

# DLO, RHH, RHW-2 Heavy Duty Flexible Power Cable - Unshielded



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<https://www.automationdirect.com/VID-WD-0016>  
 for a short introduction on our cut to length cable

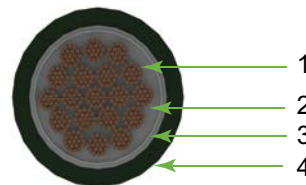


## Overview

AutomationDirect's DLO, RHH, RHW-2 Heavy Duty Flexible Power Cable is a 2kV rated flexible power cable with a variety of possible applications including industrial control panel power distribution, power feeds for Variable Frequency Drives (VFDs) and motor leads in non-drive related applications, as well as non-traditional industrial applications like drilling rigs, railroad/transit car wiring, and mining equipment. With the RHH and RHW-2 ratings these cables are suitable for use in both wet and dry locations and can be used in conduits, ducts, troughs and control panels. The maximum rating for continuous use is 90°C (194°F) either wet or dry. The cable is oil, heat, flame, abrasion and sunlight resistant. AutomationDirect's Heavy Duty Flexible Power Cable is extremely flexible with a tight bend radius allowing easy installations in limited spaces. Approved for use per the NEC as Type RHH/RHW-2 and per the CSA as 2kV Type RW90.

## Features

- 8AWG to 4/0 AWG
- Single conductor
- EPDM thermoset rubber conductor insulation
- CPE thermoset rubber jacket
- Cut to length in 1 foot increments
- Minimum cut lengths as low as 10 feet
- Flexibility for easy installation
- Multiple ratings and approvals
- Wide operating temperature range
- 2kV Maximum Voltage Rating
- NEC Type RHH/RHW-2
- CSA Type RW90
- Made in USA



## Construction

1. Conductors: Flexible Stranded Rope-Lay Class 1 Tinned Copper per ASTM B33 and B172
2. Binder Tape: Mylar Tape
3. Conductor Insulation: Thermoset Ethylene Propylene Diene Monomer (EPDM)
4. Cable Jacket: Thermoset Chlorinated Polyethylene (CPE)

# DLO, RHH, RHW-2 Cable

| DLO, RHH, RHW-2 Cable Selection |     |                   |                                   |                              |                  |      |                               |                             |                   |
|---------------------------------|-----|-------------------|-----------------------------------|------------------------------|------------------|------|-------------------------------|-----------------------------|-------------------|
| Part Number                     | AWG | Strands<br>##/AWG | Insulation<br>Thickness<br>(EPDM) | Jacket<br>Thickness<br>(CPE) | Overall Diameter |      | Approximate Weight<br>(lb/ft) | Minimum Cut<br>Length (ft)* | Price per<br>foot |
|                                 |     |                   | (inches)                          | (inches)                     | (inches)         | (mm) |                               |                             |                   |
| <a href="#">DLO8BK-1</a>        | 8   | 41/24             | 0.055                             | 0.030                        | 0.330            | 8.4  | 0.100                         | 20                          | \$1.20            |
| <a href="#">DLO6BK-1</a>        | 6   | 63/24             | 0.055                             | 0.030                        | 0.370            | 9.4  | 0.128                         | 20                          | \$1.72            |
| <a href="#">DLO4BK-1</a>        | 4   | 105/24            | 0.060                             | 0.030                        | 0.440            | 11.2 | 0.187                         | 20                          | \$2.64            |
| <a href="#">DLO2BK-1</a>        | 2   | 161/24            | 0.060                             | 0.030                        | 0.495            | 12.6 | 0.291                         | 20                          | \$3.63            |
| <a href="#">DLO1-0BK-1</a>      | 1/0 | 266/24            | 0.080                             | 0.045                        | 0.645            | 16.4 | 0.488                         | 20                          | \$5.96            |
| <a href="#">DLO2-0BK-1</a>      | 2/0 | 342/24            | 0.080                             | 0.045                        | 0.690            | 17.5 | 0.558                         | 20                          | \$7.36            |
| <a href="#">DLO3-0BK-1</a>      | 3/0 | 418/24            | 0.080                             | 0.045                        | 0.760            | 19.3 | 0.654                         | 10                          | \$8.61            |
| <a href="#">DLO4-0BK-1</a>      | 4/0 | 532/24            | 0.080                             | 0.045                        | 0.815            | 20.7 | 0.829                         | 10                          | \$10.94           |

\* See web store for maximum cut lengths

| DLO, RHH, RHW-2 Cable Specifications |                                                                           |                      |                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------|---------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conductor Stranding                  | Flexible Stranded Rope-Lay Class 1<br>Tinned Copper per ASTM B33 and B172 | Applicable Standards | ASTM B3 - Soft or Annealed Copper                                                                                                                                                                                                                                                                                          |
| Voltage Rating                       | 2kV                                                                       |                      | ASTM B33 - Tinned Soft or Annealed Copper                                                                                                                                                                                                                                                                                  |
| Outer Jacket Color                   | Black with white print                                                    |                      | B172 - Rope-Lay-Stranded Copper Conductors<br>Having Bunch Stranded Members                                                                                                                                                                                                                                                |
| Outer Jacket Material                | CPE (Chlorinated Polyethylene)<br>thermoset rubber                        |                      | UL Subject 2806 - Type HDFPC-DLO                                                                                                                                                                                                                                                                                           |
| Cold Bend Test                       | -40°C (-40°F)                                                             |                      | UL 44 - Type RHH/RHW-2                                                                                                                                                                                                                                                                                                     |
| Operating Temperature                | -40°C to 90°C (-40°F to 194°F)                                            |                      | CSA C22.2 No. 38 - Type RW90                                                                                                                                                                                                                                                                                               |
| Conductor Insulation                 | Black EPDM (ethylene propylene diene monomer) thermoset rubber            | Approvals*           | MSHA - P-07-KA100013                                                                                                                                                                                                                                                                                                       |
|                                      |                                                                           |                      | IEEE 1202/FT4 - Flame Test (70,000 Btu/hr Vertical Tray Test). #8 and larger CSA. 1/0 and larger UL.<br>UL 1685 - Vertical-Tray Fire-Propagation and Smoke Release Test<br>ICEA S-95-658 (NEMA WC70) Power cables rated 2000 volts or less for the distribution of electrical energy                                       |
| Temperature Rating                   | 90°C (194°F) Wet or Dry                                                   | Sample Print Legend  | SOUTHWIRE® ROYAL® xxx SIZE AWG (xxxmm2)<br>E30117-D (UL) TYPE HDFPC-DLO EPR/CPE 2KV<br>DLO 90C DRY 90C WET OR TYPE RHH/RHW-2 90C<br>DRY 90C WET 2KV -40C PRI PRII SR FOR CT USE<br>FT4 - CSA 156205 RW90 90C DRY 90C WET TC-<br>ER 2KV -40C PRI PRII FT1 FT4 SR P-07-KA100013-<br>MSHA SEQUENTIAL FOOTAGE MARKS xxxxxxxxFT |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

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| DLO, RHH, RHW-2 Cable Additional Specifications |     |                                     |              |                                  |              |                                 |                              |
|-------------------------------------------------|-----|-------------------------------------|--------------|----------------------------------|--------------|---------------------------------|------------------------------|
| Part Number                                     | AWG | Allowable Ampacities<br>In Conduit* |              | Allowable Ampacities In<br>Air** |              | Min. Bend<br>Radius<br>(inches) | Max. Pulling<br>Tension (lb) |
|                                                 |     | 75°C (167°F)                        | 90°C (194°F) | 75°C (167°F)                     | 90°C (194°F) |                                 |                              |
| <a href="#">DLO8BK-1</a>                        | 8   | 50                                  | 55           | 70                               | 80           | 2.63                            | 132                          |
| <a href="#">DLO6BK-1</a>                        | 6   | 65                                  | 75           | 95                               | 105          | 2.98                            | 210                          |
| <a href="#">DLO4BK-1</a>                        | 4   | 85                                  | 95           | 125                              | 140          | 3.37                            | 334                          |
| <a href="#">DLO2BK-1</a>                        | 2   | 115                                 | 130          | 170                              | 190          | 4.03                            | 531                          |
| <a href="#">DLO1-0BK-1</a>                      | 1/0 | 150                                 | 170          | 230                              | 260          | 5.52                            | 845                          |
| <a href="#">DLO2-0BK-1</a>                      | 2/0 | 175                                 | 195          | 265                              | 300          | 5.76                            | 1065                         |
| <a href="#">DLO3-0BK-1</a>                      | 3/0 | 200                                 | 225          | 310                              | 350          | 5.81                            | 1342                         |
| <a href="#">DLO4-0BK-1</a>                      | 4/0 | 230                                 | 260          | 360                              | 405          | 6.47                            | 1693                         |

\* Ampacities based on Table 310.15(B)(16) of the National Electrical Code® for not more than three current-carrying conductors in raceway, cable or earth. Based on ambient temperature of 30°C (86°F).

\*\* Ampacities based on Table 310.15(B)(17) of the National Electrical Code® allowable ampacities of single-insulated conductors rated up to and including 2000 Volts in free air. Based on ambient temperature of 30°C (86°F).



Please Note: Our prices on DLO Power cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.