

FIBER OPTIC CABLES





General Information

- Loose tube designed.
- Installed direct buried and/or duct type installation for highly reliable industrial applications.
- Designed for outdoor applications to protect optical fiber for the unexpected mechanical and environmental conditions.
 - Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 216
- High tensile strength design
- Fibers per loose tube 1-12
- Gel filled cable core for the water resistance
- Dry core design also possible for water resistance in customer request
- Suitable for direct buried application
- Colored fiber for the quick identification
- UV resistance for the outer Sheath
- High fiber count to diameter ratio
- Fully complies with Telcordia GR-20 and TIA/EIA standards
- Customer design is available on request
- Colored fiber for the quick identification
- Ripcord for easy strip outer sheath

Cable Weight & Diameter

Number Fiber Number Number Nom Nom Reel Item Per of of Outer Cable Length of Fiber Tube Tube Diameter Weight Dummy Km* Kg/km Tube mm 4 2 2 4 15,0 200 6 2 3 3 15,0 6 200 6 12 2 6 0 15,0 200 6 15,0 200 24 4 6 0 6 Direct Buried Corrugated Steel 6 0 15,0 200 36 6 6 Tape Armored Double Sheathed Optical Cables 48 8 0 15,0 200 6 6 60 12 5 1 15,0 200 6 72 12 0 15,0 200 6 6 96 12 8 0 16,5 250 4 144 12 12 0 19,0 320 4 192 12 16 2 20,0 370 4 216 12 18 0 20,0 370 4

Note: Central Strength member is FRP (Fiber Reinforced Plastic) , but steel wire also available on customer request (*)Other delivery length is available

TURKUAZ CABLE

Applications

- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communications
- Metropolitan Communication Systems



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	4.000 N
IEC 60794-1-2-E1	Opr.	2.000 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		5.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y (SR) 2Y mxnN LG Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request. Thickness of sheath is nominal 1,1 mm (±'b1 0,1) for inner and 1,8 (±'b1 0,1) mm for outer sheath respectively.

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 /G.652 d), SM 9/125(NZDSF) (G.655), SM 9/125 (G.657), MM 50 /125 OM2 , MM 62,5/125 OM1, MM 50/125 OM3 Loose tube design UV resistance Outer Sheath (LDPE-MDPE or HDPE) Jelly Filled for Water resistance Dry core design is also available on customer request Dielectric Strength member (FRP) Peripheral Strength Member is glass yarn or Aramid yarn (If necessary)





Aerial Type Armored Optical Cables

General Information

- Loose tube designed
- Applied to the poles with highly reliable and flexible and industrial applications.
- Designed for outside applications to protect optical fiber for the unexpected mechanical and environmental conditions.
- Suitable for the 60 meter span length
- Special design is required for more than 60 m span
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 216
- Fibers per loose tube 1-12
- Gel filled cable core for the water resistance
- Dry core design also possible for water resistance in customer request
- Colored fiber for the quick identification
- UV resistance for the outer sheath
- High fiber count to diameter ratio
- Suitable for aerial installation
- Fully complies with international standards, TIA/EIA
- Customer designs are available on request
- Ripcord for easy strip outer sheath

Cable Weight & Diameter

Item	Number of Fiber	Fiber Per Tube	Number of Tube	Number of Dummy Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	4	2	2	4	19,0x31,0	520	2
	6	2	3	3	19,0x31,0	520	2
	12	2	6	0	19,0x31,0	520	2
	24	4	6	0	19,0x31,0	520	2
	36	6	6	0	19,0x31,0	540	2
Aerial Armored Cables	48	8	6	0	20,5x32,5	550	2
	60	12	5	1	20,5x32,5	550	2
	72	12	6	0	20,5x32,5	560	2
	96	12	8	0	22,5x34,5	590	2
	144	12	12	0	27,0x37,0	670	2
	192	12	12	2	27,0x37,0	670	2
	216	12	18	0	27,0x37,0	670	2

Note: Central Strength member is FRP (Fiber Reinforced Plastic), but steel wire is also available on customer request. Other delivery lengths is available

Applications

- Telecommunication
- Video
- Long Haul Communication Systems
- Metropolitan Communication Systems



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	6.000 N
IEC 60794-1-2-E1	Opr.	3.000 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		5.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Note: Special design for higher than given tensile load also available

Type Code of Optical Cable

A-DF(ZN) 2Y (SR) T 2Y mxnN LG Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type: SM 9/125 (G.652 d), SM 9/125(G.655), MM 62,5/125 – MM 50/125 Loose tube design Aerial type optical cables are armored design Galvanized steel wire and corrugated steel tape armored also available UV resistance Outer Sheath (MDPE, HDPE) Jelly Filled for Water resistance Dry core design is also available on customer request Dielectric Strength member (FRP) Peripheral Strength Member is glass yarn or Aramid yarn (If necessary)



Direct Buried Type Single Sheathed Fiber Optic Cables

General Information

- Loose tube designed.
- Direct buried and/or duct type installation for highly reliable industrial applications.
- Designed for outside applications, also it's designed to protect optical fiber for the unexpected mechanical and environmental conditions.
 - Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 216
- High tensile strength design
- Fibers per loose tube 1-12
- Gel filled cable core for the water resistance
- Dry core design is also possible for water resistance in customer request
- Suitable for duct application
- Colored fiber for the quick identification
- UV resistance for the outer Sheath
- High fiber count to diameter ratio
- Fully complied with Telcordia GR-20 and TIA/EIA standards
- Colored fiber for the quick identification
- Ripcord for easy strip outer sheath

Applications

- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communication and
- Metropolitan Communication Systems

Cable Weight & Diameter

Item	Number of Fiber	Fiber Per Tube	Number of Tube	Number of Dummy Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	4	2	2	4	12,5	160	4
	6	2	3	3	12,5	160	4
	12	2	6	0	12,5	160	4
	24	4	6	0	12,5	160	4
	36	6	6	0	12,5	160	4
Direct Buried Type Single	48	8	6	0	12,5	160	4
Sheathed Fiber Optic Cables	60	12	5	1	12,5	160	4
	72	12	6	0	12,5	160	4
	96	12	8	0	13,5	200	4
	144	12	12	0	16,0	275	4
	192	12	16	2	20,0	420	4
	216	12	18	0	20,0	420	4

Note: Central Strength member is FRP (Fiber Reinforced Plastic), but steel wire is also available on customer request.



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	3.000 N
IEC 60794-1-2-E1	Opr.	1.000 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		4.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y mxnN LG Refer to the type code of the optical cable for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black.

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type: SM 9/125 /G.652 d), SM 9/125(NZDSF) (G.655), SM 9/125 (G.657), MM 50 /125 OM2 , MM 62,5/125 OM1 , MM 50/125 OM3 Loose tube design UV resistance Outer Sheath (LDPE-MDPE or HDPE) Jelly Filled for Water resistance Dry core design is also available on customer request Dielectric Strength member (FRP) Peripheral Strength Member is glass yarn or Aramid yarn (If necessary)





Aerial (ADSS) Type Optical Cables

General Information

- Loose tube designed all dielectric self-supported (ADSS)
- Applied to the toughest environmental and electrical conditions.
- Designed for extra high voltage transmission lines without interruption of services.
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 192
- Fibers per loose tube 1-12
- Gel filled cable core for the water resistance
- Dry core design also possible for water resistance in customer request
- Colored fiber for the quick identification
- UV resistance for the outer sheath
- Perfect aerodynamic performance
- All dielectric construction allows installation and maintenance on energized circuits
- High fiber count to diameter ratio
- Suitable for aerial installation
- Fully complies with international standards, TIA/EIA
- Customer designs are available on request
- Ripcord for easy strip outer sheath

Applications

- Telecommunication
- Video
- Long Haul Communication Systems
- Metropolitan Communication Systems

Cable Weight & Diameter

Item	Number of Fiber	Fiber Per Tube	Number of Tube	Number of Dummy Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	4	2	2	4	14,5	160	6
	6	2	3	3	14,5	160	6
	10	2	5	1	14,5	160	6
	12	2	6	0	14,5	160	6
	24	4	6	0	14,5	160	6
	36	6	6	0	14,5	160	6
ADSS Optical Cables	48	8	6	0	14,5	160	6
	60	12	5	1	14,5	160	6
	72	12	6	0	14,5	160	6
	96	12	8	0	16,5	210	4
	144	12	12	0	20,0	330	4
	192	16	12	2	22,5	450	4



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength IEC 60794-1-2-E1	Max Opr.	14.000 N 7.000 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3		4.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature IEC 60794-1-2-F1	Installing Operating	-30 +60 (°C) -40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage
Span Length (m)	Max.	150

Note: Special design for higher than given tensile load also available

Type Code of Optical Cable

A-DF 2Y (ZN) 2Y mxnN LG Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner / Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Another color can be applied per customer request

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655), MM 62,5/125 – MM 50/125 Loose tube design UV resistance Outer Sheath (MDPE, HDPE) Jelly Filled for Water resistance Dry core design is also available on customer request Dielectric Strength member (FRP) Peripheral Strength Member is Aramid yarn



Galvanized Steel Tape Armored Fiber Optic Cables

General Information

- Direct buried and/or duct type installation with highly reliable and industrial applications.
- Designed for outside application and also it's designed to protect optical fiber for the unexpected mechanical and environmental conditions.
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 192
- Fibers per loose tube 1-12
- Gel filled cable core for the water resistance
- Dry core design also possible for water resistance in Metropolitan Communication Systems customer request
- Colored fiber for the quick identification
- UV resistance for the outer sheath
- High fiber count to diameter ratio,
- Suitable for aerial installation,
- Fully complies with international standards, TIA/EIA
- Customer designs are available on request
- Ripcord for easy strip outer sheath

Applications

- Telecommunication
- Video
- Long Haul Communication Systems

Cable Weight & Diameter

Item	Number of Fiber	Fiber Per Tube	Number of Tube	Number of Dummy Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	4	2	2	4	18,0	350	4
	6	2	3	3	18,0	350	4
	12	2	6	0	18,0	350	4
	24	4	6	0	18,0	350	4
Tape Armored Direct	36	6	6	0	18,0	350	4
Buried Type Optical Cables	48	8	6	0	18,0	50	4
	60	12	5	1	18,0	350	2
	72	12	6	0	18,0	350	2
	96	12	8	0	20,5	400	2
	144	12	12	0	22,5	510	2
	192	12	16	2	23,5	530	2

Note: Central Strength member is FRP (Fiber Reinforced Plastic), but steel wire also available on customer request (*)Other delivery length is available

RUAZ CABLE



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	4.000 N
IEC 60794-1-2-E1	Opr.	3.000 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		5.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Type Code of Optical Cable

A-DF(ZN) 2Y (B) 2Y mxnN LG Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request. Thickness of sheath is nominal 1,1 mm (±'b1 0,1) for inner and 1,8 (±'b1 0,1) mm for outer sheath respectively.

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655 - NZDSF), MM 62,5/125 - 50/125 Loose tube design Galvanized steel wire and corrugated steel tape armored also available UV resistance Outer Sheath (MDPE, HDPE) LSZH or HFFR Sheathing also possible in indoor applications Jelly Filled for Water resistance Dry core design is also available on customer request Dielectric Strength member (FRP) Peripheral Strength Member is glass yarn or Aramid yarn (If necessary)





Duct Type Single Sheathed Fiber Optic Cables

General Information

- Loose tube designed.
- Duct type installation for highly reliable industrial applications.
- Applicable for outdoor and indoor applications, also it's designed to protect optical fiber for the unexpected mechanical and environmental conditions.
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 216
- High tensile strength design
- Fibers per loose tube 1-12
- Gel filled cable core for the water resistance
- Dry core design is also possible for water
- resistance in customer request
- Suitable for duct applications
- Colored fiber for the quick identificationUV resistance for the outer Sheath
- High fiber count to diameter ratio
- Fully complied with Telcordia GR-20 and TIA/EIA standards
- Custom designs are available on request

Applications

- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communication and
- Metropolitan Communication Systems

Cable Weight & Diameter

Item	Number of Fiber	Fiber Per Tube	Number of Loose Tube	Number of Dummy Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	4	2	2	4	11,0	100	6
	6	2	3	3	11,0	100	6
	12	2	6	0	11,0	100	6
	24	4	6	0	11,0	100	6
	36	6	6	0	11,0	100	6
Duct Type Single Sheathed	48	8	6	0	11,0	100	6
Optical Cables	60	12	5	1	11,0	100	6
	72	12	6	0	11,0	100	6
	96	12	8	0	12,5	140	4
	144	12	12	0	15,5	195	4
	192	12	16	2	15,5	210	4
	216	12	18	0	15,5	210	4

Note: Central Strength member is FRP (Fiber Reinforced Plastic), but steel wire also available on customer request.



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	2.000 N
IEC 60794-1-2-E1	Opr.	1.000 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		2.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y mxnN LG Refer to the type code of the optical cable for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black.

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

- Fiber Type: SM 9/125 SM 9/125(NZDSF) MM 62,5/125 - MM 50/125
- Loose tube design
- UV resistance Outer Sheath (MDPE or HDPE)
- Jelly Filled for water resistance
- Dry core design is also available on customer request
- Dielectric Strength member (FRP)
- Peripheral Strength Member is glass yarn or Aramid yarn (if necessary)



Under Water Type (Submarine) Steel Wire Armored Fiber Optic Cables

General Information

These type optical cables are installed for underwater / submarine, Lake and River Crossing type installation with highly reliable and industrial applications. These types of cables are designed for outside application and also it's designed to protect optical fiber for the unexpected extra high mechanical and environmental conditions. Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- -Fiber counts up to 144
- -Fibers per loose tube 1-12
- -Gel filled cable core for the water resistance
- -Its design for water resistance in customer request
- -Colored fiber for the quick identification
- -UV resistance for the outer sheath
- -High fiber count to diameter ratio,
- -Suitable for underwater installation,
- -Fully complies with international standards, TIA/EIA
- -Customer designs are available on request
- -Ripcord for easy strip outer sheath

Applications

- -Telecommunication applications
- -Video applications
- -Data applications
- -CATV Transmission
- -Local Area Networks applications

Cable Weight & Diameter

Item	Number of Fiber	Fiber Per Tube	Number of Tube	Number of Dummy Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	4	2	2	4	29	1.800	12
	6	2	3	3	29	1.800	12
	12	2	6	0	29	1.800	12
Daubla Steal	24	4	6	0	29	1.800	12
Wire Armored Underwater	36	6	6	0	29	1.800	12
Type Optical Cables	48	8	6	0	29	1.800	12
	60	12	5	1	29	1.800	12
	72	12	6	0	29	1.800	12
	96	12	8	0	33	2.750	6
	144	12	12	0	36	3.150	6

Note: Central Strength member is FRP (Fiber Reinforced Plastic) , but steel wire also available on customer request. (*) Other delivery length is available

TURKUAZ CABLE



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink
Tubes	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	80 KN
IEC 60794-1-2-E1	Opr.	160 KN
Bending Radius(mm)	Dynamic	15xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		10. KN
Impact Resistance IEC-60794-1-2-E4		300 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Note: Special design for higher than given tensile load are also available D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y SWA 2Y SWA 2Y mxnN LG Refer to the type code of the optical cables for the description of the cable code.

Optical Characteristics

Refer to the fiber data sheet

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request. Thickness of sheath is nominal 1,5 mm (\pm 0,1) for inner and 2,5 (\pm 0,1) mm for outer sheaths respectively.

Packing

Shipment will be done with non-returnable woodensteel drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655 - NZDSF), MM 62,5/125 - 50/125 Loose tube design UV resistance Outer Sheath (MDPE,HDPE) LSZH or HFFR Sheathing also possible in indoor applications Jelly Filled for Water resistance Dry core design is also available on customer request Dielectric Strength member (FRP) Peripheral Strength Member is glass yarn or Aramide yarn (If necessary)



Central Tube Armored Single Sheathed Optical Cables

General Information

- Indoor / Outdoor type installation
- Designed to protect optical fiber for the unexpected mechanical and environmental conditions
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 12
- Light weight
- High tensile strength design
- Dry core design
- Small diameter
- Colored fiber for the quick identification
- UV resistance for the outer sheath
- Fully complies with international standards, TIA/EIA
- Customer designs are available on request

Applications

- Building interconnection
- Campus and Local Area Network

Cable Weight & Diameter

Item	Number of Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	2	9,5	85	2
	4	9,5	85	2
Indoor/Outdoor Central Tube Cables	6	9,5	85	2
indoor/outdoor central rube cables	8	9,5	85	2
	10	9,5	85	2
	12	9,5	85	2

(*) Other delivery length is available

URKUAZ CABI



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	800 N
IEC 60794-1-2-E1	Opr.	500 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		1.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Type Code of Optical Cable

A-DQ (BN) (SR) 2Y mxn ...'85...'85...'85...N CT Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655), MM 62,5/125 – MM 50/125 Central tube design (Single Loose Tube, SLT) UV resistance Outer Sheath LSZH or HFFR Sheathing also possible for indoor applications Peripheral Strength Member is Glass yarn or Aramid yarn is also possible per customer requests.



Central Tube Armored Double Sheathed Optical Cables

General Information

- Applied to outdoor and directly buried installation
- Designed for outdoor and direct buried type application and also to protect optical fiber for the unexpected mechanical and environmental conditions.
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 12
- Light weight
- High tensile strength design
- Dry core design
- Small diameter
- Colored fiber for the quick identification
- UV resistance for the outer sheath
- Fully complies with international standards, TIA/EIA
- Customer designs are available on request

Applications

- Building interconnection
- Campus and Local Area Network

Cable Weight & Diameter

Item	Number of Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	2	10,5	110	2
	4	10,5	110	2
Central Tube Armored Double	6	10,5	110	2
Sheathed Optical Cables	8	10,5	110	2
	10	10,5	110	2
	12	10,5	110	2



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Color of Louse tube is natural

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	1.000 N
IEC 60794-1-2-E1	Opr.	600 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		1.000 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Type Code of Optical Cable

A-DQ (BN) 2Y (SR) 2Y mxnN CT Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655), MM 62,5/125 – MM 50/125 Central tube design (Single Loose Tube, SLT) UV resistance Outer Sheath LSZH or HFFR Sheathing is also possible for indoor applications Peripheral Strength Member is Glass yarn or Aramid yarn is also possible per customer requests.



Central Tube Unarmored Optical Cables

General Information

- Indoor/Outdoor type installation
- Designed for indoor/outdoor application to protect optical fiber for the unexpected mechanical and environmental conditions.
- Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- Fiber counts up to 12
- Lightweight
- High tensile strength design
- Dry core design
- Small diameter
- Colored fiber for the quick identification
- UV resistance for the outer sheath
- Fully complies with international standards, TIA/EIA
- Customer designs are available on request

Applications

- Building interconnection
- Campus and Local Area network

Cable Weight & Diameter

Item	Number of Tube	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
Outdoor Central Tube Cables	2	8,0	60	4
Outdoor Central Tube Cables	4	8,0	60	4
Outdoor Central Tube Cables	6	8,0	60	4
Outdoor Central Tube Cables	8	8,0	60	4
Outdoor Central Tube Cables	10	8,0	60	4
Outdoor Central Tube Cables	12	8,0	60	4

(*) Other delivery length is available

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Cable Construction



Identification of Optical Fiber and Loose Tube

No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	1.000 N
IEC 60794-1-2-E1	Opr.	600 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		500 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Type Code of Optical Cable

A-DQ (BN) 2Y mxnN CT Refer to the type code of the optical cables for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner / Outer sheath materials are MDPE-HDPE-LDPE and outer sheath color is black. Other color can be applied in customer request

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655), MM 62,5/125 – MM 50/125 Central tube design (Single Loose Tube, SLT) UV resistance Outer Sheath LSZH or HFFR Sheathing also possible in indoor applications Peripheral Strength Member is Glass yarn or Aramid yarn also possible in customer requests.



Tigth Tube Non-Metalic Optical Cables

General Information

Indoor/Outdoor type tight coated type optical cables are applied to indoor/outdoor installation. These types of cables are designed for indoor/outdoor application and also to protect optical fiber for the unexpected mechanical, environmental and rodent protection conditions. Qualification and acceptance testing are performed to assure the optical cable's performance and durability in several environments.

Features and Benefits

- -Fiber counts up to 12
- -Light weight
- -High tensile strength design
- -Completely dry core design
- -Small diameter
- -Colored fiber for the quick identification
- -UV resistance for the outer sheath
- -Fully complies with international standards, TIA/EIA
- -Customer designs are available on request

Applications

-Building interconnection -Campus and Local Area Network

Cable Weight & Diameter

Item	Number of Fiber	Nom Outer Diameter mm	Nom Cable Weight Kg/km	Reel Length Km*
	2	9,5	110	4
	4	9,5	110	4
Tight Coated Ontical Cables	6	10,5	120	4
light oblice optical oubles	8	11,0	135	4
	10	12,0	140	4
	12	12,5	150	4



No	1	2	3	4	5	6	7	8	9	10	11	12
Fiber	Blue	Orange	Green	Red	Yellow	Violet	Brown	Black	White	Grey	Turquoise	Pink

Mechanical & Environmental Characteristics Parameters

Tensile Strength	Max	1.000 N
IEC 60794-1-2-E1	Opr.	600 N
Bending Radius(mm)	Dynamic	20xD
IEC 60794-1-2-E11	Static	10xD
Crush Resistance IEC 60794-1-2-E3		500 N
Impact Resistance IEC-60794-1-2-E4		50 N
Operation Temperature	Installing	-30 +60 (°C)
IEC 60794-1-2-F1	Operating	-40 +80 (°C)
Water Penetration IEC 60794-1-2 F5	24 hour, 1 meter	No leakage

Type Code of Optical Cable

J-VQ (BN) H (SR) 2Y mxnN Refer to the type code of the optical cables for the description of the cable code.

Optical Characteristics

Refer to the fiber data sheet

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows; TURKUAZ CABLE < Year of manufacturing > < number and type of fiber > < length marking in meter >

Color of Sheath and Material

Inner/ Outer sheath materials are HFFR-MDPE-HDPE and outer sheath color is black. Other color can be applied in customer request

Packing

Shipment will be done with non-returnable wooden drums with protection.

TURKUAZ Cable Design Information

Fiber Type SM 9/125 (G.652 d), SM 9/125(G.655), MM 62,5/125 – MM 50/125- MM 50/125 OM3 Tight coated design UV resistance Outer Sheath LSZH or HFFR for inner sheath LSZH or HFFR Sheathing also possible in indoor applications Peripheral Strength Member is Glass yarn or Aramide yarn also possible in customer requests.



Technical Specification of Optical Fiber

SINGLE MODE FIBER (G.652.d) 1. Optical Specifications

Specified Value Specifications Tolerance Unit 1310 nm 1550 nm Attenuation Max. dB/km +0.35 +0.21 Mode Field Diameter ±0.5 9.2 10.3 μm **Choromatic Dispersion** Max. ps/(nm*km) †3.5 †17 **Cladding Diameter** ±2 μm 125 1 Core / Cladding Concentricity Error _ μm Zero Dispersion Wavelength Attenuation 1300-1324 % **Cladding Non Circularity** Max. †2 **Coating Diameter** ±15 250 μm Cut off Wavelength Max. μm 1150-1270

2. Mechanical Specifications

Specifications	Unit	Specified Value
Proof Test	Ν	8.4
Proof Test Strain	%	1.00
Storage Temperature	°C	-40†K†80
Installation Temperature	°C	0†K†50

Note: 1310 nm; 1285 † λ † 1330 nm 1550 nm; 1525 † λ † 1575 nm

MULTI MODE FIBERS (62.5/125 - 50/125) 1. Optical Specifications

Specifications	Unit	Specified Val	ue (62.5/125)	Specified Value (50/125)	
Specifications	Onit	850 nm	1300 nm	850 nm	1300 nm
Attenuation Max.	dB/km	3.0	0.7	2.5	0.7
Bandwidth Min.	MHz. km	160	300	500	500

2. Mechanical Specifications

Specifications	Unit	Specified Value (62.5/125)	Specified Value (50/125)
Core Diameter	μm	62.5±3	50±2.5
Cladding Diameter	μm	125±2	125±2
Coating Diameter	μm	245±10	245±10
Core Non Circularity (Max)	%	6	6
Core to Cladding Concentrity	μm	1.5	1.5
Cladding Non Circularity (Max)	%	2	2