



ISO 6722 High-Temperature & Specialty Polymer Automotive Wires (4Y / 5Y / 6Y / 7Y / 9Y)

FLR7Y-A / FLR7Y-B

FLR7Y Automotive Wire

60 V DC ISO 6722-1 Class D (-65 to +150 °C) ETFE (7Y) tough cut-through & chemical-resista



60 V DC ISO 6722-1 Class D

ETFE (7Y) -65 to +150 °C

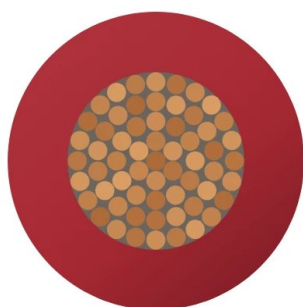
High Scrape & Pinch Fluoropolymer

Application

FLR7Y-A and FLR7Y-B are ISO 6722-1 Class D (-65 °C to +150 °C) reduced-wall automotive wires insulated with ethylene tetrafluoroethylene ('7Y' = ETFE). Combining fluoropolymer chemical inertness and +150 °C thermal endurance with exceptional mechanical stiffne

Typical uses: Cylinder-head & fuel-injector looms, Wheel-speed (ABS) & brake-wear cores, EV e-axle & oil-cooled motor sensors, In-tank fuel & AdBlue delivery modules, Heavy-duty diesel powertrain harnesses

Construction



Cross-section, not to scale

1	Bare or tinned copper (Type A or B)	ISO 6722-1
2	Ethylene tetrafluoroethylene (7Y / ETFE)	DIN 72551
3	Abrasion-resistant ETFE 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 min ($\geq 0.5 \text{ mm}^2$) · 1.0 kV ($< 0.5 \text{ mm}^2$)
In-line spark test	5.0 kV AC rms	Thermal class	ISO 6722-1 Class D: -65 °C to +150 °C (3000 h)
Short-term heat & overload	240 h at +175 °C · 6 h thermal overload at +200 °C · melt point $\approx$ +265 °C	Cold winding test	-65 °C for 4 hours without cracking
Min. wall thickness	0.20 mm (0.22–0.5 mm ²) · 0.24 mm (0.75–1.5 mm ²) · 0.28 mm (2.5 mm ²)	Scrape & dynamic cut-through	Highest scrape and crush resistance of all fluoropolymers (3–4× PTFE/FEP)
Flame propagation	Self-extinguishes immediately (LOI $\approx$ 30–32 %) per ISO 6722-1	Chemical & fluid immunity	Inert to gasoline, E85, diesel, ATF, brake fluid, battery acid & AdBlue
Standards	ISO 6722-1 Class D, DIN 72551 & VDA LV 112		

Sizes

12 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 $\times$ $\varnothing$ / Wall mm	Max. OD mm	Copper kg/km	Total mass $\approx$ kg/km	Min. bend R mm
FLR7Y-A / FLR7Y-B size range 12 sizes						
☐ FLR7Y-A 0.22 mm ²	0.22 mm ² Type A	7 $\times$ 0.21 · 0.20 mm	1.15	2.1	3.4	4.6
☐ FLR7Y-A 0.35 mm ²	0.35 mm ² Type A	7 $\times$ 0.26 · 0.20 mm	1.30	3.3	4.9	5.2
☐ FLR7Y-B 0.35 mm ²	0.35 mm ² Type B	12 $\times$ 0.21 · 0.20 mm	1.35	3.3	5.0	5.4
☐ FLR7Y-A 0.50 mm ²	0.50 mm ² Type A	19 $\times$ 0.19 · 0.22 mm	1.55	4.8	7.1	6.2
☐ FLR7Y-B 0.50 mm ²	0.50 mm ² Type B	16 $\times$ 0.21 · 0.22 mm	1.60	4.8	7.2	6.4
☐ FLR7Y-A 0.75 mm ²	0.75 mm ² Type A	19 $\times$ 0.23 · 0.24 mm	1.85	7.2	10.3	7.4
☐ FLR7Y-B 0.75 mm ²	0.75 mm ² Type B	24 $\times$ 0.21 · 0.24 mm	1.90	7.2	10.4	7.6
☐ FLR7Y-A 1.00 mm ²	1.00 mm ² Type A	19 $\times$ 0.26 · 0.24 mm	2.05	9.6	13.4	8.2
☐ FLR7Y-A 1.50 mm ²	1.50 mm ² Type A	19 $\times$ 0.32 · 0.24 mm	2.35	14.4	19.2	9.4
☐ FLR7Y-A 2.50 mm ²	2.50 mm ² Type A	19 $\times$ 0.41 · 0.28 mm	2.95	24.0	31.5	11.8
☐ FLR7Y-B 4.00 mm ²	4.00 mm ² Type B	56 $\times$ 0.31 · 0.32 mm	3.65	38.4	49.0	14.6
☐ FLR7Y-B 6.00 mm ²	6.00 mm ² Type B	84 $\times$ 0.31 · 0.32 mm	4.30	57.6	71.5	17.2

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

Electrical data

12 sizes

Type & Size mm ²	Max. DC R @ 20 °C m Ω /m	Single wire in air A	In harness bundle A
0.22 mm ² Type A	84.80	8	6
0.35 mm ² Type A	54.40	11	9
0.35 mm ² Type B	54.40	11	9
0.50 mm ² Type A	37.10	15	12
0.50 mm ² Type B	37.10	15	12
0.75 mm ² Type A	24.70	20	16
0.75 mm ² Type B	24.70	20	16
1.00 mm ² Type A	18.50	25	20
1.50 mm ² Type A	12.70	32	25
2.50 mm ² Type A	7.60	44	34
4.00 mm ² Type B	4.71	58	45
6.00 mm ² Type B	3.14	74	58

– 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 D (+150 °C)
- ✓ DIN 72551 (7Y ETFE)
- ✓ VDA LV 112
- ✓ VW 60306 / BMW GS 95007
- ✓ RoHS 3 & ELV 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

info@tebaoflex.com

Web

tebaoflex.com/cables/flr7y-automotive-wire



Typical values for this cable type, based on ISO 6722-1 Class D / 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.