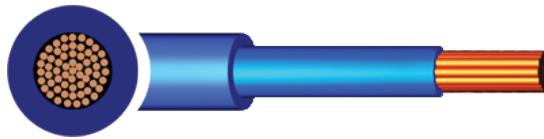


6381Y Flexible Cable - Single Core BS6004, PVC - 6mm² to 400mm²



Description

Flexible, single core, PVC telecoms cable. For use in DC power supplies on telecoms equipment and power applications where flexible cable is a requirement.

Key Features



Voltage Rating

1.5mm² To 35mm²: 450/750V
50mm² and Above: 600/1000V



Minimum Bending Radius

Up to 50mm² - 3x overall diameter
Above 50mm² - 4 x overall diameter



Flame Retardancy

BS EN 60332-1-2

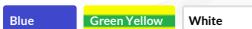


Temperature Limits

Flexed: -15°C to +70°C

Core Colours

Standard colours available:



Red available in 25mm only

Standards

- 50mm² and above: BS EN/IEC 60502-1
- BS EN/IEC 60228
- Up to 35mm²: Generally to BS 6004,
- BS EN/IEC 60332-1-2

Construction

- **Conductor:** Class 5 flexible, stranded copper
- **Insulation:** PVC (Poly Vinyl Chloride)
- **Outer Sheath:** Polyvinyl Chloride (PVC)
- **Sheath Colour:** All sizes available in Blue, Grey, Green/Yellow

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

ecovadis

6381Y Flexible Cable - Single Core BS6004, PVC - 6mm² to 400mm² - Dimensions

| Reference | Conductor Size (mm ²) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) | Gland Size |
|-----------|-----------------------------------|-------------|---------------|----------------------|---------------|------------|
| 6381Y6 | 6 | 1 | 84/0.3 | 7.7 | 105 | 20/16 |
| 6381Y10 | 10 | 1 | 80/0.40 | 8.8 | 151 | 20S |
| 6381Y16 | 16 | 1 | 126/0.40 | 9.9 | 208 | 20S |
| 6381Y25 | 25 | 1 | 196/0.40 | 11.4 | 303 | 20 |
| 6381Y35 | 35 | 1 | 276/0.40 | 12.7 | 401 | 20 |
| 6381Y50 | 50 | 1 | 396/0.40 | 14.6 | 560 | 25 |
| 6381Y70 | 70 | 1 | 360/0.50 | 16.1 | 748 | 25 |
| 6381Y95 | 95 | 1 | 475/0.50 | 18.6 | 990 | 25 |
| 6381Y120 | 120 | 1 | 608/0.50 | 20.2 | 1233 | 32 |
| 6381Y150 | 150 | 1 | 756/0.50 | 22.5 | 1528 | 32 |
| 6381Y185 | 185 | 1 | 925/0.50 | 25.1 | 1857 | 32 |
| 6381Y240 | 240 | 1 | 1221/0.50 | 28.3 | 2419 | 40 |
| 6381Y300 | 300 | 1 | 1525/0.50 | 31.2 | 3032 | 40 |
| 6381Y400 | 400 | 1 | 2013/0.50 | 35.4 | 3937 | 50S |



TABLE 4D1A

| Conductor cross-sectional area | CURRENT-CARRYING CAPACITY (amperes): | | | | | | Ambient temperature: 30 °C | | | | | | | | | |
|--------------------------------|---|------|--|------|---|------|---|------|--------------------------------------|------|-------------------------------|--|----------------------------------|------------|---|--|
| | | | | | | | Conductor operating temperature: 70 °C | | | | | | | | | |
| | Reference Method A (enclosed in conduit in thermally insulating wall etc) | | Reference Method B (enclosed in conduit on a wall or in trunking etc.) | | Reference Method C (clipped direct) | | Reference Method F (in free air or on a perforated cable tray horizontal or vertical) | | | | | | | | | |
| | 2 cables, single-phase AC or DC | | 3 or 4 cables, three-phase AC | | 2 cables, single-phase AC or DC flat and touching | | 3 or 4 cables, three-phase AC flat and touching or trefoil | | 2 cables, single-phase AC or DC flat | | 3 cables, three-phase AC flat | | 3 cables, three-phase AC trefoil | | 2 cables, single-phase AC or DC or 3 cables three-phase AC flat | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | Horizontal | Vertical | |
| (mm ²) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | (A) | | | (A) | (A) | |
| 1 | 11 | 10.5 | 13.5 | 12 | 15.5 | 14 | - | - | - | - | - | | | | | |
| 1.5 | 14.5 | 13.5 | 17.5 | 15.5 | 20 | 18 | - | - | - | - | - | | | | | |
| 2.5 | 20 | 18 | 24 | 21 | 27 | 25 | | | | | | | | | | |
| 4 | 26 | 24 | 32 | 28 | 37 | 33 | | | | | | | | | | |
| 6 | 34 | 31 | 41 | 36 | 47 | 43 | | | | | | | | | | |
| 10 | 46 | 42 | 57 | 50 | 65 | 59 | | | | | | | | | | |
| 16 | 61 | 56 | 76 | 68 | 87 | 79 | | | | | | | | | | |
| 25 | 80 | 73 | 101 | 89 | 114 | 104 | 131 | 114 | 110 | 146 | 130 | | | | | |
| 35 | 99 | 89 | 125 | 110 | 141 | 129 | 162 | 143 | 137 | 181 | 162 | | | | | |
| 50 | 119 | 108 | 151 | 134 | 182 | 167 | 196 | 174 | 167 | 219 | 197 | | | | | |
| 70 | 151 | 136 | 192 | 171 | 234 | 214 | 251 | 225 | 216 | 281 | 254 | | | | | |
| 95 | 182 | 164 | 232 | 207 | 284 | 261 | 304 | 275 | 264 | 341 | 311 | | | | | |
| 120 | 210 | 188 | 269 | 239 | 330 | 303 | 352 | 321 | 308 | 396 | 362 | | | | | |
| 150 | 240 | 216 | 300 | 262 | 381 | 349 | 406 | 372 | 356 | 456 | 419 | | | | | |
| 185 | 273 | 245 | 341 | 296 | 436 | 400 | 463 | 427 | 409 | 521 | 480 | | | | | |
| 240 | 321 | 286 | 400 | 346 | 515 | 472 | 546 | 507 | 485 | 615 | 569 | | | | | |
| 300 | 367 | 328 | 458 | 394 | 594 | 545 | 629 | 587 | 561 | 709 | 659 | | | | | |
| 400 | - | - | 546 | 467 | 694 | 634 | 754 | 689 | 656 | 852 | 795 | | | | | |
| 500 | - | - | 626 | 533 | 792 | 723 | 868 | 789 | 749 | 982 | 920 | | | | | |
| 630 | - | - | 720 | 611 | 904 | 826 | 1005 | 905 | 855 | 1138 | 1070 | | | | | |
| 800 | - | - | - | - | 1030 | 943 | 1086 | 1020 | 971 | 1265 | 1188 | | | | | |
| 1000 | - | - | - | - | 1154 | 1058 | 1216 | 1149 | 1079 | 1420 | 1337 | | | | | |



TABLE 4D1B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 70 °C

| Conductor cross-sectional area | 2 cables DC | 2 cables, single-phase AC | | | | | | 3 or 4 cables, three-phase AC | | | | | | | | | | | | | | |
|--------------------------------|-------------|---|----------|----------|--|----------|----------------|---|----------|--|----------|-----------------------|----------|----------------------|----------|----------|----------|------|------|-------|------|------|
| | | Reference Methods A & B (enclosed in conduit or trunking) | | | Reference Methods C & F (clipped direct, on tray or in free air) | | | Reference Methods A & B (enclosed in conduit or trunking) | | Reference Methods C & F (clipped direct, on tray or in free air) | | | | | | | | | | | | |
| | | | | | Cables touching | | Cables spaced* | | | Cables touching, Trefoil | | Cables touching, Flat | | Cables spaced*, Flat | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | | | | | | | | | | | |
| mm ² | (mV/Nm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | (mV/Afm) | | | | | |
| 1 | 44 | 44 | 44 | 44 | 38 | 38 | 38 | 38 | | | | | | | | | | | | | | |
| 1.5 | 29 | 29 | 29 | 29 | 25 | 25 | 25 | 25 | | | | | | | | | | | | | | |
| 2.5 | 18 | 18 | 18 | 18 | 15 | 15 | 15 | 15 | | | | | | | | | | | | | | |
| 4 | 11 | 11 | 11 | 11 | 9.5 | 9.5 | 9.5 | 9.5 | | | | | | | | | | | | | | |
| 6 | 7.3 | 7.3 | 7.3 | 7.3 | 6.4 | 6.4 | 6.4 | 6.4 | | | | | | | | | | | | | | |
| 10 | 4.4 | 4.4 | 4.4 | 4.4 | 3.8 | 3.8 | 3.8 | 3.8 | | | | | | | | | | | | | | |
| 16 | 2.8 | 2.8 | 2.8 | 2.8 | 2.4 | 2.4 | 2.4 | 2.4 | | | | | | | | | | | | | | |
| | | r | X | Z | r | X | Z | r | X | Z | r | X | Z | r | X | Z | r | X | Z | | | |
| 25 | 1.75 | 1.80 | 0.33 | 1.80 | 1.75 | 0.20 | 1.75 | 0.29 | 1.80 | 1.50 | 0.29 | 1.55 | 1.50 | 0.175 | 1.50 | 1.50 | 0.25 | 1.55 | 1.50 | 0.32 | 1.55 | |
| 35 | 1.25 | 1.30 | 0.31 | 1.30 | 1.25 | 0.195 | 1.25 | 0.28 | 1.30 | 1.10 | 0.27 | 1.10 | 1.10 | 0.170 | 1.10 | 1.10 | 0.24 | 1.10 | 1.10 | 0.32 | 1.15 | |
| 50 | 0.93 | 0.95 | 0.30 | 1.00 | 0.93 | 0.190 | 0.95 | 0.93 | 0.97 | 0.81 | 0.26 | 0.85 | 0.80 | 0.165 | 0.82 | 0.80 | 0.24 | 0.84 | 0.80 | 0.32 | 0.86 | |
| 70 | 0.63 | 0.65 | 0.29 | 0.72 | 0.63 | 0.185 | 0.66 | 0.63 | 0.27 | 0.69 | 0.56 | 0.25 | 0.61 | 0.55 | 0.160 | 0.57 | 0.55 | 0.24 | 0.60 | 0.55 | 0.31 | 0.63 |
| 95 | 0.46 | 0.49 | 0.28 | 0.56 | 0.47 | 0.180 | 0.50 | 0.47 | 0.27 | 0.54 | 0.42 | 0.24 | 0.48 | 0.41 | 0.155 | 0.43 | 0.41 | 0.23 | 0.47 | 0.40 | 0.31 | 0.51 |
| 120 | 0.36 | 0.39 | 0.27 | 0.47 | 0.37 | 0.175 | 0.41 | 0.37 | 0.26 | 0.45 | 0.33 | 0.23 | 0.41 | 0.32 | 0.150 | 0.36 | 0.32 | 0.23 | 0.40 | 0.32 | 0.30 | 0.44 |
| 150 | 0.29 | 0.31 | 0.27 | 0.41 | 0.30 | 0.175 | 0.34 | 0.29 | 0.26 | 0.39 | 0.27 | 0.23 | 0.36 | 0.26 | 0.150 | 0.30 | 0.26 | 0.23 | 0.34 | 0.26 | 0.30 | 0.40 |
| 185 | 0.23 | 0.25 | 0.27 | 0.37 | 0.24 | 0.170 | 0.29 | 0.24 | 0.26 | 0.35 | 0.22 | 0.23 | 0.32 | 0.21 | 0.145 | 0.26 | 0.21 | 0.22 | 0.31 | 0.21 | 0.30 | 0.36 |
| 240 | 0.180 | 0.195 | 0.26 | 0.33 | 0.185 | 0.165 | 0.25 | 0.185 | 0.25 | 0.31 | 0.17 | 0.23 | 0.29 | 0.160 | 0.145 | 0.22 | 0.160 | 0.22 | 0.27 | 0.160 | 0.29 | 0.34 |
| 300 | 0.145 | 0.160 | 0.26 | 0.31 | 0.150 | 0.165 | 0.22 | 0.150 | 0.25 | 0.29 | 0.14 | 0.23 | 0.27 | 0.130 | 0.140 | 0.190 | 0.130 | 0.22 | 0.25 | 0.130 | 0.29 | 0.32 |
| 400 | 0.105 | 0.130 | 0.26 | 0.29 | 0.120 | 0.160 | 0.20 | 0.115 | 0.25 | 0.27 | 0.12 | 0.22 | 0.25 | 0.105 | 0.140 | 0.175 | 0.105 | 0.21 | 0.24 | 0.100 | 0.29 | 0.31 |
| 500 | 0.086 | 0.110 | 0.26 | 0.28 | 0.098 | 0.155 | 0.185 | 0.093 | 0.24 | 0.26 | 0.10 | 0.22 | 0.25 | 0.086 | 0.135 | 0.160 | 0.086 | 0.21 | 0.23 | 0.081 | 0.29 | 0.30 |
| 630 | 0.068 | 0.094 | 0.25 | 0.27 | 0.081 | 0.155 | 0.175 | 0.076 | 0.24 | 0.25 | 0.08 | 0.22 | 0.24 | 0.072 | 0.135 | 0.150 | 0.072 | 0.21 | 0.22 | 0.066 | 0.28 | 0.29 |
| 800 | 0.053 | - | - | - | 0.068 | 0.150 | 0.165 | 0.061 | 0.24 | 0.25 | - | - | - | 0.060 | 0.130 | 0.145 | 0.060 | 0.21 | 0.22 | 0.053 | 0.28 | 0.29 |
| 1000 | -0.042 | - | - | - | 0.059 | 0.150 | 0.160 | 0.050 | 0.24 | 0.24 | - | - | - | 0.052 | 0.130 | 0.140 | 0.052 | 0.20 | 0.21 | 0.044 | 0.28 | 0.28 |

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