



SAE J1128 North American Automotive Primary Wires

GXL

Automotive Cross-Linked Wire

60 V DC / 25 V AC SAE J1128 general-purpose regular-wall XLPE automotive wire
(-40 to +125



60 V DC / 25 V AC

SAE J1128 Regular-Wall XLPE

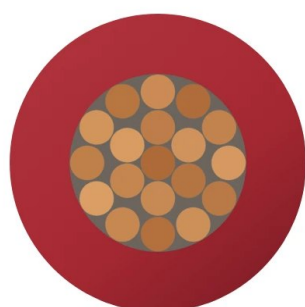
-40 to +125 °C (Class C)

Application

Type GXL (General Purpose Cross-Linked) is a regular-wall (0.58 mm on 20–14 AWG) 60 V DC (25 V AC) SAE J1128 primary wire insulated with cross-linked polyethylene (XLPE) for -40 °C to +125 °C service. It provides higher cut-through, pinch and chafe margin than

Typical uses: Heavy-duty trucks & buses, Construction & earthmoving plant, Agricultural combines & tractors, Diesel engines & gensets, Specialty emergency vehicles

Construction



Cross-section, not to scale

1	Concentric stranded copper	ASTM B3
2	Regular-wall cross-linked XLPE	SAE J1128
3	Smooth colour-coded outer skin	SAE J1128

Technical data

Typical values

Rated voltage	≤60 V DC / ≤25 V AC	Wet dielectric test	1.0 kV AC rms for 1 minute
In-line spark test	3.0 kV AC rms	Continuous operating temp.	-40 °C to +125 °C (3000 h Class C)
Short-term overload temp.	+150 °C (240 h) · +250 °C short-circuit (5 s)	Cold bend test	-40 °C for 4 hours without cracking
Nom. wall thickness (20-14 AWG)	0.58 mm (0.023 in)	Nom. wall thickness (12 / 10 / 8 AWG)	0.66 mm (12 AWG) · 0.79 mm (10 AWG) · 0.94 mm (8 AWG)
Pinch & scrape abrasion	45 % thicker XLPE wall than TXL for high pinch resistance	Flame propagation	Self-extinguishing within 70 s per SAE J1128
Fluid resistance	Hot engine oil, diesel, gasoline, hydraulic fluid, DEF/AdBlue & coolant	Standards	SAE J1128 Type GXL & ISO 6722-1 Class C

Sizes

12 standard constructions

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

Designation	AWG Metric mm ²	Strands / Wall mm	Max. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
GXL size range 12 sizes						
☐ GXL 20 AWG (0.5 mm ²)	20 AWG (0.5 mm ²)	7/28 · 0.58 mm	2.40	4.9	8.2	12.0
☐ GXL 18 AWG (0.8 mm ²)	18 AWG (0.8 mm ²)	19/30 · 0.58 mm	2.65	8.9	12.8	13.2
☐ GXL 16 AWG (1.0 mm ²)	16 AWG (1.0 mm ²)	19/29 · 0.58 mm	2.90	11.2	15.6	14.5
☐ GXL 14 AWG (2.0 mm ²)	14 AWG (2.0 mm ²)	19/27 · 0.58 mm	3.35	17.8	23.2	16.8
☐ GXL 12 AWG (3.0 mm ²)	12 AWG (3.0 mm ²)	19/25 · 0.66 mm	4.05	28.2	35.8	20.2
☐ GXL 10 AWG (5.0 mm ²)	10 AWG (5.0 mm ²)	19/23 · 0.79 mm	4.95	45.0	55.6	24.8
☐ GXL 8 AWG (8.0 mm ²)	8 AWG (8.0 mm ²)	19/21 · 0.94 mm	6.10	71.5	86.8	30.5
☐ GXL 18 AWG (16/30)	18 AWG (16/30)	16/30 · 0.58 mm	2.60	7.6	11.5	13.0
☐ GXL 16 AWG (26/30)	16 AWG (26/30)	26/30 · 0.58 mm	2.95	12.1	16.6	14.8
☐ GXL 14 AWG (41/30)	14 AWG (41/30)	41/30 · 0.58 mm	3.40	19.1	24.6	17.0
☐ GXL 12 AWG (37/28)	12 AWG (37/28)	37/28 · 0.66 mm	4.10	28.8	36.5	20.5
☐ GXL 10 AWG (37/26)	10 AWG (37/26)	37/26 · 0.79 mm	5.00	45.8	56.5	25.0

– Dimensions and maximum overall diameters conform to SAE J1128 / ISO 6722-1 Class C.

Electrical data

12 sizes

AWG Metric mm ²	Max. DCR @ 20 °C mΩ/m	Single wire in air A	In harness bundle A
20 AWG (0.5 mm ²)	34.60	14	11
18 AWG (0.8 mm ²)	19.20	19	15
16 AWG (1.0 mm ²)	14.60	23	18
14 AWG (2.0 mm ²)	9.18	32	25
12 AWG (3.0 mm ²)	5.77	43	34
10 AWG (5.0 mm ²)	3.63	58	45
8 AWG (8.0 mm ²)	2.28	78	61
18 AWG (16/30)	21.40	18	14
16 AWG (26/30)	13.80	23	18
14 AWG (41/30)	8.90	32	25
12 AWG (37/28)	5.68	43	34
10 AWG (37/26)	3.58	58	45

– Current ratings are reference values at +25 °C ambient; derate for multi-wire harness bundles and elevated engine-bay temperatures.

Standards and approvals

- ✓ SAE J1128 Type GXL
- ✓ ISO 6722-1 Class C (+125 °C)
- ✓ Ford ESB-M1L85-B
- ✓ Chrysler MS-8900
- ✓ RoHS 3 Compliant

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/gxl-automotive-cross-linked-wire



Typical values for this cable type, based on SAE J1128 / ISO 6722-1 Class C. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.