

# FLUY, FLRY & FLY Automotive Lead Wire

Ultra Thin Wall or Thin Wall or Thick Wall

60 VDC and 25 VAC

100°C, -40°C



Image not to scale. See Table 1 for Dimensions

## CONSTRUCTION:

- Conductors:** Bare or Tinned Copper  
Type A Symmetrical, Type B Asymmetrical, or Type C Flexible  
Ultra Thin Wall: 0.35 mm<sup>2</sup> through 2.5 mm<sup>2</sup>\*  
Thin Wall: 0.22 mm<sup>2</sup> through 35 mm<sup>2</sup>  
Thick Wall: 0.35 mm<sup>2</sup> through 120.0 mm<sup>2</sup>
- Insulation:** Polyvinyl Chloride (PVC)  
\*Only available in Type A Symmetrical

## APPLICATIONS AND FEATURES:

Southwire PVC Automotive Lead Wires are 60 VDC and 25 VAC cables that can be used in harnesses made for all types of land vehicles. 600 V rated designs may be available on special order. Contact sales.

This construction meets 3000 hour long-term aging. Resistant to flame, ozone, hot water, abrasion, automotive fluids, temperature, and humidity cycling.

## SPECIFICATIONS:

- FORD: ES-AU5T-1A348-AA Class 1 & Class 2
- GM: GMW 15626 Class A & Class B
- FIAT/CHRYSLER: MS.90034 Class A, Class B & Class C
- INTERNATIONAL STANDARDS: ISO 6722-1 Class A & B
- RoHS Compliant



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**TABLE 1 - MEASUREMENTS**

| Cond. Size | CONDUCTOR CONSTRUCTION (mm) |          |           | MAX CONDUCTOR OD | ULTRA THIN WALL           |                       |              |                           | THIN WALL             |      |                           |                       | THICK WALL |                           |                       |       |
|------------|-----------------------------|----------|-----------|------------------|---------------------------|-----------------------|--------------|---------------------------|-----------------------|------|---------------------------|-----------------------|------------|---------------------------|-----------------------|-------|
|            | TYPE A                      | TYPE B   | TYPE C    |                  | Insulation Thickness (mm) | Outside Diameter (mm) |              | Insulation Thickness (mm) | Outside Diameter (mm) |      | Insulation Thickness (mm) | Outside Diameter (mm) |            | Insulation Thickness (mm) | Outside Diameter (mm) |       |
|            |                             |          |           |                  |                           | Symmetrical           | Asymmetrical |                           | Flexible              | nom  |                           | max                   | nom        |                           | max                   | nom   |
| 0.22       | 7/0.21                      | ---      | 19/0.13   | 0.70             | 0.16                      | 0.20                  | 0.95         | 1.05                      | 0.20                  | 0.25 | 1.10                      | 1.20                  | ---        | ---                       | ---                   | ---   |
| 0.35       | 7/0.27                      | 12/0.21  | 19/0.16   | 0.90             | 0.16                      | 0.20                  | 1.10         | 1.20                      | 0.20                  | 0.25 | 1.20                      | 1.40                  | ---        | ---                       | ---                   | ---   |
| 0.5        | 19/0.19                     | 16/0.21  | 38/0.14   | 1.10             | 0.16                      | 0.20                  | 1.30         | 1.40                      | 0.22                  | 0.28 | 1.40                      | 1.60                  | 0.48       | 0.60                      | 2.00                  | 2.30  |
| 0.75       | 19/0.24                     | 24/0.21  | 38/0.16   | 1.30             | 0.16                      | 0.20                  | 1.45         | 1.60                      | 0.24                  | 0.30 | 1.70                      | 1.90                  | 0.48       | 0.60                      | 2.20                  | 2.50  |
| 1.00       | 19/0.27                     | 32/0.21  | 54/0.16   | 1.50             | 0.16                      | 0.20                  | 1.55         | 1.75                      | 0.24                  | 0.30 | 1.90                      | 2.10                  | 0.48       | 0.60                      | 2.40                  | 2.70  |
| 1.50       | 19/0.33                     | 30/0.26  | 79/0.16   | 1.80             | 0.16                      | 0.20                  | 1.90         | 2.10                      | 0.24                  | 0.30 | 2.20                      | 2.40                  | 0.48       | 0.60                      | 2.70                  | 3.00  |
| 2.00       | 19/0.38                     | 28/0.31  | 105/0.16  | 2.00             | 0.20                      | 0.25                  | 2.20         | 2.40                      | 0.28                  | 0.35 | 2.50                      | 2.80                  | 0.48       | 0.60                      | 3.00                  | 3.30  |
| 2.50       | 37/0.29                     | 50/0.26  | 140/0.16  | 2.20             | 0.20                      | 0.25                  | 2.50         | 2.70                      | 0.28                  | 0.35 | 2.70                      | 3.00                  | 0.56       | 0.70                      | 3.30                  | 3.60  |
| 3.00       | 37/0.34                     | 44/0.31  | 160/0.16  | 2.40             | ---                       | ---                   | ---          | ---                       | 0.32                  | 0.40 | 3.10                      | 3.40                  | 0.56       | 0.70                      | 3.80                  | 4.10  |
| 4.00       | 37/0.38                     | 56/0.31  | 224/0.16  | 2.80             | ---                       | ---                   | ---          | ---                       | 0.32                  | 0.40 | 3.40                      | 3.70                  | 0.64       | 0.80                      | 4.00                  | 4.40  |
| 5.00       | 37/0.43                     | 65/0.33  | 250/0.16  | 3.10             | ---                       | ---                   | ---          | ---                       | 0.32                  | 0.40 | 3.90                      | 4.20                  | 0.64       | 0.80                      | 4.50                  | 4.90  |
| 6.00       | 37/0.45                     | 84/0.31  | 320/0.16  | 3.40             | ---                       | ---                   | ---          | ---                       | 0.32                  | 0.40 | 4.00                      | 4.30                  | 0.64       | 0.80                      | 4.60                  | 5.00  |
| 8.00       | 98/0.33                     | 62/0.41  | 240/0.21  | 4.30             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 0.64       | 0.80                      | 5.00                  | 5.90  |
| 10.00      | 63/0.46                     | 80/0.41  | 320/0.21  | 4.50             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 0.80       | 1.00                      | 5.90                  | 6.50  |
| 12.00      | 154/0.33                    | 96/0.41  | 380/0.21  | 5.40             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 0.80       | 1.00                      | 6.60                  | 7.40  |
| 16.00      | 105/0.46                    | 126/0.41 | 512/0.21  | 6.30             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 0.80       | 1.00                      | 7.70                  | 8.30  |
| 20.00      | 247/0.33                    | 152/0.41 | 610/0.21  | 6.90             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 0.88       | 1.10                      | 8.10                  | 9.10  |
| 25.00      | 154/0.46                    | 196/0.41 | 790/0.21  | 7.60             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.04       | 1.30                      | 9.40                  | 10.40 |
| 30.00      | 361/0.33                    | 224/0.41 | 900/0.21  | 8.30             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.04       | 1.30                      | 9.70                  | 10.90 |
| 35.00      | 551/0.30                    | 276/0.41 | 1070/0.21 | 9.00             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.04       | 1.30                      | 9.60                  | 11.60 |
| 40.00      | 494/0.33                    | 308/0.41 | 1200/0.21 | 9.60             | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.12       | 1.40                      | 11.20                 | 12.40 |
| 50.00      | 798/0.33                    | 396/0.41 | 1600/0.21 | 10.50            | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.20       | 1.50                      | 11.50                 | 13.50 |
| 60.00      | 741/0.33                    | 296/0.41 | 1200/0.26 | 11.60            | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.20       | 1.50                      | 13.40                 | 14.60 |
| 70.00      | 1140/0.30                   | 360/0.51 | 1427/0.26 | 12.50            | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.20       | 1.50                      | 13.50                 | 15.50 |
| 95.00      | 836/0.40                    | 475/0.51 | 1936/0.26 | 14.80            | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.28       | 1.60                      | 16.00                 | 18.00 |
| 120.00     | 1064/0.40                   | 608/0.51 | 2450/0.26 | 16.50            | ---                       | ---                   | ---          | ---                       | ---                   | ---  | ---                       | ---                   | 1.28       | 1.60                      | 17.70                 | 19.70 |



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