

BRUsens temperature 85°C

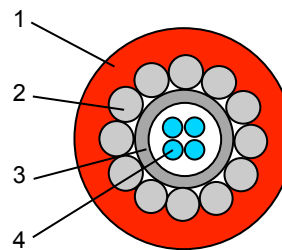
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Small fiber optic temperature sensing cable, armored with stainless steel loose tube, stainless steel strength members and PA outer sheath, fast thermal response, for up to 8 fibers

LLK-BSTE 85°C 3.4 ...4.8 mm

Construction:

- 1) PA outer sheath
- 2) Stainless steel wires, 316L
- 3) Stainless steel loose tube, 316L
- 4) Bend insensitive optical fibers with dual layer acrylate coating for increased micro bending performance



Description:

- Gel filled central metal loose tube with up to 8 fibers, hermetically sealed
- High tensile strength
- High crush resistance
- Excellent rodent protection
- Laterally watertight
- High chemical resistance
- Robust abrasion resistant cable sheath
- Compact, high flexibility, small bending radius
- Halogen free
- Fast temperature response

Temperature range:

- Operating temperature: -40° C ... + 85° C
- Storage temperature: -40° C ... + 85° C
- Installation temperature: -10° C ... + 50° C
- Short- term temperature: (max 60min) -50° C ... +150° C

Cable sheath color:

- Red, similar RAL 3000
- Other colors upon request

Standards:

- Cable tests complying with IEC 60794-1-2

Applications:

- Sensing applications: e.g. temperature monitoring
- Sensing technologies: Raman, Brillouin, FBG etc.
- Harsh environment, outdoors
- Deployment in conduits, directly in the ground or attached to structures
- Connection and communication cable for sensing
- Temperature compensation cable for Brillouin

Remarks:

- Fiber colors: 1 red, 2 green, 3 yellow, 4 blue,
- Other cable designs and temperature ranges available
- Standard cable marking with meter marks, special labeling of outer sheath upon request
- Accessories such as loops, fan-outs, connectors, mounting brackets etc. available
- Deployment training upon request
- For improved UV resistance, black cable sheath available upon request

Standard optical fiber:

- Multimode fiber: ITU-T G.651, 50µm or 62.5 µm
- Single-mode fiber: ITU-T G.652.D or G.657
- Other fiber types and fiber quality

Technical data:

Type	Max. no. of fibres units	Cable ø mm	Weight kg/km	Max. crush res. N/cm	Max. tensile strength installation N	Max. tensile strength operation N
1F	1	3.4	18	2000	800	600
2F	2	3.8	26	800	1500	1000
4F	4	3.8	26	800	1500	1000
8F	8	4.8	46	1000	3000	2000

Type	Min. bending radius		Hydrostatic pressure resistance x100kPa (bar)
	with tensile mm	without tensile mm	
1F...8F	20xD	15xD	300

Optical fiber data (cabled) at 20°C

Fiber Type	Attenuation, dB/km			Modal Bandwidth, MHz·km	
	850 nm	1300 / 1310 nm	1550 nm	850 nm	1300 nm
MMF 50/125	≤3.0	≤1.0	NA	700	500
MMF 62.5/125	≤3.5	≤1.0	NA	200	500
SMF	NA	≤0.36	≤0.25	NA	NA

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