

# SOOW CORD

## APPLICATION / SCOPE

SOOW flexible cords are designed for heavy duty use in portable tools, equipment, small motors and associated machinery, industrial equipment, marine dockside power, appliances, equipment exposed to oils, solvents, flame, moisture and other electrical equipment where flexibility and durability are required. The rated voltage is 600V and the temperature range is -40°C to +105°C.

This specification covers flame retardant, water and ozone resistance, and flexible cables which shall be in accordance with UL 62 and cUL.

## STANDARD / APPROVALS

- UL 62
- CSA C22.2 No.49
- MSHA
- NEC Table 400.5 Allowable Ampacity for Flexible Cords and Cables

## CONDUCTOR

Flexible stranded bare copper in accordance with ASTM B-3 and UL 62

## INSULATION

### 1. Material

Premium grade color coded Ethylene-Propylene Diene Monomer (EPDM) compound class 19 comply with table 8 of UL 62.

### 2. Color Code Table

| CORE # | COLOR  | TRACER | CORE # | COLOR  | TRACER | CORE # | COLOR  | TRACER |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1      | Black  |        | 8      | Red    | Black  | 15     | Blue   | White  |
| 2      | White  |        | 9      | Green  | Black  | 16     | Black  | Red    |
| 3      | Red    |        | 10     | Orange | Black  | 17     | White  | Red    |
| 4      | Green  |        | 11     | Blue   | Black  | 18     | Orange | Red    |
| 5      | Orange |        | 12     | Black  | White  | 19     | Blue   | Red    |
| 6      | Blue   |        | 13     | Red    | White  | 20     | Red    | Green  |
| 7      | White  | Black  | 14     | Green  | White  | 21     | Orange | Green  |

For more than 21 conductors the color sequence is repeated as necessary

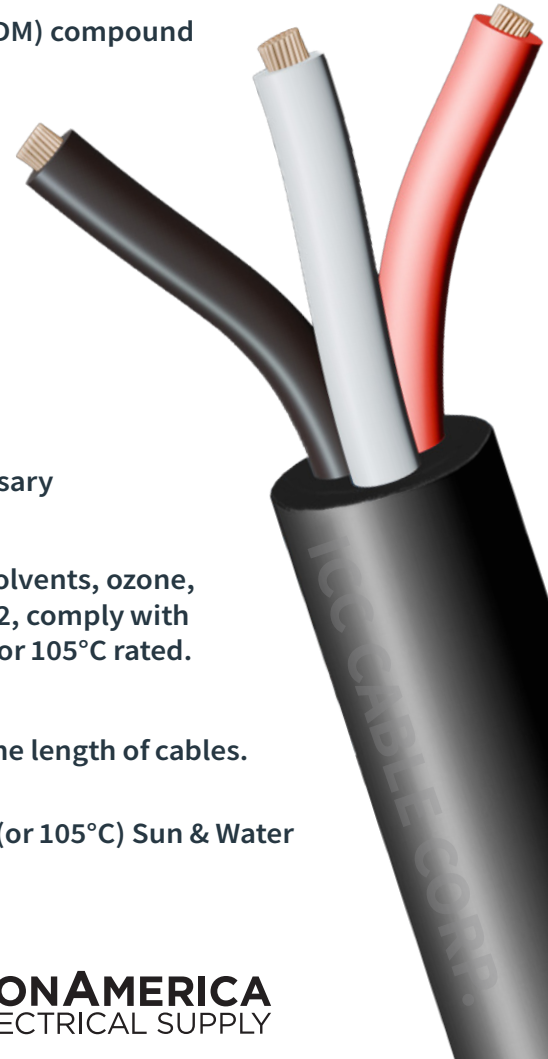
## JACKET

Overall jacket of black Chlorinated Polyethylene (CPE), which is oil, solvents, ozone, weather, sunlight, and water resistant. CPE 90°C compound class 1.12, comply with table 11 of UL 62. Standard jacket is black, yellow jacket is available for 105°C rated.

## PRINT LEGEND

The cables shall be marked with the following information through the length of cables. The marking shall be repeated at least every 2 feet.

Legend : ICC Cable (COND)(SIZE)(mm2)UL c(UL) E537089 SOOW 90°C(or 105°C) Sun & Water Res. 600V -40°C FT1 FT2 07-KA240001-MSHA (week)2024 0000ft.

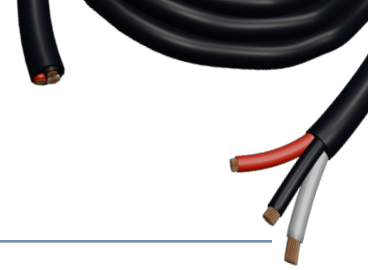


ICC CABLE CORP.



DONAMERICA  
ELECTRICAL SUPPLY

# SOOW CORD



FLEXIBLE CORD : POWER

| CONDUCTOR SIZE (AWG) | NUMBER OF CONDUCTORS | CONDUCTOR STRANDING (NO. / AWG) | INSULATION THICKNESS (IN) | JACKET THICKNESS (IN) | OVERALL DIAMETER (IN) | WEIGHT (LBS / KFT) | RATED AMPACITY (AMPS) |
|----------------------|----------------------|---------------------------------|---------------------------|-----------------------|-----------------------|--------------------|-----------------------|
| 8                    | 2                    | 168/30                          | 0.05                      | 0.06                  | 0.64                  | 258                | 40                    |
| 8                    | 3                    | 168/30                          | 0.05                      | 0.06                  | 0.68                  | 326                | 40                    |
| 8                    | 4                    | 168/30                          | 0.05                      | 0.06                  | 0.74                  | 410                | 35                    |
| 8                    | 5                    | 168/30                          | 0.05                      | 0.06                  | 0.81                  | 499                | 28                    |
| 6                    | 2                    | 266/30                          | 0.05                      | 0.06                  | 0.72                  | 353                | 55                    |
| 6                    | 3                    | 266/30                          | 0.05                      | 0.06                  | 0.77                  | 450                | 45                    |
| 6                    | 4                    | 266/30                          | 0.05                      | 0.08                  | 0.89                  | 607                | 45                    |
| 6                    | 5                    | 266/30                          | 0.05                      | 0.08                  | 0.97                  | 736                | 36                    |
| 4                    | 2                    | 427/30                          | 0.05                      | 0.08                  | 0.88                  | 540                | 70                    |
| 4                    | 3                    | 427/30                          | 0.05                      | 0.08                  | 0.94                  | 689                | 70                    |
| 4                    | 4                    | 427/30                          | 0.05                      | 0.08                  | 1.03                  | 876                | 60                    |
| 4                    | 5                    | 427/30                          | 0.05                      | 0.08                  | 1.13                  | 1068               | 48                    |
| 2                    | 2                    | 665/30                          | 0.05                      | 0.08                  | 1.02                  | 816                | 95                    |
| 2                    | 3                    | 665/30                          | 0.05                      | 0.08                  | 1.08                  | 1029               | 95                    |
| 2                    | 4                    | 665/30                          | 0.05                      | 0.08                  | 1.19                  | 1297               | 80                    |
| 2                    | 5                    | 665/30                          | 0.05                      | 0.08                  | 1.31                  | 1597               | 64                    |



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# SOOW CORD

FLEXIBLE CORD : CONTROL

| CONDUCTOR SIZE (AWG) | NUMBER OF CONDUCTORS | CONDUCTOR STRANDING (NO. / AWG) | INSULATION THICKNESS (IN) | JACKET THICKNESS (IN) | OVERALL DIAMETER (IN) | WEIGHT (LBS / KFT) | RATED AMPACITY (AMPS) |
|----------------------|----------------------|---------------------------------|---------------------------|-----------------------|-----------------------|--------------------|-----------------------|
| 12                   | 2                    | 65/30                           | 0.045                     | 0.095                 | 0.57                  | 184                | 184                   |
| 12                   | 3                    | 65/30                           | 0.045                     | 0.095                 | 0.59                  | 217                | 217                   |
| 12                   | 4                    | 65/30                           | 0.045                     | 0.095                 | 0.64                  | 261                | 261                   |
| 12                   | 5                    | 65/30                           | 0.045                     | 0.095                 | 0.7                   | 319                | 319                   |
| 12                   | 6                    | 65/30                           | 0.045                     | 0.095                 | 0.74                  | 344                | 344                   |
| 12                   | 7                    | 65/30                           | 0.045                     | 0.095                 | 0.74                  | 358                | 358                   |
| 12                   | 8                    | 65/30                           | 0.045                     | 0.095                 | 0.8                   | 408                | 408                   |
| 12                   | 10                   | 65/30                           | 0.045                     | 0.095                 | 0.95                  | 519                | 519                   |
| 12                   | 12                   | 65/30                           | 0.045                     | 0.11                  | 0.98                  | 591                | 591                   |
| 12                   | 14                   | 65/30                           | 0.045                     | 0.11                  | 1.03                  | 668                | 668                   |
| 12                   | 16                   | 65/30                           | 0.045                     | 0.11                  | 1.08                  | 755                | 755                   |
| 12                   | 20                   | 65/30                           | 0.045                     | 0.125                 | 1.22                  | 971                | 971                   |
| 12                   | 24                   | 65/30                           | 0.045                     | 0.125                 | 1.35                  | 1106               | 1106                  |
| 10                   | 2                    | 104/30                          | 0.045                     | 0.095                 | 0.63                  | 230                | 230                   |
| 10                   | 3                    | 104/30                          | 0.045                     | 0.095                 | 0.66                  | 281                | 281                   |
| 10                   | 4                    | 104/30                          | 0.045                     | 0.095                 | 0.71                  | 336                | 336                   |
| 10                   | 5                    | 104/30                          | 0.045                     | 0.095                 | 0.76                  | 409                | 409                   |
| 10                   | 6                    | 104/30                          | 0.045                     | 0.095                 | 0.82                  | 452                | 452                   |
| 10                   | 7                    | 104/30                          | 0.045                     | 0.095                 | 0.82                  | 474                | 474                   |
| 10                   | 8                    | 104/30                          | 0.045                     | 0.095                 | 0.88                  | 541                | 541                   |
| 10                   | 9                    | 104/30                          | 0.045                     | 0.11                  | 1.01                  | 615                | 615                   |
| 10                   | 10                   | 104/30                          | 0.045                     | 0.11                  | 1.05                  | 686                | 686                   |
| 10                   | 12                   | 104/30                          | 0.045                     | 0.11                  | 1.09                  | 788                | 788                   |
| 10                   | 16                   | 104/30                          | 0.045                     | 0.125                 | 1.23                  | 1053               | 1053                  |
| 10                   | 20                   | 104/30                          | 0.045                     | 0.125                 | 1.35                  | 1304               | 1304                  |



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