



## 4Pairs Cat5e UTP Outdoor Cable Specification

| 4N2X3 55                                  |                      | DATE:2014.10.10  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
|---|----------------------|--|--------------------------|------------------------------------|----------------------|--------------------------------|--------------------------|-----------------------|-------|-------------------------------|--------|---------------------------|-------|---|---------|------------------------------|-----------------|----------------------|-----------------|-------------------------|----------|---------------------|------------|-------------------|-----------|-----------------------|-------|--------------------------|-------|--------------------------|-------------|-----------------------------------|-------|------------------------------|------|------|------|---------------|--------------|-----------------------|------|--------------------------|-------|--------------------|-------------|------|------|----------|-------------|------|------|------|-------|------|------|------|------|-------|-----|------|------|------|-------|
| <b>Cross Section</b>                      |                      | <b>Performance</b>   |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
|   |                      | <b>Electrical Characteristics:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Frequency (MHz)</th> <th>Return loss (Min dB)</th> <th>Attenuation Max (dB/100m)</th> <th>NEXT (Min dB)</th> </tr> </thead> <tbody> <tr><td>0.772</td><td>19.4</td><td>1.8</td><td>67.0</td></tr> <tr><td>1</td><td>20.0</td><td>2.0</td><td>65.3</td></tr> <tr><td>4</td><td>23.0</td><td>4.1</td><td>56.3</td></tr> <tr><td>8</td><td>24.5</td><td>5.8</td><td>51.8</td></tr> <tr><td>10</td><td>25.0</td><td>6.5</td><td>50.3</td></tr> <tr><td>16</td><td>25.0</td><td>8.2</td><td>47.3</td></tr> <tr><td>20</td><td>25.0</td><td>9.3</td><td>45.8</td></tr> <tr><td>25</td><td>24.3</td><td>10.4</td><td>44.3</td></tr> <tr><td>31.25</td><td>23.6</td><td>11.7</td><td>42.9</td></tr> <tr><td>62.5</td><td>21.5</td><td>17.0</td><td>38.4</td></tr> <tr><td>100</td><td>20.1</td><td>22.0</td><td>35.3</td></tr> </tbody> </table>  |                          | Frequency (MHz)                    | Return loss (Min dB) | Attenuation Max (dB/100m)      | NEXT (Min dB)            | 0.772                 | 19.4  | 1.8                           | 67.0   | 1                         | 20.0  | 2.0                                       | 65.3    | 4                            | 23.0            | 4.1                  | 56.3            | 8                       | 24.5     | 5.8                 | 51.8       | 10                | 25.0      | 6.5                   | 50.3  | 16                       | 25.0  | 8.2                      | 47.3        | 20                                | 25.0  | 9.3                          | 45.8 | 25   | 24.3 | 10.4          | 44.3         | 31.25                 | 23.6 | 11.7                     | 42.9  | 62.5               | 21.5        | 17.0 | 38.4 | 100      | 20.1        | 22.0 | 35.3 |      |       |      |      |      |      |       |     |      |      |      |       |
| Frequency (MHz)                           | Return loss (Min dB) | Attenuation Max (dB/100m)  | NEXT (Min dB)            |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 0.772                                     | 19.4                 | 1.8  | 67.0                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 1   | 20.0                 | 2.0  | 65.3                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 4   | 23.0                 | 4.1  | 56.3                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 8   | 24.5                 | 5.8  | 51.8                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 10  | 25.0                 | 6.5  | 50.3                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 16  | 25.0                 | 8.2  | 47.3                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 20  | 25.0                 | 9.3  | 45.8                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 25  | 24.3                 | 10.4   | 44.3                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 31.25                                     | 23.6                 | 11.7   | 42.9                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 62.5                                      | 21.5                 | 17.0   | 38.4                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 100                                       | 20.1                 | 22.0   | 35.3                     |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Marking</b>                            |                      | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Frequency (MHz)</th> <th>PSNEXT (Min dB)</th> <th>ELFEXT (Min (dB/100m))</th> <th>PSELFEXT (Min (dB/100m))</th> <th>Delay (Max (ns/100m))</th> </tr> </thead> <tbody> <tr><td>0.772</td><td>64.0</td><td>66.0</td><td>63.0</td><td>575.0</td></tr> <tr><td>1</td><td>62.3</td><td>63.8</td><td>60.8</td><td>570.0</td></tr> <tr><td>4</td><td>53.3</td><td>51.7</td><td>48.7</td><td>552.0</td></tr> <tr><td>8</td><td>48.8</td><td>45.7</td><td>42.7</td><td>546.7</td></tr> <tr><td>10</td><td>47.3</td><td>43.8</td><td>40.8</td><td>545.4</td></tr> <tr><td>16</td><td>44.3</td><td>39.7</td><td>36.7</td><td>543.0</td></tr> <tr><td>20</td><td>42.8</td><td>37.7</td><td>34.7</td><td>542.0</td></tr> <tr><td>25</td><td>41.3</td><td>35.8</td><td>32.8</td><td>541.2</td></tr> <tr><td>31.25</td><td>39.9</td><td>33.9</td><td>30.9</td><td>540.4</td></tr> <tr><td>62.5</td><td>35.4</td><td>27.8</td><td>24.8</td><td>538.6</td></tr> <tr><td>100</td><td>32.3</td><td>23.8</td><td>20.8</td><td>537.6</td></tr> </tbody> </table>  |                          | Frequency (MHz)                    | PSNEXT (Min dB)      | ELFEXT (Min (dB/100m))         | PSELFEXT (Min (dB/100m)) | Delay (Max (ns/100m)) | 0.772 | 64.0                          | 66.0   | 63.0                      | 575.0 | 1   | 62.3    | 63.8                         | 60.8            | 570.0                | 4               | 53.3                    | 51.7     | 48.7                | 552.0      | 8                 | 48.8      | 45.7                  | 42.7  | 546.7                    | 10    | 47.3                     | 43.8        | 40.8                              | 545.4 | 16                           | 44.3 | 39.7 | 36.7 | 543.0         | 20           | 42.8                  | 37.7 | 34.7                     | 542.0 | 25                 | 41.3        | 35.8 | 32.8 | 541.2    | 31.25       | 39.9 | 33.9 | 30.9 | 540.4 | 62.5 | 35.4 | 27.8 | 24.8 | 538.6 | 100 | 32.3 | 23.8 | 20.8 | 537.6 |
| Frequency (MHz)                           | PSNEXT (Min dB)      | ELFEXT (Min (dB/100m))   | PSELFEXT (Min (dB/100m)) | Delay (Max (ns/100m))              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 0.772                                     | 64.0                 | 66.0   | 63.0                     | 575.0                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 1   | 62.3                 | 63.8   | 60.8                     | 570.0                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 4   | 53.3                 | 51.7   | 48.7                     | 552.0                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 8   | 48.8                 | 45.7   | 42.7                     | 546.7                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 10  | 47.3                 | 43.8   | 40.8                     | 545.4                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 16  | 44.3                 | 39.7   | 36.7                     | 543.0                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 20  | 42.8                 | 37.7   | 34.7                     | 542.0                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 25  | 41.3                 | 35.8   | 32.8                     | 541.2                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 31.25                                     | 39.9                 | 33.9   | 30.9                     | 540.4                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 62.5                                      | 35.4                 | 27.8   | 24.8                     | 538.6                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| 100                                       | 32.3                 | 23.8   | 20.8                     | 537.6                              |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Description</b>                        |                      | <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Rated Temperature (°C)</td> <td style="text-align: right;">75</td> </tr> <tr> <td>Product Standard Certification</td> <td></td> </tr> <tr> <td colspan="2"><b>Application</b></td> </tr> <tr> <td colspan="2">Horizontal Wiring in LAN</td> </tr> <tr> <td colspan="2"><b>Reference Standard</b></td> </tr> <tr> <td colspan="2">UL Subject 444,EIA/TIA568 &amp; ISO/IEC 11801</td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Construction</b></td> </tr> <tr> <td><b>Conductor</b></td> <td style="text-align: right;"><b>CCA</b></td> </tr> <tr> <td>AWG</td> <td style="text-align: right;">24</td> </tr> <tr> <td>Conductor Dia. (mm)</td> <td style="text-align: right;"><b>0.5</b></td> </tr> <tr> <td><b>Insulation</b></td> <td style="text-align: right;"><b>PE</b></td> </tr> <tr> <td>Average Thickness(mm)</td> <td style="text-align: right;">0.205</td> </tr> <tr> <td>Min. Point Thickness(mm)</td> <td style="text-align: right;">0.198</td> </tr> <tr> <td>Insulation Dia.(±0.01mm)</td> <td style="text-align: right;"><b>0.91</b></td> </tr> <tr> <td><b>Twisted Pair Dia.(±0.02mm)</b></td> <td style="text-align: right;">1.82</td> </tr> <tr> <td><b>Assembly Dia.(±0.2mm)</b></td> <td style="text-align: right;">3.9</td> </tr> <tr> <td colspan="2"><br/></td> </tr> <tr> <td><b>Jacket</b></td> <td style="text-align: right;"><b>LLDPE</b></td> </tr> <tr> <td>Average Thickness(mm)</td> <td style="text-align: right;">0.55</td> </tr> <tr> <td>Min. Point Thickness(mm)</td> <td style="text-align: right;">0.5</td> </tr> <tr> <td>Outer Dia.(±0.2mm)</td> <td style="text-align: right;"><b>5.10</b></td> </tr> <tr> <td colspan="2"><br/></td> </tr> <tr> <td>Rip Cord</td> <td style="text-align: right;">Per request</td> </tr> </tbody> </table> |                          | Rated Temperature (°C)             | 75                   | Product Standard Certification |                          | <b>Application</b>    |       | Horizontal Wiring in LAN      |        | <b>Reference Standard</b> |       | UL Subject 444,EIA/TIA568 & ISO/IEC 11801 |         | <b>Construction</b>          |                 | <b>Conductor</b>     | <b>CCA</b>      | AWG                     | 24       | Conductor Dia. (mm) | <b>0.5</b> | <b>Insulation</b> | <b>PE</b> | Average Thickness(mm) | 0.205 | Min. Point Thickness(mm) | 0.198 | Insulation Dia.(±0.01mm) | <b>0.91</b> | <b>Twisted Pair Dia.(±0.02mm)</b> | 1.82  | <b>Assembly Dia.(±0.2mm)</b> | 3.9  | <br> |      | <b>Jacket</b> | <b>LLDPE</b> | Average Thickness(mm) | 0.55 | Min. Point Thickness(mm) | 0.5   | Outer Dia.(±0.2mm) | <b>5.10</b> | <br> |      | Rip Cord | Per request |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Rated Temperature (°C)                    | 75                   |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Product Standard Certification            |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Application</b>                        |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Horizontal Wiring in LAN                  |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Reference Standard</b>                 |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| UL Subject 444,EIA/TIA568 & ISO/IEC 11801 |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Construction</b>                       |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Conductor</b>                          | <b>CCA</b>           |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| AWG                                       | 24                   |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Conductor Dia. (mm)                       | <b>0.5</b>           |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Insulation</b>                         | <b>PE</b>            |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Average Thickness(mm)                     | 0.205                |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Min. Point Thickness(mm)                  | 0.198                |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Insulation Dia.(±0.01mm)                  | <b>0.91</b>          |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Twisted Pair Dia.(±0.02mm)</b>         | 1.82                 |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Assembly Dia.(±0.2mm)</b>              | 3.9                  |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <br>                                      |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Jacket</b>                             | <b>LLDPE</b>         |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Average Thickness(mm)                     | 0.55                 |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Min. Point Thickness(mm)                  | 0.5                  |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Outer Dia.(±0.2mm)                        | <b>5.10</b>          |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <br>                                      |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Rip Cord                                  | Per request          |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Color</b>                              |                      | <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td colspan="2"><b>Insulation colors are:</b></td> </tr> <tr> <td colspan="2">Blue,White/Blue</td> </tr> <tr> <td colspan="2">Orange,White/Orange</td> </tr> <tr> <td colspan="2">Green,White/Green</td> </tr> <tr> <td colspan="2">Brown,White/Brown</td> </tr> <tr> <td colspan="2"><b>Jacket colors:</b></td> </tr> <tr> <td colspan="2">Per request</td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Marking</b></td> </tr> </tbody> </table>  |                          | <b>Insulation colors are:</b>      |                      | Blue,White/Blue                |                          | Orange,White/Orange   |       | Green,White/Green             |        | Brown,White/Brown         |       | <b>Jacket colors:</b>                     |         | Per request                  |                 | <b>Marking</b>       |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Insulation colors are:</b>             |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Blue,White/Blue                           |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Orange,White/Orange                       |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Green,White/Green                         |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Brown,White/Brown                         |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Jacket colors:</b>                     |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Per request                               |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Marking</b>                            |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
|   |                      | <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td colspan="2"><b>Mechanical Characteristics:</b></td> </tr> <tr> <td>Test Object</td> <td style="text-align: right;">Jacket</td> </tr> <tr> <td>Test Material</td> <td style="text-align: right;">PVC</td> </tr> <tr> <td>Before Tensile Strength (Mpa)</td> <td style="text-align: right;">&gt;=13.8</td> </tr> <tr> <td>Aging Elongation (%)</td> <td style="text-align: right;">&gt;=100</td> </tr> <tr> <td>Aging Condition (°Cxhrs)</td> <td style="text-align: right;">100x168</td> </tr> <tr> <td>After Tensile Strength (Mpa)</td> <td style="text-align: right;">&gt;=85% of unaged</td> </tr> <tr> <td>Aging Elongation (%)</td> <td style="text-align: right;">&gt;=50% of unaged</td> </tr> <tr> <td>Cold Bend(-20±2°Cx4hrs)</td> <td style="text-align: right;">No crack</td> </tr> </tbody> </table>   |                          | <b>Mechanical Characteristics:</b> |                      | Test Object                    | Jacket                   | Test Material         | PVC   | Before Tensile Strength (Mpa) | >=13.8 | Aging Elongation (%)      | >=100 | Aging Condition (°Cxhrs)                  | 100x168 | After Tensile Strength (Mpa) | >=85% of unaged | Aging Elongation (%) | >=50% of unaged | Cold Bend(-20±2°Cx4hrs) | No crack |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| <b>Mechanical Characteristics:</b>        |                      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Test Object                               | Jacket               |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Test Material                             | PVC                  |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Before Tensile Strength (Mpa)             | >=13.8               |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Aging Elongation (%)                      | >=100                |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Aging Condition (°Cxhrs)                  | 100x168              |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| After Tensile Strength (Mpa)              | >=85% of unaged      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Aging Elongation (%)                      | >=50% of unaged      |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |
| Cold Bend(-20±2°Cx4hrs)                   | No crack             |  |                          |                                    |                      |                                |                          |                       |       |                               |        |                           |       |   |         |                              |                 |                      |                 |                         |          |                     |            |                   |           |                       |       |                          |       |                          |             |                                   |       |                              |      |      |      |               |              |                       |      |                          |       |                    |             |      |      |          |             |      |      |      |       |      |      |      |      |       |     |      |      |      |       |