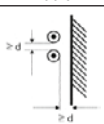
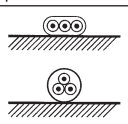


**Table 34-1: Current Rating and Rating Factors**

Cables having PVC Insulation, sheathed (Copper Conductor) 300/500 V  
Cable Categories: YSLY, YSLCY, FLEXI UL 1007 / 1015 SC

**Current-Rating Capacities (Amp)**

| Conductor cross-sectional area | Single-core in free air   | 2- and 3-core upon or on surface  |
|--------------------------------|---|---|
|                                |  |  |
| mm <sup>2</sup>                | A   | A   |
| 0.14                           | 3   | 2   |
| 0.25                           | 5   | 4   |
| 0.34                           | 8   | 6   |
| 0.5                            | 12  | 9   |
| 0.75                           | 15  | 12  |
| 1.0                            | 19  | 15  |
| 1.5                            | 24  | 18  |
| 2.5                            | 32  | 26  |
| 4                              | 42  | 34  |
| 6                              | 54  | 44  |
| 10                             | 73  | 61  |
| 16                             | 98  | 82  |
| 25                             | 129   | 108   |
| 35                             | 158   | 135   |
| 50                             | 198   | 168   |
| 70                             | 245   | 207   |
| 95                             | 292   | 250   |
| 120                            | 344   | 292   |
| 150                            | 391   | 335   |
| 185                            | 448   | 382   |
| 240                            | 528   | 453   |
| 300                            | 608   | 523   |

| Rating factors for other number of cores |                                       |   |
|--|---------------------------------------|---|
| Number of current carrying conductors    | Rating factors for cables in free air | Rating factors for cables in earth (burial) |
| 5  | 0.75                                  | 0.70  |
| 7  | 0.65                                  | 0.60  |
| 10                                       | 0.55                                  | 0.50  |
| 14                                       | 0.50                                  | 0.45  |
| 19                                       | 0.45                                  | 0.40  |
| 24                                       | 0.40                                  | 0.35  |
| 40                                       | 0.35                                  | 0.30  |
| 61                                       | 0.30                                  | 0.25  |

| Rating factors for other ambient temperatures |      |      |      |      |      |      |      |      |      |      |      |      |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| °C  | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   |
| Factors                                       | 1.22 | 1.17 | 1.12 | 1.06 | 1.00 | 0.94 | 0.87 | 0.79 | 0.71 | 0.61 | 0.50 | 0.35 |

Notes: These ratings are based on ambient air temperature of 30°C and conductor temperature of 70°C.

**Table 34-2: Current Rating and Rating Factors**

Cable Categories: Welding Cable (X01N2-D)

**Current Rating Capacities (Amp)**

| Current rating for repeat cycle operation based on 5 min period |       |      |      |      |      |      |      |
|---|-------|------|------|------|------|------|------|
| Current rating at various duty cycles                           |       |      |      |      |      |      |      |
| Nominal cross-sectional area mm <sup>2</sup>                    | 100 % | 85 % | 80 % | 60 % | 35 % | 20 % | 8 %  |
|   | A     | A    | A    | A    | A    | A    | A    |
| 10  | 100   | 101  | 102  | 106  | 119  | 142  | 206  |
| 16  | 135   | 138  | 140  | 148  | 173  | 212  | 314  |
| 25  | 180   | 186  | 189  | 204  | 244  | 305  | 460  |
| 35  | 225   | 235  | 239  | 260  | 317  | 400  | 608  |
| 50  | 285   | 299  | 305  | 336  | 415  | 529  | 811  |
| 70  | 355   | 375  | 383  | 426  | 531  | 682  | 1053 |
| 95  | 430   | 456  | 467  | 523  | 658  | 850  | 1319 |
| 120   | 500   | 532  | 545  | 613  | 776  | 1006 | 1565 |
| 150   | 580   | 619  | 634  | 716  | 911  | 1184 | 1845 |
| 185   | 665   | 711  | 729  | 826  | 1054 | 1374 | 2145 |

| Derating factors for a conductor temperature of 85 °C (free air, ambient temperature 25 °C) |        |
|---|--------|
| Ambient temperature °C  | Factor |
| 30  | 0.96   |
| 35  | 0.91   |
| 40  | 0.87   |
| 45  | 0.82   |