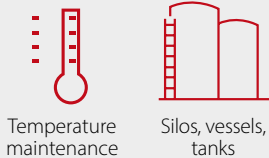


At a Glance

Applications



- › 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

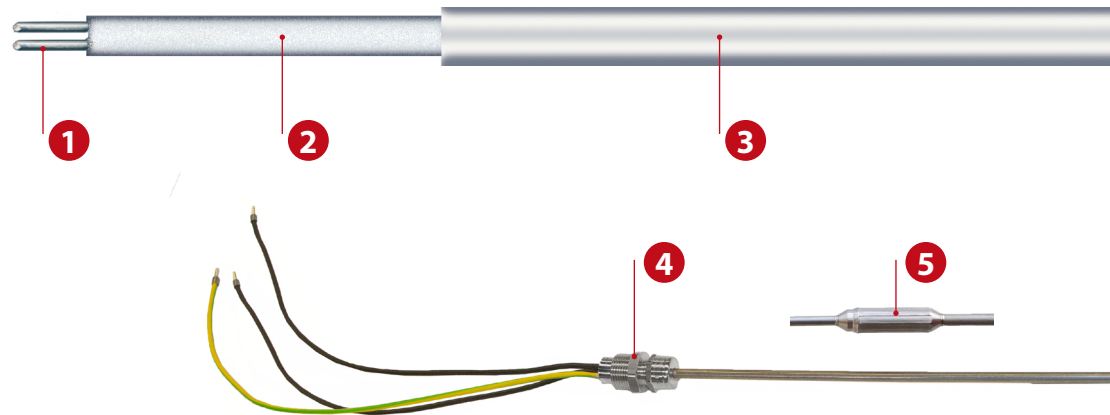
Approvals



- › 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

ELK-MI AY 825

up to 700 °C, twin conductor



1 Bus wire (TWIN)	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.

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

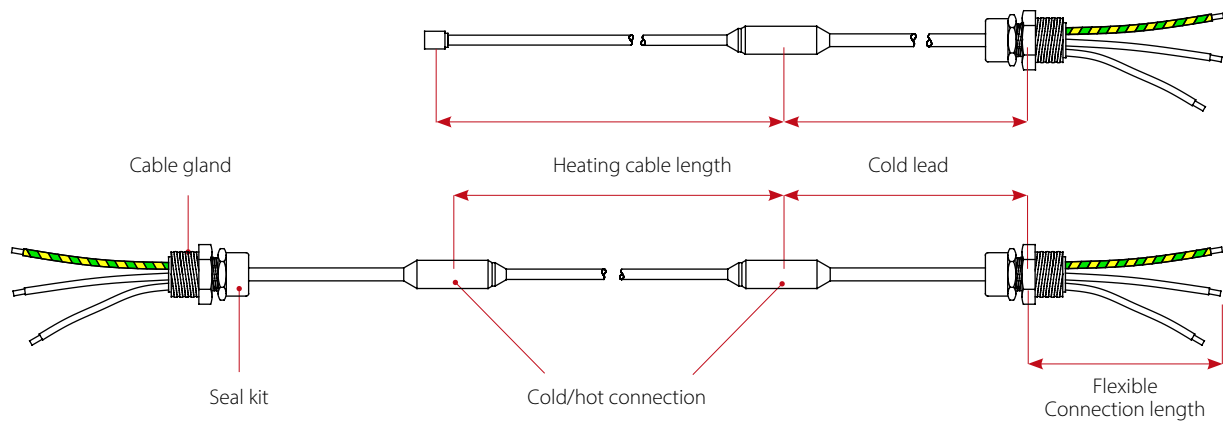
Power connection line Alloy 825, TWIN , 600 V, 2.08 mm ² , Ø 8.9 mm	20340K0027
Power connection line Alloy 825, TWIN , 600 V, 3.32 mm ² , Ø 9.7 mm	20340K0042
Power connection line Alloy 825, TWIN , 600 V, 5.17 mm ² , Ø 11.0 mm	20340K0062
Power connection line Alloy 825, TWIN , 300 V, 2.08 mm ² , Ø 7.1 mm	20340K0026
Power connection line Alloy 825, TWIN , 300 V, 3.32 mm ² , Ø 8.0 mm	20340K0041

Factory assembly

ELVB-MI-AY 825-T-2,08mm ² Laser welded, TWIN 2.08 mm ²	MAG0007
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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	1/2 x 0.50 m



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.

Heating cable data ELK-MI AY 825 TWIN

300 V AC				600 V AC			
Nominal resistance	Outer Ø	Bending radius	Art.-No.	Nominal resistance	Outer Ø	Bending radius	Art.-No.
[Ω/km @ 20°C]	[mm]	[mm]		[Ω/km @ 20°C]	[mm]	[mm]	
36100	4.1	25	2034003601	36100	5.6	34	2034003600
29500	4.1	25	2034002952	29500	5.7	34	2034002951
24600	4.1	25	2034002462	19700	5.8	35	2034001968
19700	4.1	25	2034001969	13100	6.1	37	2034001312
16400	4.1	25	2034001641	6530	6.5	39	2034000656
13100	4.1	25	2034001311	3280	6.5	39	2034000329
10500	4.1	25	2034001001	2300	6.7	40	2034000231
8860	4.1	25	2034000886	1640	7.1	43	2034000162
8200	4.1	25	2034000820	980	7.6	46	2034000099
6560	4.1	25	2034000657	660	6.5	39	2034000065
5580	4.1	25	2034000558	490	6.7	40	2034000050
4590	4.1	25	2034000461	330	7.1	43	2034000034
3280	4.2	25	2034000330	230	7.5	45	2034000023
2300	4.6	28	2034000232	160	7.9	47	2034000016
1640	4.8	29	2034000166	130	8.3	50	2034000014
980	4.3	26	2034000101	98	8.8	53	2034000009
820	4.3	26	2034000083	66	6.9	41	2034000006
660	4.3	26	2034000068	52	7.1	43	2034000005
490	4.4	26	2034000051	43	7.4	44	2034000004
330	4.8	29	2034000035	33	7.6	46	2034000000
230	5.2	31	2034000027				
160	5.7	34	2034000017				