



DIN 72551 / ISO 6722 / LV 112 Reduced-Wall (FLR) Automotive Wires

FLRYW-A / FLRYW-B

FLRYW Automotive Wire

60 V DC ISO 6722-1 Class C (-40 to +125 °C) heat-resistant reduced-wall PVC wire



60 V DC ISO 6722-1

Class C (-40 to +125 °C)

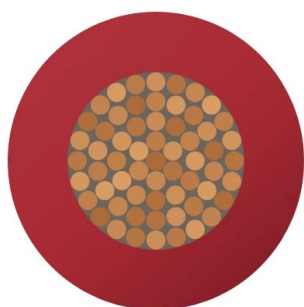
Heat-Resistant PVC (YW)

Application

FLRYW-A and FLRYW-B are ISO 6722-1 Class C (-40 °C to +125 °C) heat-resistant reduced-wall automotive primary wires ('YW' = Wärmebeständiges PVC, polymeric trimellitate/polyester plasticized PVC). They upgrade the thermal ceiling of standard FLRY from +105 °C

Typical uses: Engine compartment periphery, Headlamp & LED lighting modules, Commercial truck & bus power, HVAC & radiator fan harnesses, Agricultural & off-highway plant

Construction



Cross-section, not to scale

1	Cu-ETP1 bare copper (Type A or B)	ISO 6722-1
2	Class C heat-resistant PVC (YW)	ISO 6722-1
3	Smooth colour-coded outer surface	ISO 6722-1

Technical data

Typical values

Nominal voltage	60 V DC / 25 V AC	Wet dielectric test	3.0 kV AC rms for 5 minutes ($\geq 0.5 \text{ mm}^2$) · 1.0 kV ($< 0.5 \text{ mm}^2$)
In-line spark test	5.0 kV AC rms ($\geq 0.5 \text{ mm}^2$)	Thermal class	ISO 6722-1 Class C: -40 °C to +125 °C (3000 h)
Short-term ageing & overload	240 h at +150 °C · 6 h thermal overload at +175 °C	Cold winding test	-40 °C for 4 hours without cracking
Min. wall thickness	0.20 mm (0.35–0.5 mm ²) · 0.24 mm (0.75–1.5 mm ²) · 0.28 mm (2.5 mm ²)	Scrape & sandpaper abrasion	Meets ISO 6722-1 Class C reduced-wall abrasion limits
Flame propagation	Self-extinguishing within 70 s per ISO 6722-1 45° burn test	Plasticiser volatility & fogging	Non-migrating polymeric plasticiser resists embrittlement at +125 °C
Standards	ISO 6722-1 Class C, DIN 72551 & VDA LV 112		

Sizes

14 standard constructions

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

Designation	Type & Size mm ²	Strands × Ø / Wall mm	Max. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
FLRYW-A / FLRYW-B size range 14 sizes						
☐ FLRYW-A 0.35 mm ²	0.35 mm ² Type A	7×0.26 · 0.20 mm	1.30	3.3	4.6	5.2
☐ FLRYW-B 0.35 mm ²	0.35 mm ² Type B	12×0.21 · 0.20 mm	1.40	3.3	4.8	5.6
☐ FLRYW-A 0.50 mm ²	0.50 mm ² Type A	19×0.19 · 0.22 mm	1.60	4.8	6.7	6.4
☐ FLRYW-B 0.50 mm ²	0.50 mm ² Type B	16×0.21 · 0.22 mm	1.60	4.8	6.7	6.4
☐ FLRYW-A 0.75 mm ²	0.75 mm ² Type A	19×0.23 · 0.24 mm	1.90	7.2	9.6	7.6
☐ FLRYW-B 0.75 mm ²	0.75 mm ² Type B	24×0.21 · 0.24 mm	1.90	7.2	9.6	7.6
☐ FLRYW-A 1.00 mm ²	1.00 mm ² Type A	19×0.26 · 0.24 mm	2.10	9.6	12.4	8.4
☐ FLRYW-B 1.00 mm ²	1.00 mm ² Type B	32×0.21 · 0.24 mm	2.10	9.6	12.4	8.4
☐ FLRYW-A 1.50 mm ²	1.50 mm ² Type A	19×0.32 · 0.24 mm	2.40	14.4	17.7	9.6
☐ FLRYW-B 1.50 mm ²	1.50 mm ² Type B	30×0.26 · 0.24 mm	2.40	14.4	17.7	9.6
☐ FLRYW-A 2.50 mm ²	2.50 mm ² Type A	19×0.41 · 0.28 mm	3.00	24.0	28.8	12.0
☐ FLRYW-B 2.50 mm ²	2.50 mm ² Type B	50×0.26 · 0.28 mm	3.00	24.0	28.8	12.0
☐ FLRYW-B 4.00 mm ²	4.00 mm ² Type B	56×0.31 · 0.32 mm	3.70	38.4	45.0	14.8
☐ FLRYW-B 6.00 mm ²	6.00 mm ² Type B	84×0.31 · 0.32 mm	4.30	57.6	65.8	17.2

– Dimensions and maximum overall diameters conform to ISO 6722-1 Class C / DIN 72551 / LV 112.

Electrical data

14 sizes

Type & Size mm ²	Max. DC R @ 20 °C mΩ/m	Single wire in air A	In harness bundle A
0.35 mm ² Type A	54.40	10	8
0.35 mm ² Type B	54.40	10	8
0.50 mm ² Type A	37.10	13	10
0.50 mm ² Type B	37.10	13	10
0.75 mm ² Type A	24.70	18	14
0.75 mm ² Type B	24.70	18	14
1.00 mm ² Type A	18.50	22	17
1.00 mm ² Type B	18.50	22	17
1.50 mm ² Type A	12.70	28	22
1.50 mm ² Type B	12.70	28	22

Type & Size mm ²	Max. DC R @ 20 °C mΩ/m	Single wire in air A	In harness bundle A
2.50 mm ² Type A	7.60	38	30
2.50 mm ² Type B	7.60	38	30
4.00 mm ² Type B	4.71	50	39
6.00 mm ² Type B	3.14	64	50

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

Standards and approvals

- ✓ ISO 6722-1 Class C (+125 °C)
- ✓ VDA LV 112
- ✓ DIN 72551
- ✓ VW 60306 / PSA / Ford Approved
- ✓ ELV & 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

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Email

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Typical values for this cable type, based on ISO 6722-1 Class C / DIN 72551 / LV 112. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.