

Fibre optic cables

MDIC LSZH



www.ace-fibreoptic.com



MDIC LSZH - Indoor Access Cable.

Micro Drop Installation Cable, special Access cable with low bend radius, no waterpeak G.657.A1 fibres. Ruggedized construction with excellent installation performance, easy strippable for fast installation. This cable solves all in-house installation problems.

Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	MDIC LSZH	
Test procedures	IEC 60794-1-2	
Application	Inside	
Strain relief	Yes	
Fibre type	Single mode	
Optical fibre standard	ITU-T G.657.A1	
Strip method	Double sided Rip seam	
Material outer sheath	LSZH	
Colour outer sheath	White	
Halogen free	Acc. IEC 60754-1	
Halogen free (acc. EN 50267-2-2)	Yes	
UV resistant	Yes	
UV-protection	ISO 4892/2	
Cable metal free	Yes	
Longitudinal water blocking	No	
Installation temperature	-10 / 50	°C
Operation temperature range	-30 / 70	°C
Transportation and storage temperature	-30 / 70	°C
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Dimension (height - width) (mm)	Net weight (Kg/km)	Bending radius after installation	Bending radius during installation	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
69271	2x SM G.657.A1	2,0 - 3,1	10	20	30	150	50
69277	2x SM G.657.A1	-	16	37	56	150	50
69278	4x SM G.657.A1	-	16	37	56	150	50
69274	4x SM G.657.A1	-	13	37	56	150	50
69279	6x SM G.657.A1	-	16	37	56	150	50

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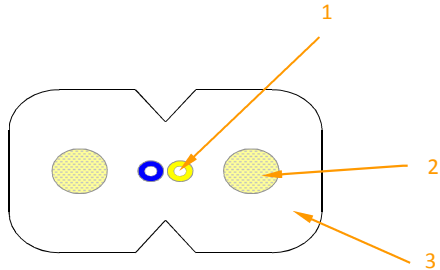
Product information

Cable construction and colour code



MDIC LSZH

Indoor FO drop cable with easy fibre access



Description:

- 1 Optical fibres
- 2 Longitudinal non-metallic strength members
- 3 Outer sheath (LSZH)

Standard Colours:

Fibre nr. Colour

- 1 Blue
- 2 Yellow

Outer sheath White

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Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	MDIC LSZH	
Test procedures	IEC 60794-1-2	
Application	Inside	
Strain relief	Yes	
Fibre type	Single mode	
Optical fibre standard	ITU-T G.657.A1	
Strip method	Double sided Rip seam	
Material outer sheath	LSZH	
Colour outer sheath	White	
Halogen free	Acc. IEC 60754-1	
Halogen free (acc. EN 50267-2-2)	Yes	
UV resistant	Yes	
UV-protection	ISO 4892/2	
Cable metal free	Yes	
Longitudinal water blocking	No	
Installation temperature	-10 / 50	°C
Operation temperature range	-30 / 70	°C
Transportation and storage temperature	-30 / 70	°C
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Outer diameter approx. (mm)	Net weight (Kg/km)	Bending radius after installation	Bending radius during installation	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
69277	2x SM G.657.A1	3,7	16	37	56	150	50
69278	4x SM G.657.A1	3,7	16	37	56	150	50
69274	4x SM G.657.A1	3,7	13	37	56	150	50
69279	6x SM G.657.A1	3,7	16	37	56	150	50

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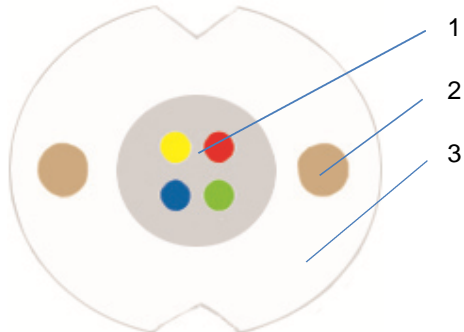
Product information

Cable construction and colour code



MDIC LSZH

Indoor cable



Description:

- 1 Optical fibres
- 2 Longitudinal non-metallic strength members
- 3 Outer sheath LSZH

Standard Colours:

Fibrenr. Colour

- 1 Red
- 2 Green
- 3 Blue
- 4 Yellow
- 5 White
- 6 Grey

Fibre optic cables

Multi-MDIC DB



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Multi-MDIC DB - Universal Cable Direct Buried.

Multi Micro Drop Installation Cable is a special installation cable, consisting of multiple individual MDIC's with low bend radius, no waterpeak G.657.A1 fibres, stranded together around a central strength element, provided with swellable tape (longitudinally waterproof) and a polypropylene outer jacket. This cable is intended for connecting homes in high-rise buildings, like porch and gallery flats (multi dwelling units - MDU's). The MDIC's in the Direct Buried cable can be directly connected into the homes from the last underground distribution in the Access network, without any transition-points. This product offers a perfect, fast and cost effective solution for 'Fibre To The Home' connections in MDU's.

Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	Multi-MDIC DB	
Test procedures	IEC 60794-1-2	
Application	Inside/outside	
Strain relief	Yes	
Optical Element	Other	
Fibre type	Single mode	
Optical fibre standard	ITU-T G.657.A1	
Strip method	1 Rip cord	
Material outer sheath	Polypropylene	
Colour outer sheath	Orange	
Halogen free (acc. EN 50267-2-2)	Yes	
UV resistant	Yes	
Longitudinal watertight construction	Super Absorbing Polymer	
Installation temperature	-10 / 50	°C
Operation temperature range	-20 / 60	°C
Transportation and storage temperature	-30 / 60	°C
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Outer diameter approx.	Net weight (Kg/km)	Bending radius after installation	Bending radius during installation	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
69276	8x SM G.657.A1 (4x2)	10	86	150	200	2300	750

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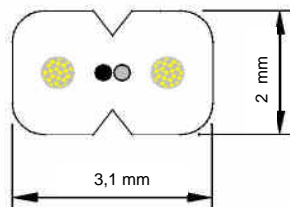
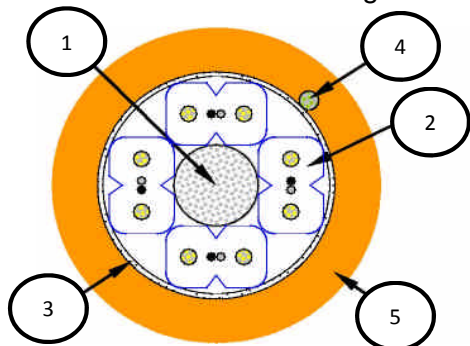
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Product information

Cable construction and colour code

Multi-MDIC DB

Indoor / Outdoor multiple FO drop cable
longitudinal waterblock



Description:

- 1 Non-metallic centre support member with waterblocking outer surface
- 2 MDIC LSZH 2x SM G.657A
- 3 Waterblocking tape
- 4 Ripcord
- 5 Polypropylene (PP) outer sheath

Standard colour:

Fibrenr.	Fibres Group 1	Remarks
1	Blue	
2	Yellow	
	MDIC sheath = White	printed unit numbers
	Outer sheath = Orange	

Fibre optic cables

Simplex



Simplex - Indoor Cable.

The simplex cable consists of one dry-buffered, easy strip low bend radius, no waterpeak G.657.A1 fibre, tensile elements of aramid yarns and a loose low smoke halogen-free outer jacket. The simplex cable is suitable for direct connector assembly. This cable is suitable for indoor installation in dry rooms, inside of telecommunication- and datasystems.

Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	Simplex	
Standardization	IEC 60794-2-50	
Test procedures	IEC 60794-1-2	
Application	Inside	
Strain relief	Yes	
Optical Element	Article dependant, see detail sheet	
Fibre type	Single mode	
Optical fibre standard	ITU-T G.657.A1	
Material outer sheath	LSZH	
Colour outer sheath	Yellow	
Flame retardant	Acc. IEC 60332-1-2	
Halogen free	Acc. IEC 60754-1	
Halogen free (acc. EN 50267-2-2)	Yes	
Cable metal free	Yes	
Installation temperature	-5 / 45	°C
Operation temperature range	-20 / 60	°C
Transportation and storage temperature	-25 / 70	°C
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Attenuation @ 1625 nm	0.4	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Outer diameter approx.	Net weight (Kg/km)	Bending radius after installation	Bending radius during installation	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
69251	1x SM G.657.A1 1,6mm	1,6	5	20	20	70	20
69252	1x SM G.657.A1 2,0mm	2,0	5	20	20	120	30
69253	1x SM G.657.A1 2,4mm	2,4	5	20	25	160	60
69254	1x SM G.657.A1 2,8mm	2,8	5	20	25	200	65

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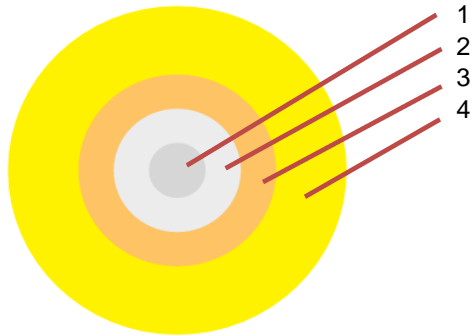
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Product information

Cable construction and colour code



Simplex

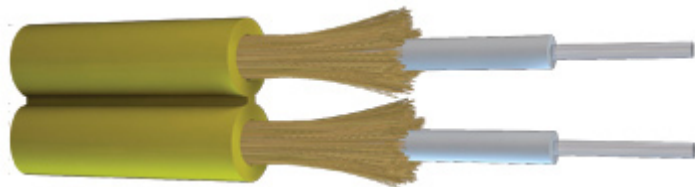


Description:

- 1 Optical fibres
- 2 Secondary protection
- 3 Strain relief elements (Aramid)
- 4 Outer sheath (LSZH)

Fibre optic cables

Duplex



Duplex - Indoor Cable.

The duplex cable consists of 2 simplex cables, parallel laying in a figure 8 design (duplex zip cord). The duplex cable is suitable for direct connector assembly and is used for indoor installation in dry rooms, inside of telecommunication- and datasystems.

Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	Duplex	
Standardization	IEC 60794-2	
Test procedures	IEC 60794-1-2	
Application	Inside	
Strain relief	Yes	
Optical Element	Article dependant, see detail sheet	
Fibre type	Single mode	
Optical fibre standard	ITU-T G.657.A1	
Material outer sheath	LSZH	
Colour outer sheath	Yellow	
Flame retardant	Acc. IEC 60332-1-2	
Halogen free	Acc. IEC 60754-1	
Halogen free (acc. EN 50267-2-2)	Yes	
Cable metal free	Yes	
Longitudinal water blocking	No	
Radial water blocking	No	
Installation temperature	-5 / 45	°C
Operation temperature range	-20 / 60	°C
Transportation and storage temperature	-25 / 70	°C
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Attenuation @ 1625 nm	0.4	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Dimension (height - width) (mm)	Net weight (Kg/km)	Bending radius after installation (mm)	Bending radius during installation	Tensile load short term (Tm) (N)
69817	ZIP 2.0 SM G.657.A1	2,0 - 4,2	8	30	40	200
69818	ZIP 2.8 SM G.657.A1	2,8 - 5,8	13	30	56	200

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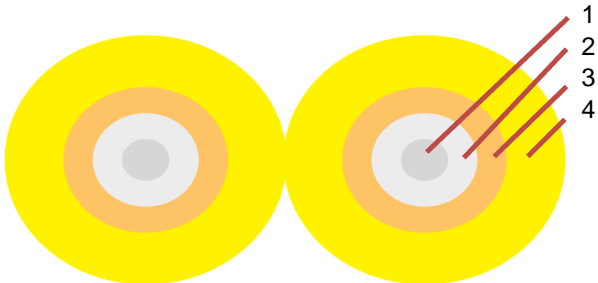
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Product information

Cable construction and colour code



Duplex



Description:

- 1 Optical fibres
- 2 Secondary protection
- 3 Strain relief elements (Aramid)
- 4 Outer sheath (LSZH)

Fibre optic cables

Break-Out



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Breakout - Indoor Cable.

The Breakout cable consists of multiple simplex cables stranded around a central support member, with a low smoke halogen-free outer jacket. The individual simplex cables are suitable for direct connector assembly. This cable is suitable for indoor installation in dry rooms, inside of telecommunication- and datashystems.

Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	Break-Out	
Standardization	IEC 60794-2-20	
Test procedures	IEC 60794-1-2	
Application	Inside	
Strain relief	Yes	
Optical Element	Article dependant, see detail sheet	
Fibre type	Single mode	
Optical fibre standard	Article dependant, see detail sheet	
Strip method	1 Rip cord	
Material outer sheath	LSZH	
Colour outer sheath	Yellow	
Flame retardant	Acc. IEC 60332-1-2	
Halogen free	Acc. IEC 60754-1	
Halogen free (acc. EN 50267-2-2)	Yes	
Cable metal free	Yes	
Longitudinal water blocking	No	
Radial water blocking	No	
Installation temperature	-10 / 60	°C
Operation temperature range	-20 / 60	°C
Transportation and storage temperature	-30 / 60	°C
Attenuation @ 1310 nm	0.5	dB/km
Attenuation @ 1550 nm	0.5	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Outer diameter approx.	Net weight (Kg/km)	Bending radius after installation	Bending radius during	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
77064	4x SM G.657.A1 1,6mm (4x1)	7,4	70	110	150	400	100
77068	4x SM G.657.A1 2,0mm (4x1)	8,7	70	130	180	700	200
77065	8x SM G.657.A1 1,6mm (8x1)	8,9	83	130	180	800	200

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Fibre optic cables

Break-Out



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Partnumber	Description	Outer diameter approx.	Net weight (Kg/km)	Bending radius after installation	Bending radius during	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
77069	8x SM G.657.A1 2,0mm (8x1)	10,1	95	135	180	900	200
77066	12x SM G.657.A1 1,6mm (12x1)	11	126	170	220	1000	250
77070	12x SM G.657.A1 2,0mm (12x1)	13	174	190	250	1200	300
77067	24x SM G.657.A1 1,6mm (24x1)	12,4	133	190	250	1200	300
77071	24x SM G.657.A1 2,0mm (24x1)	14,8	192	230	380	1800	400
77072	48x SM G.657.A1 1,6mm (48x1)	16	220	240	320	2000	400

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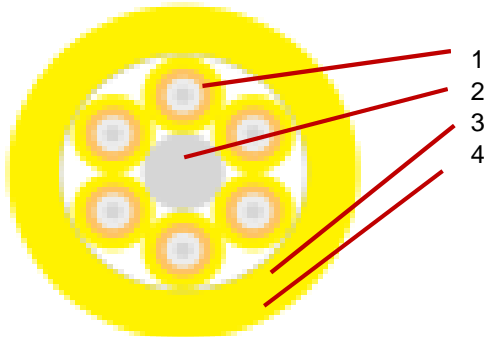
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Product information

Cable construction and colour code



Breakout



Description:

- 1 Simplex cable (printed numbers)
- 2 Central Strength-Element (FRP)
- 3 Ripcord
- 4 Outer sheath (LSZH)

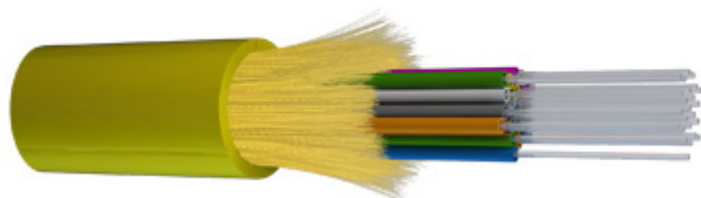


Fibre optic cables

Distribution-cable



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Distribution-cable - Indoor Cable.

The distribution-cable consists of multiple dry-buffered low bend radius, no waterpeak G.657.A1 fibres, covered by aramid yarns (strength members), with a low smoke halogen-free outer jacket. The individual fibres are suitable for direct connector assembly. This cable is suitable for indoor installation in dry rooms, inside of telecommunication- and datasystems.

Characteristics	Properties	Unit
Product group	Indoor cables	
Series	Glasvezelkabel Single Mode	
Type	Distribution-cable	
Standardization	IEC 60794-2	
Test procedures	IEC 60794-1-2	
Application	Inside	
Strain relief	Yes	
Optical Element	Dry buffer 0,9mm	
Fibre type	Single mode	
Optical fibre standard	ITU-T G.657.A1	
Material outer sheath	LSZH	
Colour outer sheath	Yellow	
Flame retardant	Acc. IEC 60332-1-2	
Halogen free	Acc. IEC 60754-1	
Halogen free (acc. EN 50267-2-2)	Yes	
Cable metal free	Yes	
Longitudinal water blocking	No	
Radial water blocking	No	
Installation temperature	-5 / 45	°C
Operation temperature range	-20 / 60	°C
Transportation and storage temperature	-25 / 70	°C
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Attenuation @ 1625 nm	0.4	dB/km
Construction and Colour codes	zie bijlagen	

Partnumber	Description	Outer diameter approx.	Net weight (Kg/km)	Bending radius after installation	Bending radius during	Tensile load short term (Tm) (N)	Tensile load Long Term (TI) (N)
69811	4x SM G.657.A1 (4x1)	4,8	19	90	45	500	100
69812	8x SM G.657.A1 (8x1)	5,6	28	110	55	700	100
69813	12x SM G.657.A1 (12x1)	6,4	36	130	60	1000	200
69814	24x SM G.657.A1 (24x1)	8,2	55	170	85	1000	200

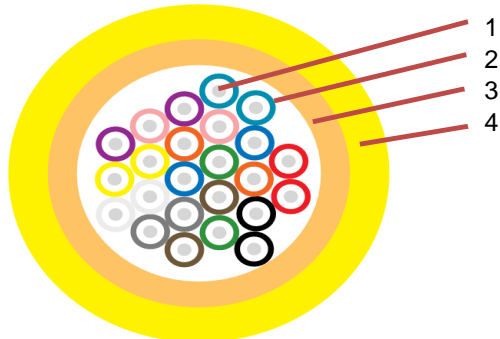
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Product information

Cable construction and colour code

Distributionkabel



Description:

- 1 Optical fibres
- 2 900 µm Secondary protection
- 3 Strain relief elements (Aramid)
- 4 Outer sheath (LSZH)

Standard colours:

Fibres		Layer 1	
Fibrenr.	Group 1		
1	Red	1	Red +t
2	Green	2	Green +t
3	Blue	3	Blue +t
4	Yellow	4	Yellow +t
5	White	5	White +t
6	Grey	6	Grey +t
7	Brown	7	Brown +t
8	Violet	8	Violet +t
9	Turquoise	9	Turquoise +t
10	Black	10	Natural
11	Orange	11	Orange +t
12	Pink	12	Pink +t