
TURKUAZ
CABLE

Company Profile
Turkuaz Cable

Turkuaz Cable, Inc. has been a leading telecommunication cables manufacturer, serving both to the domestic and international markets, since 2000. We contribute in the telecommunication industry through the production of fiber optic cables and copper insulated telecommunication cables. Turkuaz Cable brought a modern manner to the Turkish Cable industry by combining flexible operations with high quality products. We provide superior products and services through our manufacturing plant and headquarters based in Gebze, Kocaeli, Turkey. Turkuaz Cable combine the modern developments in the cable industry at its manufacturing plant of 15000 m^2 area by nearly 100 skillful personnel. It is our core value to go beyond the customer expectations and respond fast to customer requests by offering remarkable products and services.

Moreover, Turkuaz Cable focuses on every stage of the operations from the selection of raw materials through the production, the completion of shipments and after-the-sale services. We continue to use firm steps in supplying high quality products to our customers. This is why we meticulously use the best raw materials in our products and test all raw materials within our facility.

Turkuaz Cable has been providing the telecommunication cables required for underground and self-supported cables for both copper cable and fiber optic cables to turnkey telephone networks of biggest telecommunication authorities such as the government and private networks.

Beside the telecom companies, we provide cables for both domestic and international turnkey projects. Up until present, Turkuaz Cable has taken place in domestic and international tenders. We have successfully delivered our products worldwide. As one of the leading cable producers of Turkey, Turkuaz Cable had exported its products to more than 50 countries. Through these productions and other projects, the quality of Turkuaz is approved by the international markets in a short period of time.

Turkuaz Cable continues to invest in developing technologies to provide the finest products. Outstanding technical expertise combined with broad industry knowledge makes Turkuaz Cable, Inc. the ideal choice for a telecom cable consumer. Please do not hesitate to contact with us in case of any inquiry. Our commitment to the goal of customer satisfaction is the driving force in the way we perform business with our young, dynamic and dedicated team.

Yours Sincerely,
Turkuaz Cable Management

View From The Factory

Quality

Our persistent efforts to improve our products are rewarded by being qualified by the highest authorities in the telecommunication industry such as Turkish Telecom. In addition, Turkuaz Cable is certified by ISO 9001:2000 Quality Assurance System, ISO 14001 Environmental Management System and OHSAS 18001 Occupational Health and Safety Management System by Turkish Standardization Institute (TSE) and American Systems Registrar (ASR). Our quality assurance system indicates control at each process of the production to ensure the highest level of quality in our products.

We see the quality as a long term investment and main goal of our company. With a customer oriented mind, and gained experience quality process begins with the selection of raw materials from well known world wide companies, and continues at every single step of the production process.

Skilled Personel

Our employees are the most valuable asset of our company. Each individual has a long standing experience in the industry. We have been applying cross-training between different positions to increase flexibility in managing the workforce, let employees learn new skills and make them more valuable.

View From The Factory

Our Vision

Our vision is to be the most qualified, technologically sufficient telecommunication cable supplier and to be a well-known company by it's quality and technology.

Fiber Production

The fiber optic cable production capacity allows us to produce up to 288 fibered cable.

TURKUAZ CABLE

FIBER OPTIC CABLES

Direct Buried Type Double Sheathed 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

Applications

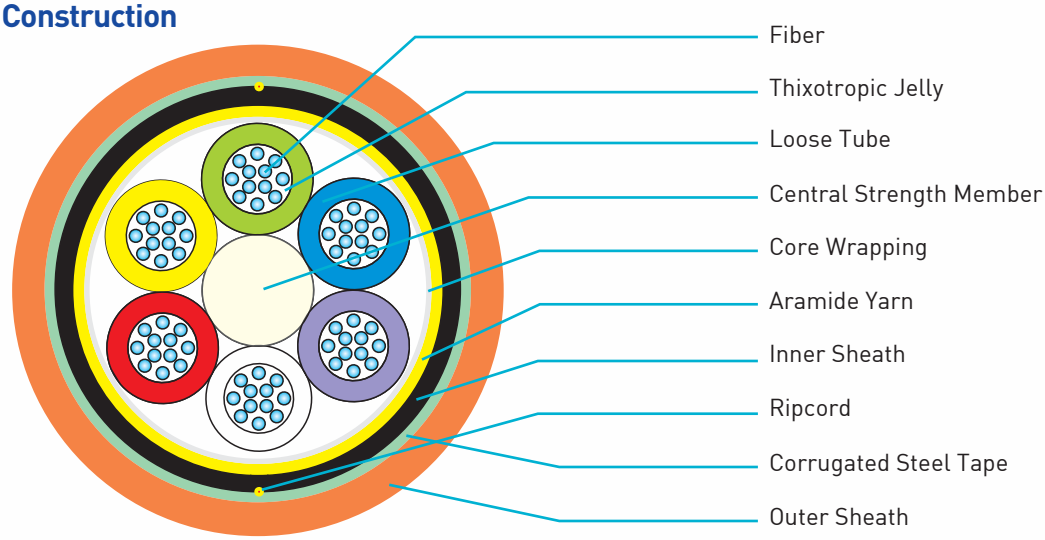
- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communications
- Metropolitan Communication Systems

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*
Direct Buried Corrugated Steel Tape Armored Double Sheathed Optical Cables	4	2	2	4	15,0	200	6
	6	2	3	3	15,0	200	6
	12	2	6	0	15,0	200	6
	24	4	6	0	15,0	200	6
	36	6	6	0	15,0	200	6
	48	8	6	0	15,0	200	6
	60	12	5	1	15,0	200	6
	72	12	6	0	15,0	200	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

Cable Construction



Note: Drawing is not scaled

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
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.	4.000 N 2.000 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	5.000 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

D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y (SR) 2Y mxn .....N 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

Applications

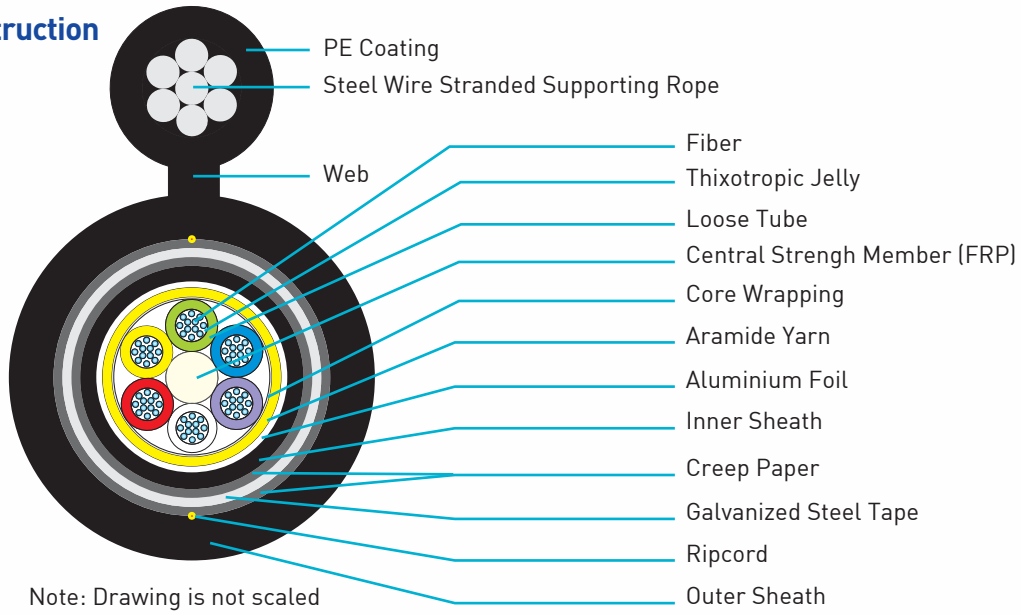
- Telecommunication
- Video
- Long Haul Communication Systems
- Metropolitan Communication Systems

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*
Aerial Armored Cables	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
	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

Cable Construction



Note: Drawing is not scaled

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
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.	6.000 N 3.000 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	5.000 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

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

Type Code of Optical Cable

A-DF(ZN) 2Y (SR) T 2Y mxn .....N 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

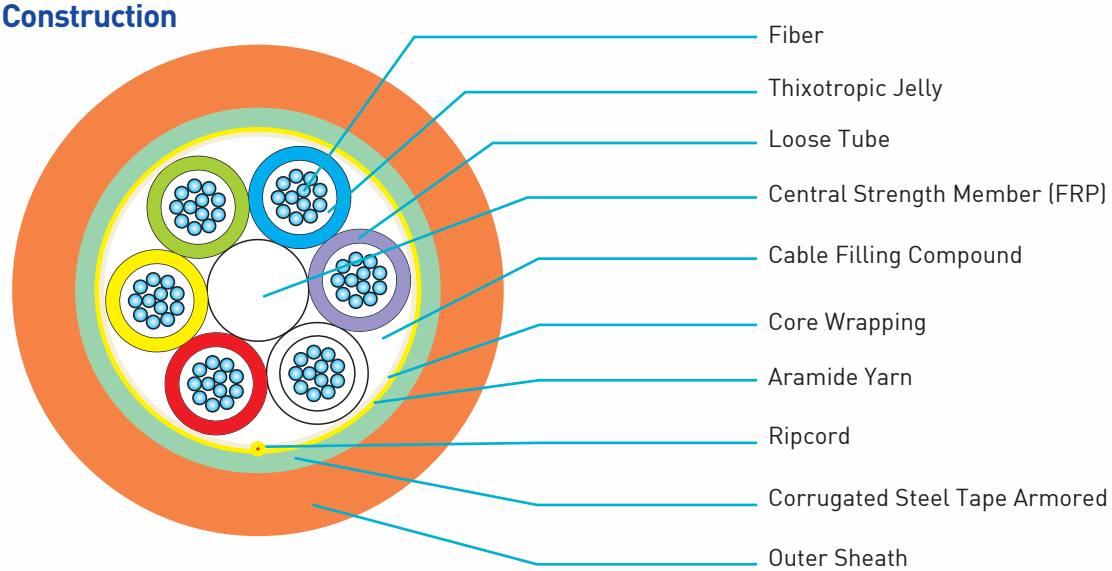
- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communication and
- Metropolitan Communication Systems

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*
Direct Buried Type Single Sheathed Fiber Optic Cables	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
	48	8	6	0	12,5	160	4
	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.
(*) Other delivery length is available

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
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.	3.000 N 1.000 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

D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y mxn .....N 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

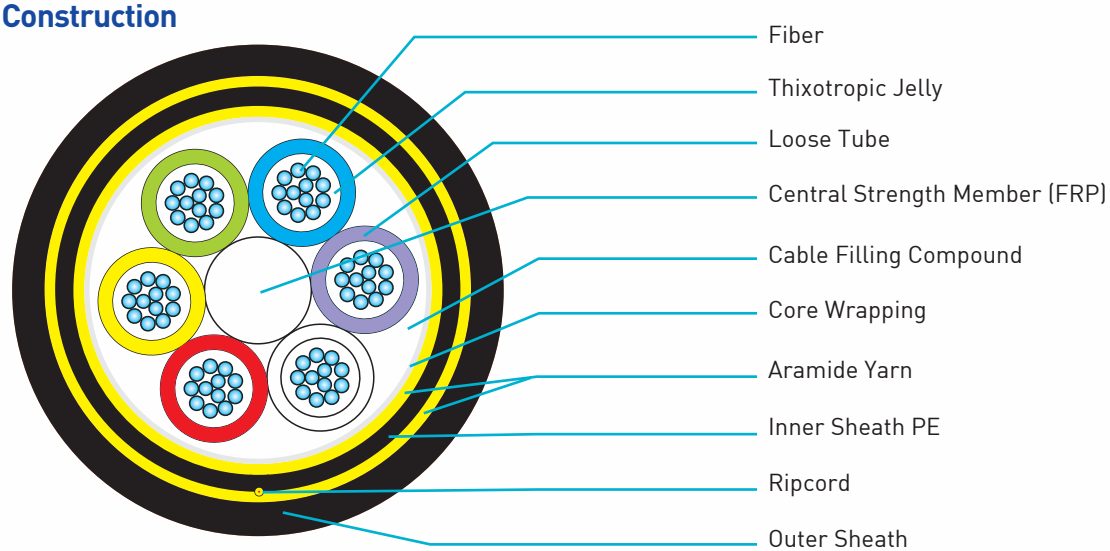
- Telecommunication
- Video
- Long Haul Communication Systems
- Metropolitan Communication Systems

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*
ADSS Optical Cables	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
	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

(*) Other delivery length is available

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
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 mxn .....N 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 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

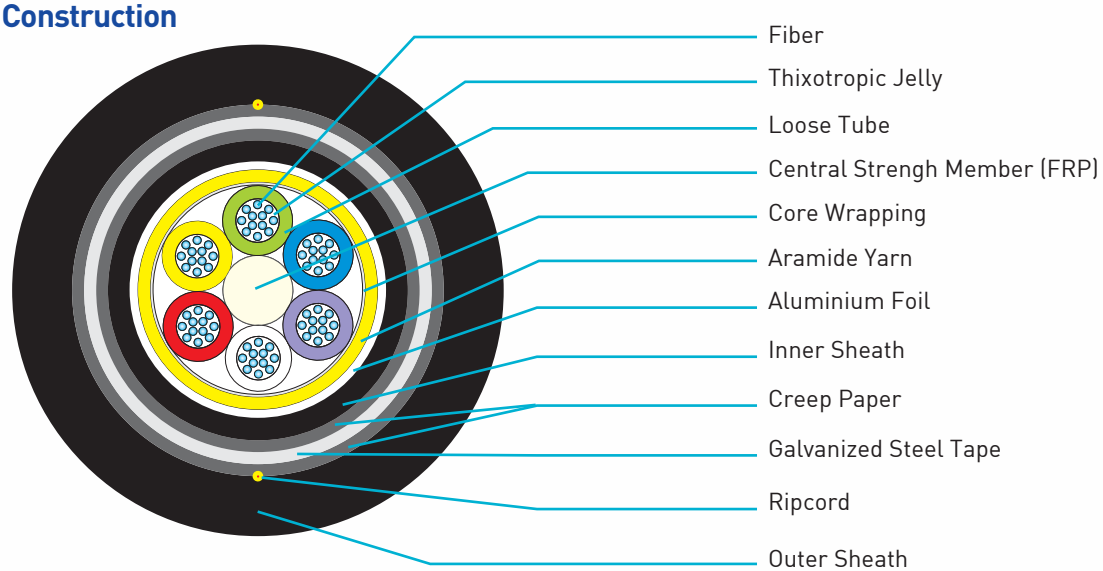
- Telecommunication
- Video
- Long Haul Communication Systems
- Metropolitan Communication Systems

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*
Galvanized Steel Tape Armored Direct Buried Type Optical Cables	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
	36	6	6	0	18,0	350	4
	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

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
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.	4.000 N 3.000 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	5.000 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

Type Code of Optical Cable

A-DF(ZN) 2Y (B) 2Y mxn .....N 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 identification
- UV 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

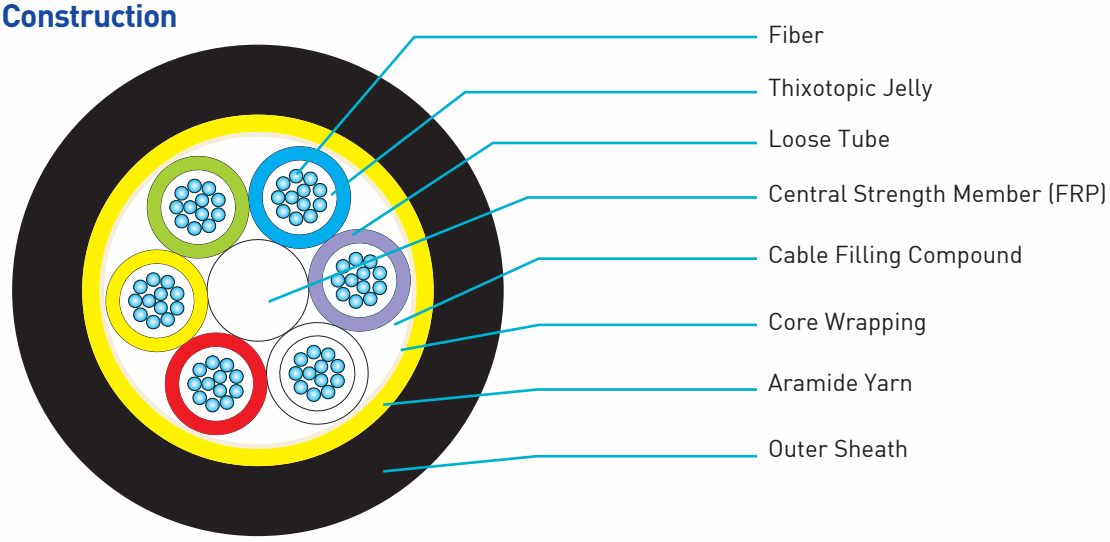
- Telecommunication applications
- Video applications
- Distribution
- Long Haul Communication and
- Metropolitan Communication Systems

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*
Duct Type Single Sheathed Optical Cables	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
	48	8	6	0	11,0	100	6
	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.
(*) Other delivery length is available

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
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.	2.000 N 1.000 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	2.000 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

D: Outer Diameter of Cable

Type Code of Optical Cable

A-DF(ZN) 2Y mxn .....N 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

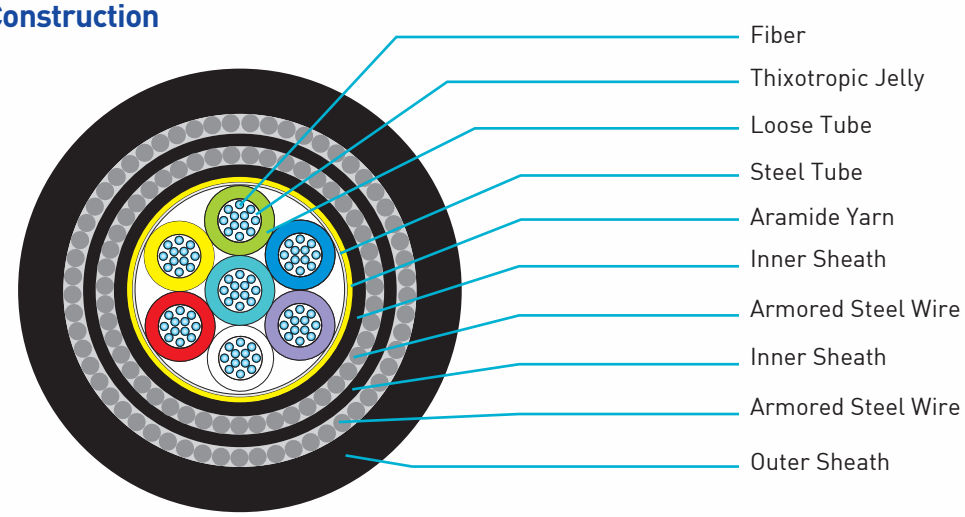
-Telecommunication applications
-Video applications
-Data applications
-CATV Transmission
-Local Area Networks applications

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*
Double Steel Wire Armored Underwater Type Optical Cables	4	2	2	4	29	1.800	12
	6	2	3	3	29	1.800	12
	12	2	6	0	29	1.800	12
	24	4	6	0	29	1.800	12
	36	6	6	0	29	1.800	12
	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

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
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.	80 KN 160 KN
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	15xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	10. KN ----
Impact Resistance IEC-60794-1-2-E4	--------- ---------	300 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

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 mxn .....N 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 (±0,1) for inner and 2,5 (± 0,1) mm for outer sheaths respectively.

Packing

Shipment will be done with non-returnable wooden-steel 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

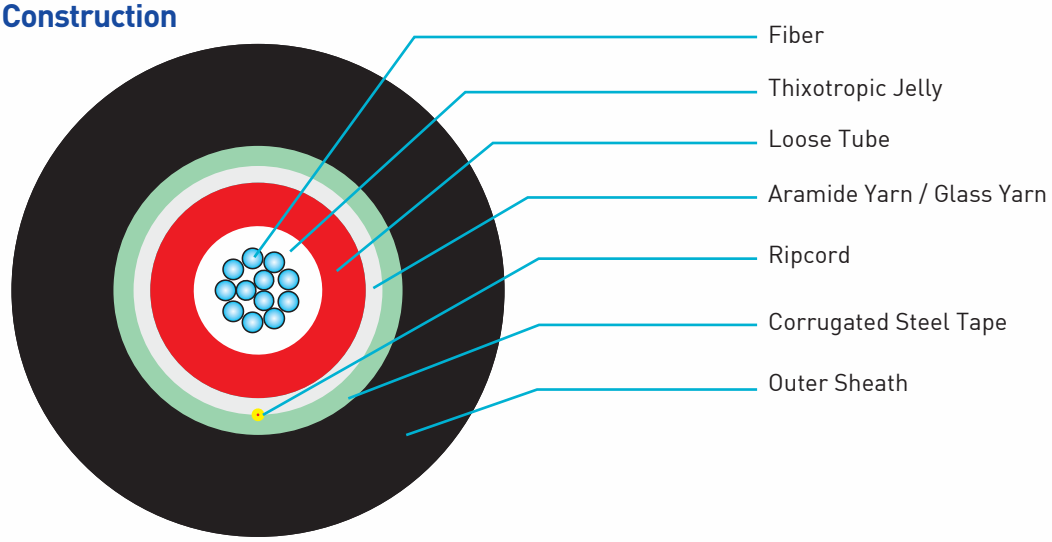
- Building interconnection
- Campus and Local Area Network

Cable Weight & Diameter

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

(*) Other delivery length is available

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 IEC 60794-1-2-E1	Max Opr.	800 N 500 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	1.000 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

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

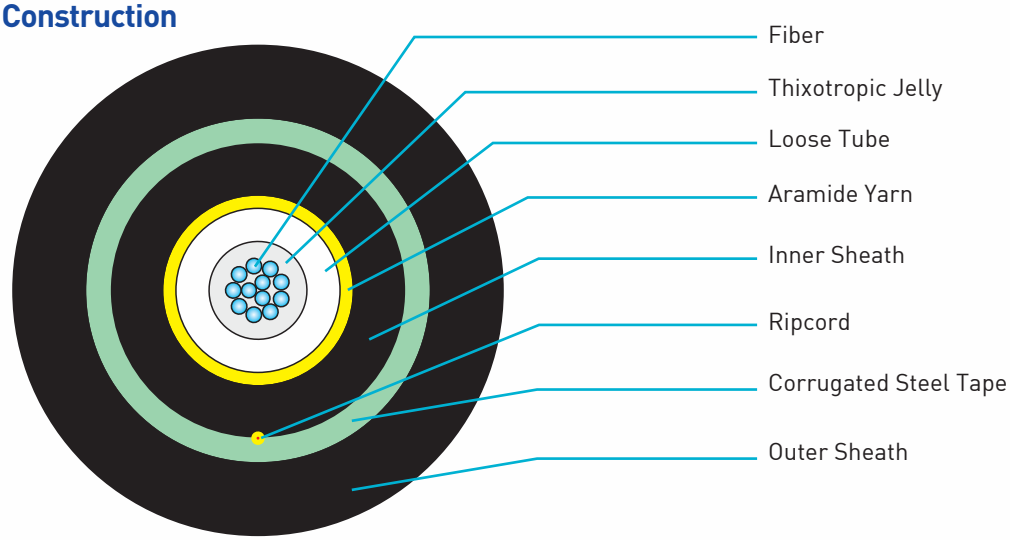
- Building interconnection
- Campus and Local Area Network

Cable Weight & Diameter

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

(*) Other delivery length is available

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

Color of Louse tube is natural

Mechanical & Environmental Characteristics

Parameters

Tensile Strength IEC 60794-1-2-E1	Max Opr.	1.000 N 600 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	1.000 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

Type Code of Optical Cable

A-DQ (BN) 2Y (SR) 2Y mxn .....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 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

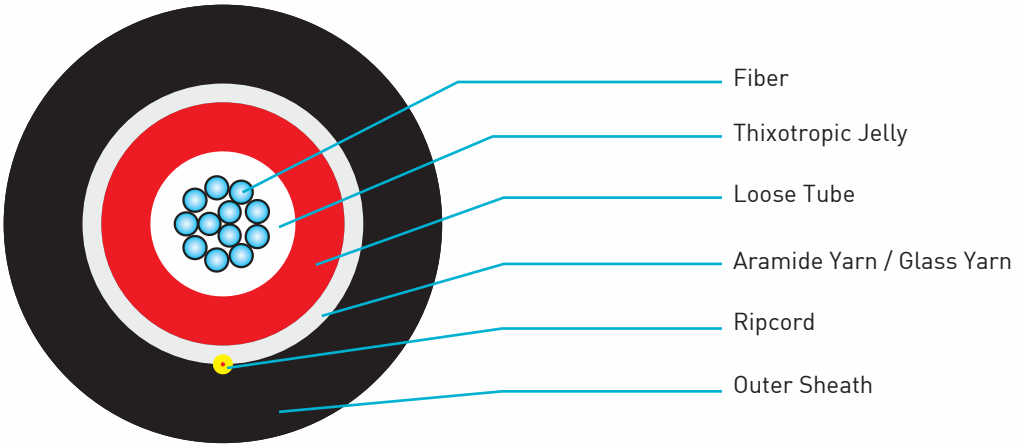
- Building interconnection
- Campus and Local Area network

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

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 IEC 60794-1-2-E1	Max Opr.	1.000 N 600 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	500 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

Type Code of Optical Cable

A-DQ (BN) 2Y mxn .....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 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

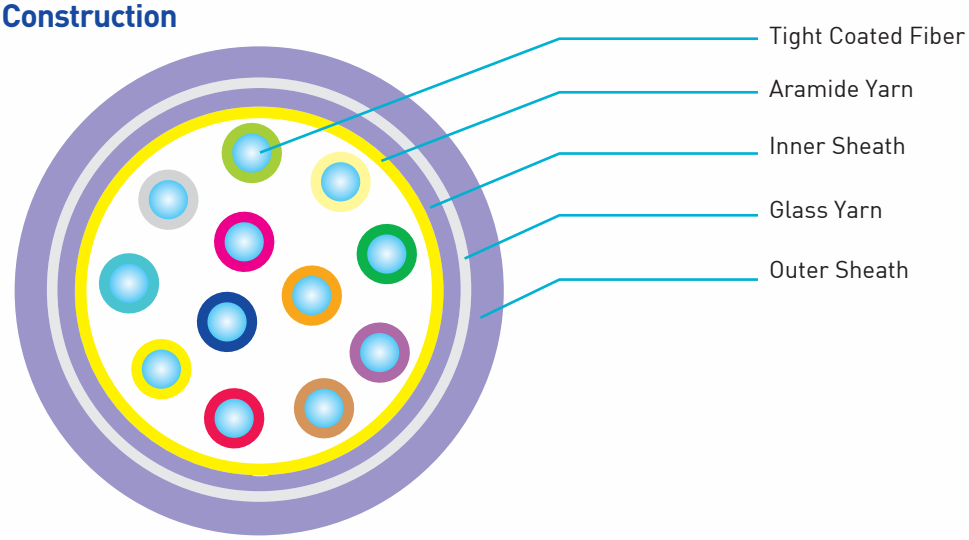
-Building interconnection
-Campus and Local Area Network

Cable Weight & Diameter

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

(*) Other delivery length is available

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 IEC 60794-1-2-E1	Max Opr.	1.000 N 600 N
Bending Radius(mm) IEC 60794-1-2-E11	Dynamic Static	20xD 10xD
Crush Resistance IEC 60794-1-2-E3	--------- ---------	500 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

Type Code of Optical Cable

J-VQ (BN) H (SR) 2Y mxn .....N
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

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

2. Mechanical Specifications

Specifications	Unit	Specified Value
Proof Test	N	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 Value (62.5/125)		Specified Value (50/125)	
		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

TURKUAZ
CABLE

COPPER CORE TELECOMMUNICATION CABLES

Jelly Filled Unarmored Telephone Cables

Description

Used for distribution and long distance networks and installed for secondary and primary networks. The cable structure is completed by the application of a suitable core wrapping material, flooding compound, copolymer coated moisture barrier and overall the black outer jacketing. Outer jacketing material is MDPE, LDPE or HDPE in accordance with ASTM D 1248. Outer jacket is sequentially marked by hot foil printing method.

Conductor

Solid annealed electrolytic copper. The conductor size are 0.4- 0.5- 0.6 and 0.9 mm

Color Coding

For fully color-coding please refer to annex for detailed information of pair color code and sub units color codes.

Insulation

Colored foam skin polyethylene insulation and solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation made medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length is specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Twisted wires are assembled to form substantially cylindrical groups of ten pairs (units). Super units are assembled with suitable number of units, which are binded by durable colored tapes and cabled to complete cable core.

Filling Compound

The water resistance-filling compound, which has 85ºC drop point, is applied to the cable core to provide water resistance.

Core Wrapping

A non-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps by 5%.

Identification

A plastic tape, durable marked by the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

Flooding Compound / Water blocking Tape

In order to prevent the water resistance-flooding compound applied over the cable core. In customer request water blocking tape could be applied between core wrapping and aluminum tape in helically or longitudinally.

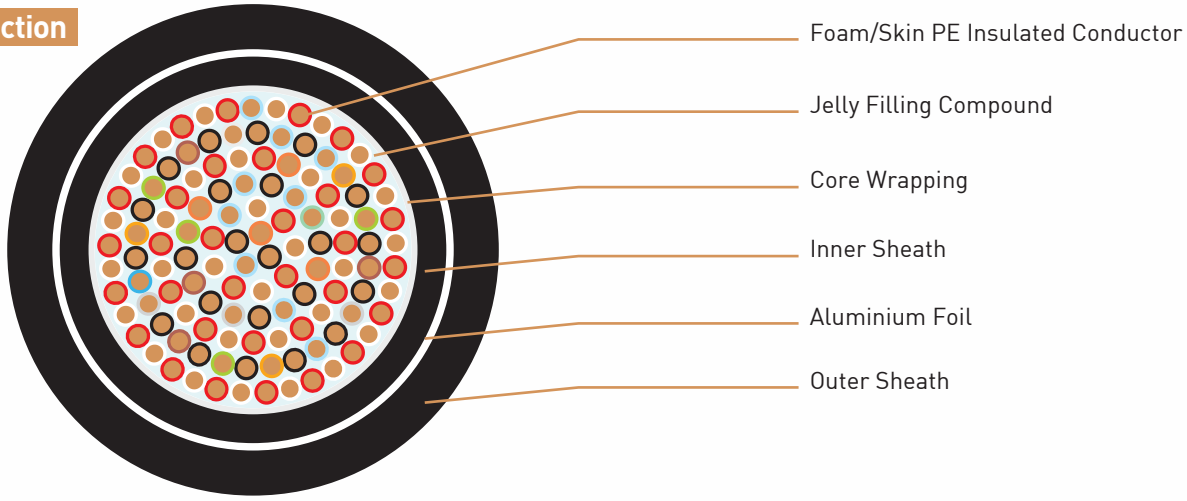
Screen

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50 micron polyethylene film applied longitudinally over core covering with a min 5 mm overlap. In customer request 0,15 mm thick aluminum tape could be used.

Outer Jacket

The cable core is extruded black low-density or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene is include %2,5 ±0,5 carbon black for sunrise resistance. The color of outer sheath is black.

Cable Construction



Type Code of Cable

A-02YF(L) 2Y mxn
Refer to the type code of the copper cable for the description of the cable code

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,5	22,6	78	2.000
20	10,0	45,3	121	2.000
30	11,5	67,9	162	2.000
50	13,5	115,5	240	1.000
100	17,0	231,0	426	1.000
150	21,0	346,5	623	500
200	23,5	462,0	807	500
300	28,0	693,0	1.169	500
400	32,0	924,1	1.525	500
600	38,0	1.386,1	2.218	500
900	45,5	2.079,1	3.242	400
1.200	51,5	2.772,2	4.275	400
1.500	57,5	3.456,2	5.309	300
1.800	62,5	4.158,2	6.342	300
2.400	71,5	5.544,3	8.327	250

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	9,5	35,5	104	2.000
20	11,5	71,1	167	2.000
30	13,0	106,6	227	1.000
50	15,5	181,2	348	1.000
100	20,5	362,4	634	500
150	25,0	543,6	932	500
200	28,5	724,8	1.216	500
300	34,0	1.087,2	1.780	500
400	38,5	1.449,6	2.333	500
600	45,5	2.174,3	3.352	500
900	54,5	3.261,5	4.939	400
1.200	62,5	4.348,7	6.525	300

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	11,0	51,2	138	1.200
20	13,5	102,3	228	1.200
30	15,5	153,5	318	1.200
50	19,0	260,9	492	1.200
100	25,5	521,8	918	800
150	31,0	782,8	1.389	400
200	35,5	1.043,7	1.798	400
300	42,5	1.565,5	2.636	400
400	48,5	2.087,4	3.468	400
600	58,0	3.131,1	5.068	400

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	14,5	115,2	260	1.200
20	18,5	230,2	456	1.200
30	21,5	345,3	646	800
50	27,0	587,1	1.054	800
100	36,5	1.174,1	1.998	400
150	45,5	1.761,2	3.052	400
200	52,5	2.348,3	4.042	400
300	63,0	3.522,4	5.940	400

(*)Other delivery length is available in customer request

Jelly Filled Armored Telephone Cables

Description

Used for distribution and long distance networks and installed for direct buried applications. The cable structure is completed by the application of a suitable core wrapping material, flooding compound, copolymer coated moisture barrier and overall the black inner and outer jacketing. Inner/outer jacketing material is MDPE LDPE or HDPE in accordance with ASTM D 1248. These types of cables have excellent mechanical performance.

Conductor

Solid annealed copper electrolytic copper. The conductor sizes are 0.4, 0.5, 0.6 or 0.9 mm

Color Coding

For fully color-coding please refer to annex for detailed information of pair color code and sub units color codes.

Insulation

Colored foam skin polyethylene insulation or solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation is made medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Twisted wires are assembled to form substantially cylindrical groups of ten pairs (units). Super units are assembled with suitable number of units, which are binded with durable colored tapes and cabled to complete cable core.

Filling Compound

The water resistance-filling compound, which is 85ºC drop point, is applied to the cable core to provide water resistance.

Core Wrapping

Anon-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps 5%.

Identification

A plastic tape, durable marked with the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

Flooding Compound / Water blocking Tape

In order to prevent the water resistance, flooding compound applied over the cable core. In customer request water blocking tape could be applied between core wrapping and aluminum tape in helically or longitudinally.

Screen

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50 micron polyethylene film applied longitudinally over core covering with a min. 5 mm overlap. In customer request 0,15 mm thickness aluminum tape could be used.

Inner Jacket

An extruded black low-density or medium-density polyethylene in accordance with ASTM D 1248 encloses the cable core.

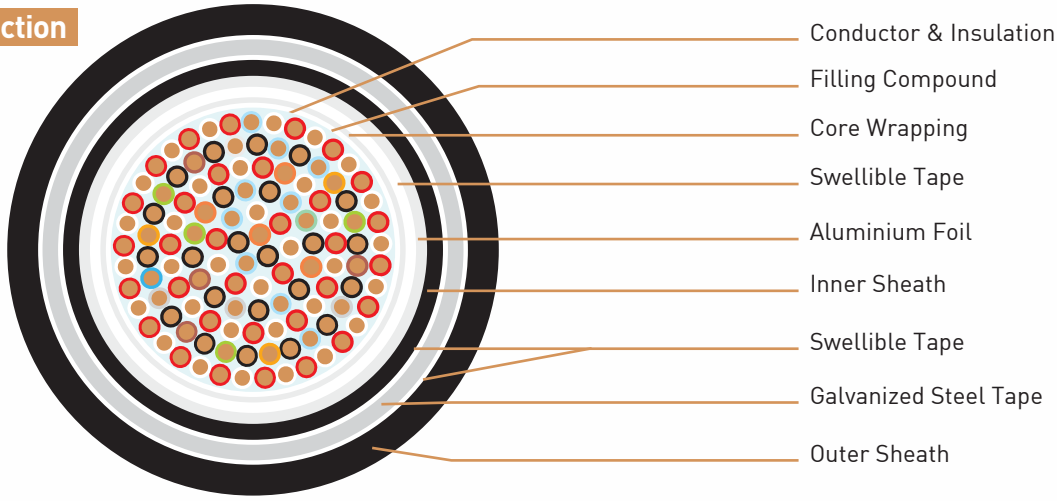
Armour

Both side 50 micron copolymer coated 0,155 mm thickness steel tape applied longitudinally over the inner jacket. Flooding compound shall be applied under the corrugated steel tape in order to prevent the water penetration. Two layer galvanized steel tape armour could be applied helically in customer request.

Outer Jacket

Over the corrugated steel tape, outer jacket is extruded black low-density or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene is include %2,5 ±0,5 carbon black for sunrise resistance. The color of outer sheath is black.

Cable Construction



Type Code of Cable

A-02YF(L) 2Y mxn
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	12,0	22,6	148	2.000
20	13,5	45,3	202	2.000
30	15,0	67,9	252	2.000
50	17,0	115,5	344	1.000
100	21,0	231,0	556	1.000
150	24,5	346,5	782	500
200	27,5	462,0	990	500
300	32,5	693,0	1.392	500
400	36,0	924,1	1.784	500
600	42,0	1.386,1	2.526	500
900	50,5	2.079,1	3.670	400
1.200	57,5	2.772,2	4.792	400
1.500	62,0	3.456,2	5.877	300

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	13,0	35,5	185	2.000
20	15,0	71,1	264	2.000
30	17,0	106,6	336	1.000
50	19,5	181,2	488	1.000
100	24,5	362,4	807	500
150	29,0	543,6	1.158	500
200	32,5	724,8	1.470	500
300	38,0	1.087,2	2.110	500
400	42,5	1.449,6	2.722	500
600	49,5	2.174,3	3.872	500
900	59,5	3.261,5	5.662	400

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	15,0	51,2	245	1.200
20	17,5	102,3	365	1.200
30	19,5	153,5	475	1.200
50	23,0	260,9	705	1.200
100	30,0	521,8	1.230	800
150	35,5	782,8	1.765	400
200	40	1.043,7	2.280	400
300	47,5	1.565,5	3.275	400
400	53,5	2.087,4	4.260	400
1.200	75,5	9.680,0	6.200	300

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	18	115,2	405	1.200
20	22,5	230,2	660	1.200
30	25,5	345,3	905	800
50	31,5	587,1	1.420	800
100	41,5	1.174,1	2.575	400
150	50,5	1.761,2	3.830	400
200	58,0	2.348,3	5.020	400
300	69,0	3.522,4	7.295	400

(*)Other delivery length is available in customer request

Jelly Filled Double Sheathed Underground Telephone Cables

Description

Used for distribution and long distance networks and installed for direct buried applications. The cable structure is completed by the application of a suitable core wrapping material, flooding compound, copolymer coated moisture barrier and overall the black inner and outer jacketing. Inner/outer jacketing material is MDPE LDPE or HDPE in accordance with ASTM D 1248. These types of cables have excellent mechanical performance.

Conductor

Solid annealed copper electrolytic copper. The conductor sizes are 0.4- 0.5- 0.6 or 0.9 mm

Color Coding

For fully color-coding please refer to annex for detailed information of pair color code and sub unit color codes.

Insulation

Colored foam skin polyethylene insulation or solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation is made by medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Twisted wires are assembled to form substantially cylindrical groups of ten pairs (units). Super units are assembled by suitable number of units, which are binded by durable colored tapes and cabled to complete cable core.

Filling Compound

The water resistance-filling compound, which has 85ºC drop point, is applied to the cable core to provide water resistance.

Core Wrapping

Anon-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps by 5%.

Identification

A plastic tape, durable marked with the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

Flooding Compound / Water blocking Tape

In order to prevent the water resistance, flooding compound applied over the cable core. In customer request water blocking tape could be applied between core wrapping and aluminum tape in helically or longitudinally.

Screen

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50-micron polyethylene film applied longitudinally over core covering with a min 5 mm overlap. In customer request 0,15 mm thick aluminum tape could be used.

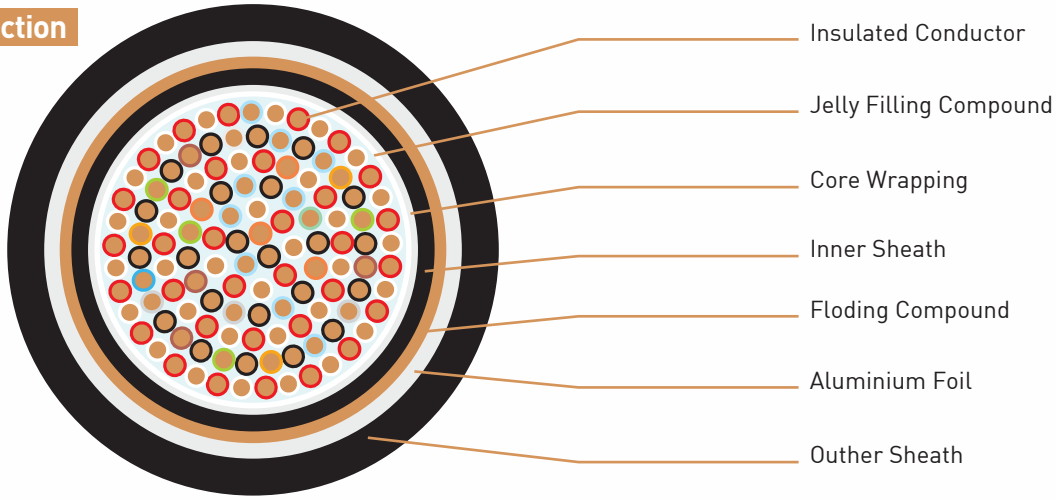
Inner Jacket

An extruded black low-density or medium-density polyethylene in accordance with ASTM D 1248 encloses the cable core.

Outer Jacket

Over the corrugated steel tape, outer jacket is extruded black low-density polyethylene or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene includes %2,5 ±0,5 carbon black for sunrise resistance. The color of outer sheath is black.

Cable Construction



Type Code of Cable

A-02YF(L) 2Y mxn
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	9,9	22,6	105	2.000
20	11,6	45,3	150	2.000
30	12,9	67,9	190	2.000
50	15,0	115,5	277	1.000
100	18,7	231,0	470	1.000
150	22,6	346,5	682	500
200	25,3	462,0	875	500
300	30,5	693,0	1.270	500
400	34,0	924,1	1.632	500
600	4,5	1.386,1	2.355	500
900	48,5	2.079,1	3.464	400
1.200	55,2	2.772,2	4.560	400
1.500	61,0	3.456,2	5.624	300
1.800	66,5	4.158,2	6.723	300

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	11,4	35,5	130	2.000
20	13,4	71,1	200	2.000
30	15,0	106,6	270	1.000
50	17,6	181,2	390	1.000
100	23,0	362,4	690	500
150	27,5	543,6	1.005	500
200	31,0	724,8	1.314	500
300	37,0	1.087,2	1.902	500
400	41,5	1.449,6	2.470	500
600	48,0	2.174,3	3.515	500
900	57,5	3.261,5	5.160	400
1.200	65,5	4.348,7	6.780	300

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	12,7	51,2	180	1.200
20	15,0	102,3	280	1.200
30	17,5	153,5	370	1.200
50	20,5	260,9	565	1.200
100	28,0	521,8	1.040	800
150	33,0	782,8	1.490	400
200	38,0	1.043,7	1.940	400
300	45,5	1.565,5	2.795	400
400	51,0	2.087,4	3.670	400

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	16,0	115,2	290	1.200
20	20,0	230,2	500	1.200
30	23,5	345,3	700	800
50	29,5	587,1	1.130	800
100	39,0	1.174,1	2.090	400
150	48,5	1.761,2	3.150	400
200	55,0	2.348,3	4.150	400
300	66,5	3.522,4	6.070	400

(*) Other delivery length is available in customer request

Jelly Filled Self Supported Aerial Telephone Cables

Description

Used for aerial installation. The cable structure is completed by the application of a suitable core wrapping material, flooding compound, copolymer coated moisture barrier, a parallel support messenger with the core area covered by an overall black outer jacketing. Outer jacketing material is MDPE, LDPE or HDPE in accordance with ASTM D 1248. These types of cables have excellent mechanical performance.

Conductor

Solid annealed electrolytic copper. The conductor sizes are 0.4- 0.5- 0.6 or 0.9 mm

Color Coding

Fully color-coding. Please refer to annex for detailed information of pair color code and sub unit color codes.

Insulation

Colored foam skin polyethylene insulation or solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered by skin layer of high-density polyethylene compound. Solid insulation is made medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Twisted wires are assembled to form substantially cylindrical groups of ten pairs (units). Super units are assembled by suitable number of units which are binded by durable colored tapes and cabled to complete cable core.

Filling Compound

The water resistance-filling compound, which has 85ºC drop point, is applied to the cable core to provide water resistance.

Core Wrapping

Anon-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps by 5%.

Identification

A plastic tape, durable marked by the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

Flooding Compound / Water blocking Tape

In order to prevent the water resistance, flooding compound applied over the cable core. In customer request water blocking tape could be applied between core wrapping and aluminum tape in helically or longitudinally.

Screen

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50 micron polyethylene film applied longitudinally over core covering with a min 5 mm overlap. In customer request 0,15 mm thick aluminum tape could be used.

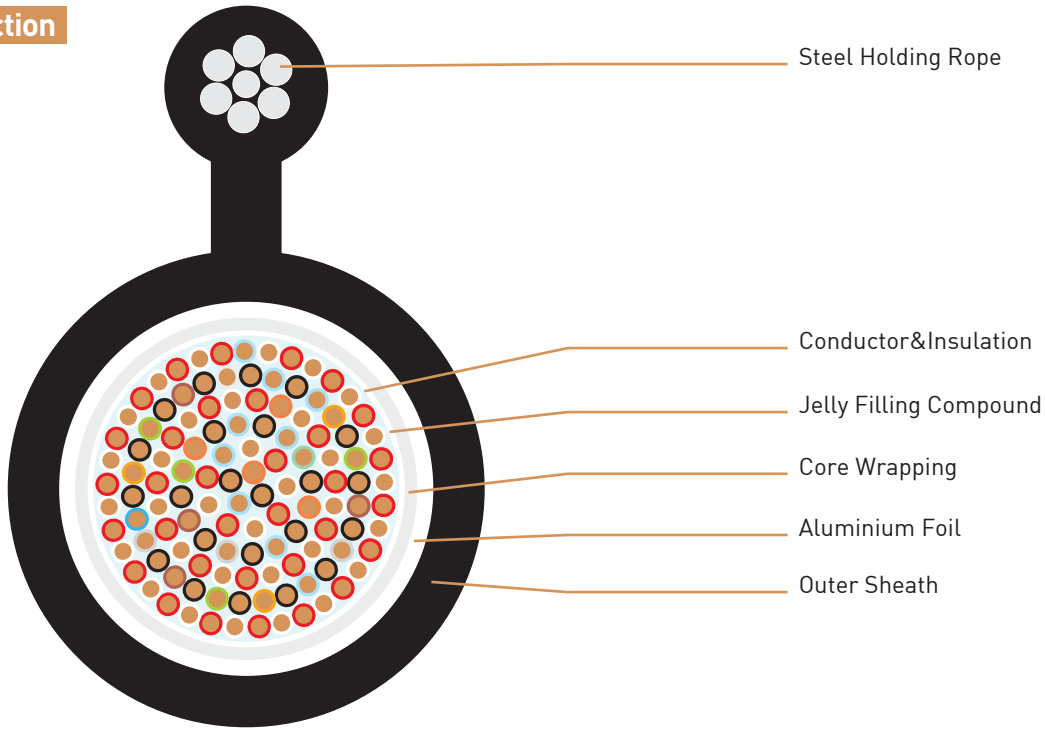
Support Messenger

According to ASTM A 475-66T galvanized 7 steel wires stranded rope having minimum 120 kg/mm^2 is used as holding rope.

Outer Jacket

Over the corrugated steel tape, outer jacket is extruded black low-density polyethylene or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene includes %2,5 ±0,5 carbon black for sunrise resistance. The color of outer sheath is black.

Cable Construction



Type Code of Cable

A-02YF(L) T 2Y mxn
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,3x7,5	22,6	150	2.000
20	10,0x19,5	45,3	190	2.000
30	11,5x20,5	67,9	230	2.000
50	13,5x23,5	115,5	330	1.000
100	17,5x27,5	231,0	540	1.000
150	20,8x31,8	346,5	765	500
200	23,5x35,7	462,0	1.025	500

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	9,3x19,1	35,5	195	2.000
20	11,4x21,2	71,1	255	2.000
30	13,0x22,8	106,6	315	1.000
50	15,6x26,0	181,2	460	1.000
100	20,5x31,5	362,4	770	500
150	24,9x37,1	543,6	1.135	500
200	28,4x42,7	724,8	1.435	500

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	10,7x20,0	51,2	210	1.200
20	13,4x23,2	102,3	320	1.200
30	15,5x25,9	153,5	430	1.200
50	18,7x30,0	260,9	624	1.200
100	25,0x40,0	521,8	1.110	800
150	31,0x45,5	782,8	1.570	400
200	35,2x50,5	1.043,7	2.060	400

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	14,1x24,0	115,2	350	1.200
20	18,2x28,0	230,2	540	1.200
30	21,3x32,3	345,3	770	800
50	26,3x38,5	587,1	1.200	800
100	36,0x51,5	1.174,1	2.200	400

(*) Other delivery length is available in customer request

Air Core Single Sheated Underground Telephone Cables

Description

Used for distribution and long distance networks and installed for secondary and primary networks. The cable structure is completed by the application of a suitable core wrapping material, copolymer coated moisture barrier and overall the black outer jacketing. Outer jacketing material is MDPE, LDPE or HDPE in accordance with ASTM D 1248. Outer jacket sequentially marked by hot foil printing method.

Conductor

Solid annealed electrolytic copper. The conductor sizes are 0.4, 0.5, 0.6, or 0.9 mm

Color Coding

Fully color-coding.

Insulation

Colored foam skin polyethylene insulation and solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation made by medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Stranding of 50 pairs or 100 pairs unit, which is assembled in to 10 pair groups, assembles the cable core.

Core Wrapping

A non-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps by 5%.

Identification

A plastic tape, durable marked by the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

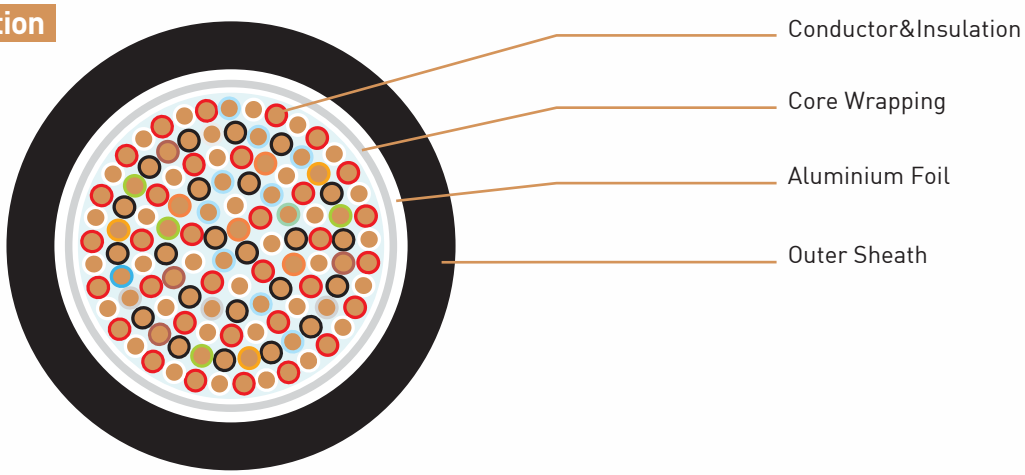
Screen

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50 micron polyethylene film applied longitudinally over core covering with an min 5 mm overlap. In customer request 0,15 mm thick aluminum tape could be used.

Outer Jacket

The cable core is extruded black low-density polyethylene or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene is include %2,5 ±0,5 carbon black for sunrise resistance.

Cable Construction



Type Code of Cable

A-02Y(L) 2Y mxn
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,0	22,6	75	2.000
20	9,6	45,3	110	2.000
30	10,8	67,9	150	2.000
50	12,7	115,5	210	1.000
100	16,2	231,0	380	1.000
150	19,8	346,5	550	500
200	22,3	462,0	695	500
300	26,5	693,0	995	500
400	30,1	924,1	1.295	500
600	34,9	1.386,1	1.880	500
900	42,0	2.079,1	2.760	400
1.200	48,5	2.772,2	3.650	400
1.500	53,2	3.456,2	4.495	300
1.800	57,9	4.158,2	5.350	300
2.400	65,6	5.544,3	7.000	250

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,7	35,5	90	2.000
20	10,6	71,1	150	2.000
30	12,0	106,6	205	1.000
50	14,5	181,2	295	1.000
100	18,6	362,4	535	500
150	25,0	543,6	785	500
200	28,5	724,8	1.020	500
300	30,5	1.087,2	1.460	500
400	34,5	1.449,6	1.915	500
600	40,3	2.174,3	2.790	500
900	48,5	3.261,5	4.090	400
1200	55,0	4.348,7	5.380	300

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	10,0	51,2	120	1.200
20	12,3	102,3	195	1.200
30	14,3	153,5	265	1.200
50	17,0	260,9	407	1.200
100	22,5	521,8	753	800
150	28,0	782,8	1.095	400
200	31,5	1.043,7	1.440	400
300	38,0	1.565,5	2.105	400
400	43,5	2.087,4	2.770	400
600	51,5	3.131,1	4.055	400

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	12,8	115,2	210	1.200
20	16,5	230,2	370	1.200
30	19,0	345,3	515	800
50	24,0	587,1	840	800
100	32,5	1.174,1	1.580	400
150	40,0	1.761,2	2.360	400
200	46,0	2.348,3	3.130	400
300	55,5	3.522,4	4.580	400

(*) Other delivery length is available in customer request

Unfilled Double Sheated Underground Telephone Cables

Description

Used for distribution and long distance networks and installed for secondary and primary networks. The cable structure is completed by the application of a suitable core wrapping material, copolymer coated moisture barrier and overall the black inner/outer jacketing. Inner/Outer jacketing material is MDPE, LDPE or HDPE in accordance with ASTM D 1248. Outer jacket sequentially marked by hot foil printing method. These types of cables designed for duct type installation.

Conductor

Solid annealed electrolytic copper. The conductor sizes are 0.4, 0.5, 0.6, or 0.9 mm

Color Coding

Fully color-coding. Please refer to annex for detailed information of pair color code and sub units color codes.

Insulation

Colored foam skin polyethylene insulation and solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation made by medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Stranding of 50 pairs or 100 pairs unit, which is assembled in to 10 pairs groups, assembles the cable core.

Core Wrapping

Twisted quads or pairs are assembled to form a substantially cylindrical group of 10 pairs (units). Super units that are assembled by suitable number of units are binded with polypropylene tapes and cabled to complete cable core.

Identification

A plastic tape, durable marked by the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

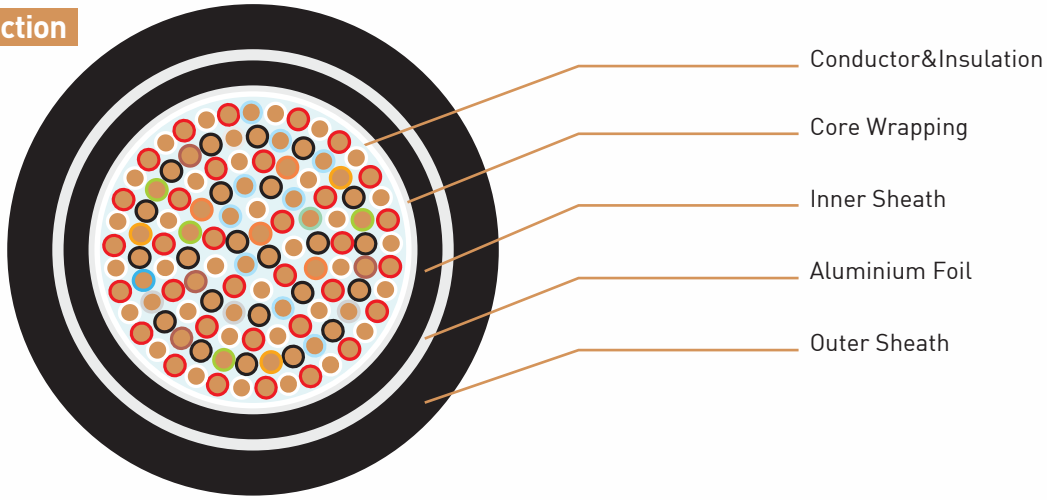
Inner Jacket

An extruded black low-density or medium-density polyethylene in accordance with ASTM D 1248 encloses the cable core.

Screen

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50-micron polyethylene film applied longitudinally over core covering with a min 5 mm overlap. In customer request 0,15 mm thick aluminum tape could be used.

Cable Construction



Type Code of Cable

A-02Y 2Y (L) 2Y mxn
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	10,0	22,6	110	2.000
20	11,7	45,3	145	2.000
30	12,8	67,9	180	2.000
50	14,8	115,5	255	1.000
100	18,5	231,0	425	1.000
150	21,5	346,5	590	500
200	24,0	462,0	760	500
300	28,5	693,0	1.090	500
400	32,5	924,1	1.390	500
600	37,5	1.386,1	2.040	500
900	45,0	2.079,1	2.950	400
1200	51,5	2.772,2	3.890	400
1500	57,0	3.456,2	4.810	300
1800	62,0	4.158,2	5.710	300

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	11,0	35,5	125	2.000
20	13,0	71,1	190	2.000
30	14,3	106,6	240	1.000
50	16,5	181,2	350	1.000
100	21,0	362,4	610	500
150	25,0	543,6	855	500
200	28,0	724,8	1.115	500
300	33,5	1.087,2	1.590	500
400	37,5	1.449,6	2.065	500
600	43,5	2.174,3	2.310	500
900	51,5	3.261,5	4.330	400
1200	59,0	4.348,7	5.690	300

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	12,0	51,2	150	1.200
20	14,3	102,3	240	1.200
30	16,3	153,5	310	1.200
50	19,5	260,9	470	1.200
100	25,8	521,8	860	800
150	30,5	782,8	1.035	400
200	34,5	1.043,7	1.590	400
300	41,0	1.565,5	2.290	400
400	46,5	2.087,4	2.995	400

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	14,7	115,2	250	1.200
20	18,5	230,2	420	1.200
30	21,3	345,3	580	800
50	26,5	587,1	950	800
100	35,0	1.174,1	1.730	400
150	43,0	1.761,2	2.545	400
200	49,0	2.348,3	3.360	400
300	59,0	3.522,4	4.890	400

(*) Other delivery length is available in customer request

Air Core Self Supported Aerial Telephone Cables

Description

Used for aerial installation. The cable structure is completed by the application of a suitable core wrapping material, copolymer coated moisture barrier, a parallel support messenger that with the core are covered by an overall the black outer jacketing. Outer jacketing material is MDPE, LDPE or HDPE in accordance with ASTM D 1248. These types of cables have excellent mechanical performance.

Conductor

Solid annealed electrolytic copper. The conductor sizes are 0.4, 0.5, 0.6, or 0.9 mm

Color Coding

Fully color-coding.

Insulation

Colored foam skin polyethylene insulation or solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation is made by medium or high-density polyethylene compound.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Twisted wires are assembled to form substantially cylindrical groups of ten pairs (units). Super units are assembled by suitable number of units which are binded with durable colored tapes and cabled to complete cable core.

Core Wrapping

Anon-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps by 5%.

Identification

A plastic tape, durable marked with the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

Screen

A single flat aluminum tape (0,15 mm thickness of aluminum) coated both side 50 micron polyethylene film applied longitudinally over core covering with an min 5 mm overlap.

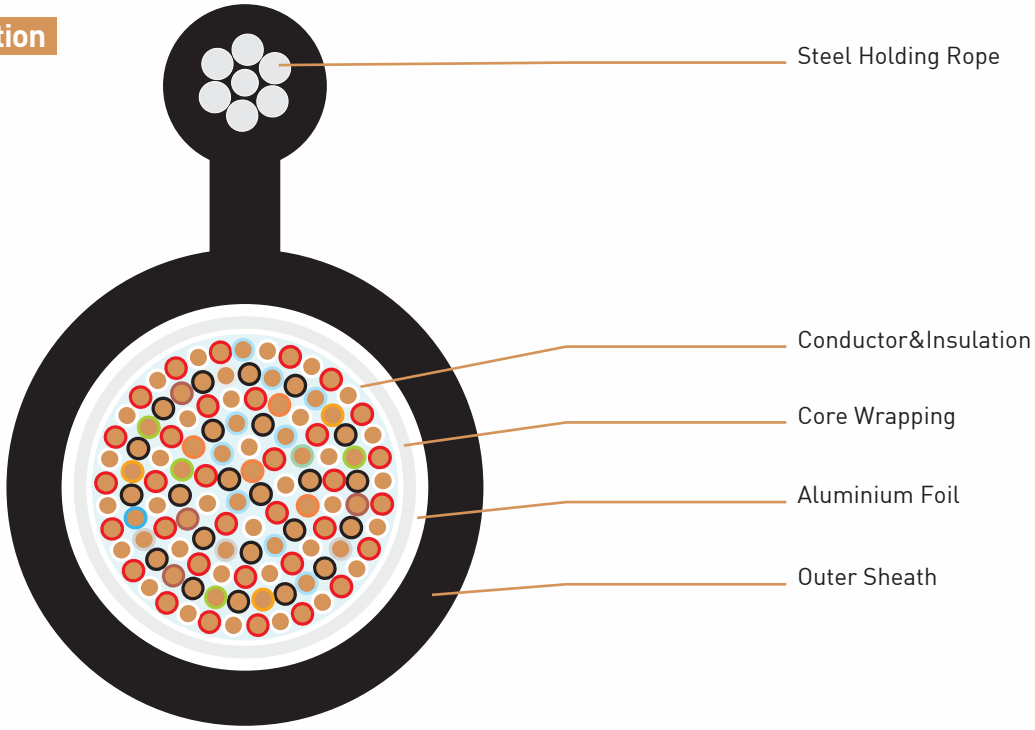
Support Messenger

According to ASTM A 475-66T galvanized 7 steel wires stranded rope having minimum 120 kg/mm^2 is used as holding rope.

Outher Jacket

Over the corrugated steel tape, outer jacket is extruded black low-density polyethylene or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene is include %2,5 ± 0,5 carbon black for sunrise resistance.

Cable Construction



Type Code of Cable

A-02Y(L) T 2Y mxn Refer to the type code of the copper cable for the description of the cable code. Sequentially numbered length marking are printed on the outside of cable jacket by hot foil printing method

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,4 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,0x17,2	22,6	140	2.000
20	9,6x19,0	45,3	190	2.000
30	10,8x20,0	67,9	220	2.000
50	13,0x22,5	115,5	310	1.000
100	16,5x27,0	231,0	490	1.000
150	20,0x31,0	346,5	680	500
200	22,5x35,5	462,0	910	500

0,5 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,7x18,5	35,5	180	2.000
20	10,6x20,5	71,1	240	2.000
30	12,0x22,0	106,6	290	1.000
50	14,5x25,0	181,2	410	1.000
100	18,6x30,0	362,4	680	500
150	22,5x35,0	543,6	970	500
200	25,5x40,0	724,8	1.220	500

0,6 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m) ± %5*
10	9,9x19,3	51,2	190	1.200
20	12,5x22,5	102,3	280	1.200
30	14,1x24,5	153,5	380	1.200
50	17,0x28,0	260,9	550	1.200
100	22,5x37,0	521,8	950	800
150	28,0x42,5	782,8	1320	400
200	31,6x47,0	1043,7	1.730	400

0,9 mm Conductor

Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m) ± %5*
10	12,7x22,5	115,2	310	1.200
20	16,5x26,0	230,2	460	1.200
30	19,0x30,0	345,3	650	800
50	23,5x35,5	587,1	1.030	800
100	31,5x47,0	1174,1	1.860	400

(*) Other delivery length is available in customer request

Air Core Self Supported Aerial Subscriber Cables

Description

Used for aerial installation connection between distribution cabins and subscribers. The cable structure is completed by the application of a suitable core wrapping material, a parallel support messenger with the core are covered by an overall black outer jacketing. Outer jacketing material is MDPE or LDPE in accordance with ASTM D 1248.

Conductor

Solid annealed electrolytic copper. The conductor sizes are 0.5 or 0.9 mm

Color Coding

Fully color-coding.

Insulation

Colored foam skin polyethylene insulation or solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation is made by medium or high-density polyethylene compound.

Cable Core

Cable core is assembled by quads, which are stranded with a suitable lay length.

Core Wrapping

Anon-hydroscopic and dielectric polyester tape is applied helically or longitudinally over the cable core. Applied polyester tape at least overlaps by 5%.

Identification

A plastic tape, durable marked with the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

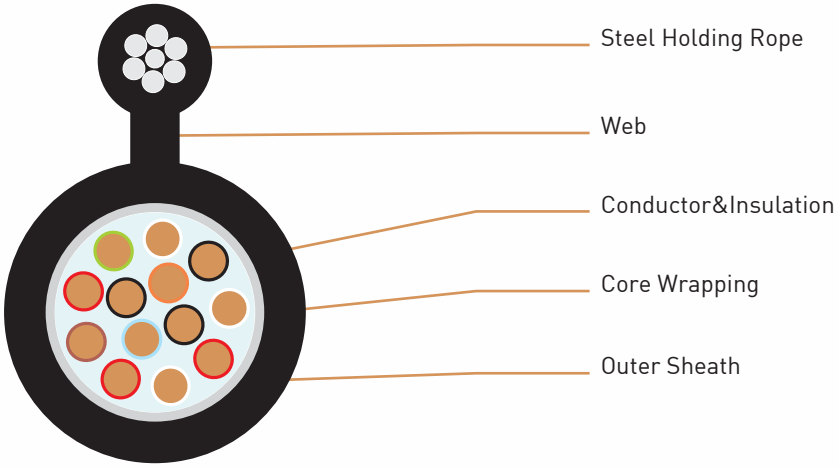
Support Messenger

According to ASTM A 475-66T galvanized 7 steel wires stranded rope having minimum 120 kg/mm^2 is used as holding rope.

Outher Jacket

Over the corrugated steel tape, outer jacket is extruded black low-density polyethylene or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene is include %2,5 ±0,5 carbon black for sunrise resistance.

Cable Construction



Type Code of Cable

A-02Y T 2Y mxn
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,5 mm Conductor				
Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
2	6,5x15,6	14,2		1.000
4	6,5x15,6	14,2	110	1.000
6	7,2x16,5	21,3	125	1.000
10	8,5x18,5	35,5	165	1.000

0,9 mm Conductor				
Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
2	8,7x18,0	46,0		1.000
4	8,7x18,0	46,0	160	1.000
6	10,0x19,5	69,1	190	1.000
10	12,0x22,2	115,1	280	1.000

(*) Other delivery length is available in customer request

Air Core PVC Sheated Telephone Cables

Description

Used for inside wiring applications and networks. The solid conductors are insulated polyvinylchloride compound. Insulated conductors are colored different colors and insulated conductors are stranded quad or pair, which are stranded together into units. Than cable core are made by those units. Outer jacketing material is PVC in accordance with international standards. Outer jacket sequentially marked by hot foil printing method.

Conductor

Solid annealed electrolytic copper. The conductor sizes are 0.5 or 0.6 mm

Color Coding

Fully color-coding.

Insulation

Colored polyvinylchloride insulated pair will be in accordance with the international standards.

Twisting / Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Stranding of 50 pairs or 100 pairs unit, which is assembled in to 10 pairs groups, assembles the cable core.

Core Wrapping

A Non-hygroscopic dielectric tape is applied helically or longitudinally by a suitable overlap.

Identification

A plastic tape, durable marked with the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

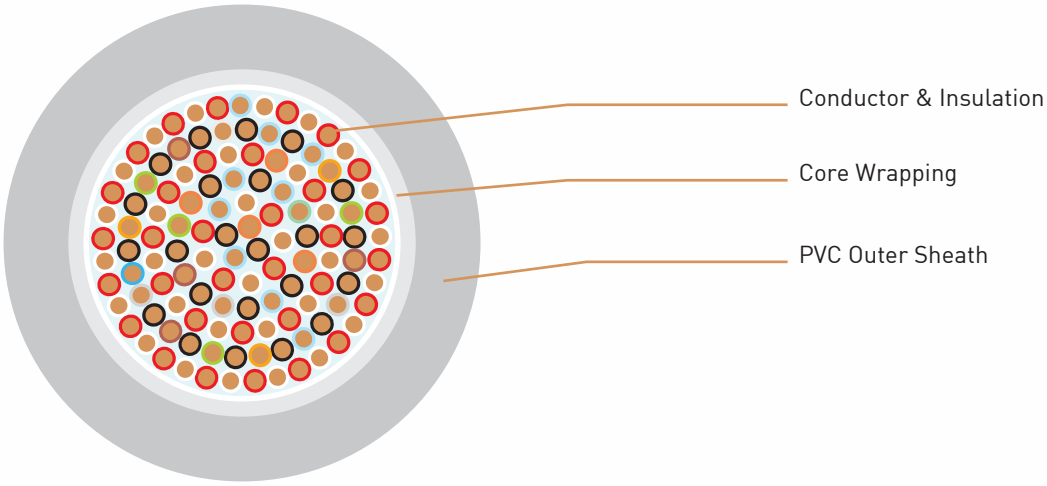
Support Messenger

According to ASTM A 475-66T galvanized 7 steel wires stranded rope having minimum 120 kg/mm^2 is used as holding rope.

Outher Jacket

The cable is sheathed with either jacketing grade polyvinyl chloride compound or halogen free flame retardant polyethylene compound in accordance with the international standards.

Cable Construction



Type Code of Cable

JYY MXN
Refer to the type code of the copper cable for the description of the cable code.

Packing

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

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket by hot foil printing method. The outer sheath marked in each meter as follows;

< TURKUAZ Cable > < year of manufacturing > < cable size and diameter of copper > < customer name > < length marking in meter > < telephone handset >

0,5 mm Conductor				
Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	8,5	35,5	95	2.000
20	10,5	71,1	150	2.000
30	12,5	106,6	210	1.000
50	15,0	181,2	320	1.000
100	20,0	360,4	630	1.000

0,6 mm Conductor				
Number of Pair	Outer Diameter of Cable mm	Weight of Copper Kg/km (Nom)	App. Cable Weight (Kg/Km)	Reel Length (m)* ± %5
10	9,8	51,2	130	1.000
20	12,5	102,3	210	1.000
30	14,5	153,5	290	1.000
50	18,0	260,9	450	1.000
100	24,1	521,8	890	1.000

(*) Other delivery length is available in customer request

Outdoor Drop Wire

Description

Used for outdoor service wire to the subscriber premises. Outer jacketing material is Polyethylene in accordance with the international standards.

Conductor

Used for outdoor service wire to the subscriber premises. Outer jacketing material is Polyethylene in accordance with the international standards.

Insulation

The hard drawn copper wires, which are parallel to each other, coated by polyethylene.

Additional Information

	a mm	d mm	r mm	s mm	g mm	l mm
Nominal Values	0,8	2,8	0,3	0,5	3,1	5,9
	0,9	2,9	0,3	0,5	3,2	6,1
	1,0	3,0	0,3	0,5	3,3	6,3
Tolerance (±)	0,012	0,1	0,1	0,2	0,2	0,5

Note: Coil length is 500 (±%5) meter

Electrical Requirements at 20°C

Conductor Size		0,8	0,9	1,0
Resistance	Max.	36,78	28,96	23,39
Insulation Resistance 500 V DC (G Ohm km)	Min.	10		
Dielectric Strength (KV DC for 1 min)	Min.	6,0		

Jumper Wire

Description

Used for outdoor service wire to the subscriber premises. Outer jacketing material is Polyethylene in accordance with the international standards.

Insulation

The copper wires, which are parallel to each other, coated with polyvinyl chloride having the colors of blue and white.

Conductor

Solid copper electrolytic copper or tin coated electrolytic copper wire. The conductor size is 0.6 mm

Cable Assembly

Blue and white colored insulations are twisted together to form a pair.

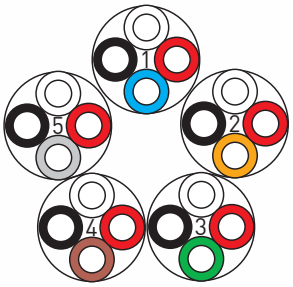
Additional Information

Conductor Diameter	Outer Diameter	Approximate Weight	Coil Length (±%5)
mm	mm	Kg/m	m
0,6	2,0	7,5	500

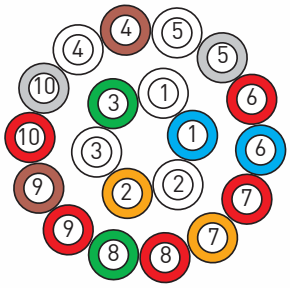
Electrical Requirements at 20°C

Conductor Size		0,6
Resistance	Max.	64,5
Insulation Resistance 500 V DC (G Ohm km)	Min.	200
Dielectric Strength (KV DC for 1 min)	Min.	1,4

Cable Design Criteria

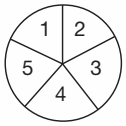


Sub-Unit (Group) Construction
(10 Pairs) Each sub-unit (group)
made up of 5 quads (10 pairs)

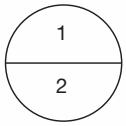


Sub-Unit (Group) Construction
made up of 10 Pairs

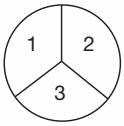
Unit or Core Construction of Telephone Cables Up to 100 Pairs



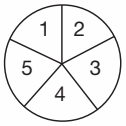
10 Pair core
(Made up of 1 sub-unit)



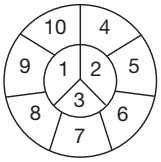
20 Pair core
(2 sub-unit)



30 Pair core
(3 sub-unit)

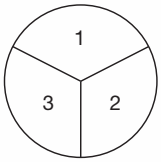


50 Pair unit or core
(5 sub-unit)

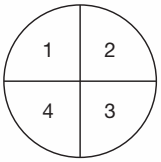


100 Pair unit or core
(10 sub-unit)

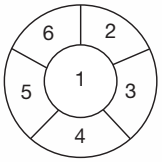
Unit or Core Construction of Telephone Cables Including 100 Pairs and More



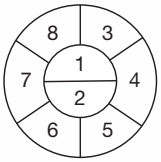
150 Pair core
(3x50 pair unit)



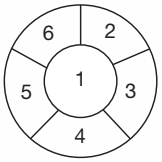
200 Pair core
(4x50 pair unit)



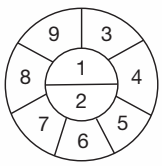
300 Pair core
(6x50 pair unit)



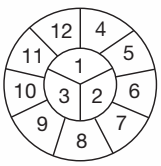
400 Pair core
(8x50 pair unit)



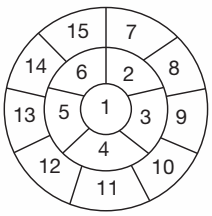
600 Pair core
(6x100 pair unit)



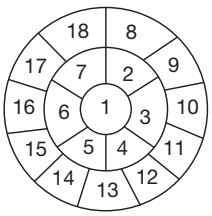
900 Pair core
(9x100 pair unit)



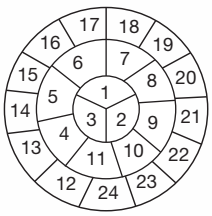
1200 Pair core
(12x100 pair unit)



1500 Pair core
(15x100 pair unit)



1800 Pair core
(18x100 pair unit)



2400 Pair core
(24x100 pair unit)

Binding Tape Colors of Sub-Unit and Unit

No	Color of binding	No	Color of binding
1	Blue	13	Yellow-Green
2	Orange	14	Yellow-Brown
3	Green	15	Yellow-Grey
4	Brown	16	Voilet-Blue
5	Grey	17	Voilet-Orange
6	White-Blue	18	Voilet-Green
7	White-Orange	19	Voilet-Brown
8	White-Green	20	Voilet-Grey
9	White-Brown	21	Red-Blue
10	White-Grey	22	Red-Orange
11	Yellow-Blue	23	Red-Green
12	Yellow-Orange	24	Red-Brown

Color Code of Insulation For 25 Pair System

No	Conductor A	No	Conductor B
1	White	1	Blue
2	White	2	Orange
3	White	3	Green
4	White	4	Brown
5	White	5	Grey
6	Red	6	Blue
7	Red	7	Orange
8	Red	8	Green
9	Red	9	Brown
10	Red	10	Grey
11	Black	11	Blue
12	Black	12	Orange
13	Black	13	Green
14	Black	14	Brown
15	Black	15	Grey
16	Yellow	16	Blue
17	Yellow	17	Orange
18	Yellow	18	Green
19	Yellow	19	Brown
20	Yellow	20	Grey
21	Voilet	21	Blue
22	Voilet	22	Orange
23	Voilet	23	Green
24	Voilet	24	Brown
25	Voilet	25	Grey

Color Codes of Insulation for 10 pair System

Pair No	Wire A	Wire B
1	White	Blue
2	White	Orange
3	White	Green
4	White	Brown
5	White	Green
6	Red	Blue
7	Red	Orange
8	Red	Green
9	Red	Brown
10	Red	Grey

Color Codes of Insulation for Star Quad System

Quad No	Wire A	Wire B	Wire C	Wire D
1	White	Blue	Red	Black
2	White	Orange	Red	Black
3	White	Green	Red	Black
4	White	Brown	Red	Black
5	White	Grey	Red	Black

Color Code of Group For 25 Pair System

No	Color of binding	No	Color of binding
1	White-Blue	14	Black-Brown
2	White-Orange	15	Black-Grey
3	White-Green	16	Yellow-Blue
4	White-Brown	17	Yellow-Orange
5	White-Grey	18	Yellow-Green
6	Red-Blue	19	Yellow-Brown
7	Red-Orange	20	Yellow-Grey
8	Red-Green	21	Voilet-Blue
9	Red-Brown	22	Voilet-Orange
10	Red-Grey	23	Voilet-Green
11	Black-Blue	24	Voilet-Brown
12	Black-Orange	25	Voilet-Grey
13	Black-Green		

Color Codes Binding Yarn for 10 pair System

Grup No	Color of Binding Yarn
1	Blue
2	Orange
3	Green
4	Brown
5	Grey
6	Red
7	White
8	Black
9	Yellow
10	Voilet

Color Codes of Group for Star Quad System

Grup No	Color of Binding Yarn
1	Blue
2	Orange
3	Green
4	Brown
5	Grey
6	White-Blue
7	White-Orange
8	White-Green
9	White-Brown
10	White-Grey

Cable Core Construction

Number of Pairs in Cable	Core Construction	Number of quads, sub-units and units layers				
		1st Layer	2nd Layer	3rd Layer	Notes	
10	Quad	5			1	
20	Sub-Unit	2				
30	Sub-Unit	3				
50	Sub-Unit	5			2	
100	Sub-Unit	3	7		3	■
150	50 Pair Unit	3				■
200	50 Pair Unit	4				■
300	50 Pair Unit	1	5			■
400	50 Pair Unit	2	6			■
600	100 Pair Unit	1	5			■
900	100 Pair Unit	2	7			■
1200	100 Pair Unit	3	9			■
1500	100 Pair Unit	1	5	9		■
1800	100 Pair Unit	1	6	11	4	■
2400	100 Pair Unit	3	8	13		■

1- Sub-Unit construction also
2- 50 pair unit construction also
3- 100 pair construction also
4- Cables exceeding 1800 pairs, shall be produced according to customer request

■ Max. 2% spare pairs in relation with the total quarantied number of pairs shall be put within layers in proper way.

PVC Insulated Pair Type Cables

Electrical Characteristics				
Conductor Diameter			0,5	0,6
Conductor Resistance @ 20°C (Ω/km)		Max.	93,0	64,6
		Avg.	89,4	62,1
Mutual Capacitance @800 Hz (nf/km)		Max.	100	100
		Avg.	90	90
Capacitance Unbalance PF/ 500 mt	Between Pair	Max.	900	900
		Avg.	500	500
	Between Adjacent Pairs	Max.	900	900
		Avg.	500	500
Insulation Resistance @ 500 V DC (M Ohm km)		Min	250	250
Dielectric Strength AC Voltage for 1 min	Pair to Pair		1000	1000
	Pair to Ground		1000	1000

PE Insulated Pair Type Cables

Electrical Characteristics							
Conductor Diameter			0,4 mm	0,5 mm	0,6 mm	0,8 mm	0,9 mm
Conductor Resistance @ 20°C (Ω/km)		Max	150	96	66,6	36,8	30
		Avg.	144	92	63,9	35,9	28
Mutual Capacitance @ 800 Hz (nf/km)		Max	64	64	64	64	65
		Avg.	55	56	55	55	59
Capacitance Unbalance PF/ 500 mt	Between Pair	Max	250	250	250	250	
		Avg.	150	150	100	100	100
	Unbalance to Earth	Max	2000	--	2000	2000	--
		Avg.	1000	1000	1000	1000	--
Insulation Resistance @ 500 V DC (M Ohm km)		Min	1500	1500	1500	1500	1500
Dielectric Strength AC Voltage for 1 min	Pair to Pair		500	500	500	500	1000
	Pair to Ground		1000	2000	2000	2000	3000

PE Insulated Quad Type Cables

Electrical Characteristics						
Conductor Diameter			0,4 mm	0,5 mm	0,6 mm	0,9 mm
Conductor Resistance @ 20°C (Ω/km)		Max	146,6	93,0	64,6	28,8
		Avg.	139,4	89,4	62,1	27,6
Mutual Capacitance @800 Hz (nf/km)		Max	56	56	51	51
		Avg.	50	50	45	45
Capacitance Unbalance PF/ 500 mt	Between Pair	Max	500	500	325	325
		Avg.	125	125	60	60
	Between Adjacent Quads	Max	375	375	370	370
		Avg.	125	125	60	60
	Unbalance to Earth	Max	2000	2000	1300	1300
		Avg.	500	500	325	325
Insulation Resistance @ 500 V DC (M Ohm km)		Min	10000	10000	10000	10000
Dielectric Strength AC Voltage for 1 min	Pair to Pair		1000	1000	1400	2100
	Pair to Ground		1000	1000	1400	2100
DC Voltage for 3 Seconds *Pair-Screen			6300	6300	6300	6300

*Only for PAP type cables.

Type Codes of Copper Insulated Cables

A-BCDEFG HxI...JKLMN

A Basic Types

A- - Outdoor telephone cables
J- - Installation cables
AJ- - Outdoor cable with protection against inductive influences
T- - Terminating cable

B Insulation Types

02Y - Cellular PE
2Y - Solid PE
02YS - Foam Skin Insulating cover of cellular PE with additional skin of solid polyolefine.
Y - PVC
H - LSZH

C Filling

F - Petroleum jelly filling
Blank - Unfilled

D Screening Material

(St) - Static shield of plastic-backed aluminum Tape for indoor cables
D - Shield of copper wire whipping over one stranding element (e.g. pair)
LR - Corrugated alumnium tape
Blank - No screen

E Bedding Material

2Y - PE
Y - PVC
H - LSZH
M - Lead Sheath
MZ - Special Alloyed Lead Sheath
Blank - No Bedding

F Armouring Material

b - Armouring
SR - Corrugated steel tape
T - Messenger of galvanized steel wires.
Blank - No Armour

G Sheath Material

2Y - PE
Y - PVC
H - LSZH
(L)2Y - Laminated sheath (shield of PE coated aluminium tape bonded with PE sheath).
M - Lead Sheath
MZ - Special Alloyed Lead Sheath
Blank - No Sheath

H Number of Pairs/Quads

2x2 - 2 Pairs
2x4 - 2 Quads

I Conductor Size

0.4 - 0.4mm
0.5 - 0.5mm
0.6 - 0.6mm
0.8 - 0.8mm
0.9 - 0.9mm

J Stranding Element

PiC - Pairs shielded with copper braid
PiMF - Pairs shielded with aluminium/polyester tape
St - Star Quad(Phantom)
StI - Star Quad(trunk cable)
StIII - Star Quad (local cable)
TIC - Triple shielded with copper braid
TiMF - Triple shielded with aluminium/polyester tape

K Cable Type

S - Railway signaling cable

L Types of Stranding

Lg - Stranded in layers
Bd - Unit Type stranding

M Copper/Steel Tape/Braid Screen Options

(.....Cu) - Total cross section of copper shield in mm sq
(fK) - Longitdinally applied copper tape, supplement to (St)
2B...- two layers of steel tape, thickness of steel tape in mm

N Fire Resistance Options

E30 - 30mins circuit integrity according to DIN VDE 4102 Part 12
E60 - 60mins circuit integrity according to DIN VDE 4102 Part 12
F180 - 950°C 180mins Insulation integrity according to IEC 60331&VDE 0427-814

Type Codes of Fiber Optic Cables

A-BCDEFG HxI...JKLMN

Type Codes for Optical Cables DIN / VDE

Code	Explanation of the Code
A	Outdoor Cable
B	Armoring
(BN)	Glass Yarn Non-metallic armoring
D	Loose Buffer Tube
E	Single Mode Fiber
F	Filling Compound in the cable Core
FR	Cable with the improved burning behavior
G	Multi mode Fiber
H	Halogen free jacket
J	Indoor Cable
K	Slotted Core
(L)	Laminated Aluminum Sheath
LG	Stranded in Layers
CT	Central Tube construction
S	Metallic Elements in core
Q	Dry Swellable material in the cable core
(SR)	Armoring by laminated corrugated longitudinal overlapped steel tape
(SG)	Armoring by laminated smooth longitudinal overlapped steel tape
Y	Jacket or protective cover of Polyvinyl chloride (PVC)
2Y	Jacket or protective cover of Polyethylene(PE)
4Y	Jacket or protective cover of Polyamide(PA)
(ZN)	Non-Metallic anti buckling and strength member
(ZM)	Non-Metallic anti buckling and strength member in the Jacket

American Systems Registrar, LLC, Wyoming, MI, USA, a provider of third-party system registration and accredited by the ANSI-ASQ National Accreditation Board attests that:

TURKUAZ KABLO TAAHHÜT TİCARET VE SAN. A.Ş.

Balçık Köyü Kömürcü Yolu 2. Km Gebze / KOCAELİ – TÜRKİYE

with a scope of:

Production of Copper Conductor Telecommunication Cables and Fiber Optic Cables

has established a quality management system that is in conformance with the International Quality System Standard

ISO 9001:2008

ASR Certificate Number:	3053
Exclusions:	7.3 Product Design
Date of Certification:	September 3, 2009
Date of Certification Expiration:	September 2, 2012
IAF Scope Category:	19
Revision:	

President

CERTIFICATE OF REGISTRATION

American Systems Registrar, LLC, Wyoming, MI, USA, a provider of third-party system registration and accredited by the ANSI-ASQ National Accreditation Board for Registrars of Environmental Management Systems, attests that:

TURKUAZ KABLO TAAHHÜT TİCARET VE SAN A.Ş.

Balçık Köyü Kömürcü Yolu 2. Km Gebze / KOCAELİ – TÜRKİYE

with a scope of:

Production of Copper Conductor Telecommunication Cables and Fiber Optic Cables

has established an environmental management system that conforms to the Environmental Management System Standard

ISO 14001:2004

ASR Certificate Number:	3054
Date of Certification:	September 3, 2009
Date of Certification Expiration:	September 2, 2012
Revision:	

President

CERTIFICATE OF REGISTRATION

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Markanın Tanımı / Description of the Mark
TSE

BELGE NUMARASI	16.10.01/TSE-13043
BELGENİN İLK VERİLİŞ TARİHİ	02/04/2004
BELGENİN SON GEÇERLİLİK TARİHİ	02/04/2010
BELGE SAHİBİ KURULUŞUN ADI	TURKUAZ KABLO TAAHHÜT TİC. VE SAN. A.Ş.
BELGE SAHİBİ KURULUŞUN ADRESİ	2. BÖLGE BALÇIK KÖYÜ KARAGÖL MEVKİ GEBZE - KOCAELİ / TÜRKİYE
ÜRETİM YERİ AZİ	TURKUAZ KABLO TAAHHÜT TİC. VE SAN. A.Ş.
ÜRETİM YERİ ADRESİ	2. BÖLGE BALÇIK KÖYÜ KARAGÖL MEVKİ GEBZE KOCAELİ TÜRKİYE
İPTAL EDİLEN BELGE NUMARASI (Varsa)	
TESCİLLİ TİCARİ MARKASI	"TURKUAZ KABLO" MARKALI
İLGİLİ TÜRK STANDARDI	TS 3830/EA 1991

BELGE KAPSAMI :

TS 3830/NİSAN 1991 "ALÇAK FREKANS KABLOLARI POLİOLEFİN YALITKANLI VE NEME KARŞI POLİOLEFİN KILIFLI (TELEFON ŞEBEKELERİ İÇİN)"
- KÜNK VEYA BORU İÇİNE (KANALLAR İÇİNE) DÖŞENEN, YÜKSEK SIĞA DEĞERLİ ALÇAK YOĞUNLUKLU POLİETİLEN MALZEMELİ DOLGULU GÖZENEKLİ YALITIMLI DÖRTLÜ KABLO 400 ÇİFTE KADAR (400 ÇİFT DAHİL)
- ASKI TELLİ, YÜKSEK SIĞA DEĞERLİ ALÇAK YOĞUNLUK POLİETİLEN MALZEMELİ DOLGULU GÖZENEKLİ YALITIMLI DÖRTLÜ KABLO, 600 ÇİFT
- ASKI TELLİ, YÜKSEK SIĞA DEĞERLİ ALÇAK YOĞUNLUK POLİETİLEN MALZEMELİ DOLGULU GÖZENEKLİ YALITIMLI DÖRTLÜ KABLO,300 ÇİFT

10.10.2006

CENGİZ OĞUZ
ELEKTROTEKNİK SEKTÖRÜ
BELGELENDİRME MÜDÜRÜ V.

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