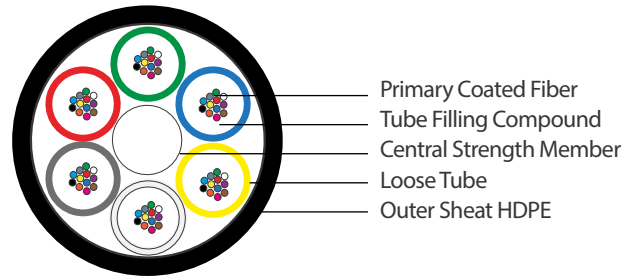


**MULTI TUBE MICRO CABLE PE IU  
(G657A/G652D) 12 - 72 fibers 5,3 mm  
Loose Tube size - 1,40mm**



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- Suitable for Blowing
- UV Resistant Outer Sheath
- Suitable for Micro duct Installation

**Characteristics**

Cable Diameter : 5.3 mm (+/-0,3) mm  
 Cable Weight : 22 kg/km  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force : During Installation 500N  
 Installed 350 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBER TYPE, PRODUCTION CODE, DRUM NUMBER

**Specifications/Norms**

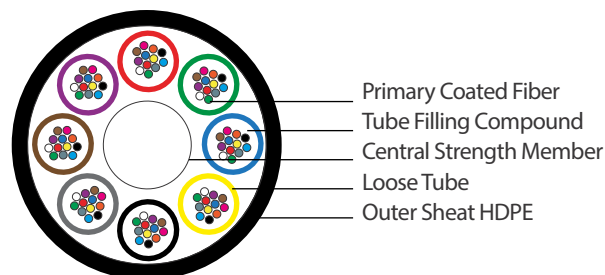
Standard: IEC 60794  
 Temperature Range Norms : IEC 60794-1-2-F1  
 Laying and Installation -20° to +70°C  
 Operation -20° to +70°C  
 Fiber colour : acc. to DIN  
 Fiber type : Singlemode G657 A or G652 D IEC/ITU standards

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 5,3mm 1x12	12	G657A/G652D	5,3mm	8 - 16 mm	4 km
ML Tube HDPE 5,3mm 2x12	24	G657A/G652D	5,3mm	8 - 16 mm	4 km
ML Tube HDPE 5,3mm 4x12	48	G657A/G652D	5,3mm	8 - 16 mm	4 km
ML Tube HDPE 5,3mm 6x12	72	G657A/G652D	5,3mm	8 - 16 mm	4 km

**MULTI TUBE MICRO CABLE PE IU**  
 (G657A/G652D) 96 fibers 6,1 mm , 144 fibers 7,9 mm  
 Loose Tube size - 1,40mm



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- Suitable for Blowing
- UV Resistant Outer Sheath
- Suitable for Micro duct Installation

**Characteristics**

Cable Diameter : 6,1 mm for 96F / 7,9 mm for 144F (+/-0,3) mm  
 Cable Weight : 33 kg/km 96F / 52 kg/km 144F  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force : During Installation 1000N  
 Installed 850 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBERTYPE, PRODUCTION CODE, DRUM NUMBER

**Specifications/Norms**

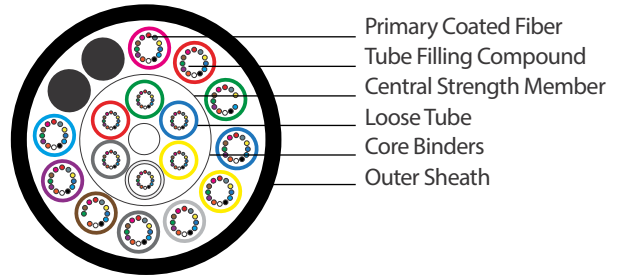
Standard:	IEC 60794
Temperature Range Norms :	IEC 60794-1-2-F1
Laying and Installation	-20° to +70°C
Operation	-20° to +70°C
Fiber colour :	acc. to DIN
Fiber type :	Singlemode G657 A or G652 D IEC/ITU standards

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 6,1mm 8x12	96	G657A/G652D	6,1mm	10 - 16 mm	4 km
ML Tube HDPE 7,9mm 12x12	144	G657A/G652D	7,9mm	12 - 16 mm	4 km

**MULTI TUBE MICRO CABLE PE IU  
(G657A/G652D) 192 fibers 8,3 mm  
Loose Tube size - 1,40mm**



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- UV Resistant Outer Sheath

**Specifications/Norms**

Standard:	IEC 60794
Temperature Range Norms :	IEC 60794-1-2-F1
Laying and Installation	-20° to +70°C
Operation	-20° to +70°C
Fiber colour :	acc. to DIN
Fiber type :	Singlemode G652D IEC/ITU standards

**Characteristics**

Cable Diameter : 8,3 (+/-0,3) mm  
 Cable Weight : 50 kg/km  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force: During installation 800 N  
 Installed 650 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBERTYPE, PRODUCTION CODE, DRUM NUMBER

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

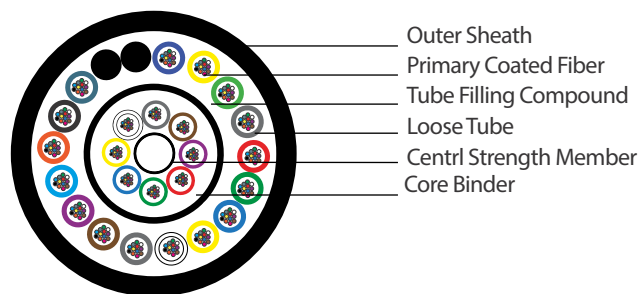
1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 8,3mm 16x12	192	G657A/G652D	8,3 mm	16 - 20 mm	4 km

**MULTI TUBE MICRO CABLE PE IU**

(G657A/G652D) 288 fibers 9,5 mm, 432 fibers 11,0 mm

Loose Tube size - 1,40mm



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- Suitable for Blowing
- UV Resistant Outer Sheath
- Suitable for Micro duct Installation

**Specifications/Norms**

Standard:	IEC 60794
Temperature Range Norms :	IEC 60794-1-2-F1
Laying and Installation	-20° to +70°C
Operation	-20° to +70°C
Fiber colour :	acc. to DIN
Fiber type :	Singlemode G657 A or G652 D IEC/ITU standards

**Characteristics**

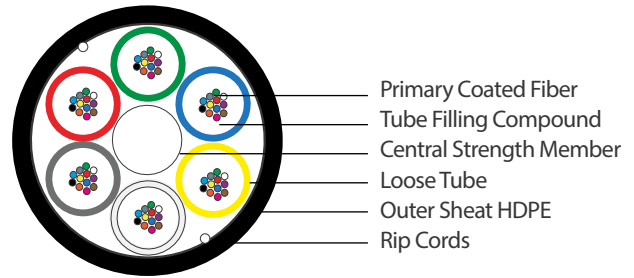
Cable Diameter : 9,5 mm for 288F / 11,0 mm for 432F (+/-0,4) mm  
 Cable Weight : 73 kg/km 288f / 95 kg/km 432F  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force : During Installation 1500N  
 Installed 1250 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBER TYPE, PRODUCTION CODE, DRUM NUMBER

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 9,5mm 24x12	288	G657A/G652D	9,5mm	16 - 20 mm	4 km
ML Tube HDPE 11,0mm 18x24	432	G657A/G652D	11,0mm	16 - 20 mm	4 km

**MULTI TUBE MICRO CABLE PE IU  
(G657A/G652D) 24 - 72 fibers 5,7mm  
Loose Tube size - 1,55mm**



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- Suitable for Blowing
- UV Resistant Outer Sheath
- Suitable for Micro duct Installation
- Rip cords to open Outer Sheath

**Characteristics**

Cable Diameter : 5.7 mm  
 Cable Weight : 24 kg/km  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force : During Installation 650N  
 Installed 500 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBER TYPE, PRODUCTION CODE, DRUM NUMBER

**Specifications/Norms**

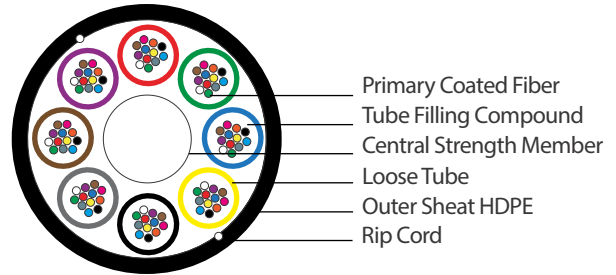
Standard: IEC 60794  
 Temperature Range Norms : IEC 60794-1-2-F1  
 Laying and Installation -30° to +70°C  
 Operation -30° to +70°C  
 Fiber colour : acc. to DIN  
 Fiber type : Singlemode G657 A or G652 D IEC/ITU standards

Colourcode Fiber - colours in bundle (13 -24 with rings)  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 5,7mm 2x12	24	G657A/G652D	5,7mm	8 - 16 mm	4 km
ML Tube HDPE 5,7mm 4x12	48	G657A/G652D	5,7mm	8 - 16 mm	4 km
ML Tube HDPE 5,7mm 6x12	72	G657A/G652D	5,7mm	8 - 16 mm	4 km

**MULTI TUBE MICRO CABLE PE IU**  
 (G657A/G652D) 96 fibers 6,5 mm , 144 fibers 8,7 mm  
 Loose Tube size - 1,55mm



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- Suitable for Blowing
- UV Resistant Outer Sheath
- Suitable for Micro duct Installation
- Rip cords to open Outer Sheath

**Characteristics**

Cable Diameter : 6,5 mm for 96F / 8,7 mm for 144F  
 Cable Weight : 37 kg/km 96F / 60 kg/km 144F  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force : During Installation 1500N  
 Installed 1000 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBERTYPE, PRODUCTION CODE, DRUM NUMBER

**Specifications/Norms**

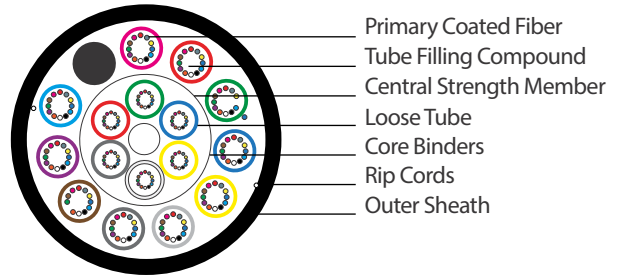
Standard:	IEC 60794
Temperature Range Norms :	IEC 60794-1-2-F1
Laying and Installation	-30° to +70°C
Operation	-30° to +70°C
Fiber colour :	acc. to DIN
Fiber type :	Singlemode G657 A or G652 D IEC/ITU standards

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 6,5mm 8x12	96	G657A/G652D	6,5mm	10 - 16 mm	4 km
ML Tube HDPE 8,7mm 12x12	144	G657A/G652D	8,7mm	12 - 16 mm	4 km

**MULTI TUBE MICRO CABLE PE IU**  
 (G652D) 192 fibers 9,5 mm  
 Loose Tube size - 1,55mm



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- UV Resistant Outer Sheath
- Rip cords to open Outer Sheath

**Specifications/Norms**

Standard:	IEC 60794
Temperature Range Norms :	IEC 60794-1-2-F1
Laying and Installation	-30° to +70°C
Operation	-30° to +70°C
Fiber colour :	acc. to DIN
Fiber type :	Singlemode G652D IEC/ITU standards

**Characteristics**

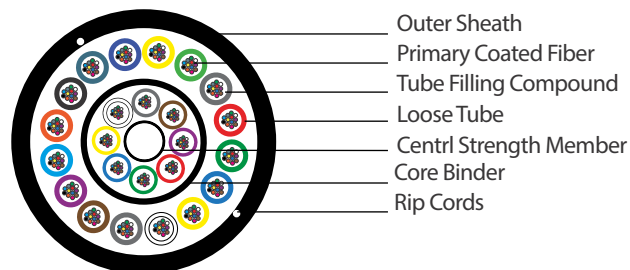
Cable Diameter : 9,5 (+/-0,5) mm  
 Cable Weight : 65 kg/km  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 10 x Cable Diameter  
 Tensile Force: During installation 1450 N  
 Installed 850 N  
 Crush Resistance: 500 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBERTYPE, PRODUCTION CODE, DRUM NUMBER

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 9,5mm 16x12	192	G652D	9,5 mm	16 - 20 mm	4 km

**MULTI TUBE MICRO CABLE PE IU  
(G657A/G652D) 288 fibers 10,4 mm  
Loose Tube size - 1,55mm**



**Properties**

- Multi Loose Tube Unarmoured
- Outer Sheath HDPE for optimal blowing length
- Completely dielectric / non metallic cable immune to electromagnetic interferences
- Suitable for Blowing
- UV Resistant Outer Sheath
- Suitable for Micro duct Installation
- Rip cords to open Outer Sheath

**Specifications/Norms**

Standard:	IEC 60794
Temperature Range Norms :	IEC 60794-1-2-F1
Laying and Installation	-30° to +70°C
Operation	-30° to +70°C
Fiber colour :	acc. to DIN
Fiber type :	Singlemode G657 A or G652 D IEC/ITU standards

**Characteristics**

Cable Diameter : 10,4 mm f  
 Cable Weight : 85 kg/km  
 Transport : Wooden Drum  
 Bending radius ( installed ) : 15 x Cable Diameter  
 Tensile Force : During Installation 1500N  
 Installed 1000 N  
 Crush Resistance: 700 N (100 x 100 mm) for 60 sec.  
 Outer Sheath colour: black  
 Inkjet-Print: MICRO CABLE, FIBER COUNT, FIBER TYPE, PRODUCTION CODE, DRUM NUMBER

Colourcode Fiber - colours in bundle (13 -24 with rings )  
 Tube colours

1	2	3	4	5	6	7
red	green	blue	yellow	white	grey	brown
8	9	10	11	12		
violet	cyan	black	orange	rosa		

Cable type	Fiber Number	Fiber Type	Cable Ø	Recommended microduct inside Ø	Drum Length
ML Tube HDPE 10,4mm 24x12	288	G657A/G652D	10,4mm	16 - 20 mm	4 km