ISO 6722-1 Class C FL11Y

FL11Y

Abrasion-Resistant TPE-U Automotive Low-Voltage Primary Wire

ISO 6722-1 Class C / DIN 72551 · 60 V DC · −40…+125 °C industrial FL11Y construction



ISO 6722-1 Class C / DIN 72551 | 60 V DC (600 V peak) | −40…+125 °C

Application

FL11Y Abrasion-Resistant TPE-U Automotive Low-Voltage Primary Wire engineered to ISO 6722-1 Class C / DIN 72551 for 60 V DC service across −40…+125 °C, featuring stranded copper conductor and tpe-u insulation with minimum bending radius 5 × OD.

Typical uses: Passenger & Commercial Vehicle Harnesses, EV Traction, Braking (EPB) & Chassis Sensors, Heavy-Duty Truck & Off-Highway Equipment, Automotive Tier-1 Actuator & Sensor Subsystems

Construction





Cross-section, not to scale

1	**Stranded copper conductor**	ISO 6722-1 Class C / DIN 72551
2	**TPE-U insulation**	ISO 6722-1 Class C / DIN 72551

Technical data

Typical values

Rated voltage / duty	60 V DC (600 V peak) (ISO 6722-1 Class C / DIN 72551)	**Conductor construction**	Stranded copper conductor — High-conductivity copper conductor per ISO 6722-1 Class C / DIN 72551
Primary insulation / dielectric	TPE-U insulation — Extruded TPE-U insulation dielectric (continuous layer)	**Continuous operating temperature**	−40…+125 °C per ISO 6722-1 Class C / DIN 72551
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s adiabatic limit depending on dielectric class)	**Minimum installation temperature**	−5 °C (thermoplastic) / −25 °C (cross-linked or elastomer) / −40 °C (metallic)
Outer protection / covering	TPE-U insulation — Extruded TPE-U insulation dielectric (continuous layer)	**Minimum bending radius**	5 × OD (installed / static routing)
Layer count & geometry	2 concentric/structural layers verified by cross-section inspection	**Environmental & chemical durability**	Engineered for industrial service in accordance with ISO 6722-1 Class C / DIN 72551
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant	**Standards**	ISO 6722-1 Class C / DIN 72551

Sizes

12 standard constructions

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

Order designation	Configuration	Outer Ø ≈ mm	Weight ≈ kg/km	Min. bend R fixed mm
FL11Y Standard Production Schedule (60 V DC (600 V peak) · −40…+125 °C) 12 sizes				
☐ **FL11Y 3G1.5**	3 × 1.5 mm²	8.4	105	68
☐ **FL11Y 4G1.5**	4 × 1.5 mm²	9.2	128	74
☐ **FL11Y 5G1.5**	5 × 1.5 mm²	10.1	156	81
☐ **FL11Y 3G2.5**	3 × 2.5 mm²	9.8	148	78
☐ **FL11Y 4G2.5**	4 × 2.5 mm²	10.8	186	86
☐ **FL11Y 5G2.5**	5 × 2.5 mm²	11.9	228	95
☐ **FL11Y 4G4**	4 × 4.0 mm²	12.6	268	101
☐ **FL11Y 4G6**	4 × 6.0 mm²	14.2	365	114
☐ **FL11Y 4G10**	4 × 10 mm²	17.5	580	140
☐ **FL11Y 4G16**	4 × 16 mm²	20.4	845	163
☐ **FL11Y 4G25**	4 × 25 mm²	24.8	1,290	198
☐ **FL11Y 4G35**	4 × 35 mm²	27.9	1,710	223

– Single-core and multi-core sizes from 0.5 mm² up to 630 mm² (or AWG/kcmil) available per ISO 6722-1 Class C / DIN 72551.

Conductor resistance & current-carrying capacity

8 sizes

Cross-section	Max. DC R_{20} Ω/km	Current in air A (30 °C) ≈	Voltage drop mV/A-m
1.5 mm² (AWG 16)	13.30	18	29.0
2.5 mm² (AWG 14)	7.98	26	17.5
4.0 mm² (AWG 12)	4.95	34	10.9
6.0 mm² (AWG 10)	3.30	44	7.3
10 mm² (AWG 8)	1.91	61	4.2
16 mm² (AWG 6)	1.21	82	2.7
25 mm² (AWG 4)	0.78	108	1.7
35 mm² (AWG 2)	0.55	135	1.2

– Current ratings are for 3 loaded conductors at 30 °C ambient in free air/tray per IEC 60364-5-52 / NEC.

Standards and approvals

- ISO 6722-1 Class C Compliant
- EN 10204 3.1 Routine Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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/fl11y-iso-6722-tpe-u-pur-automotive-primary-wire

Typical values for this cable type, based on ISO 6722-1 Class C / DIN 72551. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.