

# SPECIFICATION CONTROL DRAWING

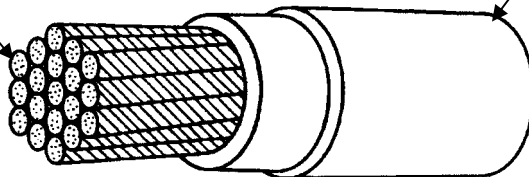
**FDR25S**

|       |  |      |         |          |   |
|-------|--|------|---------|----------|---|
| Title | WIRE, RADIATION-CROSSLINKED, POLYESTER BLEND-INSULATED,<br>FLEXIBLE CABLE, 1000 VOLT | Date | 3-14-14 | Revision | G |
|-------|--|------|---------|----------|---|

This specification sheet forms a part of the latest issue of Raychem Specification WCD 3304 to the extent as specified herein.

CONDUCTOR - TIN-COATED COPPER

INSULATION - FDR-25  
COLOR - BLACK



## CONSTRUCTION DETAILS

| PART<br>NUMBER<br>1/ | WIRE<br>SIZE<br>(AWG) | CONDUCTOR<br>STRANDING<br>(number x<br>AWG) | DIAMETER<br>OF<br>STRANDED<br>CONDUCTOR<br>(inch) (mm) |             | FINISHED WIRE  |                         |             |             |  |
|----------------------|-----------------------|---|--|-------------|--|-------------------------|-------------|-------------|--|
|                      |                       |   |  |             | MAXIMUM<br>RESISTANCE<br>AT 20°C<br>(ohms/1000 ft.)<br>(ohms/km) | DIAMETER<br>(inch) (mm) |             |             | MAXIMUM<br>WEIGHT<br>(lbs/1000 ft.)<br>(kg/km) |
|                      |                       |   | MINIMUM  | MAXIMUM     |  | MINIMUM                 | NOMINAL     | MAXIMUM     |  |
| FDR25S-8             | 8                     | 1078 x 38                                   | .160 (4.06)  | .180 (4.57) | .711 (2.33)  | .244 (6.20)             | .256 (6.50) | .268 (6.81) | 77.6 (115.)                                    |
| FDR25S-4             | 4                     | 1666 x 36                                   | .250 (6.35)  | .290 (7.37) | .275 (.902)  | .369 (9.37)             | .384 (9.75) | .399 (10.1) | 176. (262.)                                    |
| FDR25S-2             | 2                     | 2646 x 36                                   | .323 (8.20)  | .347 (8.81) | .171 (.561)  | .498 (12.6)             | .515 (13.1) | .532 (13.5) | 306. (455.)                                    |
| FDR25S-0             | 0                     | 4256 x 36                                   | .390 (9.91)  | .430 (10.9) | .110 (.361)  | .582 (14.8)             | .602 (15.3) | .622 (15.8) | 442. (658.)                                    |
| FDR25S-00            | 00                    | 5320 x 36                                   | .440 (11.2)  | .480 (12.2) | .087 (.285)  | .644 (16.4)             | .668 (17.0) | .692 (17.6) | 551. (820.)                                    |
| FDR25S-000           | 000                   | 6783 x 36                                   | .510 (13.0)  | .550 (14.0) | .068 (.223)  | .730 (18.5)             | .754 (19.2) | .778 (19.8) | 699. (1040.)                                   |
| FDR25S-0000          | 0000                  | 8379 x 36                                   | .640 (16.3)  | .680 (17.3) | .055 (.180)  | .860 (21.8)             | .884 (22.5) | .908 (23.1) | 933. (1388.)                                   |

## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 125°C

Maximum continuous conductor temperature

VOLTAGE RATING: 1000 volts (rms) at sea level

CONCENTRICITY: 70% (minimum)

INSULATION ELONGATION AND TENSILE STRENGTH

(both layers pulled together):

Elongation, 300% (minimum)

Tensile Strength, 2000 lbf/in<sup>2</sup> (14 N/mm<sup>2</sup>) (minimum)

INSULATION (JACKET) FLAWS: Spark Test, 3.0 kV (rms)

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.

Tyco Electronics Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.