

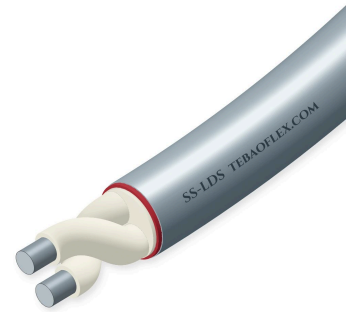


Linear Heat Detection (LHD) Sensor Cables

SS-LDS

Stainless-Steel-Protected Linear Heat Detection Cable

AISI 304/316 stainless-steel wire braided armoured digital linear heat detection cable



EN 54-28 / UL 521

AISI 304/316 SS Braid

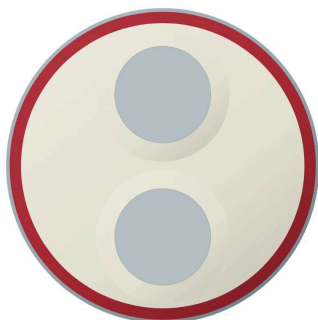
Crush & Rodent Resistant

Application

SS-LDS armours the digital linear heat detection sensor core (or PA12 nylon-jacketed core) with a high-coverage woven AISI 304 / AISI 316 stainless-steel wire braid. Designed for coal and ore conveyors, mining roadways, road/rail tunnels, steelworks and heavy

Typical uses: Underground & surface mining conveyors, Bulk port terminals & silos, Road, rail & utility tunnels, Steelworks & foundries, Power station coal bunkers

Construction



Cross-section, not to scale

1	Spring-steel sensing conductors	EN 54-28
2	Calibrated thermo-reactive polymer	EN 54-28
3	Flame-retardant inner jacket	EN 54-28
4	Stainless-steel wire braid armour	EN 54-28

Technical data

Typical values

Max. operating voltage	42 VDC / 30 VAC	Nominal DC resistance	≈100 Ω/km per conductor (200 Ω/km loop)
Braid earthing	Stainless-steel outer braid must be earthed at one end to drain induced EMI	Alarm temperature classes	68 °C · 78 °C · 85 °C · 105 °C · 138 °C
Max. continuous ambient temp.	45 °C (68 °C) · 65 °C (85 °C) · 85 °C (105 °C) · 105 °C (138 °C)	Min. operating temp.	-40 °C
Nominal outer diameter	4.6 mm ± 0.2 mm (4.9 mm on PA12+SS)	Min. installation bend radius	75 mm
Crush & cut-through resistance	>1500 N radial crush resistance without false trip	Rodent & abrasion resistance	Woven AISI 304/316 stainless-steel wire armour
Corrosion resistance	Salt-mist, acid-mine water & industrial washdown resistant	Flame retardancy	IEC 60332-1-2
Standards	EN 54-28 & UL 521		

Sizes

12 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation	Alarm Temp & Armour	Core Ø mm	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
SS-LDS standard series 12 sizes						
☐ SS-LDS-68 (68 °C + SS304 Braid)	68 °C SS304 (Amb ≤45 °C)	2×0.85 mm	4.5	12	38	72
☐ SS-LDS-78 (78 °C + SS304 Braid)	78 °C SS304 (Amb ≤55 °C)	2×0.85 mm	4.5	12	38	72
☐ SS-LDS-85 (85 °C + SS304 Braid)	85 °C SS304 (Amb ≤65 °C)	2×0.85 mm	4.5	12	38	72
☐ SS-LDS-95 (95 °C + SS304 Braid)	95 °C SS304 (Amb ≤70 °C)	2×0.85 mm	4.5	12	38	72
☐ SS-LDS-105 (105 °C + SS304 Braid)	105 °C SS304 (Amb ≤85 °C)	2×0.85 mm	4.6	12	39	74
☐ SS-LDS-138 (138 °C + SS304 Braid)	138 °C SS304 (Amb ≤105 °C)	2×0.85 mm	4.7	12	41	75
☐ SS-LDNS-68 (68 °C PA12 + SS316)	68 °C PA12+SS316	2×0.85 mm	4.9	12	44	78
☐ SS-LDNS-85 (85 °C PA12 + SS316)	85 °C PA12+SS316	2×0.85 mm	4.9	12	44	78
☐ SS-LDNS-105 (105 °C PA12 + SS316)	105 °C PA12+SS316	2×0.85 mm	5.0	12	45	80
☐ SS-LDNS-138 (138 °C PA12 + SS316)	138 °C PA12+SS316	2×0.85 mm	5.1	12	47	82
☐ SS-LDS-85-LSZH (85 °C LSZH + SS304)	85 °C LSZH+SS304	2×0.85 mm	4.6	12	40	74
☐ SS-LDS-105-LSZH (105 °C LSZH + SS304)	105 °C LSZH+SS304	2×0.85 mm	4.7	12	41	75

– Nominal outer diameters and weights are subject to manufacturing tolerances per EN 54-28 / UL 521.

Electrical data

12 sizes

Alarm Temp & Armour	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
68 °C SS304 (Amb ≤45 °C)	98.000	1	1
78 °C SS304 (Amb ≤55 °C)	98.000	1	1
85 °C SS304 (Amb ≤65 °C)	98.000	1	1
95 °C SS304 (Amb ≤70 °C)	98.000	1	1
105 °C SS304 (Amb ≤85 °C)	98.000	1	1
138 °C SS304 (Amb ≤105 °C)	98.000	1	1
68 °C PA12+SS316	98.000	1	1
85 °C PA12+SS316	98.000	1	1
105 °C PA12+SS316	98.000	1	1
138 °C PA12+SS316	98.000	1	1
85 °C LSZH+SS304	98.000	1	1

Alarm Temp & Armour	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
105 °C LSZH+SS304	98.000	1	1

– Current ratings apply at +30 °C ambient in free air and +25 °C in enclosed tray/conduit.

Standards and approvals

- ✓ EN 54-28 Compliant
- ✓ UL 521 Design
- ✓ IEC 60079-11 Simple Apparatus
- ✓ ISO 9227 Salt-Spray Tested

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/stainless-steel-protected-linear-heat-detection-cable



Typical values for this cable type, based on EN 54-28 / UL 521. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.