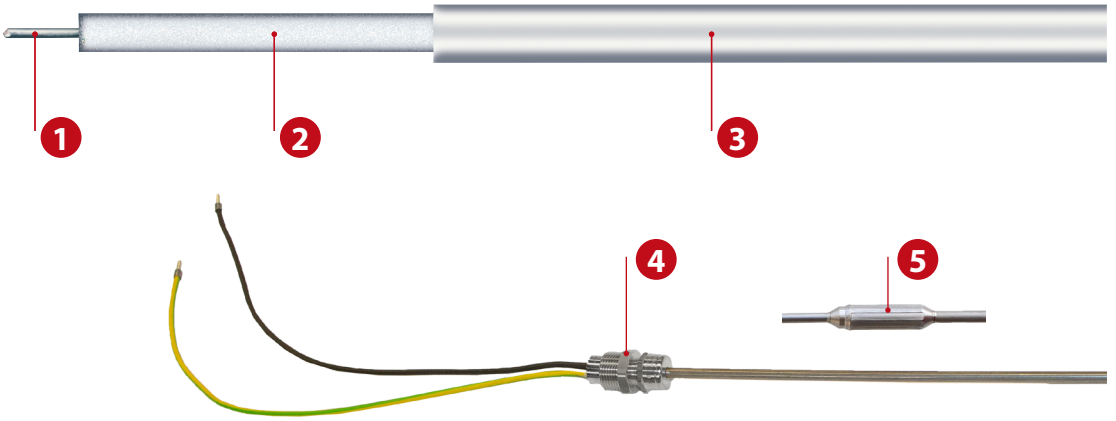
eltherm®

ELK-MI AY 825

up to 700 °C, single conductor



1	Bus wire (SINGLE)	Nichrome R, KP, Constantan, Alloy 60 or Copper
2	Insulation	Magnesium oxide (MgO) acc. ASTM E1652-Standard
3	Outer jacket	NiCr 2.4858 (Alloy 825)
4	Cable gland	Stainless steel M20 x 1.5 / M25 x 1.5
5	Connection	Laser welded, pressed

Manufactured and assembled exclusively from premium nickel/chrome Alloy 825 or stainless steel 1.4541. eltherm's revolutionary Clean Laser Seal technology (CLS) guarantees high output and reliability in all industrial applications. This technology offers the technologically best possible protection against stress corrosion, especially with aggressive chemicals such as leachable chlorides or high sulphur content. MI trace heating consists of one- or two-wire heating cables and mineral-insulated cold conductor connections with Clean Laser Seal connection. The free end of the cold conductor is sealed seamlessly and connected with a flexible supply line.

At a Glance

Applications

Temperature maintenance

Silos, vessels, tanks

Pipelines

- Chemistry and Petrochemistry
- Oil and Gas Industry
- Industrial processes
- Mobile processing facilities
- Vacuum processes

Benefits

- 100% homogeneous design
- No filling holes
- High temperature resistance
- Maximum resistance to chemicals
- High power output
- Protection against stress corrosion
- Resistant against moisture

Approvals

- Classification

II 2 G Ex 60079-30-1 db eb IIC Gb
II 2 D Ex 60079-30-1 tb IIIC Db

- Certification

FM15ATEX0046X
FM18US0191X
FM18CA0089X
IECEx FME 15.0009X

Checklist

Junction boxes		
ELAK-6-SP	220 x 120 x 90 mm, ALU, up to 3 heating cables, 6x M20, 1x M25	MDA0002
ELAK-3-SP	122 x 120 x 90 mm, ALU, up to 1 heating cable, 1x M25, 2x M20	MDA0003
ELAK-5-SP	122 x 120 x 90 mm, ALU, up to 2 heating cables, 1x M25, 4x M20	MDA0005

Temperature-resistant power connection line	
Power connection line Alloy 825, **SINGLE**, 600 V, 2.08 mm², Ø 5.3 mm	20340K0016
Power connection line Alloy 825, **SINGLE**, 600 V, 3.32 mm², Ø 5.7 mm	20340K0033
Power connection line Alloy 825, **SINGLE**, 600 V, 5.17 mm², Ø 6.4 mm	20340K0052
Power connection line Alloy 825, **SINGLE**, 600 V, 8.30 mm², Ø 7.2 mm	20340K0083

Factory assembly		
ELVB-MI-AY 825-**S**-2,08mm²	Laser welded, **SINGLE** 2.08 mm²	MAG0006

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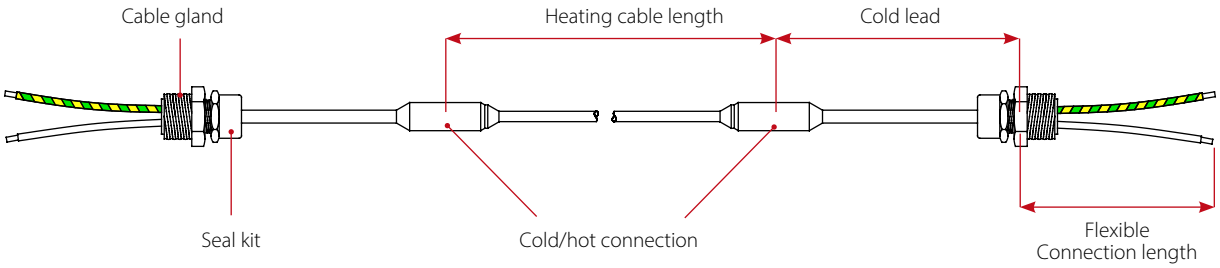
Technical Information

Rated temperature	up to 700 °C
Ambient temperature	-60 °C up to +60 °C
Nominal output	up to 250 W/m *
Nominal voltage	up to 500 V AC
Min. Bending radius	Diameter x 6
Min. Installation temperature	– 60 °C
Protective conductor connection	Protective connection integrated
Protection rating / protection class	IP65 / Protection class I
Power connection line	2 x 0.50 m



Heating cable data

Nominal resistance [Ω/km @ 20°C]	Outer Ø [mm]	Bending radius [mm]	Art.-No.
6560	4.3	26	2034000656
5250	4.3	26	2034000525
4270	4.3	26	2034000427
3280	4.3	26	2034000328
2790	4.3	26	2034000279
2300	4.3	26	2034000230
1640	4.3	26	2034000164
1250	4.3	26	2034000125
980	4.3	26	2034000098
820	4.3	26	2034000082
660	4.4	26	2034000066
560	4.6	28	2034000056
490	4.3	26	2034000049
330	4.3	26	2034000033
260	4.3	26	2034000026
230	4.3	26	2034000023
200	4.3	26	2034000020

Nominal resistance [Ω/km @ 20°C]	Outer Ø [mm]	Bending radius [mm]	Art.-No.
130	4.4	26	2034000013
100	4.7	28	2034000010
70	5.1	31	2034000007
34	4.3	26	2034000003
21	4.6	28	2034000002
14	4.8	29	2034000001

NOTE

- * The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.
- An excerpt from the possible resistances is listed here. Additional cold conductor diameters are also available. Please feel free to contact us!
- Cables shall neither intersect nor contact.
- Provide protection by means of circuit breaker FI 30. mA
- Please observe the standards IEC 62395-2, EN 60519-10.