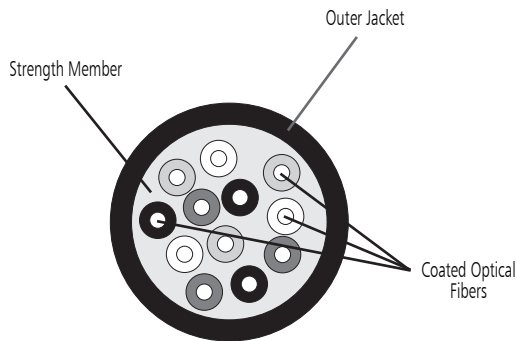
**Outer Jacket** Black thermoplastic with weather resistance and flame resistance

## Cable Characteristics

**Optical Attenuation (Typical Value) (dB/km)**  
 Single-mode (@1310/1550nm) 0.36/0.25  
 Multimode (@850/1300nm) 3.5/1.5

**Min. Bandwidth (MM only) (MHz-km @850/1300nm)** 200/500

**Operating Temperature Range (°C)** -20 to +65



Part No.	No. of Fibers	Outer Diameter (mm)	Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Installation Tensile (N)
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### Single-mode

7 to 9 μm Core • 125 μm Clad					
700033	2	6.0	37	60	450
700034	4	6.3	43	60	450
700035	6	6.7	47	70	520
700036	8	7.1	52	70	520
700037	10	7.5	58	80	630
700038	12	7.9	63	80	630

### Multimode

50 or 62.5 μm Core • 125 μm Clad					
700039	2	6.0	37	60	450
700040	4	6.3	43	60	450
700041	6	6.7	47	70	520
700042	8	7.1	52	70	520
700043	10	7.5	58	80	630
700044	12	7.9	63	80	630

# Internal/External Cable

2 to 12 Fibers  
Simplex Cords

## Cable Construction

<b>Optical Fibers</b>	2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type
<b>Fiber Coating - Material/Diameter</b>	
Primary	Acrylate/0.250 mm
Secondary	Colored flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit (Simplex Cord)</b>	
Fibers per Unit	1
Coating Material	Colored flame-resistant thermoplastic
Diameter	2.0 mm
Strength Member	Aramid yarns
<b>Strength Members</b>	
Central	Dielectric with high elastic modulus
Distributed	Aramid yarns
<b>Outer Jacket</b>	Black thermoplastic with weather resistance and flame resistance

## Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.25
Multimode (@850/1300nm)	3.5/1.5
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	200/500
<b>Operating Temperature Range (°C)</b>	-20 to +65

Part No.	No. of Fibers/ BUs	Outer Diameter (mm)	Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Installation Tensile (N)
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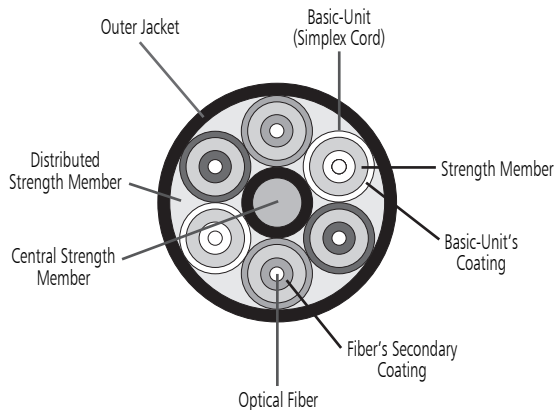
### Single-mode

7 to 9 μm Core • 125 μm Clad					
700045	2	6.8	44	65	440
700046	4	8.0	61	80	610
700047	6	9.6	83	95	830
700048	8	10.9	106	100	1060
700049	10	12.1	131	120	1310
700050	12	13.5	160	135	1600

### Multimode

50 or 62.5 μm Core • 125 μm Clad					
700051	2	6.8	44	70	440
700052	4	7.9	60	80	600
700053	6	9.7	84	100	840
700054	8	10.9	106	110	1060
700055	10	12.1	130	120	1300
700056	12	13.5	160	130	1600

BU = Basic-Unit



# Internal/External Cable

## 18 to 36 Fibers

### Cable Construction

<b>Optical Fibers</b>	18 to 36 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type
<b>Fiber Coating - Material/Diameter</b>	
Primary	Acrylate/0.250 mm
Secondary	Colored flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit</b>	
Fibers per Unit	6
Coating Material	Colored flame-resistant thermoplastic
Diameter	4.7 mm
Strength Member	Aramid yarns
<b>Central Strength Member</b>	Dielectric with high elastic modulus
<b>Outer Jacket</b>	Black thermoplastic with weather resistance and flame resistance

### Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.25
Multimode (@850/1300nm)	3.5/1.5
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	200/500
<b>Operating Temperature Range (°C)</b>	-20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)	Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
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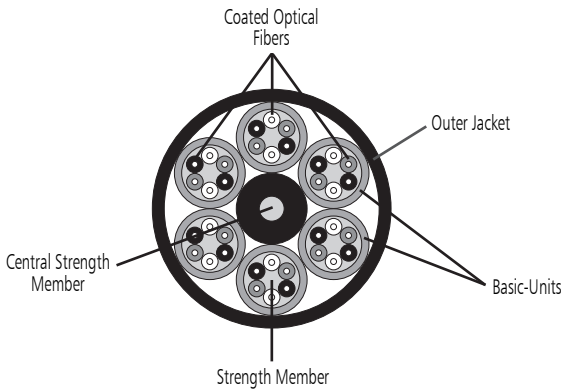
#### Single-mode

7 to 9 μm Core • 125 μm Clad						
700057	18	3	14.6	168	150	2000
700058	24	4	15.7	200	150	2000
700059	30	5	17.1	242	150	2900
700060	36	6	18.4	286	150	2900

#### Multimode

50 or 62.5 μm Core • 125 μm Clad						
700061	18	3	14.6	168	150	2000
700062	24	4	15.7	200	150	2000
700063	30	5	17.1	242	150	2900
700064	36	6	18.4	286	150	2900

BU = Basic-Unit



# Internal/External Cable

48 to 72 Fibers

## Cable Construction

<b>Optical Fibers</b>	48 to 72 acrylate coated fibers of normal-dispersion single-mode type	
<b>Fiber Coating - Material/Diameter</b>		
Primary	Acrylate/0.250 mm	
Secondary	Colored flame-resistant thermoplastic/0.900 mm	
<b>Basic-Unit</b>		
Fibers per Unit	12	
Coating Material	Colored flame-resistant thermoplastic	
Diameter	6.1 mm	
Strength Member	Aramid yarns	
<b>Central Strength Member</b>	Dielectric with high elastic modulus	
<b>Outer Jacket</b>	Black thermoplastic with weather resistance and flame resistance	

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)	Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
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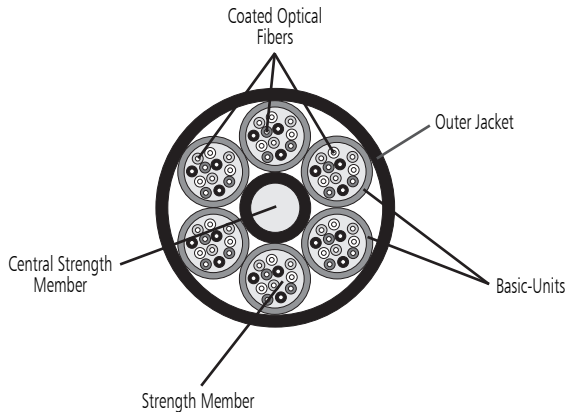
### Single-mode

7 to 9 μm Core • 125 μm Clad						
700065	48	4	18.6	270	180	2700
700066	60	5	20.2	325	200	3250
700067	72	6	22.0	390	220	3900

BU = Basic-Unit

## Cable Characteristics

<b>Optical Attenuation (Typical)</b> (dB/km @1310/1550nm)	0.36/0.25
<b>Operating Temperature Range</b> (°C)	-20 to +65





# Dielectric Cable for Duct or Lashed Installation

2 to 12 Fibers

Central Loose Tube

## Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Colored flame-resistant thermoplastic/0.900 mm

**Basic-Unit (Central Loose Tube)**  
 Fibers per Unit 2 to 12  
 Coating Material Flame-resistant thermoplastic  
 Diameter 2.0 to 2.5 mm (see right-side table)  
 Filling Water-repellent thixotropic jelly

**Strength Member** Aramid yarns

**Outer Jacket** Black thermoplastic with weather resistance

## Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.22
Multimode (@850/1300nm)	3.0/1.0
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b> 160/500	
<b>Compression Resistance (N/mm)</b> 10	
<b>Operating Temperature Range (°C)</b> 0 to +65	

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)		Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Jacket	BU			

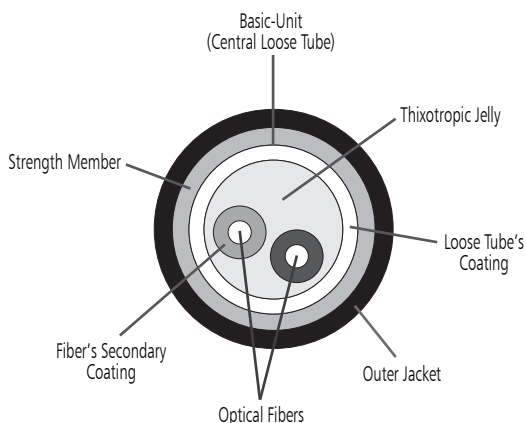
### Single-mode

7 to 9 μm Core • 125 μm Clad							
700068	2	1	4.5	2.0	16	50	360
700069	4	1	4.5	2.0	16	50	360
700070	6	1	4.5	2.0	16	50	360
700071	8	1	5.0	2.5	20	50	400
700072	10	1	5.0	2.5	20	50	400
700073	12	1	5.0	2.5	20	50	400

### Multimode

50 or 62.5 μm Core • 125 μm Clad							
700074	2	1	4.5	2.0	16	50	360
700075	4	1	4.5	2.0	16	50	360
700076	6	1	4.5	2.0	16	50	360
700077	8	1	5.0	2.5	20	50	400
700078	10	1	5.0	2.5	20	50	400
700079	12	1	5.0	2.5	20	50	400

BU = Basic-Unit



# Dielectric Cable for Duct or Lashed Installation

2 to 12 Fibers

Multiple Loose Tubes

## Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Colored flame-resistant thermoplastic/0.900 mm

**Basic-Unit (Loose Tube)**  
 Fibers per Unit 2  
 Coating Material Flame-resistant thermoplastic  
 Diameter 1.8 mm  
 Filling Thixotropic jelly

**Strength Members**  
 Central Glass-resin with high elastic modulus  
 Around the Core Aramid yarns

**Outer Jacket** Black thermoplastic with weather resistance

## Cable Characteristics

**Optical Attenuation (Typical Value) (dB/km)**  
 Single-mode (@1310/1550nm) 0.36/0.21  
 Multimode (@850/1300nm) 3.5/1.5

**Min. Bandwidth (MM only) (MHz-km @850/1300nm)** 200/500

**Compression Resistance (N/mm)** 10

**Operating Temperature Range (°C)** -20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)			Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Jacket	Core	CSM			

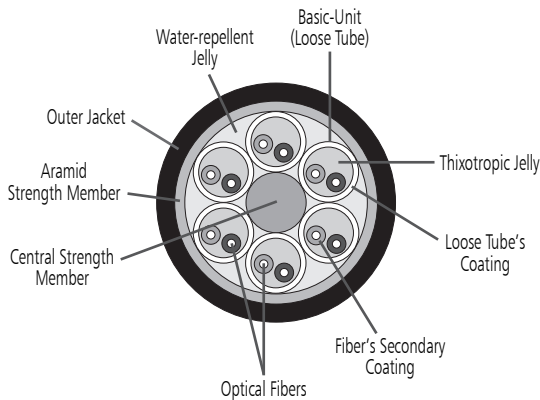
### Single-mode

7 to 9 μm Core • 125 μm Clad								
700080	2	1	9.5	5.7	2.0	74	100	2000
700081	4	2	9.5	5.7	2.0	74	100	2000
700082	6	3	9.5	5.7	2.0	74	100	2000
700083	8	4	9.5	5.7	2.0	74	100	2000
700084	10	5	9.5	5.7	2.0	74	100	2000
700085	12	6	9.5	5.7	2.0	74	100	2000

### Multimode

50 or 62.5 μm Core • 125 μm Clad								
700086	2	1	9.4	5.7	2.0	72	100	2000
700087	4	2	9.4	5.7	2.0	72	100	2000
700088	6	3	9.4	5.7	2.0	72	100	2000
700089	8	4	9.4	5.7	2.0	72	100	2000
700090	10	5	9.4	5.7	2.0	72	100	2000
700091	12	6	9.4	5.7	2.0	72	100	2000

BU = Basic-Unit • CSM = Central Strength Member



# Dielectric Cable for Duct or Lashed Installation

## 18 to 36 Fibers

### Cable Construction

<b>Optical Fibers</b>	18 to 36 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type	
<b>Fiber Coating - Material/Diameter</b>		
Primary	Acrylate/0.250 mm	
Secondary	Colored flame-resistant thermoplastic/0.900 mm	
<b>Basic-Unit (Loose Tube)</b>		
Fibers per Unit	6	
Coating Material	Flame-resistant thermoplastic	
Diameter	2.0 mm	
Filling	Thixotropic jelly	
<b>Strength Members</b>		
Central	Glass-resin with high elastic modulus	
Around the Core	Aramid yarns	
<b>Outer Jacket</b>	Black thermoplastic with weather resistance	

### Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.21
Multimode (@850/1300nm)	3.5/1.5
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	200/500
<b>Compression Resistance (N/mm)</b>	10
<b>Operating Temperature Range (°C)</b>	-20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)			Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Jacket	Core	CSM			

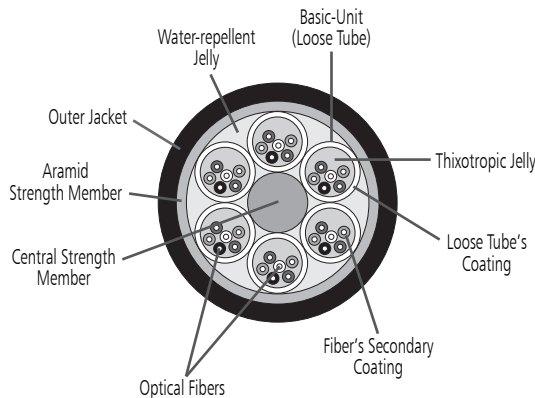
#### Single-mode

7 to 9 μm Core • 125 μm Clad								
700092	18	3	9.4	5.6	1.5	71	100	2000
700093	24	4	9.4	5.6	1.5	71	100	2000
700094	30	5	9.4	5.6	1.5	71	100	2000
700095	36	6	10.0	6.3	2.2	82	100	2000

#### Multimode

50 or 62.5 μm Core • 125 μm Clad								
700096	18	3	9.4	5.6	1.5	71	100	2000
700097	24	4	9.4	5.6	1.5	71	100	2000
700098	30	5	9.4	5.6	1.5	71	100	2000
700099	36	6	10.0	6.3	2.2	82	100	2000

BU = Basic-Unit • CSM = Central Strength Member



# Dielectric Cable for Duct or Lashed Installation

48 to 72 Fibers

## Cable Construction

<b>Optical Fibers</b>	48 to 72 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type
<b>Fiber Coating - Material/Diameter</b>	
Primary	Acrylate/0.250 mm
Secondary	Colored flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit (Loose Tube)</b>	
Fibers per Unit	12
Coating Material	Flame-resistant thermoplastic
Diameter	2.5 mm
Filling	Thixotropic jelly
<b>Strength Members</b>	
Central	Glass-resin with high elastic modulus
Around the Core	Aramid yarns
<b>Outer Jacket</b>	Black thermoplastic with weather resistance

## Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.21
Multimode (@850/1300nm)	3.5/1.5
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	200/500
<b>Compression Resistance (N/mm)</b>	10
<b>Operating Temperature Range (°C)</b>	-20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)			Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Jacket	Core	CSM			

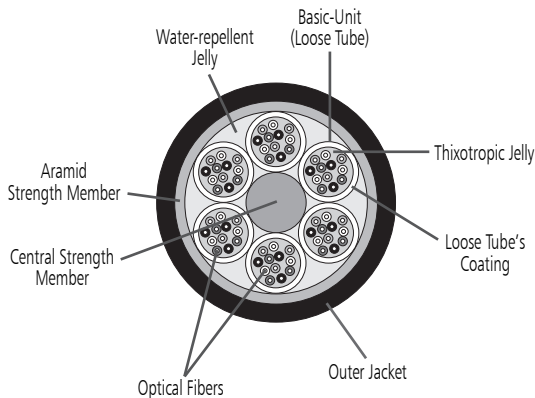
### Single-mode

7 to 9 μm Core • 125 μm Clad								
700100	48	4	10.8	7.0	2.0	96	100	2000
700101	60	5	10.8	7.0	2.0	96	100	2000
700102	72	6	11.6	7.9	2.7	115	110	2300

### Multimode

50 or 62.5 μm Core • 125 μm Clad								
700103	48	4	10.8	7.0	2.0	96	100	2000
700104	60	5	10.8	7.0	2.0	96	100	2000
700105	72	6	11.6	7.9	2.7	115	110	2300

BU = Basic-Unit • CSM = Central Strength Member



# Rodent-Proof Dielectric Cable for Duct Installation

2 to 12 Fibers

Central Loose Tube

## Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Colored flame-resistant thermoplastic/0.900 mm

**Basic-Unit (Central Loose Tube)**  
 Fibers per Unit 2 to 12  
 Coating Material Flame-resistant thermoplastic  
 Diameter 2.0 to 2.5 mm (see right-side table)  
 Filling Water-repellent thixotropic jelly

**Strength Member** Aramid yarns

**Anti-Rodent Protection** High-density fiberglass

**Inner/Outer Jacket** Black thermoplastic with weather resistance

## Cable Characteristics

**Optical Attenuation (Typical Value) (dB/km)**  
 Single-mode (@1310/1550nm) 0.36/0.22  
 Multimode (@850/1300nm) 3.5/1.5

**Min. Bandwidth (MM only) (MHz-km @850/1300nm)** 160/400

**Compression Resistance (N/mm)** 10

**Operating Temperature Range (°C)** -10 to +60

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)			Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Outer Jacket	Inner Jacket	BU			

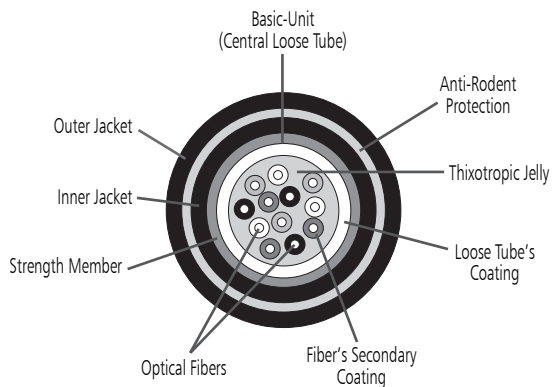
### Single-mode

7 to 9 μm Core • 125 μm Clad								
700106	2	1	10.5	4.5	2.0	96	100	2000
700107	4	1	10.5	4.5	2.0	96	100	2000
700108	6	1	10.5	4.5	2.0	96	100	2000
700109	8	1	11.0	5.0	2.5	110	100	2000
700110	10	1	11.0	5.0	2.5	110	100	2000
700111	12	1	11.0	5.0	2.5	110	100	2000

### Multimode

50 or 62.5 μm Core • 125 μm Clad								
700112	2	1	10.5	4.5	2.0	96	100	2000
700113	4	1	10.5	4.5	2.0	96	100	2000
700114	6	1	10.5	4.5	2.0	96	100	2000
700115	8	1	11.0	5.0	2.5	110	100	2000
700116	10	1	11.0	5.0	2.5	110	100	2000
700117	12	1	11.0	5.0	2.5	110	100	2000

BU = Basic-Unit



# Rodent-Proof Dielectric Cable for Duct Installation

2 to 12 Fibers

Multiple Loose Tubes

## Cable Construction

<b>Optical Fibers</b>	2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type
<b>Fiber Coating - Material/Diameter</b>	
Primary	Acrylate/0.250 mm
Secondary	Colored flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit (Loose Tube)</b>	
Fibers per Unit	2
Coating Material	Flame-resistant thermoplastic
Diameter	1.8 mm
Filling	Thixotropic jelly
<b>Central Strength Member</b>	Glass-resin with high elastic modulus
<b>Anti-Rodent Protection</b>	High-density fiberglass
<b>Inner/Outer Jacket</b>	Black thermoplastic with weather resistance

## Cable Characteristics

<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.22
Multimode (@850/1300nm)	3.5/1.5
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	160/500
<b>Compression Resistance (N/mm)</b>	20
<b>Operating Temperature Range (°C)</b>	-20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)		Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Outer Jacket	Inner Jacket			

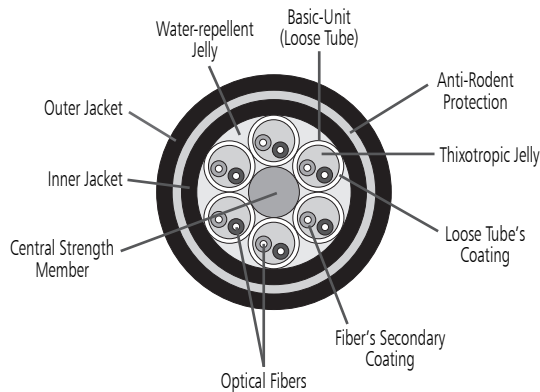
### Single-mode

7 to 9 $\mu\text{m}$ Core • 125 $\mu\text{m}$ Clad							
700118	2	1	13.6	7.3	165	135	3300
700119	4	2	13.6	7.3	165	135	3300
700120	6	3	13.6	7.3	165	135	3300
700121	8	4	13.6	7.3	165	135	3300
700122	10	5	13.6	7.3	165	135	3300
700123	12	6	13.6	7.3	165	135	3300

### Multimode

50 or 62.5 $\mu\text{m}$ Core • 125 $\mu\text{m}$ Clad							
700124	2	1	13.6	7.3	165	135	3300
700125	4	2	13.6	7.3	165	135	3300
700126	6	3	13.6	7.3	165	135	3300
700127	8	4	13.6	7.3	165	135	3300
700128	10	5	13.6	7.3	165	135	3300
700129	12	6	13.6	7.3	165	135	3300

BU = Basic-Unit



# Rodent-Proof Dielectric Cable for Duct Installation

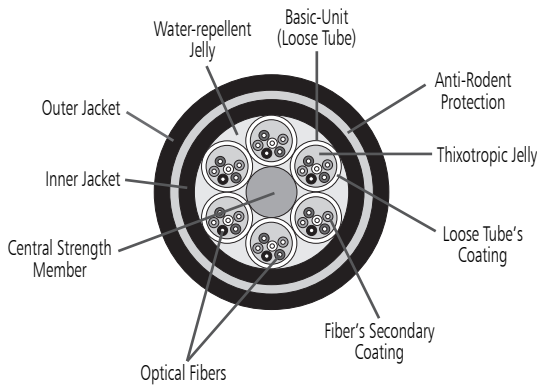
18 to 36 Fibers

## Cable Construction

<b>Optical Fibers</b>	18 to 36 acrylate coated fibers of normal-dispersion single-mode type	
<b>Fiber Coating - Material/Diameter</b>	Primary	Acrylate/0.250 mm
	Secondary	Colored flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit (Loose Tube)</b>		
	Fibers per Unit	6
	Coating Material	Flame-resistant thermoplastic
	Diameter	2.0 mm
	Filling	Thixotropic jelly
<b>Central Strength Member</b>	Glass-resin with high elastic modulus	
<b>Anti-Rodent Protection</b>	High-density fiberglass	
<b>Inner/Outer Jacket</b>	Black thermoplastic with weather resistance	

## Cable Characteristics

<b>Optical Attenuation (Typical) (dB/km @1310/1550nm)</b>	0.36/0.22
<b>Compression Resistance (N/mm)</b>	20
<b>Operating Temperature Range (°C)</b>	-20 to +65



Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)		Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Outer Jacket	Inner Jacket			

### Single-mode

7 to 9 μm Core • 125 μm Clad							
<b>700130</b>	18	3	13.6	7.3	160	140	3400
<b>700131</b>	24	4	13.6	7.3	160	140	3400
<b>700132</b>	30	5	13.6	7.3	160	140	3400
<b>700133</b>	36	6	14.2	7.9	175	140	3400

BU = Basic-Unit

# Rodent-Proof Dielectric Cable for Duct Installation

48 to 72 Fibers

## Cable Construction

<b>Optical Fibers</b>	48 to 72 acrylate coated fibers of normal-dispersion multimode type	
<b>Fiber Coating - Material/Diameter</b>	Acrylate/0.250 mm	
Primary	Acrylate/0.250 mm	
Secondary	Colored flame-resistant thermoplastic/0.900 mm	
<b>Basic-Unit (Loose Tube)</b>		
Fibers per Unit	12	
Coating Material	Flame-resistant thermoplastic	
Diameter	2.5 mm	
Filling	Thixotropic jelly	
<b>Central Strength Member</b>	Glass-resin with high elastic modulus	
<b>Anti-Rodent Protection</b>	High-density fiberglass	
<b>Inner/Outer Jacket</b>	Black thermoplastic with weather resistance	

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)		Net Weight (kg/km)	Min. Bend Radius (mm)	Max. Install. Tensile (N)
			Outer Jacket	Inner Jacket			

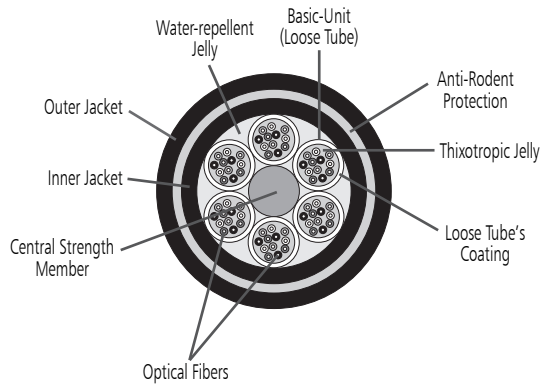
### Multimode

50 or 62.5 μm Core • 125 μm Clad							
<b>700134</b>	48	4	15.6	9.2	200	160	4400
<b>700135</b>	60	5	15.6	9.2	200	160	4400
<b>700136</b>	72	6	16.3	10.0	220	160	4400

BU = Basic-Unit

## Cable Characteristics

<b>Optical Attenuation (Typical) (dB/km @1310/1550nm)</b>	3.5/1.5
<b>Minimum Bandwidth (MHz-km @850/1300nm)</b>	200/500
<b>Compression Resistance (N/mm)</b>	10
<b>Operating Temperature Range (°C)</b>	-20 to +65





# Aerial Self Supporting Dielectric Cable

2 to 12 Fibers

Single Loose Tube

## Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Colored flame-resistant thermoplastic/0.900 mm

**Basic-Unit (Single Loose Tube)**  
 Fibers per Unit 2 to 12  
 Coating Material Flame-resistant thermoplastic  
 Diameter 2.0 to 2.5 mm (see right-side table)  
 Filling Water-repellent thixotropic jelly

**Strength Members** Glass-resin with high elastic modulus

**Outer Jacket** Black thermoplastic with weather resistance

## Cable Characteristics

**Maximum Installation Void (m)** 80

**Optical Attenuation (Typical Value) (dB/km)**  
 Single-mode (@1310/1550nm) 0.36/0.22  
 Multimode (@850/1300nm) 3.0/1.0

**Min. Bandwidth (MM only) (MHz-km @850/1300nm)** 200/500

**Compression Resistance (N/mm)** 10

**Operating Temperature Range (°C)** -20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)				Net Weight (kg/km)	Underload Min. Bend Radius (mm)	Long Term MOL (N)
			OJ	Core	SM	BU			

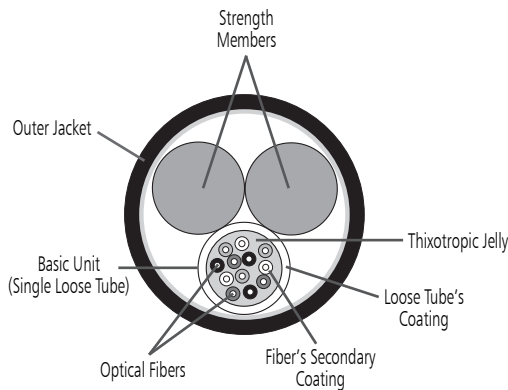
### Single-mode

7 to 9 μm Core • 125 μm Clad									
700137	2	1	8.1	4.8	2.2	2.0	63	80	900
700138	4	1	8.1	4.8	2.2	2.0	63	80	900
700139	6	1	8.1	4.8	2.2	2.0	63	80	900
700140	8	1	8.6	5.8	2.7	2.5	73	90	1100
700141	10	1	8.6	5.8	2.7	2.5	73	90	1100
700142	12	1	8.6	5.8	2.7	2.5	73	90	1100

### Multimode

50 or 62.5 μm Core • 125 μm Clad									
700143	2	1	8.6	5.8	2.2	2.0	60	90	900
700144	4	1	8.6	5.8	2.2	2.0	60	90	900
700145	6	1	8.6	5.8	2.2	2.0	60	90	900
700146	8	1	9.5	6.7	2.7	2.5	74	100	1200
700147	10	1	9.5	6.7	2.7	2.5	74	100	1200
700148	12	1	9.5	6.7	2.7	2.5	74	100	1200

BU = Basic-Unit • OJ = Outer Jacket • SM = Strength Member • MOL = Maximum Operating Load



# Aerial Self Supporting Dielectric Cable

2 to 12 Fibers

Multiple Loose Tubes

## Cable Construction

**Optical Fibers** 2 to 12 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type

**Fiber Coating - Material/Diameter**  
 Primary Acrylate/0.250 mm  
 Secondary Colored flame-resistant thermoplastic/0.900 mm

**Basic-Unit (Loose Tube)**  
 Fibers per Unit 2  
 Coating Material Flame-resistant thermoplastic  
 Diameter 2.0 mm  
 Filling Thixotropic jelly

**Strength Members**  
 Central Glass-resin with high elastic modulus  
 Around the Inner Jacket Aramid yarns

**Inner Jacket** Black thermoplastic with weather resistance

**Outer Jacket** Black thermoplastic with weather resistance and flame resistance

## Cable Characteristics

<b>Maximum Installation Void (m)</b>	80
<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.22
Multimode (@850/1300nm)	3.0/1.0
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	200/500
<b>Compression Resistance (N/mm)</b>	10
<b>Operating Temperature Range (°C)</b>	-20 to +65

Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)			Net Weight (kg/km)	Underload Min. Bend Radius (mm)	Long Term MOL (N)
			Outer Jacket	Inner Jacket	CSM			

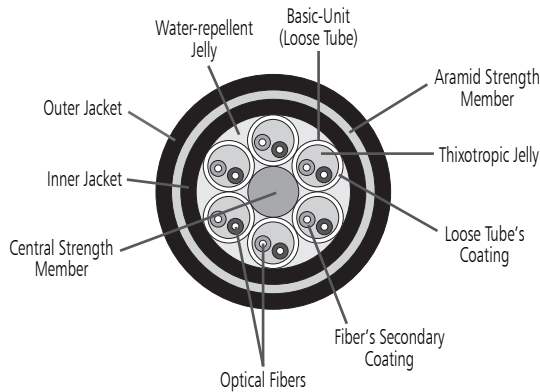
### Single-mode

7 to 9 μm Core • 125 μm Clad								
700149	2	1	11.8	7.8	2.2	125	240	1880
700150	4	2	11.8	7.8	2.2	125	240	1880
700151	6	3	11.8	7.8	2.2	125	240	1880
700152	8	4	11.8	7.8	2.2	125	240	1880
700153	10	5	11.8	7.8	2.2	125	240	1880
700154	12	6	11.8	7.8	2.2	125	240	1880

### Multimode

50 or 62.5 μm Core • 125 μm Clad								
700155	2	1	11.8	7.8	2.2	125	240	1880
700156	4	2	11.8	7.8	2.2	125	240	1880
700157	6	3	11.8	7.8	2.2	125	240	1880
700158	8	4	11.8	7.8	2.2	125	240	1880
700159	10	5	11.8	7.8	2.2	125	240	1880
700160	12	6	11.8	7.8	2.2	125	240	1880

BU = Basic-Unit • CSM = Central Strength Member • MOL = Maximum Operating Load



# Aerial Self Supporting Dielectric Cable

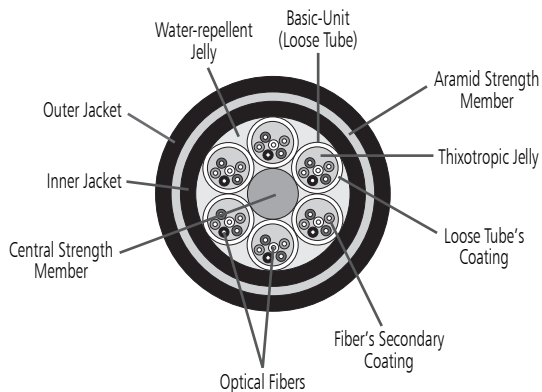
## 18 to 36 Fibers

### Cable Construction

<b>Optical Fibers</b>	18 to 36 acrylate coated fibers of normal-dispersion single-mode type or graded-index multimode type
<b>Fiber Coating - Material/Diameter</b>	
Primary	Acrylate/0.250 mm
Secondary	Colored flame-resistant thermoplastic/0.900 mm
<b>Basic-Unit (Loose Tube)</b>	
Fibers per Unit	6
Coating Material	Flame-resistant thermoplastic
Diameter	2.0 mm
Filling	Thixotropic jelly
<b>Strength Members</b>	
Central	Glass-resin with high elastic modulus
Around the Inner Jacket	Aramid yarns
<b>Inner Jacket</b>	Black thermoplastic with weather resistance
<b>Outer Jacket</b>	Black thermoplastic with weather resistance and flame resistance

### Cable Characteristics

<b>Maximum Installation Void (m)</b>	80
<b>Optical Attenuation (Typical Value) (dB/km)</b>	
Single-mode (@1310/1550nm)	0.36/0.22
Multimode (@850/1300nm)	3.0/1.0
<b>Min. Bandwidth (MM only) (MHz-km @850/1300nm)</b>	200/500
<b>Compression Resistance (N/mm)</b>	10
<b>Operating Temperature Range (°C)</b>	-20 to +65



Part No.	No. of Fibers	No. of BUs	Outer Diameter (mm)			Net Weight (kg/km)	Underload Min. Bend Radius (mm)	Long Term MOL (N)
			Outer Jacket	Inner Jacket	CSM			

### Single-mode

7 to 9 μm Core • 125 μm Clad								
700161	18	3	11.5	7.8	2.2	125	240	1900
700162	24	4	11.5	7.8	2.2	125	240	1900
700163	30	5	11.5	7.8	2.2	125	240	1900
700164	36	6	11.5	7.8	2.2	125	240	1900

### Multimode

50 or 62.5 μm Core • 125 μm Clad								
700165	18	3	12.0	7.8	2.2	130	240	1950
700166	24	4	12.0	7.8	2.2	130	240	1950
700167	30	5	12.0	7.8	2.2	130	240	1950
700168	36	6	12.0	7.8	2.2	130	240	1950

BU = Basic-Unit • CSM = Central Strength Member • MOL = Maximum Operating Load