

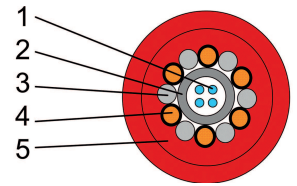
# BRUsens AHFO DTS 4.0mm 25Ω

3\_50\_1\_022

Fiber optic temperature sensing cable, heatable, small, 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.

- Outdoors, harsh environment
- Direct burial in soil or in conduits

LLK-BSTH 85°C 4.0 mm



**Construction**

1. Optical fiber, bend insensitive with dual layer acrylate coating for increased micro bending performance
2. Loose tube, metal, stainless steel 316L, gel-filled
3. Armoring, metal wires stainless steel 316L
4. Copper conductors, total 0.83 mm<sup>2</sup>
5. Outer sheath PA double layer

**Standard optical fiber**

Singlemode fiber: ITU-T G.652.D or G.657  
 Other fiber types and quality available upon request  
 Multimode fiber: ITU-T G.651, 50 μm

**Temperature range**

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

**Jacket colour**

- Red, similar RAL 3000
- Other colours on request

**Standards**

- IEC 60794-1-2

**Remarks**

- For improved UV resistance, black cable sheath available upon request
- Accessories such as mounting brackets, loops, fan-outs, splice enclosures, connectors, patch-panels, repair kits etc. are available
- Deployment training upon request
- Standard fiber color code: 1 red, 2 green
- Standard cable marking with meter marks, special labeling of outer sheath upon request
- Other cable designs and temperature ranges upon request

**Description**

- Compact design, good flexibility, small bending radius
- Loose tube, central, metal, gel filled, with up to 4 fibers, hermetically sealed, optimized fiber excess length
- Outer sheath, robust, abrasion resistant, double layer for electrical insulation and protection
- Insulation of outer sheath monitored with spark test, operating voltage max. 600/1000 V
- High crush resistance
- High tensile strength
- Excellent rodent protection
- High chemical resistance

**Application**

- Temperature
- Moisture and flow detection
- Temperature heatable
- Raman, Brillouin

**Technical data**

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

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

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

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

Subject to change without notice