



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

FLR5Y-A / FLR5Y-B

FLR5Y Automotive Wire

60 V DC ISO 6722-1 Class F (-65 to +200 °C / +260 °C) PTFE fluoropolymer extreme-temperature



60 V DC ISO 6722-1 Class F

PTFE (5Y) -65 to +200/+260 °C

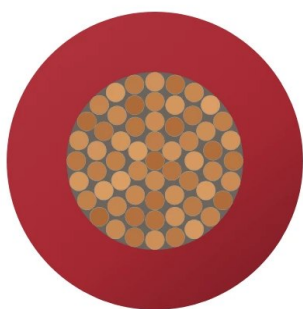
Exhaust, Turbo & NOx Sensor Wire

Application

FLR5Y-A and FLR5Y-B are ISO 6722-1 Class F (-65 °C to +200 °C with nickel-plated or silver-plated copper up to +260 °C, or +180/+200 °C with tinned copper) reduced-wall automotive wires insulated with polytetrafluoroethylene ('5Y' = PTFE). Representing the high

Typical uses: Lambda (O₂) & NO_x exhaust sensors, Turbocharger & EGR actuators, DPF & exhaust gas temp (EGT) looms, Internal gearbox & wet-clutch wiring, Motorsport & heavy-duty diesel engines

Construction



Cross-section, not to scale

1	Plated copper conductor (Cu/Ni, Cu/Ag or Cu/Sn)	ISO 6722-1
2	Polytetrafluoroethylene (5Y / PTFE)	DIN 72551
3	Non-stick chemical-inert PTFE surface	ISO 6722-1

Technical data

Typical values

Nominal voltage	60 V DC / 25 V AC (tested to 3.0 kV AC rms)	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 F: -65 °C to +200 °C (3000 h) · up to +260 °C with Ni-Cu
Short-term ageing & overload	240 h at +225 °C · 6 h thermal overload at +250 °C	Cold winding test	-65 °C for 4 hours on mandrel without cracking
Min. wall thickness	0.20 mm ($0.22\text{--}0.5 \text{ mm}^2$) · 0.24 mm ($0.75\text{--}1.5 \text{ mm}^2$) · 0.28 mm (2.5 mm^2)	Solder iron & hot-pinch resistance	Crystalline transition +327 °C—does not melt under soldering irons
Flammability (Limiting Oxygen Index)	LOI >95 % — inherently non-flammable in atmospheric air	Chemical & fluid immunity	100 % inert to all fuels, synthetic oils, ATF, brake fluid, AdBlue/urea & concentrated acids
Standards	ISO 6722-1 Class F, DIN 72551 & VDA LV 112		

Sizes

8 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
FLR5Y-A / FLR5Y-B size range 8 sizes						
☐ FLR5Y-A 0.22 mm^2	0.22 mm^2 Type A	7 $\times$ 0.21 · 0.20 mm	1.15	2.1	3.8	4.6
☐ FLR5Y-A 0.35 mm^2	0.35 mm^2 Type A	19 $\times$ 0.16 · 0.20 mm	1.30	3.4	5.4	5.2
☐ FLR5Y-A 0.50 mm^2	0.50 mm^2 Type A	19 $\times$ 0.19 · 0.22 mm	1.55	4.9	7.8	6.2
☐ FLR5Y-A 0.75 mm^2	0.75 mm^2 Type A	19 $\times$ 0.23 · 0.24 mm	1.85	7.3	11.2	7.4
☐ FLR5Y-A 1.00 mm^2	1.00 mm^2 Type A	19 $\times$ 0.26 · 0.24 mm	2.05	9.7	14.4	8.2
☐ FLR5Y-A 1.50 mm^2	1.50 mm^2 Type A	19 $\times$ 0.32 · 0.24 mm	2.35	14.6	20.5	9.4
☐ FLR5Y-A 2.50 mm^2	2.50 mm^2 Type A	19 $\times$ 0.41 · 0.28 mm	2.95	24.3	33.5	11.8
☐ FLR5Y-B 4.00 mm^2	4.00 mm^2 Type B	56 $\times$ 0.31 · 0.32 mm	3.65	38.8	52.0	14.6

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

Electrical data

8 sizes

Type & Size mm^2	Max. DC R @ 20 °C $\text{m}\Omega/\text{m}$	Single wire in air A	In harness bundle A
0.22 mm^2 Type A	88.50	9	7
0.35 mm^2 Type A	56.80	13	10
0.50 mm^2 Type A	39.20	17	13
0.75 mm^2 Type A	26.00	23	18
1.00 mm^2 Type A	19.50	28	22
1.50 mm^2 Type A	13.30	36	28
2.50 mm^2 Type A	7.98	49	38
4.00 mm^2 Type B	4.95	65	51

– 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 F (+200 °C / +260 °C)
- ✓ DIN 72551 (5Y PTFE)
- ✓ VDA LV 112
- ✓ 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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/flr5y-automotive-wire



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