

# BRUsens Temperature 85°C heatable

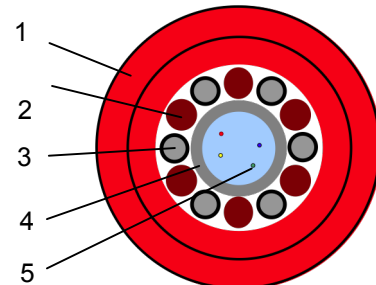
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Small fiber optic temperature sensing cable with central loose tube, 0.83 mm<sup>2</sup> copper conductor for active sensing, stainless steel strength members and double layer PA outer sheath, fast thermal response, for up to 4 fibers

LLK-BSTH 85°C 4.0 mm

**Construction:**

- 1) Double layer PA outer sheath
- 2) Copper wires, total 0.83 mm<sup>2</sup> cross section
- 3) Stainless steel 316 wires
- 4) Gel-filled, stainless steel 316L, metal loose tube
- 5) Optical fibers with dual layer acrylate coating for increased micro bending performance



**Description:**

- Central metal loose tube with up to 4 fibers, hermetically sealed
- High tensile strength
- Longitudinally and laterally watertight
- Excellent rodent protection
- Compact design, high flexibility, small bending radius
- Abrasion resistant, double layer outer sheath for electrical insulation and protection
- Halogen-free cable sheath
- Insulation of outer sheath monitored with spark test, operating voltage max. 600/1000 V

**Temperature range:**

- Operating temperature: -40° C ... +85° C
- Storage temperature: -40° C ... +85° C
- Installation temperature: -10° C ... +50° C
- Short term temperature (3 min) +150° C

**Cable sheath color:**

- Red, similar RAL 3000
- Other colors upon request

**Standards:**

- Cable tests complying with IEC 60794-1-2

**Applications:**

- Temperature monitoring, acoustic monitoring
- Sensing applications, Raman, Brillouin
- Active sensing applications with heated cables
- Harsh environment, outdoors
- Deployment in conduits or directly in the ground

**Remarks:**

- Fiber color: 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
- Single-mode fiber: ITU-T G.652.D or G.657
- Other fiber types and fiber quality available upon request

**Technical data:**

Type	Max. no. of fibres units	Cable ø mm	Weight kg/km	Max. tensile strength	
				installation N	operation N
4F (2F MM/ 2F SM)	4	4.0	28	1000	700

Type	Min. bending radius		Max. crush resistance N/cm	Continuous operation current A	Electrical resistance Ω/km
	with tensile mm	without tensile mm			
4F (2F MM/ 2F SM)	20xD	15xD	300	8	25

**Optical fiber data (cabled) at 20°C**

Fiber Type	Attenuation, dB/km				Modal Bandwidth, MHz·km	
	850 nm	1064 nm	1300 / 1310 nm	1550 nm	850 nm	1300 nm
MMF 50/125	≤3.0	≤2.6	≤1.0	NA	400	600
SMF	NA		≤0.36	≤0.25	NA	NA

Subject to changes without notice

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