

CHARACTER:

1.Physical performance

a、excellent mechanical properties:
Tensile strength≥10.3MPa, elongation at break≥150%
After aging:
Condition: 180±1.0℃/ 168h
Tensile strength residual rate≥80% elongation at break≥80%

b、Flame retardancy: FT2, horizontal burning, burning once, 30S each time, no particles or droplets igniting the cotton layer can be emitted on the sample during the test.
VW-1, vertical burning, burning for 5 times, 15S each time, any residual flame is not more than 60S.

c、Low temperature bending: -40℃/4H, still at low temperature, the sample is wound on the specified large and small test rod, the bending experiment is carried out, the conductor is not exposed. The sample was immersed in salt water for 10 minutes. After soaking for 5h, AC voltage of 50 or 60Hz was applied between the conductor and the ground to gradually increase the resistance voltage to 1KV. After 1min, no breakdown was achieved

2. Electrical Properties

a、rated temperature: 150℃ **rated voltage:** 1000V

b、Spark test: When passing through the test electrode, no breakdown occurs. Spark test voltage is 8KV

c、dielectric withstand voltage : Withstand voltage test: withstand voltage test over voltage 5kV 5min without breakdown.
The sheath voltage test of a shielded wire is to apply a voltage between the shielded part and the electrode soaked in salt water. The sheath withstand voltage test is to apply a voltage of 1kV(rms) for 1 minute (after which there is no voltage rise) without breakdown.

3.Processing properties

a、 suitable for all conventional wire harness processing

b、 If you have special needs, please let us know.

4.Environmental protection

a、 ROHS/REACH compliant

SHOULD BE USED:

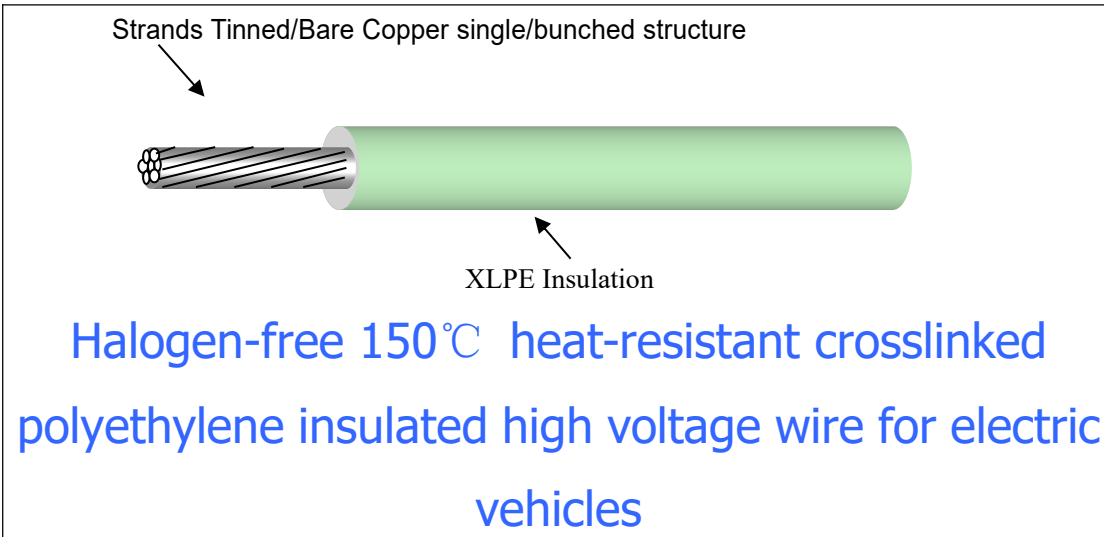
Halogen-free 150℃ heat-resistant crosslinked polyethylene insulated high voltage wire for electric vehicles

REFERENCE:

JASO D624 (2015) ISO 6722-1

3F product code:

Eg.: EEHX-03000-37G
EEHX,0.3mm2 BLACK 37/0.32 Bare copper



Wire structure description:								
Conductor: Tinned /Bare copper ;								
Insulation materials: XLPE Insulation								
Halogen-free 150℃ heat-resistant crosslinked polyethylene insulated high voltage wire for electric vehicles								
Rated temperature:150℃ Rated voltage: 1000V								
STYL E	standa rd AWG	Conductor size (No./ mm) ±0.005mm	Conductor resistance 20℃ (Ω/Km)	Conduct or Dia.(mm)	insulation thickness (mm)		Overall diameter (mm)	
					Nom.	Min.	Nom.	Tole.
EEHX	3	37/0.32	6.15	2.25	0.7	0.56	3.65	±0.15
	5	58/0.32	3.94	2.8	0.8	0.64	4.4	±0.2
	8	7/14/0.32	2.38	3.95	0.8	0.64	5.55	±0.2
	12	7/22/0.32	1.52	5.0	1.0	0.80	7.0	±0.2
	15	19/ 9/0.32	1.37	5.3	1.1	0.88	7.5	±0.30
	20	19/13/0.32	0.946	6.5	1.1	0.88	8.7	±0.30
	30	19/19/0.32	0.647	7.8	1.4	1.12	10.6	±0.30
	40	19/26/0.32	0.473	9.1	1.4	1.12	11.9	±0.30
	50	19/32/0.32	0.381	10.1	1.5	1.20	13.1	±0.30

NO Marking

SAE COLOR SERIES				
* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- PURPUL
PACKAGE				
*PACKAGE				
Part No.	Packing- Ft/roll			
3-5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
8-50mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

- a. **Short-term aging:** 200 ± 3 / 240H after aging, low temperature (-25 ± 2℃ / 4H) winding experiment, The voltage resistance experiment was performed. No visible exposed conductor after winding and should not be penetrated in voltage resistant experiments. Before applying the voltage, the sample shall be soaked in the saline bath for at least 10 min; Apply 1kV (AC) voltage for 1 min without applying 1kV (AC) voltage.
- b. **Low-temperature winding resistance:** -40 ± 2℃ / 4H, winding the specified number of circles in the freezer. After winding, no visible exposed conductor. Then conduct the voltage resistance experiment, no breakdown.
- c. **Thermal shrinkage:** 150 ± 3℃ / 15min, and the maximum shrinkage of insulation at any end shall not exceed 2mm.
- d. **Anti-flame retardant:** sample 45 degrees dip, apply flame. For wires with a size no greater than 2.5 mm2, After 15 s, the flame can be removed, for wires larger than 2.5 mm2, after 30s To revoke the flame. The combustion flame shall be extinguished within 70 s with at least 50 m at the sample end Insulation shall remain unburned.

2. Electrical performance:

- a.**pressure test:** The sample shall be immersed in saline for 4 hours, and both ends of the sample shall be extended to the liquid level. A 1kV test voltage is then applied between the conductor and the salt solution for 30min, and the voltage is increased at 500V / s:
- The wire with a conductor size less than 0.5mm2 is 3kV;
- The wire with a conductor size of no less than 0.5mm2 is 5kV Maintain the voltage for 5min without breakdown

3. Processing performance

- a, Suitable for all conventional wire harness processing processes
- b. Please inform us if you have special requirements

4.Environmental protection:

- Compliance with ROHS / REACH
- application:

Suitable for high-voltage cables for road vehicles

REFERENCE:

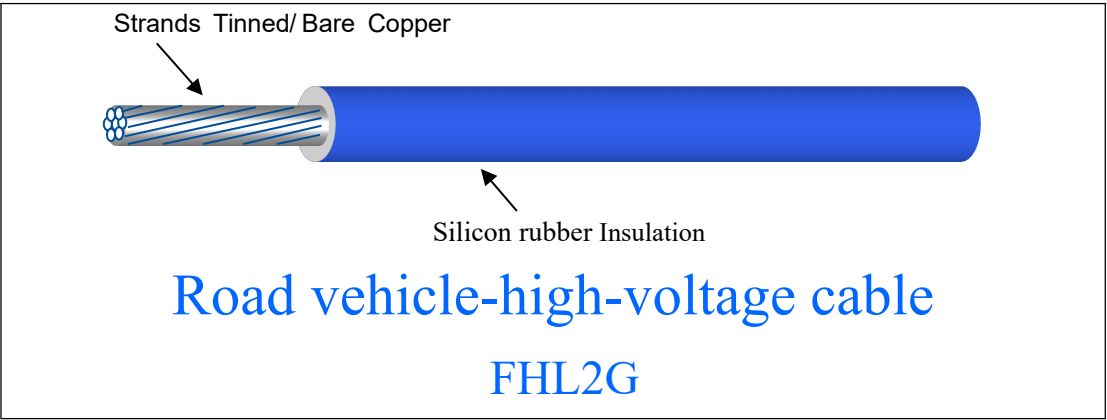
ISO6722

Outline:

- Install wires inside to prevent collision and acute angle bending at high temperature.

3F product code:

eg: FHL2G-05000-16G
FHL2G,0.50mm2, black, 16/0.20, Bare



Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: Silicon rubber Insulation

Road vehicle-high-voltage cable								
Rated temperature: -40~180℃ rated voltage: 600Vac or1000Vdc								
STYLE	mm²	Conductor size(No./mm) ±0.005	Conduct or Dia(mm)	Conducto r resistance 20℃ (Ω/Km)	insulation thickness(mm)		Overall diameter (mm)	
					Nom	Min	Nom	Tol
FHL2G	0.50	16/0.2	0.92	37.10	0.60	0.45	2.12	±0.10
	0.75	24/0.2	1.13	24.70	0.60	0.45	2.34	±0.10
	1.0	32/0.2	1.31	18.50	0.60	0.45	2.52	±0.10
	1.5	30/0.25	1.58	12.70	0.60	0.45	2.80	±0.15
	2.5	50/0.25	2.04	7.60	0.70	0.55	3.44	±0.15
	4.0	56/0.3	2.60	4.71	0.80	0.65	4.20	±0.15
	6.0	7/12/0.3	3.60	3.14	0.80	0.65	5.20	±0.15
	10.0	1/14/0.4+6 /11/0.4	4.80	1.82	1.0	0.80	6.80	±0.20
	16.0	7/18/0.40	5.88	1.16	1.0	0.80	7.88	±0.30
	25.0	7/28/0.40	7.33	0.743	1.3	1.04	9.93	±0.30
	35.0	1/42/0.4+6 /39/0.4	8.70	0.527	1.3	1.04	11.30	±0.30

Marking: NO.

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.5-1.0mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
1.5-4.0mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M	
6.0-10.0mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a. Short-term aging:** 150 ± 3 / 240H after aging, low temperature (-25 ± 2℃ / 4H) winding experiment, The voltage resistance experiment was performed. No visible exposed conductor after winding and should not be penetrated in voltage resistant experiments. Before applying the voltage, the sample shall be soaked in the saline bath for at least 10 min; Apply 1kV (AC) voltage for 1 min without applying 1kV (AC) voltage.
- b. Low-temperature winding resistance:** -40 ± 2℃ / 4H, winding the specified number of circles in the freezer. After winding, no visible exposed conductor. Then conduct the voltage resistance experiment, no breakdown.
- c. Thermal shrinkage:** 150 ± 3℃ / 15min, and the maximum shrinkage of insulation at any end shall not exceed 2mm.
- d. Anti-flame retardant:** sample 45 degrees dip, apply flame. For wires with a size no greater than 2.5mm2, After 15s, the flame can be removed, for wires larger than 2.5mm2, after 30s To revoke the flame. The combustion flame shall be extinguished within 70s with at least 50m at the sample end Insulation shall remain unburned.

2. Electrical performance:

- a.pressure(-tight)test:** The sample shall be immersed in saline for 4 hours, and both ends of the sample shall be extended to the liquid level. A 1kV test voltage is then applied between the conductor and the salt solution for 30min, and the voltage is increased at 500V / s:
- The wire with a conductor size less than 0.5mm2 is 3kV;
- The wire with a conductor size of no less than 0.5mm2 is 5kV Maintain the voltage for 5min without breakdown

b .Spark experiment:

ISO conductor specifications mm2	Voltage level (AC)KV	
	60Vwire	600Vwire
<0.5	3	6
≥0.5	5	8

3. Processing performance

- a, Suitable for all conventional wire harness processing processes
- b. Please inform us if you have special requirements

4.Environmental protection:

- Compliance with ROHS / REACH
- application:**

Suitable for high-voltage cables for road vehicles

REFERENCE:

DIN 72551 ,ISO6722

Outline:

Install wires inside to prevent collision and acute angle bending at high temperature.

3F product code:

eg: FHLRY-B-03500-12G
FHLRY-B,0.35mm2, black, 12/0.20, Bare

Strands Tinned/ Bare Copper



XLPE Insulation

road vehicles with thin wall insulation single core no shielding high voltage cable

FHLR2X-B

Wire structure description:

Conductor: Tinned /Bare copper ;

Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable									
Rated temperature: -40~125℃ rated voltage: 600Vac or1000Vdc									
STYLE	mm²	Conductor size(No./mm) ±0.005	Conductor Dia(mm)	Conductor resistance20℃ (Ω/Km)		insulation thickness(mm)		Overall diameter (mm)	
				Bare	Tinned	Nom	Min	Nom	Tol
FHLR2X-B	0.35	12/0.20	0.80	54.4	55.5	0.35	0.24	1.50	±0.10
	0.50	16/0.20	0.92	37.1	38.2	0.35	0.24	1.62	±0.10
	0.75	24/0.20	1.13	24.7	25.4	0.35	0.24	1.83	±0.10
	1.00	32/0.20	1.31	18.5	19.1	0.35	0.24	2.00	±0.10
	1.50	30/0.25	1.58	12.7	13.0	0.40	0.28	2.38	±0.10
	2.50	50/0.25	2.04	7.60	7.82	0.40	0.28	2.85	±0.15
	3.0	41/0.32	2.37	6.15	6.36	0.47	0.30	3.30	±0.15
	4.0	56/0.30	2.60	4.71	4.85	0.47	0.30	3.55	±0.15
	6.0	7/12/0.30	3.60	3.14	3.23	0.50	0.32	4.60	±0.15
	8.0	64/0.400	3.70	2.38	2.52	0.80	0.67	6.60	±0.20
	10.0	1/14/0.4+ 6/11/0.4	4.79	1.82	1.85	0.90	0.72	8.28	±0.20
	16.0	7/18/0.40	5.88	1.16	1.18	1.20	1.06	9.73	±0.20

- Marking:**
- 1、Printing: No
- 2、 Label identification: manufacturer, model, specification, rated temperature resistance, rated voltage resistance, insulation material, color, packaging length, production date

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- Ft/roll			
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
4.0~6.0mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
8.0~16.0mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

- a. Short-term aging:** 125 ± 3 / 240H after aging, low temperature (-25 ± 2℃ / 4H) winding experiment, The voltage resistance experiment was performed. No visible exposed conductor after winding and should not be penetrated in voltage resistant experiments. Before applying the voltage, the sample shall be soaked in the saline bath for at least 10 min; Apply 1kV (AC) voltage for 1 min without applying 1kV (AC) voltage.
- b. Low-temperature winding resistance:** -40 ± 2℃ / 4H, winding the specified number of circles in the freezer. After winding, no visible exposed conductor. Then conduct the voltage resistance experiment, no breakdown.
- c. Thermal shrinkage:** 150 ± 3℃ / 15min, and the maximum shrinkage of insulation at any end shall not exceed 2mm.
- d. Anti-flame retardant:** sample 45 degrees dip, apply flame. For wires with a size no greater than 2.5 mm2, After 15 s, the flame can be removed, for wires larger than 2.5mm2, after 30s To revoke the flame. The combustion flame shall be extinguished within 70 s with at least 50 m at the sample end Insulation shall remain unburned.

2. Electrical performance:

- a.pressure(-tight)test:** The sample shall be immersed in saline for 4 hours, and both ends of the sample shall be extended to the liquid level. A 1kV test voltage is then applied between the conductor and the salt solution for 30min, and the voltage is increased at 500V / s:
- The wire with a conductor size less than 0.5mm2 is 3kV;
- The wire with a conductor size of no less than 0.5mm2 is 5kV Maintain the voltage for 5min without breakdown

b .Spark experiment:

ISO conductor specifications mm2	Voltage level (AC)KV	
	60Vwire	600Vwire
<0.5	3	6
≥0.5	5	8

3. Processing performance

- A, Suitable for all conventional wire harness processing processes
- B. Please inform us if you have special requirements

4.Environmental protection:

Compliance with ROHS / REACH

5.application:

Suitable for high-voltage cables for road vehicles

6.REFERENCE:

DIN 72551 ,ISO6722

7.Outline:

Install wires inside to prevent collision and acute angle bending at high temperature.

3F product code:

eg: FHLRY-A-03500-19G
FHLRY-A,0.35mm2, black, 19/0.15, Bare

Strands Tinned/ Bare Copper



PVC Insulation

road vehicles with thin wall insulation single core no shielding high voltage cable FHLRY-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: PVC Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~105℃ rated voltage: 600Vac or1000Vdc								
STYLE	mm²	Conductor size(No./mm) ±0.005	Conductor Dia(m m)	Conductor resistance20℃ (Ω/Km)		insulation thickness(mm)	Overall diameter (mm)	
				Bare	Tinned		Nom	tolerance
FHLRY-A	0.35	19/0.15	0.76	54.5	55.5	0.35	1.46	±0.1
	0.50	19/0.19	0.95	37.10	38.2	0.35	1.65	±0.1
	0.75	19/0.23	1.15	24.70	25.4	0.35	1.85	±0.1
	1.00	19/0.25	1.25	18.50	19.1	0.45	2.15	±0.1
	1.50	19/0.32	1.60	12.70	13.0	0.45	2.50	±0.1
	2.00	19/0.374	1.87	9.42	9.69	0.50	2.87	±0.1
	2.50	19/0.41	2.05	7.60	7.80	0.50	3.05	±0.2
	3.00	19/0.45	2.25	6.15	6.36	0.55	3.35	±0.2
	4.00	19/0.52	2.60	4.71	4.85	0.55	3.70	±0.2
	5.00	19/9/0.2	3.46	3.94	4.02	0.55	4.56	±0.2
	6.00	19/10/0.2	3.65	3.14	3.23	0.55	4.75	±0.2
	8.00	19/14/0.2	4.32	2.38	2.52	0.55	5.42	±0.2
	10.00	19/17/0.2	4.76	1.82	1.85	1.20	7.16	±0.2
	12.00	19/20/0.2	5.16	1.52	1.60	1.20	7.56	±0.2
	16.00	19/27/0.2	6.00	1.16	1.18	1.20	8.40	±0.3
	25.00	19/42/0.2	7.48	0.74	0.76	1.20	9.90	±0.3

Marking: FHLRY-A NO mm2 -40-105℃ 600V PVC QIFURUI

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- Ft/roll			
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
3.0~10.0mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
12.0~25.0mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

a. **Short-term aging:** 125 ± 3 / 240H after aging, low temperature (-25 ± 2℃ / 4H) winding experiment, The voltage resistance experiment was performed.

No visible exposed conductor after winding and should not be penetrated in voltage resistant experiments. Before applying the voltage, the sample shall be soaked in the saline bath for at least 10 min; Apply 1kV (AC) voltage for 1 min without applying 1kV (AC) voltage.

b. **Low-temperature winding resistance:** -40 ± 2℃ / 4H, winding the specified number of circles in the freezer. After winding, no visible exposed conductor. Then conduct the voltage resistance experiment, no breakdown.

c. **Thermal shrinkage:** 150 ± 3℃ / 15min, and the maximum shrinkage of insulation at any end shall not exceed 2mm.

d. **Anti-flame retardant:** sample 45 degrees dip, apply flame. For wires with a size no greater than 2.5 mm2, After 15 s, the flame can be removed, for wires larger than 2.5mm2, after 30s To revoke the flame. The combustion flame shall be extinguished within 70 s with at least 50 m at the sample end Insulation shall remain unburned.

2. Electrical performance:

a.**pressure(-tight)test:** The sample shall be immersed in saline for 4 hours, and both ends of the sample shall be extended to the liquid level. A 1kV test voltage is then applied between the conductor and the salt solution for 30min, and the voltage is increased at 500V / s:

- The wire with a conductor size less than 0.5mm2 is 3kV;
- The wire with a conductor size of no less than 0.5mm2 is 5kV Maintain the voltage for 5min without breakdown

b .Spark experiment:

ISO conductor specifications mm2	Voltage level (AC)KV	
	60Vwire	600Vwire
<0.5	3	6
≥0.5	5	8

3. Processing performance

- a, Suitable for all conventional wire harness processing processes
- b. Please inform us if you have special requirements

4.Environmental protection:

Compliance with ROHS / REACH

application:

Suitable for high-voltage cables for road vehicles

REFERENCE:

DIN 72551 ,ISO6722

Outline:

Install wires inside to prevent collision and acute angle bending at high temperature.

3F product code:

eg: FHLRY-B-03500-12G
FHLRY-B,0.35mm2, black, 12/0.20, Bare

Strands Tinned/ Bare Copper



PVC Insulation

road vehicles with thin wall insulation single core no shielding high voltage cable FHLRY-B

Wire structure description:

Conductor: Tinned /Bare copper ;

Insulation materials: PVC Insulation

Ground vehicles with low voltage electric system primary cable									
Rated temperature: -40~105℃ rated voltage: 600Vac or1000Vdc									
STYLE	mm²	Conductor size(No./mm) ±0.005	Conductor Dia(mm)	Conductor resistance20℃ (Ω/Km)		insulation thickness(mm)		Overall diameter (mm)	
				Bare	Tinned	Nom	Min	Nom	Tol
FHLRY-B	0.35	12/0.20	0.80	54.4	55.5	0.30	0.24	1.40	+0/-0.20
	0.50	16/0.20	0.92	37.1	38.2	0.30	0.24	1.60	+0/-0.20
	0.75	24/0.20	1.13	24.7	25.4	0.35	0.24	1.90	+0/-0.20
	1.00	32/0.20	1.31	18.5	19.1	0.40	0.24	2.10	+0/-0.20
	1.50	30/0.25	1.58	12.7	13.0	0.40	0.28	2.40	+0/-0.20
	2.50	50/0.25	2.04	7.60	7.82	0.45	0.28	3.00	+0/-0.30
	4.0	56/0.30	2.60	4.71	4.85	0.55	0.30	3.70	+0/-0.30
	6.0	84/0.30	3.18	3.14	3.23	0.55	0.32	4.30	+0/-0.30

Marking: FHLRY-B NO. mm² -40-105℃ 600V PVC QIFURUI

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

*PACKAGE				
Part No.	Packing- Ft/roll			
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
4.0~6.0mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.
- b. Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

mm ²		0.3	0.5	0.7	1	1.5	2.5	4	6
Release force (N)	min	3	5			10		15	
	max	30	40			80		120	

- Note: This verification is not done for models above 6.0mm2
- c. Thermal shrinkage: the insulation can only shrink by 4% at most in the length direction, and cracks are not allowed.

2.Electrical Properties

- a. rated temperature: -40-200℃ rated voltage: 60V
- b. 30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).

3.Processing properties

- a.Suitable for all conventional wire harness machining processes
- b.Please advise if you have special needs

4.Environmental protection

- a.ROHS/REACH compliant

SHOULD BE USED:

Suitable for Automotive silicone rubber insulated heat-resistant low-voltage wire

REFERENCE:

DIN 72551, ISO6722

Outline:

Internal installation of wires to prevent impact and sharp bending at high temperatures.

Strands Tinned/Bare Copper



SILICONE RUBBER Insulation

Automotive silicone rubber insulated heat-resistant low-voltage wire FL2G-B

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: SILICONE RUBBER Insulation

Automotive silicone rubber insulated heat-resistant low-voltage wire									
Rated temperature:-40-200℃ rated voltage:60V									
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)		Overall diameter (mm)	
				Bare	tin.	Nom.	Min.	Nom.	Tol.
FL2G-B	0.35	12/0.20	0.80	54.4	55.5	0.50	0.35	1.80	±0.10
	0.50	16/0.20	0.92	37.10	38.2	0.60	0.45	2.12	±0.10
	0.75	24/0.20	1.13	24.70	25.4	0.60	0.45	2.33	±0.10
	1.00	32/0.20	1.31	18.50	19.1	0.60	0.45	2.50	±0.10
	1.50	30/0.25	1.58	12.70	13.0	0.60	0.45	2.78	±0.10
	2.50	50/0.25	2.04	7.60	7.82	0.80	0.65	3.64	±0.15
	4.0	56/0.30	2.60	4.71	4.85	1.00	0.80	4.60	±0.15
	6.0	84/0.30	3.18	3.14	3.23	1.00	0.80	5.18	±0.20
	10.0	1/14/0.4+6/11/0.4	4.13	1.82	1.85	1.30	1.07	6.80	±0.20
	16.0	7/18/0.40	6.00	1.16	1.18	1.30	1.07	8.60	±0.30
	25.0	7/28/0.40	7.47	0.743	0.757	1.50	1.25	10.50	±0.30
	35.0	1/42/0.4+6/39/0.4	8.70	0.527	0.538	1.50	1.25	11.80	±0.30

Sign: No Marking

3F product code:

eg: FL2G-B-03500-12G
FL2G-B, 0.35mm2, BLACK, 12/0.2, Bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
4.0~6.00mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M	
10.0~35.00mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M	
4.0~6.00mm2					
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.
- b. Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

mm ²		0.35	0.5	0.75	1	1.5	2.5	4	6
Release force (N)	min	3	5			10		15	
	max	30	40			80		120	

- Note: This verification is not done for models above 6.0mm2
- c. Insulation wear-resisting strength: the number of times the insulation is worn out is at least equal to the value listed in the last row of the table.

mm ²	0.35	0.5	0.75	1	1.5	2.5	4	6
Route mm	10±2							
Circulation min ⁻¹	50~60							
Speed	Accelerate or decelerate at a constant speed or by a sine wave							
Power N	7±0.05							
Period	200	300	350	500	1500			

- Note: This verification is not done for models above 6.0mm2
- d. Thermal shrinkage: the insulation can only shrink by 4% at most in the length direction, and cracks are not allowed.
- e, low temperature impact test: -20±2℃, 1h, with 100g drop hammer from the height of 100mm impact sample, sample no damage.

2.Electrical Properties

- a. rated temperature: 125℃ rated voltage: 60Vdc or 25Vac
- b. 30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

- a、ROHS/REACH compliant

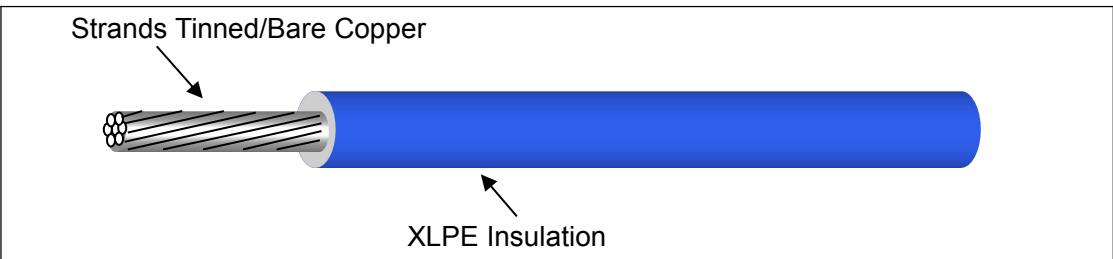
SHOULD BE USED:

Suitable for XLPE insulated single core unshielded low voltage cable for road vehicles

REFERENCE:

DIN 72551-6

Outline:



XLPE insulated single core unshielded low voltage cable for road vehicles FL2X-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable							
Rated temperature: 125℃ rated voltage: 60Vdc or 25Vac							
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm) Nom.
				Bare	tin.	Nom.	
FL2X-A	0.22	7/0.20	0.60	84.80	86.5	0.30	1.2±0.10
	0.35	7/0.254	0.76	54.5	55.5	0.30	1.36±0.10
	0.50	19/0.19	0.95	37.10	38.2	0.44	1.83±0.10
	0.75	19/0.23	1.15	24.70	25.4	0.44	2.03±0.10
	1.0	19/0.25	1.25	18.50	19.1	0.44	2.13±0.10
	1.5	19/0.30	1.50	12.70	13.0	0.44	2.38±0.10
	2.5	19/0.41	2.05	7.60	7.80	0.53	3.11±0.15
	4.0	56/0.30	2.60	4.71	4.85	0.64	3.88±0.15
	5.0	65/0.32	2.98	3.41	3.54	0.64	4.26±0.15
	6.0	84/0.30	3.20	3.14	3.23	0.64	4.48±0.15
	10.0	7/46/0.20	4.79	1.82	1.85	0.80	6.39±0.15
	16.0	19/27/0.20	6.04	1.13	1.16	0.80	7.64±0.15

Marking:

3F product code:

eg: FL2X-A-02200-07G
FL2X-A, 0.22mm2, BLACK, 7/0.2, Bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- Ft/roll			
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
4~6mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
10~16mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

- 1.Physical performance**
- a、Excellent mechanical properties
 - b、Excellent thermal stability
 - c、Low temperature soft good performance
 - d、Good flame retardancy
 - e、Of high resistance to chemicals
 - f、Chemistry stability is good
 - b、Good resistance to high temperature of the engine fluid
 - j、Excellent resistance to impact ability

2.Electrical Properties

- a、Electrical insulation good
- b、Good the dielectric properties

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

- a、ROHS/REACH compliant

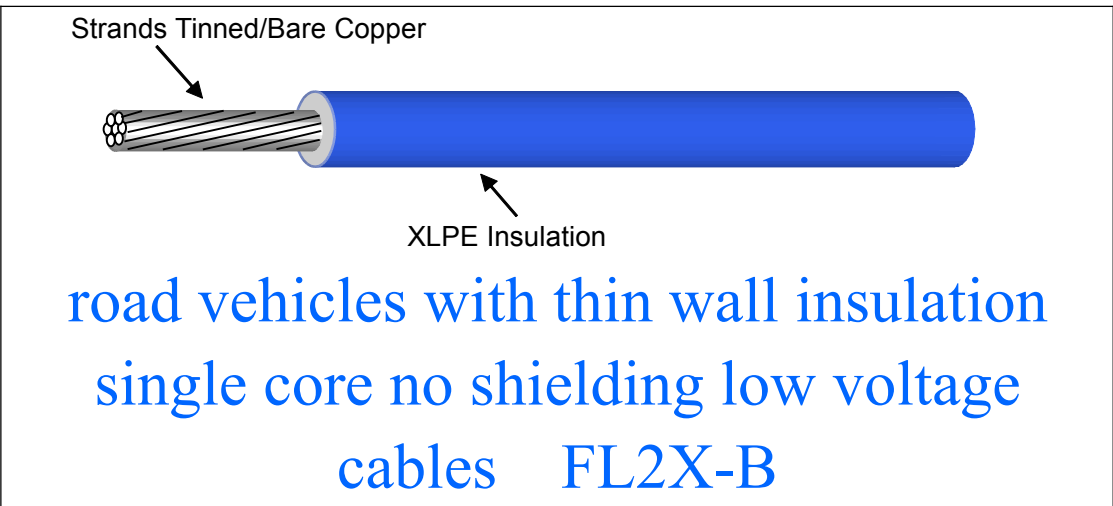
SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:



Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable							
Rated temperature: 125℃ rated voltage: 60Vdc or 25Vac							
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)
				Bare	tin.	Nom.	
FL2X-B	0.35	12/0.20	0.80	54.5	55.5	0.30	1.50±0.10
	0.50	16/0.20	0.92	37.1	38.2	0.44	2.30±0.10
	0.75	24/0.20	1.13	24.7	25.4	0.44	2.50±0.10
	1.00	32/0.20	1.31	18.5	19.1	0.44	2.70±0.10
	1.50	30/0.25	1.58	12.7	13.0	0.44	3.00±0.15
	2.50	50/0.25	2.04	7.60	7.80	0.53	3.60±0.15
	4.00	56/0.30	2.59	4.71	4.85	0.62	4.40±0.15
	6.00	84/0.30	3.18	3.14	3.23	0.62	5.10±0.20
	10.0	80/0.40	4.13	1.82	1.85	0.80	6.40±0.20

Marking:

SAE COLOR SERIES				
* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE				
*PACKAGE				
Part No.	Packing- Ft/roll			
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
4.0~6.00mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
10.0~25.0mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

a、Insulation detachable: The insulation should be able to fully detachable at least a 20mm section.

b、Thermal shrinkage: A 100mm sample was placed horizontally in an oven at 150±3℃ for 15min and then cooled to 23±5℃ with a maximum shrinkage of no more than 2mm at each end.

c、Low temperature crisping test: -40±2℃/4h, the sample surface without crack is qualified.

d、Flame retardant: the 600mm sample is suspended in a draft-free environment at an Angle of 45 degrees with the ground, and the fire supply time is 30 seconds. The flame of the burning insulation must be extinguished within 70 seconds after the blowtorch is removed.

2.Electrical Properties

a、Rated temperature :125℃ Rated voltage: 600V

b、30 min withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.

The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage was then boosted at a rate of 0.5kV/s until it reached 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2), and maintained for 5min after the voltage reached 3KV or 5kV.

3.Processing properties

- a、Applicable to all conventional wire harness processing processes
- b、Please let us know if you have any special requirements

4.Environmental protection

a、ROHS/REACH compliant

SHOULD BE USED:

Flexible power cables for automobiles

REFERENCE:

ISO 6722

Outline:

Strands Bare Copper ;Single branch/bundle twisted structure



XLPE Insulation

Flexible power cables for automobiles

FL42X

Wire structure description:
Conductor: Bare copper ;
Insulation materials: XLPE Insulation

Flexible power cables for automobiles FL42X							
Rated temperature: 125℃ rated voltage: 600V							
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)	insulation thickness (mm) Nom.	Overall diameter (mm) Nom.	
				tin.		min	max
FL42X	10	320/0.21	4.60	1.820	0.80	6.10	6.50
	16	7/71/0.21	6.20	1.160	0.80	7.70	8.10
	25	7/110/0.21	7.50	0.743	1.04	9.20	9.80
	35	1088/0.21	8.40	0.527	1.04	10.10	10.70
	50	7/224/0.21	10.00	0.368	1.20	12.00	12.80
	70	2176/0.21	12.00	0.259	1.20	14.00	15.00
	95	7/416/0.21	13.85	0.196	1.28	16.20	17.20
	120	19/192/0.21	16.00	0.152	1.28	17.90	19.10
	150	7/600/0.21	16.50	0.129	1.28	18.80	20.00

Marking: FL42X NO.mm2 -40-125℃ 600V XLPE QIFURUI

3F product code:

eg: FL42X-50000-1568G
FL42X 50mm2, BLACK, 7/224/0.21, Bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				3F
10~16mm2	■ 100M	□ 200M	□ 500M	□ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.
- b. Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

mm ²		0.35	0.5	0.75	1	1.5	2.5	4	6
Release force (N)	min	3	5			10		15	
	max	30	40			80		120	

- Note: This verification is not done for models above 6.0mm2
- c. Insulation wear-resisting strength: the number of times the insulation is worn out is at least equal to the value listed in the last row of the table.

mm ²	0.35	0.5	0.75	1	1.5	2.5	4	6
Route mm	10±2							
Circulation min ⁻¹	50~60							
Speed	Accelerate or decelerate at a constant speed or by a sine wave							
Power N	7±0.05							
Period	200	300	350	500	1500			

- Note: This verification is not done for models above 6.0mm2
- d. Thermal shrinkage: the insulation can only shrink by 4% at most in the length direction, and cracks are not allowed.
- e.low temperature impact test: -20±2℃, 1h, with 100g drop hammer from the height of 100mm impact sample, sample no damage.
- f.Flame retardancy: The sample is suspended at a 45° angle from the ground in a draft-free environment, and the ignition time is 30s. The burning insulation flame must be extinguished within 30s after the flame is removed.

2.Electrical Properties

- a. 30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).

3.Processing properties

- a、 Suitable for all conventional wire harness machining processes
- b、 Please advise if you have special needs

4.Environmental protection

- a、 ROHS/REACH compliant

SHOULD BE USED:

Suitable for thin-walled insulated single-core unshielded low-voltage cables for road vehicles

REFERENCE:

DIN 72551-6

Outline:

Strands Tinned/Bare Copper



XLPE Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR2X-A

Wire structure description:

Conductor: Tinned /Bare copper ;

Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable							
Rated temperature: -40~125℃ rated voltage: 60Vac or 25Vdc							
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm) Nom. tolerance
				Bare	tin.	Nom.	
FLR2X-A	0.22	7/0.20	0.60	84.80	86.5	0.25	1.10-1.20
	0.35	7/0.254	0.76	54.5	55.5	0.25	1.20-1.30
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.40-1.60
	0.50	7/0.32	0.96	37.10	38.2	0.30	1.40-1.60
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.70-1.90
	1.0	19/0.25	1.25	18.50	19.1	0.40	1.90-2.10
	1.5	19/0.30	1.50	12.70	13.0	0.40	2.20-2.40
	2.0	19/0.36	1.80	9.42	9.69	0.40	2.40-2.60
	2.5	19/0.41	2.05	7.60	7.80	0.40	2.70-3.00
	4.0	56/0.30	2.60	4.71	4.85	0.48	3.40-3.70
	5.0	65/0.32	2.98	3.41	3.54	0.53	3.90-4.20

Marking:

3F product code:

Eg: FLR2X-A-02200-07G
FLR2X-A, 0.22mm2, black, 7/0.2, bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability

2.Electrical Properties

- a、Electrical insulation good
- b、Good the dielectric properties

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

- a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper

XLPE Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR2X-B

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable							
Rated temperature: -40~125℃ rated voltage: 60Vac or 25Vdc							
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)
				Bare	tin.	Nom.	
FLR2X -B	0.35	12/0.20	0.80	54.5	55.5	0.25	1.20-1.40
	0.50	16/0.20	0.92	37.10	38.2	0.30	1.40-1.60
	0.75	24/0.20	1.13	24.70	25.4	0.30	1.70-1.90
	1.00	32/0.20	1.31	18.50	19.1	0.35	1.90-2.10
	1.50	30/0.25	1.58	12.70	13.0	0.35	2.20-2.40
	2.00	41/0.254	1.88	9.42	9.69	0.35	2.40-2.60
	2.50	50/0.25	2.04	7.60	7.80	0.35	2.70-2.90
	3.00	45/0.30	2.32	6.15	6.36	0.35	2.90-3.10
	4.00	56/0.30	2.59	4.71	4.85	0.45	3.40-3.60
	6.00	84/0.30	3.18	3.14	3.23	0.45	4.00-4.20
	10.00	80/0.40	4.13	1.82	1.85	0.70	5.40-5.60
	16.00	126/0.40	5.19	1.16	1.18	1.10	7.30-7.50
	25.00	196/0.40	6.47	0.74	0.76	1.27	8.60-9.40

Marking:

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					3F
Part No.	Packing- Ft/roll				
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
4.0~6.00mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M	
10.0~25.0mm2	☒ 100M	☐ 200M	☐ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a、 Good mechanical properties
- b、 Good Thermal stability
- c、 Soft good performance at low temperature
- d、 Good flame retardancy
- e、 High chemical resistance
- f、 Good Chemical stability
- b、 Good Resistance to high temperature fluid engine
- j、 Good Thermal shock ability

2.Electrical Properties

- a、 Electrical insulation good
- b、 Good dielectric properties

3.Processing properties

- a、 Using the hot extrusion processing
- b、 Pair twist and Multiple core stranded wire
- c、 In the process of wire processing good compatibility
- d、 In the process of wiring harness processing compatibility
- e、 According to DIN standard design

4.Environmental protection

- a、 ROHS/REACH compliant

SHOULD BE USED:

Road vehicles with thin wall insulation single core no shielding low voltage cable

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Silver plated/ Nickel-plated copper conductor



PTFE Insulation

Road vehicles with thin wall insulation single core no shielding low voltage cable FLR5Y

Wire structure description:
Conductor:: Silver plated/ Nickel-plated copper conductor
Insulation materials: PTFE Insulation

Road vehicles with thin wall insulation single core no shielding low voltage cable							
Rated temperature: 260℃ rated voltage: 50V							
STYLE	stand mm²	Conducto r size (No./ mm) ±0.005m m	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)	Insulation thickness The average (mm)	Overall diameter (mm)	
						MIN	MAX
FLR5 Y	0.35	19/0.16	0.81	52.50	0.35	1.45	1.60
	0.60	19/0.203	1.02	32.50	0.35	1.66	1.75
	0.90	19/0.247	1.24	20.40	0.35	1.88	2.05

Marking:

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- FT/roll			
	0.35~0.9mm2	☐ 100FT	☐ 200FT	☐ 500FT ☒ 1000FT
According to customer requirements for packaging packaging				

CHARACTERISTICS:

- a、Excellent mechanical properties
- b、Excellent thermal stability
- c、Using the hot extrusion processing
- d、Long-term ageing resistance
- e、Can be twisted pair and multi-core
- f、Good flame retardancy (VW-1)
- g、Electrical insulation good
- h、Of high resistance to chemicals
- i、Chemistry stability is good
- j、High specific gravity(2.2g/cm3)
- k、ROHS compliant
- l、Wide application, High cost
- m、Melting point 270~280℃
- n. Instant high temperature resistant 260℃

SHOULD BE USED:

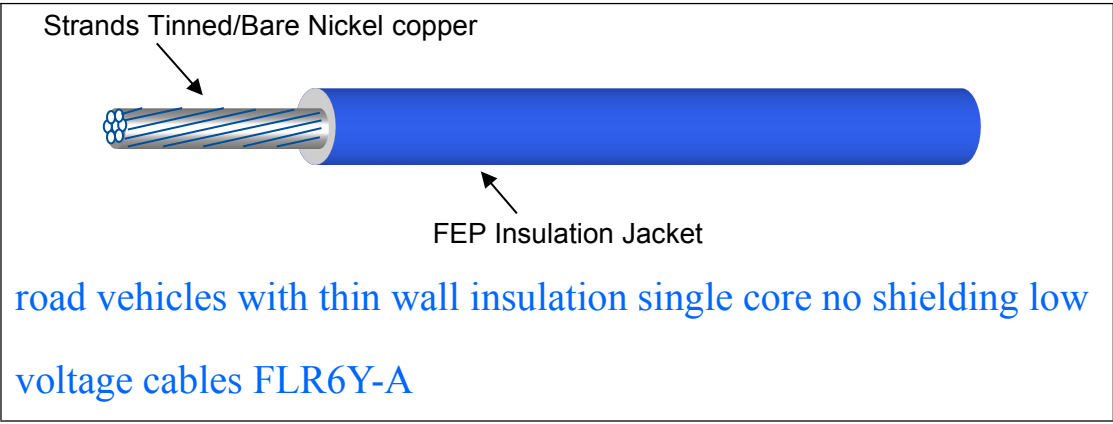
Low voltage cable with thin wall insulation for road vehicles, Thin wall

REFERENCE:

DIN72551 T6

Outline:

Conductor tolerance: +/-0.01mm



Wire structure description:

Conductor: Tinned、Bare 、Nickel copper

Jacket insulation materials: FEP Insulation

Ground vehicles with low voltage electric system primary cable FLR6Y								
Rated temperature:200℃								
Part No.	Standard MM2	Construction Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		Maximum Conductor Dia.(mm)	insulation thickness Nom. (mm)	Overall diameter(mm)	
			Bare	Tinned			Min	Max
FLR6Y-A	0.22	7/0.20	84.80	86.5	0.60	0.25	1.10	1.20
	0.35	7/0.254	52.00	54.5	0.76	0.25	1.20	1.30
	0.35	19/0.15	52.00	54.5	0.76	0.25	1.20	1.30
	0.50	19/0.19	37.10	38.2	0.95	0.30	1.40	1.60
	0.75	19/0.23	24.70	25.4	1.15	0.30	1.70	1.90
	1.00	19/0.25	18.50	19.1	1.25	0.40	1.90	2.10
	1.50	19/0.32	12.70	13.01	1.60	0.40	2.20	2.40
	2.00	19/0.37	8.62	8.96	1.86	0.45	2.61	2.91
	2.50	19/0.41	7.60	7.80	2.05	0.45	2.70	3.00

SAECOLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- M/roll			
0.35~1.0mm2	☐ 200M	☐ 500M	☒ 1000M	
1.5~6.0mm2	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging				

CHARACTERISTICS:

- a、Excellent mechanical properties
- b、Excellent thermal stability
- c、Using the hot extrusion processing
- d、Long-term ageing resistance
- e、Can be twisted pair and multi-core
- f、Good flame retardancy (VW-1)
- g、Electrical insulation good
- h、Of high resistance to chemicals
- i、Chemistry stability is good
- j、High specific gravity(2.2g/cm3)
- k、ROHS compliant
- l、Wide application, High cost
- m、Melting point 270~280℃
- n. Instant high temperature resistant 260℃

SHOULD BE USED:

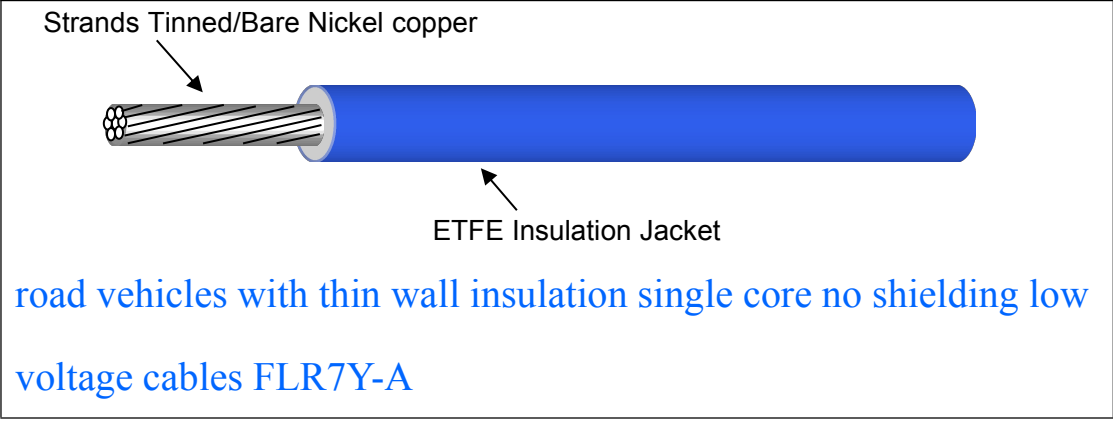
Low voltage cable with thin wall insulation for road vehicles, Thin wall

REFERENCE:

DIN72551 T6

Outline:

Conductor tolerance: +/-0.01mm



Wire structure description:

Conductor: Tinned、Bare copper

Jacket insulation materials: ETFE Insulation

Ground vehicles with low voltage electric system primary cable FLR7Y-A								
Rated temperature: 180℃								
Part No.	Standar d MM²	Construction Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		Maximum Conductor Dia.(mm)	insulation thickness Nom. (mm)	Overall diameter(mm)	
			Copper	Tinned copper			Min	Max
FLR7Y-A	0.22	7/0.20	84.80	86.5	0.60	0.25	1.10	1.20
	0.35	7/0.254	52.00	54.5	0.76	0.30	1.30	1.40
	0.50	19/0.19	37.10	38.2	0.95	0.30	1.50	1.60
	0.75	19/0.23	24.70	25.4	1.15	0.35	1.80	1.90
	1.00	19/0.25	18.50	19.1	1.25	0.40	2.00	2.10
	1.50	19/0.32	12.70	13.01	1.60	0.40	2.30	2.40
	2.50	19/0.41	7.60	7.80	2.05	0.45	2.85	3.00

SAECOLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- M/roll			3F
0.35~1.0mm2	☐ 200M	☐ 500M	☒ 1000M	
1.5~6.0mm2	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging				

CHARACTERISTICS:

- a、Excellent mechanical properties
- b、Excellent thermal stability
- c、Using the hot extrusion processing
- d、Long-term ageing resistance
- e、Can be twisted pair and multi-core
- f、Good flame retardancy (VW-1)
- g、Electrical insulation good
- h、Of high resistance to chemicals
- i、Chemistry stability is good
- j、High specific gravity(2.2g/cm3)
- k、ROHS compliant
- l、Wide application, High cost
- m、Melting point 270~280℃
- n. Instant high temperature resistant 260℃

SHOULD BE USED:

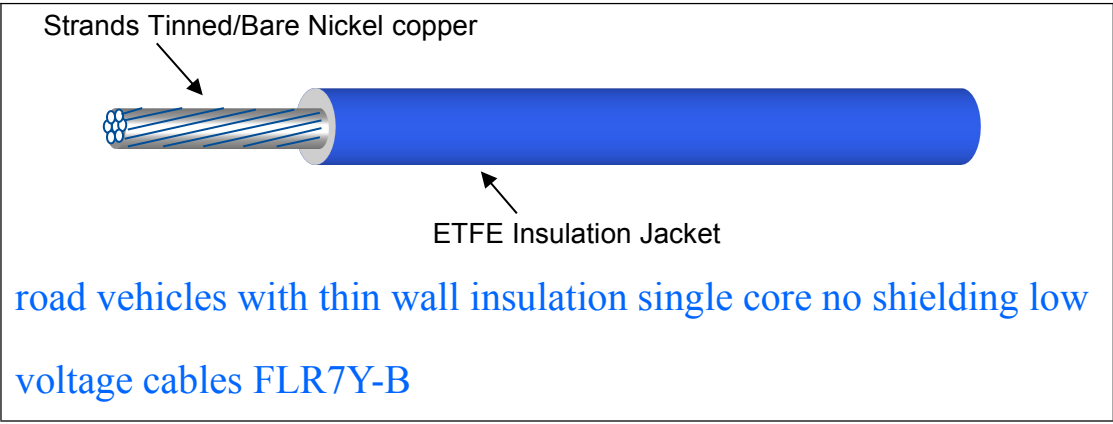
Low voltage cable with thin wall insulation for road vehicles, Thin wall

REFERENCE:

DIN72551 T6

Outline:

Conductor tolerance: +/-0.01mm



Wire structure description:

Conductor: Tinned、Bare copper

Jacket insulation materials: ETFE Insulation

Ground vehicles with low voltage electric system primary cable FLR7Y-B								
Rated temperature: 180℃,rated voltage: 60Vac or 25Vdc								
Part No.	Standard MM²	Construction Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		Maximum Conductor Dia.(mm)	insulation thickness Nom. (mm)	Overall diameter(mm)	
			copper	Tinned copper			Min	Max
FLR7Y-B	0.25	32/0.10	74.0	75.0	0.65	0.25	1.05	1.25
	0.35	12/0.20	54.5	55.5	0.80	0.25	1.20	1.40
	0.5	16/0.20	37.10	38.2	0.92	0.35	1.50	1.70
	0.75	24/0.20	24.70	25.4	1.13	0.35	1.70	1.90
	1.0	32/0.20	18.50	19.1	1.31	0.35	1.90	2.10
	1.5	30/0.251	12.70	13.0	1.59	0.35	2.10	2.40
	2.5	50/0.251	7.60	7.80	2.05	0.40	2.70	3.00
	4.0	56/0.30	4.70	4.80	2.59	0.50	3.40	3.70
	6.0	84/0.30	3.14	3.23	3.18	0.50	4.00	4.30
	10.0	80/0.40	1.81	1.85	4.13	0.56	4.50	6.00
	16.0	126/0.404	1.16	1.18	5.24	0.81	6.60	7.10

SAECOLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- M/roll			3F
0.35~1.0mm2	☐ 200M	☐ 500M	☒ 1000M	
1.5~6.0mm2	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging				

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good
- b、Good resistance to high temperature of the engine fluid
- j、Excellent resistance to impact ability
- 2.Electrical Properties
- a、Electrical insulation good

b、Good the dielectric properties
- 3.Processing properties
- a、Using the hot extrusion processing

b、Can be twisted pair and multi-core

c、Good processing properties Harness

d、Harness processing process good compatibility

e、According to DIN standard design
- 4.Environmental protection
- a、ROHS/REACH compliant

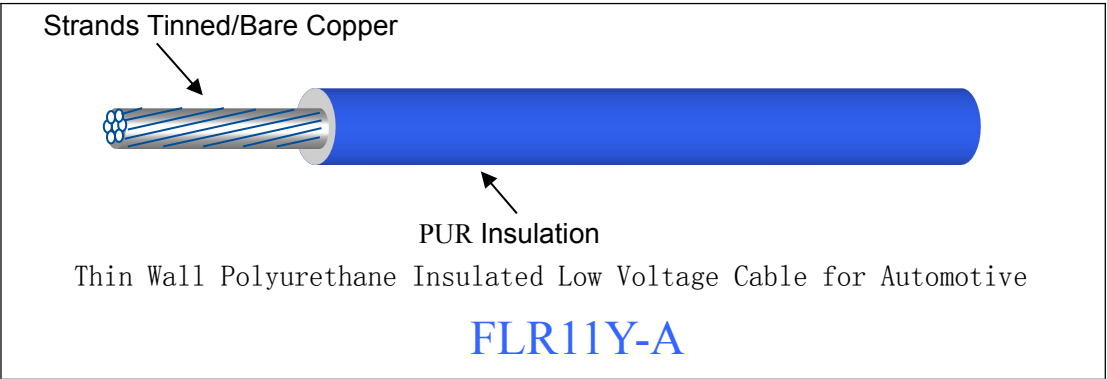
SHOULD BE USED:

Thin Wall Polyurethane Insulated Low Voltage Cable for Automotive

REFERENCE:

DIN 72551-6,ISO6722

Outline:



Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: PUR Insulation

Thin Wall Polyurethane Insulated Low Voltage Cable for Automotive								
Rated temperature: -40℃~105℃ rated voltage: 60Vdc or 25Vac								
STYL	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness Nom (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLR11Y-A	0.22	7/0.20	0.60	84.80	86.5	0.25	1.20	+0/-0.10
	0.35	7/0.254	0.76	52.00	54.5	0.25	1.30	+0/-0.10
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.90	+0/-0.20
	1.00	19/0.25	1.25	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	19/0.32	1.60	12.70	13.0	0.40	2.40	+0/-0.20
	2.50	19/0.41	2.05	7.60	7.80	0.45	3.00	+0/-0.30

Marking: NO Marking

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- Ft/roll			
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability
- 2.Electrical Properties
- a、Electrical insulation good

b、Good the dielectric properties
- 3.Processing properties
- a、Using the hot extrusion processing

b、Can be twisted pair and multi-core

c、Good processing properties Harness

d、Harness processing process good compatibility

e、According to DIN standard design
- 4.Environmental protection
- a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper

TPE-E Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR12Y-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: TPE-E Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~150℃ rated voltage: 60Vdc or 25Vac								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLR12 Y-A	0.22	7/0.20	0.60	84.80	86.5	0.25	1.20	+0/-0.10
	0.35	7/0.254	0.76	52.00	54.5	0.25	1.30	+0/-0.10
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.90	+0/-0.20
	1.00	19/0.25	1.25	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	19/0.32	1.60	12.70	13.0	0.40	2.40	+0/-0.20
	2.50	19/0.41	2.05	7.60	7.80	0.45	3.00	+0/-0.30

Marking: NOM

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability
- 2.Electrical Properties
- a、Electrical insulation good

b、Good the dielectric properties
- 3.Processing properties
- a、Using the hot extrusion processing

b、Can be twisted pair and multi-core

c、Good processing properties Harness

d、Harness processing process good compatibility

e、According to DIN standard design
- 4.Environmental protection
- a、ROHS/REACH compliant

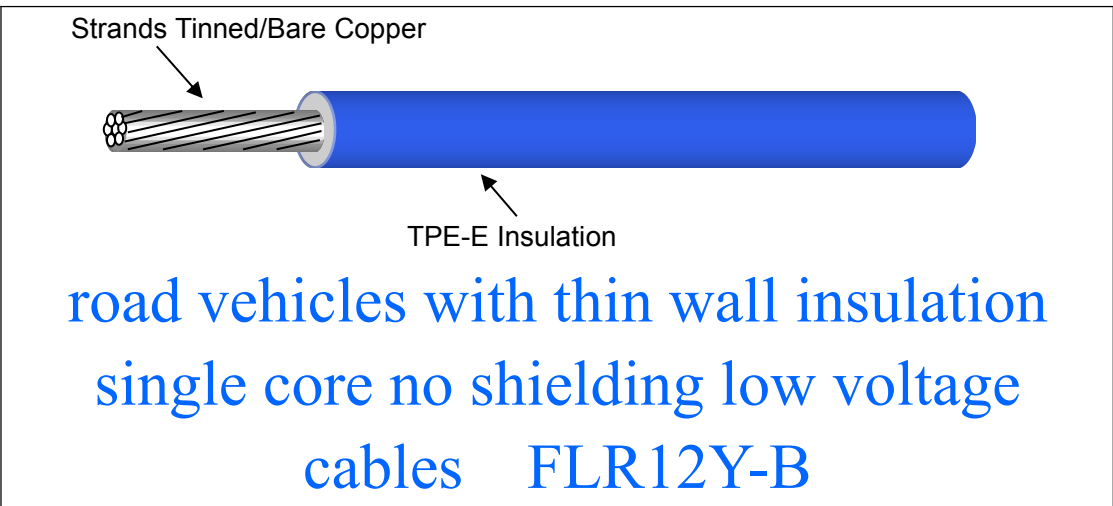
SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:



Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: TPE-E Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~150℃ rated voltage: 60Vdc or 25Vac								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLR12 Y-B	0.35	12/0.20	0.80	54.5	55.5	0.40	1.70	±0.10
	0.50	16/0.20	0.92	37.1	38.2	0.40	1.80	±0.10
	0.75	24/0.20	1.13	24.7	25.4	0.40	2.00	±0.10
	1.00	32/0.20	1.31	18.5	19.1	0.40	2.20	±0.10
	1.50	30/0.25	1.58	12.7	13.0	0.40	2.45	±0.10
	2.50	50/0.25	2.04	7.60	7.80	0.40	2.90	±0.10
	3.00	45/0.30	2.59	6.15	6.36	0.45	3.35	±0.10
	4.00	56/0.30	3.18	4.70	4.80	0.45	3.65	±0.10

Marking: NOM

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- Ft/roll			
0.35~1.0mm2	□ 100M	□ 200M	□ 500M	■ 1000M
1.5~2.5mm2	□ 100M	□ 200M	■ 500M	□ 1000M
4.0~6.00mm2	□ 100M	■ 200M	□ 500M	□ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability

2.Electrical Properties

- a、Electrical insulation good
- b、Good the dielectric properties

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

- a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper

TPE-E Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR13Y-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: TPE-E Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~150℃ rated voltage: 60Vdc or 25Vac								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLR13 Y-A	0.22	7/0.20	0.60	84.80	86.5	0.25	1.20	+0/-0.10
	0.35	7/0.254	0.76	52.00	54.5	0.25	1.30	+0/-0.10
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.90	+0/-0.20
	1.00	19/0.25	1.25	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	19/0.32	1.60	12.70	13.0	0.40	2.40	+0/-0.20
	2.50	19/0.41	2.05	7.60	7.80	0.45	3.00	+0/-0.30

Marking: NOM

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability

2.Electrical Properties

- a、Electrical insulation good
- b、Good the dielectric properties

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

- a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper

TPE-E Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR13Y-B

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: TPE-E Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~150℃ rated voltage: 60Vdc or 25Vac								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLR13 Y-B	0.35	12/0.20	0.80	54.5	55.5	0.40	1.70	±0.10
	0.50	16/0.20	0.92	37.1	38.2	0.40	1.80	±0.10
	0.75	24/0.20	1.13	24.7	25.4	0.40	2.00	±0.10
	1.00	32/0.20	1.31	18.5	19.1	0.40	2.20	±0.10
	1.50	30/0.25	1.58	12.7	13.0	0.40	2.45	±0.10
	2.50	50/0.25	2.04	7.60	7.80	0.40	2.90	±0.10
	3.00	45/0.30	2.59	6.15	6.36	0.45	3.35	±0.10
	4.00	56/0.30	3.18	4.70	4.80	0.45	3.65	±0.10

Marking: NOM

SAE COLOR SERIES				
* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE				
*PACKAGE				
Part No.	Packing- Ft/roll			
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
4.0~6.00mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.
- b. Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

mm ²		0.35	0.5	0.75	1	1.5	2.5	4	6
Release force (N)	min	5		5		10	10	10	
	max	30		40		50	60	70	

- Note: This verification is not done for models above 6.0mm2
- c. Insulation wear-resisting strength: the number of times the insulation is worn out is at least equal to the value listed in the last row of the table.

mm ²	0.35	0.5	0.75	1	1.5	2.5	4	6
Route mm	10±2							
Circulation min ⁻¹	50~60							
Speed	Accelerate or decelerate at a constant speed or by a sine wave							
Power N	7±0.05							
Period	200	300	350	500	1500			

- Note: This verification is not done for models above 6.0mm2
- d. Thermal shrinkage: The maximum insulation shrinkage at any end shall not exceed 2mm.
- e.low temperature impact test: -20±2℃, 1h, with 100g drop hammer from the height of 100mm impact sample, sample no damage.
- f.Flame retardancy: The sample is suspended at a 45° angle from the ground in a draft-free environment, and the ignition time is 30s. The burning insulation flame must be extinguished within 30s after the flame is removed.

2.Electrical Properties

- a. withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).

3.Processing properties

- a、 Suitable for all conventional wire harness machining processes
- b、 Please advise if you have special needs

4.Environmental protection

- a、 ROHS/REACH compliant

SHOULD BE USED:

Suitable for thin-walled insulated single-core unshielded low-voltage cables for road vehicles

REFERENCE:

ISO 6722

Outline:

Strands Tinned/Bare Copper

XLPE Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR21X-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable							
Rated temperature: -40~125℃ rated voltage:60Vdc or 25Vac							
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm) Nom. tolerance
				Bare	tin.	Nom.	
FLR21 X-A	0.35	7/0.254	0.76	54.5	55.5	0.25	1.20-1.30
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.40-1.60
	0.50	7/0.32	0.96	37.10	38.2	0.30	1.40-1.60
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.70-1.90
	1.0	19/0.25	1.25	18.50	19.1	0.40	1.90-2.10
	1.5	19/0.32	1.50	12.70	13.0	0.40	2.30-2.50
	2.0	19/0.36	1.80	9.42	9.69	0.40	2.40-2.60
	2.5	19/0.41	2.05	7.60	7.80	0.40	2.70-3.00

- Marking:
- 1, Printing: NO.
- 2, Label Identification: manufacturer, model, specifications, rated temperature resistance, rated pressure, insulation, color, packaging length,Production Date

3F product code:
Eg: FLR21X-A-03500-07G
FLR21X-A, 0.35mm2, black, 7/0.254, bare

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

*PACKAGE				
Part No.	Packing- Ft/roll			
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M
According to customer requirements for packaging packaging				

CHARACTER:

1.Physical performance

a、Insulation detachability: The insulation should be able to completely detach at least 20mm section.

b、Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

导体标称截面 mm²		0.35	0.5	0.75	1	1.5	2	2.5
剥离力 N	最小	3	5			10		
	最大	30	40			80		

c、Thermal shrinkage: the insulation can only shrink by 4% at most in the length direction, and cracks are not allowed.

d、Low temperature bending: -40℃/4H, no crack on the surface of the sample is qualified

e、low temperature impact test: -20±2℃, 1h, with 100g drop hammer from the height of 100mm impact sample, sample no damage.

f、Flame retardancy: The sample should maintain a tilt angle of 45°±1 with the vertical axis, and either end of the sample should be kept at a minimum distance of 100mm from the combustion chamber wall. Apply flame at a distance of (500±5) mm from the upper end of the insulation. If the conductor is seen, the flame can be removed. The burning insulating flame must be extinguished within 30 seconds after the flame is withdrawn.

2.Electrical Properties

a、30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.

The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV (conductor nominal section < 0.5mm²) or 5kV (conductor nominal section ≥ 0.5mm²).

b、Spark test: When passing through the test electrode, no breakdown occurs.

The spark test voltage is:

Conductor nominal cross-sectional area	Application voltage kv (rms)
<0.5	3
≥0.5	5

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper



XLPE Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLR91X-A/B

Wire structure description:

Conductor: Tinned /Bare copper ;

Insulation materials: XLPE Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~150℃ rated voltage: 60V								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)		Overall diameter (mm)
				Bare	tin.	Nom.	Min.	
FLR91X-A	0.35	7/0.26	0.8	54.4	55.5	0.25	0.20	1.20-1.30
	0.50	19/0.19	1.0	37.1	38.5	0.30	0.22	1.40-1.60
	0.75	19/0.23	1.2	24.7	25.4	0.35	0.24	1.70-1.90
	1.00	19/0.26	1.35	18.5	19.1	0.35	0.24	1.90-2.10
	1.50	19/0.31	1.7	12.7	13.0	0.35	0.24	2.20-2.40
	2.00	19/0.37	2.0	9.42	9.69	0.40	0.28	2.50-2.80
	2.50	19/0.41	2.2	7.6	7.8	0.40	0.28	2.70-3.00
FLR91X-B	0.35	12/0.20	0.9	54.4	55.5	0.25	0.20	1.30-1.40
	0.50	16/0.20	1.0	37.1	38.5	0.30	0.22	1.40-1.60
	0.75	24/0.20	1.2	24.7	25.4	0.35	0.24	1.70-1.90
	1.00	32/0.20	1.35	18.5	19.1	0.35	0.24	1.90-2.10
	1.50	30/0.26	1.7	12.7	13.0	0.35	0.24	2.20-2.40
	2.00	37/0.26	2.0	9.42	9.69	0.40	0.28	2.50-2.80
	2.50	50/0.26	2.2	7.6	7.8	0.40	0.28	2.70-3.00
	4.00	56/0.30	2.75	4.7	4.8	0.50	0.32	3.40~3.70
	6.00	84/0.30	3.30	3.1	3.2	0.50	0.32	4.00~4.30

Marking: NO

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability
- 2.Electrical Properties
- a、Electrical insulation good

b、Good the dielectric properties
- 3.Processing properties
- a、Using the hot extrusion processing

b、Can be twisted pair and multi-core

c、Good processing properties Harness

d、Harness processing process good compatibility

e、According to DIN standard design
- 4.Environmental protection
- a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper

PVC Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLRY-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: PVC Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~105℃ rated voltage: 60Vac or 25Vdc								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLRY-A	0.22	7/0.20	0.60	84.80	86.5	0.25	1.20	+0/-0.10
	0.35	7/0.254	0.76	52.00	54.5	0.25	1.30	+0/-0.10
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.90	+0/-0.20
	1.00	19/0.25	1.25	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	19/0.32	1.60	12.70	13.0	0.40	2.40	+0/-0.20
	2.50	19/0.41	2.05	7.60	7.80	0.45	3.00	+0/-0.30

Marking: FLRY-A NO mm2 -40-105℃ 50V PVC QIFURUI

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.
- b. Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

mm ²		0.35	0.5	0.75	1	1.5	2.5	4	6
Release force (N)	min	3	5			10		15	
	max	30	40			80		120	

- Note: This verification is not done for models above 6.0mm2
- c. Insulation wear-resisting strength: the number of times the insulation is worn out is at least equal to the value listed in the last row of the table.

mm ²	0.35	0.5	0.75	1	1.5	2.5	4	6
Route mm	10±2							
Circulation min ⁻¹	50~60							
Speed	Accelerate or decelerate at a constant speed or by a sine wave							
Power N	7±0.05							
Period	200	300	350	500	1500			

- Note: This verification is not done for models above 6.0mm2
- d. Thermal shrinkage: the insulation can only shrink by 4% at most in the length direction, and cracks are not allowed.
- e, low temperature impact test: -20±2℃, 1h, with 100g drop hammer from the height of 100mm impact sample, sample no damage.

2.Electrical Properties

- a. rated temperature: 105℃ rated voltage: 50Vdc or 25Vac
- b. 30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).

3.Processing properties

- a、Suitable for all conventional wire harness machining processes
- b、Please advise if you have special needs

4.Environmental protection

- a、ROHS/REACH compliant

SHOULD BE USED:

Suitable for thin-walled insulated single-core unshielded low-voltage cables for road vehicles

REFERENCE:

DIN 72551-6

Outline:

Internal installation of wires to prevent impact and sharp bending at high temperatures.

Strands Tinned/Bare Copper



PVC Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLRY-B

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: PVC Insulation

Ground vehicles with low voltage electric system primary cable Rated temperature: 105℃ rated voltage: 50Vac or 25Vdc								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conduct or Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.	Nom.	Nom.	tolerance
FLRY-B	0.35	12/0.20	0.80	54.5	55.5	0.30	1.40	+0/-0.20
	0.35	17/0.16	0.76	54.5	55.5	0.30	1.40	+0/-0.20
	0.50	16/0.20	0.92	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	24/0.20	1.13	24.70	25.4	0.35	1.90	+0/-0.20
	1.00	32/0.20	1.31	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	30/0.25	1.58	12.70	13.0	0.40	2.40	+0/-0.20
	2.00	41/0.254	1.88	9.42	9.65	0.40	2.68	+0/-0.20
	2.50	50/0.25	2.04	7.60	7.80	0.45	3.00	+0/-0.30
	4.0	56/0.30	2.59	4.70	4.80	0.55	3.70	+0/-0.30
	6.0	84/0.30	3.18	3.10	3.20	0.55	4.30	+0/-0.30
	8.0	64/0.40	3.70	2.38	2.52	0.80	5.30	±0.30
	10.0	1/14/0.4+6/11/0.4	4.79	1.82	1.85	0.90	6.60	±0.20
	16.0	7/18/0.40	5.88	1.16	1.18	1.20	8.28	±0.30
	25.0	7/28/0.40	7.33	0.74	0.76	1.20	9.73	±0.30
	35.0	1/42/0.4+6/39/0.4	8.70	0.53	0.54	1.20	11.1	±0.30

Marking: FLRY-B NO mm2 -40-105℃ 50V PVC QIFURUI

3F product code:

eg: FLRY-B-03500-12G
FLRY-B, 0.35mm2, BLACK, 12/0.2, Bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.35~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
4.0~6.00mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

- 1.Physical performance
- a、Excellent mechanical properties

b、Excellent thermal stability

c、Low temperature soft good performance

d、Good flame retardancy

e、Of high resistance to chemicals

f、Chemistry stability is good

b、Good resistance to high temperature of the engine fluid

j、Excellent resistance to impact ability

2.Electrical Properties

- a、Electrical insulation good
- b、Good the dielectric properties

3.Processing properties

- a、Using the hot extrusion processing
- b、Can be twisted pair and multi-core
- c、Good processing properties Harness
- d、Harness processing process good compatibility
- e、According to DIN standard design

4.Environmental protection

- a、ROHS/REACH compliant

SHOULD BE USED:

Apply to road vehicles with thin wall insulation single core no shielding low voltage cables

REFERENCE:

DIN 72551-6,ISO6722

Outline:

Strands Tinned/Bare Copper

PVC Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLRYW-A

Wire structure description:
Conductor: Tinned /Bare copper ;
Insulation materials: PVC Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -40~105℃ rated voltage: 60Vac or 25Vdc								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLRY W-A	0.22	7/0.20	0.60	84.80	86.5	0.25	1.20	+0/-0.10
	0.35	7/0.254	0.76	52.00	54.5	0.25	1.30	+0/-0.10
	0.35	7/0.26	0.79	59.4	59.4	0.25	1.30	+0/-0.10
	0.50	19/0.19	0.95	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	19/0.23	1.15	24.70	25.4	0.30	1.90	+0/-0.20
	1.00	19/0.25	1.25	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	19/0.32	1.60	12.70	13.0	0.40	2.40	+0/-0.20
	2.50	19/0.41	2.05	7.60	7.80	0.45	3.00	+0/-0.30

Marking: NO

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.
- b. Insulation adhesion force: the force required to strip the remaining (50±1)mm insulation is within the limit value listed in the table.

mm²		0.35	0.5	0.75	1	1.5	2.5	4	6
Release force (N)	min	3	5			10		15	
	max	30	40			80		120	

Note: This verification is not done for models above 6.0mm2

- c. Insulation wear-resisting strength: the number of times the insulation is worn out is at least equal to the value listed in the last row of the table.

mm²	0.35	0.5	0.75	1	1.5	2.5	4	6
Route mm	10±2							
Circulation min ⁻¹	50~60							
Speed	Accelerate or decelerate at a constant speed or by a sine wave							
Power N	7±0.05							
Period	200	300	350	500	1500			

Note: This verification is not done for models above 6.0mm2

- d. Thermal shrinkage: the insulation can only shrink by 4% at most in the length direction, and cracks are not allowed.
- e. Low temperature impact test: -20±2℃, 1h, with 100g drop hammer from the height of 100mm impact sample, sample no damage.
- f.Flame retardancy: The sample is suspended at a 45-degree angle to the ground in a non-drafty environment, and the ignition time is 30s. The flame of the burning insulation must be extinguished within 30s after the spray gun is removed.

2.Electrical Properties

- a. 30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).

3.Processing properties

- a、Suitable for all conventional wire harness machining processes
- b、Please advise if you have special needs

4.Environmental protection

- a、ROHS/REACH compliant

SHOULD BE USED:

Suitable for thin-walled insulated single-core unshielded low-voltage cables for road vehicles

REFERENCE:

DIN 72551

Outline:

Internal installation of wires to prevent impact and sharp bending at high temperatures.

Strands Tinned/Bare Copper



PVC Insulation

road vehicles with thin wall insulation
single core no shielding low voltage
cables FLRYW-B

Wire structure description:

Conductor: Tinned /Bare copper ;

Insulation materials: PVC Insulation

Ground vehicles with low voltage electric system primary cable								
Rated temperature: -25~125℃ rated voltage: 60Vac or 25Vdc								
STYLE	mm2	Conductor size (No./ mm) ±0.005mm	Conductor Dia.(mm)	Conductor resistance 20℃ (Ω/Km)		insulation thickness (mm)	Overall diameter (mm)	
				Bare	tin.		Nom.	tolerance
FLRYW-B	0.35	12/0.20	0.80	54.5	55.5	0.30	1.40	+0/-0.20
	0.50	16/0.20	0.92	37.10	38.2	0.30	1.60	+0/-0.20
	0.75	24/0.20	1.13	24.70	25.4	0.35	1.90	+0/-0.20
	1.00	32/0.20	1.31	18.50	19.1	0.40	2.10	+0/-0.20
	1.50	30/0.25	1.58	12.70	13.0	0.40	2.40	+0/-0.20
	2.00	41/0.254	1.88	9.42	9.69	0.40	2.80	+0/-0.30
	2.50	50/0.25	2.04	7.60	7.80	0.45	3.00	+0/-0.30
	3.00	45/0.30	2.32	6.15	6.36	0.45	3.20	+0/-0.30
	4.0	56/0.30	2.59	4.70	4.80	0.55	3.70	+0/-0.30
	6.0	7/12/0.30	3.60	3.10	3.20	0.55	4.30	+0/-0.30
	10.0	1/14/0.4+6/11/0.4	4.79	1.76	1.88	1.00	6.80	±0.15
	16.0	7/18/0.4	5.90	1.64	1.72	1.00	7.90	±0.20

Marking: NO

3Fproduct code:

E.g: FLRYW-B-03500-12G
FLRYW-B, 0.35mm2, black, 12/0.2, bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE					
Part No.	Packing- Ft/roll				
0.22~1.0mm2	☐ 100M	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.5mm2	☐ 100M	☐ 200M	☒ 500M	☐ 1000M	
4.0~6.00mm2	☐ 100M	☒ 200M	☐ 500M	☐ 1000M	
According to customer requirements for packaging packaging					

CHARACTER:

1.Physical performance

- a、Excellent mechanical properties
- Tensile strength $\geq$ 15MPa; elongation at break $\geq$ 200%。
- b、Heat shrinkage experiment: After heating at 150℃ for 15 minutes, the shrinkage length of both ends is less than 2mm
- c、Flame retardancy:
- The sample should maintain a tilt angle of 45°±1 with the vertical axis, and either end of the sample should be kept at a minimum distance of 100mm from the combustion chamber wall.Apply flame at a distance of (500±5) mm from the upper end of the insulation.
- If the conductor is seen, the flame can be removed. For wires with a specification of no more than 2.5mm2, the flame can be removed after 15 seconds. For wires with a specification greater than 2.5mm2, the flame can be removed after 30 seconds.
- All burning flames on the insulation material must be extinguished within 70 seconds, and at least 50mm of insulation must remain unburned at the end of the sample.
- d、Low temperature bending: -40℃/4H, no crack on the surface of the sample is qualified

2.Electrical performance

- a、rated temperature: 200℃
- b、Spark test: When passing through the test electrode, no breakdown occurs.
- The spark test voltage is:
- | | |
|--|------------------------------|
| Conductor nominal cross-sectional area | Application voltage kv (rms) |
| <0.5 | 3 |
| ≥0.5 | 5 |
- c、Dielectric strength: 1KV, no breakdown for 60 seconds

3.Processing performance

- a、Thin wall
- b、Can be twisted and multi-core stranded
- c、Light weight

Environmental protection

- a、in line with ROHS/REACH

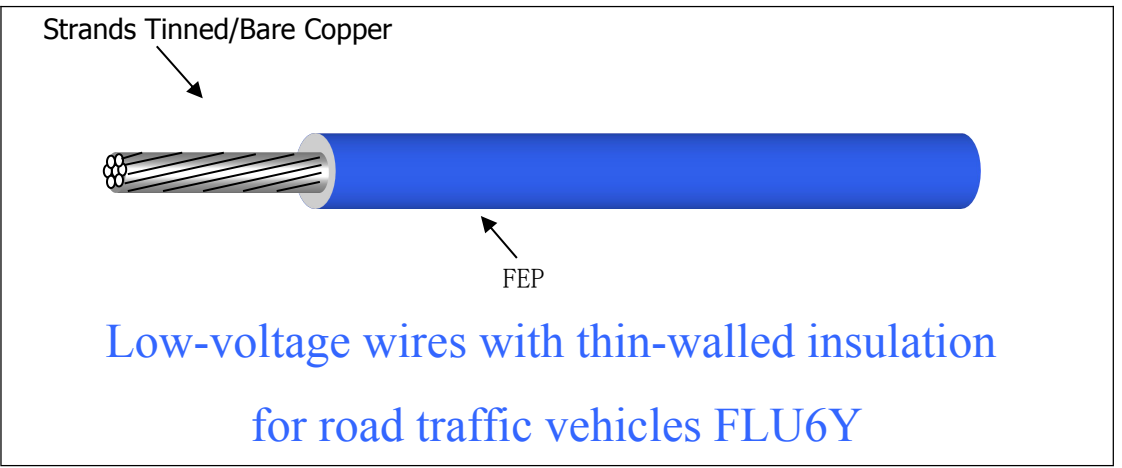
Application:

Low-voltage circuit systems suitable for thin-walled insulated road traffic vehicles

Guideline:

DIN72551 T6、ISO6722

Overview:



Wire structure description:
Conductor: Tinned/Bare copper
Jacket insulation materials: FEP

Thin-walled insulated single-core conductor unsheathed cable FLU6Y with conductor temperature of 200° C for road traffic vehicle circuit system
rated temperature: -40℃~200℃

Part No.	Standard MM²	Conductor SIZE (No./ mm) ±0.005mm	Conductor resistance 20℃ (Ω/Km)		Conductor Dia.(mm)	Insulation thickness (mm)		Overall diameter (mm)	
			Bare	Tin.		Nom.	Min.	Nom.	Max.
FLU6Y	0.22	7/0.20	84.80	86.5	0.61	0.20	0.16	1.01	1.05
	0.35	7/0.254	54.4	55.5	0.78	0.20	0.16	1.18	1.20
	0.50	19/0.19	37.10	38.2	0.95	0.20	0.16	1.35	1.40
	0.75	19/0.23	24.70	25.4	1.15	0.20	0.16	1.55	1.60
	1.00	19/0.26	18.50	19.1	1.25	0.20	0.16	1.65	1.75
	1.50	19/0.32	12.70	13.00	1.60	0.20	0.16	2.00	2.10
	2.50	19/0.41	7.60	7.82	2.05	0.25	0.20	2.55	2.70

3F product code:

E.g: FLU6Y-02200-07
FLU6Y, 0.22mm2, black, 7/0.20, Tinned-plated

SAE COLOR SERIES

* SAE COLOR SERIES				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

PACKAGE

*PACKAGE				
Part No.	Packing- M/roll			3F
0.22~1.0mm2	☐ 200M	☐ 500M	☒ 1000M	
1.5~2.50mm2	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging				

CHARACTER:

1.Physical performance

- a. Tensile strength ≥13.5MPa, Elongation at break ≥200%
- b. Heat shrinkage experiment: After heating at 150℃ for 15 minutes, the shrinkage length of both ends is less than 2mm
- c. Flame retardancy:
The conductor specification is not less than 0.5mm2, and the flame is applied at (500±5) mm from the upper end of the insulation. If the conductor is seen, the flame can be removed. For wires with specifications less than 2.5mm2, the flame can be removed after 15s; For wires with specifications greater than 2.5mm 2, the flame can be removed after 30s. All combustion flames were extinguished within 70s and a minimum of 50mm insulation was left unburned at the end of the specimen
- d. Low temperature bending: -40℃±2℃ /4H sample surface cracks are qualified

2. Electrical Properties

- a. Rated temperature -40℃-200℃
- b. Dielectric withstand voltage : Spark test through the test electrode, no breakdown

Conductor size	Voltage kv (rms)
≤ 0.5mm2	3kv
> 0.5mm2	5kv

- c. Dielectric voltage: 3.0kv, 60s no breakdown

3.Processing performance

- a. Thin wall
- b. Can be twisted and multi-core stranded
- c. Light weight

4.Environmental protection

ROHS/REACH compliant

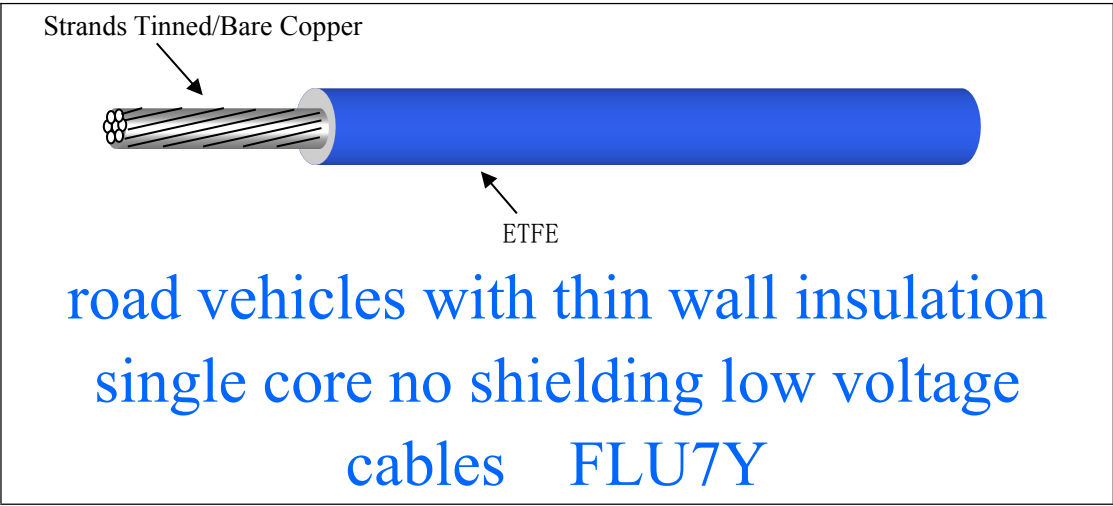
Applications

Low voltage circuit system suitable for thin-walled insulated road traffic vehicles

REFERENCE

ISO6722 DIN72551 T6

Outline:



Wire structure description:
Conductor: Tinned /Bare copper
Insulation materials:ETFE

Ground vehicles with low voltage electric system primary cable FLU
Rated temperature: -40~200℃

STYL E	MM²	Condu ctor size (No./ mm) ±0.005 mm	Conductor resistance 20℃ (Ω/Km)		Conduc tor Dia.(m m)	insulation thickness (mm)		Overall diameter (mm)	
			Bare	tin.		Nom.	Min	Nom.	Max
FLU7Y	0.22	7/0.20	84.80	86.5	0.61	0.2	0.16	0.93	1.05
	0.35	7/0.254	52.00	54.5	0.78	0.2	0.16	1.10	1.20
	0.50	19/0.19	37.10	38.2	0.95	0.2	0.16	1.27	1.40
	0.75	19/0.23	24.70	25.4	1.15	0.2	0.16	1.47	1.60
	1.00	19/0.26	18.50	19.1	1.25	0.2	0.16	1.57	1.75
	1.50	19/0.32	12.70	13.00	1.60	0.2	0.16	1.92	2.10
	2.50	19/0.41	7.60	7.82	2.05	0.25	0.2	2.45	2.70

Marking:

1. Print: None
- 2.Label identification: manufacturer, model, specification, rated temperature resistance, rated pressure resistance, insulation material, color, package length, Date of production

3Fproduct code:

eg: FLU7Y-02200-07G
FLU7Y, 0.22mm2, Black, 7/0.2, Bare

SAE COLOR SERIES

* STOCK COLOR CHART				
00-BLACK	01-WHITE	02-RED	03-YELLOW	04-GREEN
05-BLUE	06-BROWN	07-GREY	08-ORANGE	09- VIOLET

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1.5~2.50mm2	☐ 200M	☒ 500M	☐ 1000M	
According to customer requirements for packaging packaging				

CHARACTER:

- 1.Physical performance
- a. Insulation detachability: The insulation should be able to completely detach at least 20mm section.

b. Heat shrinkage: 100 mm samples are placed horizontally in an oven at 150±3℃ for 15 min, then cooled to 23±5℃ with a maximum shrinkage of no more than 2 mm at each end.

c. Low temperature curl test: -40±2℃/4h, no cracks on the surface of the sample is qualified

d. Flame retardancy: hang the 600mm sample at a 45 degree angle to the ground in a non-piercing environment, the fire supply time is 30 seconds, the flame of the burning insulation must be extinguished within 70 seconds after the blowtorch is removed, and the minimum 50mm insulation at the end remains unburned.

- 2.Electrical Properties
- a. rated temperature: 100℃

b. 30 minutes withstand voltage test: no breakdown occurs when any test voltage is applied to the cable.
- The sample was immersed in salt solution (1 liter solution containing (30±5)g NaCl) at room temperature for 4 hours, and the two ends of the sample should extend out of the liquid level. Then the test voltage of 1kV effective value (frequency 50 ~ 60Hz) sine waveform was applied between the conductor and the salt solution for 30 minutes. The voltage is then boosted at a rate of 0.5kV/s until it reaches 3kV(conductor nominal section < 0.5mm2) or 5kV(conductor nominal section ≥0.5mm2).
- 3.Processing properties

a、Using the hot extrusion processing

b、Can be twisted pair and multi-core

c、Good processing properties Harness

d、Harness processing process good compatibility

e、According to ISO standard design
- 4.Environmental protection

a、ROHS/REACH compliant
- SHOULD BE USED:
- Low voltage cable with thin wall insulation for road vehicles, Thin wall
- REFERENCE:
- ISO 6722-3/2006,class B/Thick wall according to ISO 6722,class B
- Outline:
- 3F product code:
- | |
|-------------------------------------|
| eg: FLY-B-03500-12G |
| FLY-B, 0.35mm2, BLACK, 12/0.2, Bare |
- The diagram shows a cross-section of a cable. On the left, a bundle of 'Strands Tinned/Bare Copper' is shown. This bundle is covered by a 'PVC Insulation Jacket', which is depicted as a solid blue cylinder. An arrow points from the text 'PVC Insulation Jacket' to the blue jacket.
- Low voltage cable with thin wall insulation for road vehicles, Thin wall FLY-B
- Wire structure description:
Conductor: Tinned/Bare copper ;
Jacket insulation materials: PVC Insulation
- Appliances with internal , No more than -40~100℃ temperature of conductor occasion
Rated temperature: -40~100℃
- | Part No. | Standard MM² | Conductor SIZE (No./ mm) ±0.005mm | Conductor resistance 20℃ (Ω/Km) | Conductor Dia.(mm) | insulation hickness (mm) | | Overall diameter(mm) | |
|----------|--------------|-----------------------------------|---------------------------------|--------------------|--------------------------|------|----------------------|-------|
| | | | | | Nom | Min | Nom | Max |
| FLY-B | 0.35 | 12/0.20 | 52.00 | 0.80 | 0.60 | 0.44 | 1.92 | 2.10 |
| | 0.50 | 16/0.20 | 37.10 | 0.92 | 0.60 | 0.44 | 2.10 | 2.30 |
| | 0.75 | 24/0.20 | 24.70 | 1.13 | 0.60 | 0.44 | 2.30 | 2.50 |
| | 1.00 | 32/0.20 | 18.50 | 1.30 | 0.60 | 0.44 | 2.50 | 2.70 |
| | 1.50 | 30/0.254 | 12.70 | 1.60 | 0.60 | 0.44 | 2.80 | 3.00 |
| | 2.50 | 50/0.254 | 7.60 | 2.07 | 0.70 | 0.53 | 3.40 | 3.60 |
| | 4.0 | 56/0.30 | 4.70 | 2.59 | 0.80 | 0.62 | 4.20 | 4.40 |
| | 6.0 | 84/0.30 | 3.10 | 3.18 | 0.80 | 0.62 | 4.80 | 5.00 |
| | 10 | 80/0.40 | 1.82 | 4.13 | 1.00 | 0.80 | 6.20 | 6.50 |
| | 16 | 126/0.40 | 1.16 | 6.00 | 1.00 | 0.80 | 8.00 | 8.30 |
| | 25 | 196/0.40 | 0.743 | 7.47 | 1.30 | 1.07 | 10.10 | 10.40 |
| | 35 | 266/0.405 | 0.352 | 8.80 | 1.30 | 1.07 | 11.40 | 11.70 |
| | | 276/0.4 | 0.352 | 8.80 | 1.30 | 1.07 | 11.40 | 11.70 |
- Conductor tolerance: +/-0.005mm
- SAE COLOR SERIES
- | * STOCK COLOR CHART | | | | |
|---------------------|----------|---------|-----------|------------|
| 00-BLACK | 01-WHITE | 02-RED | 03-YELLOW | 04-GREEN |
| 05-BLUE | 06-BROWN | 07-GREY | 08-ORANGE | 09- VIOLET |
- PACKAGE
- | *PACKAGE | | | | | 3F | |
|--|-------------------------------|--|---|---|----|--|
| Part No. | Packing- M/roll | | | | | |
| 0.35~1.0mm2 | ☐ 200M | ☐ 500M | ☐ 1000M | ☒ 2000M | | |
| 1.5~4.0mm2 | ☐ 200M | ☐ 500M | ☒ 1000M | ☐ 2000M | | |
| 6.0~35mm2 | ☐ 200M | ☒ 500M | ☐ 1000M | ☐ 2000M | | |
| According to customer requirements for packaging packaging | | | | | | |
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