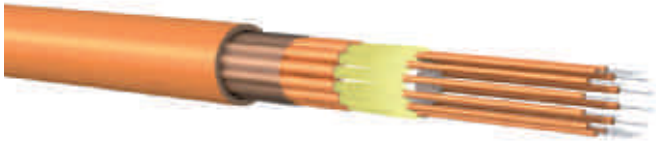


## Breakout cables 1.4 mm



### Design

Cable design	central strength member (non metallic) 4-24 single fiber cables with tight buffered tube 0,6mm strain relief (Aramide yarn) separating tape and 1 ripcord	
Channel marking	single fiber cable numbred	
Jacket material	LSFH™	
Outer jacket colour	E9	yellow
	OM2	orange
	OM3	turquoise
	OM4	heather violet
	G62.5	orange

### Properties

- Metal free indoor and outdoor cable
- Each fiber strain relieved
- For direct connector assembly with strain relieved
- Ripcord for easy jacket removal
- Low smoke, halogen free and self-extinguishing
- Cable with improved fire performance
- For SMARTLINE applications

### Applications

- Installation in indoor areas
- Data cable in distribution networks
- For installations in cable ducts
- For horizontal and collapsed backbone cabling
- Terminations possible for SFF connectors only

According to IEC 60794-1-2

### Ordering information

04-.../VJSNH-...14

08-.../VJSNH-...14

12-.../VJSNH-...14

16-.../VJSNH-...14

24-.../VJSNH-...14

Please see page 140

## Breakout cables 1.4 mm

Specification	4	8	12	16	24		stranding
Jacket material	LSFH™	LSFH™	LSFH™	LSFH™	LSFH™		
Jacket Ø	5.4	7.0	9.0	9.0	10.6	mm	
Single fiber cable Ø	1.4	1.4	1.4	1.4	1.4	mm	with one tube each
Tube Ø	0.6	0.6	0.6	0.6	0.6	mm	with one fiber each
Streight member	0.7	2.4	4.1	1.0	2.8	mm	
Channel marking on single fiber cable	numbered						
Approx. weight	31	50	85	81	105	kg/km	

Mechanical properties								
Tensile strength	during installation	1000	2000	3000	4000	5000	N	IEC 60794-1-2 E1
	in service	4x70	8x70	12x70	16x70	24x70	N	
Min. bend radius	during installation	80	100	130	130	160	mm	IEC 60794-1-2 E11
	in service	50	70	90	90	100	mm	
Crush resistance	short-term	400	400	400	400	400	N/cm	IEC 60794-1-2 E3
	long-term	200	200	200	200	200	N/cm	
Impact resistance	Wp = 2.21 J	50	100	100	100	100	impacts	IEC 60794-1-2 E4
Repeated bending	r = 100 mm, weight = 4 kg	2000	2000	2000	2000	2000	cycles	IEC 60794-1-2 E6

Thermal properties						
Temperature range	during installation	-10 to +60			°C	IEC 60794-2-50 F1
	in service	-25 to +70			°C	
	in storage	-40 to +60			°C	

Specification for singlemode at 1310 nm, for multimode at 1300 nm

Combustion properties							
Fire load		0.85	1.40	2.30	2.40	3.10	MJ/m
Fire propagation	on a vertical single cable	p	p	p	p	p	IEC 60332-1
	on a vertical cable bundle	p	p	p	p	p	IEC 60332-3-25
Smoke density		p	p	p	p	p	IEC 61034-2
Halogen acid gas	jacket material	p	p	p	p	p	IEC 60754-1
Degree of acidity	jacket material	p	p	p	p	p	IEC 60754-2
2002/95/EC (RoHS)		compliant					

p = passed

## Breakout cables 2.0 mm



Lloyd's  
Register



### Design

Cable design	central strength member, non-metallic 4 to 16 single fiber cables with semi-tight tubes strain relief (Aramide yarn) separating tape and 1 ripcord	
Channel marking	single fiber cable numbered	
Jacket material	LSFH™	
Outer jacket colour	E9	yellow
	OM2	orange
	OM3	turquoise
	OM4	heather violet
	G62.5	orange

### Properties

- Metal free indoor cable
- Each fiber strain relief
- For direct connector assembly with strain relief
- Ripcord for easy jacket removal
- Low smoke, halogen free and self-extinguishing
- Cable with improved fire performance
- For SMARTLINE applications

### Applications

- Installation in indoor areas
- Data cable in distribution networks
- For installation in cable ducts
- Deal for applications involving high safety requirements in case of fire
- For horizontal and collapsed backbone cabling

According to IEC 60794-1-2

### Approvals

Germanischer Lloyd,  
GL-approval certificate no. 24 367-04 HH  
Lloyd's Register  
LR-approval certificate no. 05/200 44

### Ordering information

04-.../CWJSNH-...20  
08-.../CWJSNH-...20  
12-.../CWJSNH-...20  
16-.../CWJSNH-...20  
Please see page 140

## Breakout cables 2.0 mm

Specification	4	8	12	16		stranding
Jacket Ø	7.0	9.0	12.0	12.0	mm	
Single cable Ø	2.0 <sup>1)</sup>	2.0 <sup>1)</sup>	2.0 <sup>1)</sup>	2.0	mm	with one tube each
Tube Ø	0.9	0.9	0.9	0.9	mm	with one fiber each
Strength member	1.0	3.2	5.8	1.6	mm	
Channel marking on single fiber cable	numbered					
Approx. weight	47	82	144	135	kg/km	

1) also available with Ø 2.7 mm single cable

Mechanical properties							
Tensile strength	during installation	1200	2400	4000	4800	N	IEC 60794-1-2 E1
	in service	4 x 100	8 x 100	12x100	16x100	N	
Min. bend radius	during installation	100	120	180	180	mm	IEC 60794-1-2 E11
	in service	70	80	120	120	mm	
Crush resistance	short-term	750	750	750	400	N/cm	IEC 60794-1-2 E3
	long-term	200	200	200	200	N/cm	
Impact resistance	Wp = 2.21 J, r = 25 mm	50	50	50	50	impacts	IEC 60794-1-2 E4
Repeated bending	r = 100 mm, weight = 5.4 kg	1000	1000	1000	1000	cycles	IEC 60794-1-2 E6
Flexing		10'000	10'000	10'000	10'000	cycles	IEC 60794-1-2 E8
Torsion	± 360°, l = 1000 mm m = 2 kg	25'000	25'000	25'000	25'000	cycles	IEC 60794-1-2 E7

Thermal properties						
Temperature range	during installation	-10 to +60			°C	IEC 60794-2-50 F1
	in service	-25 to +70			°C	
	in storage	-40 to +60			°C	

Specification for singlemode at 1310 nm, for multimode at 1300 nm

Combustion properties							
Fire load		1.09	1.63	3.15	2.95	MJ/m	
Fire propagation	on a vertical single cable	p	p	p	p		IEC 60332-1
	on a vertical cable bundle	p	p	p	p		IEC 60332-3-24
Smoke density		p	p	p	p		IEC 61034-2
Halogen acid gas	jacket material	p	p	p	p		IEC 60754-1
Degree of acidity	jacket material	p	p	p	p		IEC 60754-2
2002/95/EC (RoHS)		compliant					

p = passed

Technical data for cable types with H200 fiber might vary