



Linear Heat Detection (LHD) Sensor Cables

SS-LDN

Nylon-Jacketed Linear Heat Detection Cable

PA12 nylon-overjacketed UV-, oil- and chemical-resistant digital linear heat sensor cable



EN 54-28 / UL 521

PA12 Nylon Outer Jacket

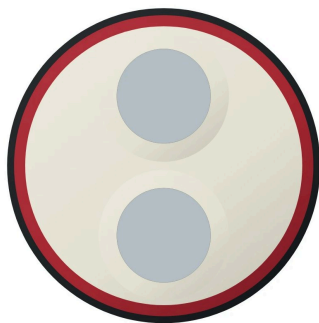
UV, Oil & Chemical LHD

Application

SS-LDN adds an extruded carbon-black UV-stabilised polyamide (PA12 nylon) protective outer jacket over the SS-LD digital linear heat detection core. Engineered for petrochemical floating-roof tanks, outdoor conveyors, chemical processing plants and coastal pie

Typical uses: Petrochemical floating-roof tanks, Oil refineries & LNG terminals, Outdoor mining & port conveyors, Chemical & fertilizer plants, Solar rooftop & outdoor trays

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 sheath	EN 54-28
4	PA12 nylon protective jacket	EN 54-28

Technical data

Typical values

Max. operating voltage	42 VDC / 30 VAC	Conductor DC resistance	≈100 Ω/km per conductor (200 Ω/km loop)
Dielectric test voltage	500 VAC rms for 1 minute	Alarm temperature ratings	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)	Operating temperature floor	-40 °C
Nominal outer diameter	4.2 mm ± 0.2 mm	Min. installation bend radius	65 mm (≈15 × cable OD)
Abrasion & cut-through	High-hardness Shore D 72 PA12 nylon outer skin	Hydrocarbon & solvent resistance	Resists crude oil, diesel, jet fuel, benzene, dilute acids & alkalis
UV weather resistance	Carbon-black stabilised PA12 per UL 1581 / ISO 4892 UV exposure	Flame retardancy	IEC 60332-1-2 / UL 1581 VW-1
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 & Amb.	Core Ø mm	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
SS-LDN standard series 12 sizes						
☐ SS-LDN-68 (68 °C Nylon LHD)	68 °C PA12 (Amb ≤45 °C)	2×0.85 mm	4.2	12	27	63
☐ SS-LDN-78 (78 °C Nylon LHD)	78 °C PA12 (Amb ≤55 °C)	2×0.85 mm	4.2	12	27	63
☐ SS-LDN-85 (85 °C Nylon LHD)	85 °C PA12 (Amb ≤65 °C)	2×0.85 mm	4.2	12	27	63
☐ SS-LDN-95 (95 °C Nylon LHD)	95 °C PA12 (Amb ≤70 °C)	2×0.85 mm	4.2	12	27	63
☐ SS-LDN-105 (105 °C Nylon LHD)	105 °C PA12 (Amb ≤85 °C)	2×0.85 mm	4.3	12	28	64
☐ SS-LDN-138 (138 °C Nylon LHD)	138 °C PA12 (Amb ≤105 °C)	2×0.85 mm	4.4	12	30	66
☐ SS-LDN-68-MSG (68 °C + Messenger)	68 °C PA12 + SS Messenger	2×0.85 mm	6.8	12	48	102
☐ SS-LDN-85-MSG (85 °C + Messenger)	85 °C PA12 + SS Messenger	2×0.85 mm	6.8	12	48	102
☐ SS-LDN-105-MSG (105 °C + Messenger)	105 °C PA12 + SS Messenger	2×0.85 mm	6.9	12	49	104
☐ SS-LDN-138-MSG (138 °C + Messenger)	138 °C PA12 + SS Messenger	2×0.85 mm	7.0	12	51	105
☐ SS-LDN-85-4C (85 °C 4-Core PA12)	85 °C 4C Redundant PA12	4×0.85 mm	5.8	24	49	87
☐ SS-LDN-105-4C (105 °C 4-Core PA12)	105 °C 4C Redundant PA12	4×0.85 mm	5.9	24	51	88

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

Electrical data

12 sizes

Alarm Temp & Amb.	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
68 °C PA12 (Amb ≤45 °C)	98.000	1	1
78 °C PA12 (Amb ≤55 °C)	98.000	1	1
85 °C PA12 (Amb ≤65 °C)	98.000	1	1
95 °C PA12 (Amb ≤70 °C)	98.000	1	1
105 °C PA12 (Amb ≤85 °C)	98.000	1	1
138 °C PA12 (Amb ≤105 °C)	98.000	1	1
68 °C PA12 + SS Messenger	98.000	1	1
85 °C PA12 + SS Messenger	98.000	1	1
105 °C PA12 + SS Messenger	98.000	1	1
138 °C PA12 + SS Messenger	98.000	1	1
85 °C 4C Redundant PA12	98.000	1	1

Alarm Temp & Amb.	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
105 °C 4C Redundant PA12	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 (with IS barrier)
- ✓ ISO 4892 UV Stabilised

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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/nylon-jacketed-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.