

Comparison of the transmission characteristics of KERPEN GigaLine® with the requirements of the standard:

Comparison between fibre category OM1 and KERPEN GigaLine® G62.5/125 "OM1e"

	850 nm		1,300/1310 nm	
	Requirements of standard	KERPEN GigaLine®	Requirements of standard	KERPEN GigaLine®
Attenuation	3.5 dB/km	3.0 dB/km	1.5 dB/km	0.7 dB/km
Bandwidth/length product	200 MHz x km	250 MHz x km	500 MHz x km	800 MHz x km
Gigabit Ethernet segment length	275 m	500 m	550 m	1,000 m
10 Gigabit Ethernet segment length	33 m	65 m	300 m	450 m

Comparison between fibre category OM2 and KERPEN GigaLine® G50/125 "OM2e"

	850 nm		1,300/1310 nm	
	Requirements of standard	KERPEN GigaLine®	Requirements of standard	KERPEN GigaLine®
Attenuation	3.5 dB/km	2.5 dB/km	1.5 dB/km	0.7 dB/km
Bandwidth/length product	500 MHz x km	600 MHz x km	500 MHz x km	1,200 MHz x km
Gigabit Ethernet segment length	550 m	750 m	550 m	2,000 m
10 Gigabit Ethernet segment length	82 m	110 m	300 m	900 m

Comparison between fibre category OM3 and KERPEN GigaLine® G50/125 "OM3"

	850 nm		1,300/1310 nm	
	Requirements of standard	KERPEN GigaLine®	Requirements of standard	KERPEN GigaLine®
Attenuation	3.5 dB/km	2.5 dB/km	1.5 dB/km	0.7 dB/km
Bandwidth/length product	1,500 MHz x km	1,500 MHz x km	500 MHz x km	500 MHz x km
Laser bandwidth	2,000 MHz x km	2,000 MHz x km		
Gigabit Ethernet segment length	550 m	900 m	550 m	550 m
10 Gigabit Ethernet segment length	300 m	300 m	300 m	300 m

Comparison between fibre category OM3 and KERPEN GigaLine® G50/125 "OM3e"

	850 nm		1,300/1310 nm	
	Requirements of standard	KERPEN GigaLine®	Requirements of standard	KERPEN GigaLine®
Attenuation	3.5 dB/km	2.5 dB/km	1.5 dB/km	0.7 dB/km
Bandwidth/length product	1,500 MHz x km	3,500 MHz x km	500 MHz x km	500 MHz x km
Laser bandwidth	2,000 MHz x km	4,700 MHz x km		
Gigabit Ethernet segment length	550 m	1,000 m	550 m	550 m
10 Gigabit Ethernet segment length	300 m	550 m	300 m	300 m

Comparison between fibre category OS1 and KERPEN GigaLine® E9...10/125 "OS1e"

	1310 nm		1550 nm	
	Requirements of standard	KERPEN GigaLine®	Requirements of standard	KERPEN GigaLine®
Attenuation	1.0 dB/km	0.36 dB/km	1.0 dB/km	0.22 dB/km
Attenuation at 1383 nm	not defined	≤ 0.4 dB/km		
10 Gigabit Ethernet segment length	10,000 m	10,000 m	40,000 m	40,000 m

## GigaLine® Fibre optic indoor cables

**GigaLine® DX 100, 500, 625**

**GigaLine® DX0 100, 500, 625**

**GigaLine® AT 100, 500, 625**

**GigaLine® M 100, 500, 625**



Easy plug assembly and good splicing behaviour are the characteristics of GigaLine® indoor cables.

In the standard version, all designs of indoor cables are supplied with a halogen-free outer sheath compound.

GigaLine® indoor cables are flame-retardant according to IEC 60332-1-2 and usually also according to IEC 60332-3-24.

They also have the following characteristics:

- High flexibility
- Excellent resistance to transverse and longitudinal stress and to thermal stress
- High tensile strength

GigaLine® DX 100

GigaLine® DX 500

GigaLine® DX 625



Fibre optic indoor cables (duplex figure 8)  
KL-J-V(ZN)H 2G/E ...

**Structure:**

Two compact wires in a figure 8 sheath with a separator and strain relief.

Sheath: halogen-free compound

**Field of application:**

Work area/patch cords, suitable for direct plug mounting and splicing

Dimensions	Outer Ø	Weight	Tensile strength	Transverse compression strength		Fire load		Article number	Sheath colour
				permanent N/cm (approx.)	short-term N/cm (approx.)	MJ/m (approx.)	kWh/m (approx.)		
2 G50/125	2.8x5.6	18	500 (2x250)	50	100	0.36	0.10	8DA20003	orange
2 G50/125 OM3	2.8x5.6	18	500 (2x250)	50	100	0.36	0.10	8DA50003	orange
2 G62.5/125	2.8x5.6	18	500 (2x250)	50	100	0.36	0.10	8DB70003	orange
2 E9...10/125	2.8x5.6	18	500 (2x250)	50	100	0.36	0.10	8DC72001	yellow

GigaLine® DX0 100

GigaLine® DX0 500

GigaLine® DX0 625



Fibre optic indoor cables (duplex figure 0)  
KL-J-V(ZN)H 2G/E ...

**Structure:**

Two individual cables with strain relief (Ø 2.1 mm; compact wires in inner sheath) in parallel under an outer sheath.

Sheath: halogen-free compound

**Field of application:**

Floor cabling, suitable for direct plug mounting and splicing

Dimensions	Outer Ø	Weight	Tensile strength	Transverse compression strength		Fire load		Article number	Sheath colour
				permanent N/cm (approx.)	short-term N/cm (approx.)	MJ/m (approx.)	kWh/m (approx.)		
2 G50/125	3.1x5.2	17	600 (2x300)	50	100	0.39	0.11	8DA20011	orange
2 G50/125 OM3	3.1x5.2	17	600 (2x300)	50	100	0.39	0.11	8DA50011	orange
2 G62.5/125	3.1x5.2	17	600 (2x300)	50	100	0.39	0.11	8DB70011	orange
2 E9...10/125	3.1x5.2	17	600 (2x300)	50	100	0.39	0.11	8DC70010	yellow

GigaLine® AT 100  
GigaLine® AT 500  
GigaLine® AT 625



Fibre optic indoor cables, splittable (breakout cables)  
KL-AT-V(ZN)HH n G/E ...

**Structure:**

Up to 12 individual cables with strain relief (Ø 2.1 mm; compact wires in inner sheath) stranded under an outer sheath. Sheath: halogen-free compound, colour: yellow

**Field of application:**

Floor cabling, suitable for direct plug mounting and splicing

Dimensions	Outer ø	Weight	Tensile strength	Transverse compression strength		Fire load		Article number			
				permanent N/cm (max.)	short-term N/cm (max.)	MJ/m (approx.)	kWh/m (approx.)	G 50/125	G 50/125 OM3	G 62.5/125	E 9...10/125
4 G/E	7.0	46	1,200	50	100	1.00	0.28	8BA20002	8BA50002	8BB70002	8BC70002
6 G/E	8.2	66	1,800	50	100	1.60	0.44	8BA20003	8BA50003	8BB70003	8BC70003
8 G/E	9.6	83	2,400	50	100	2.25	0.63	8BA20004	8BA50004	8BB70004	8BC70004
10 G/E	11.2	113	3,000	50	100	2.75	0.76	8BA20005	8BA50005	8BB70005	8BC70005
12 G/E	12.4	135	3,600	50	100	3.05	0.85	8BA20006	8BA50006	8BB70006	8BC70006

GigaLine® M 100  
GigaLine® M 500  
GigaLine® M 625



Fibre optic indoor cables, (multi)  
KL-J-V(ZN)H n G/E ...

**Structure:**

Up to 12 individual cables stranded under an outer sheath, with common strain relief.  
Sheath: halogen-free compound, colour: yellow

**Field of application:**

Floor cabling, suitable for direct plug mounting and splicing.

Dimensions	Outer ø	Weight	Tensile strength	Transverse compression strength		Fire load		Article number			
				permanent N/cm (max.)	short-term N/cm (max.)	MJ/m (approx.)	kWh/m (approx.)	G 50/125	G 50/125 OM3	G 62.5/125	E 9...10/125
4 G/E	5.2	24	400	50	100	0.45	0.13	8MA20002	8MA50002	8MB70002	8MC70002
6 G/E	5.8	28	600	50	100	0.50	0.15	8MA20003	8MA50003	8MB70003	8MC70003
8 G/E	5.8	30	600	50	100	0.55	0.17	8MA20004	8MA50004	8MB70004	8MC70004
10 G/E	6.3	34	800	50	100	0.60	0.18	8MA20005	8MA50005	8MB70005	8MC70005
12 G/E	6.3	37	800	50	100	0.65	0.19	8MA20006	8MA50006	8MB70006	8MC70006