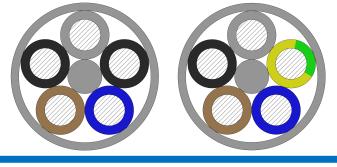




MachFlex 375 YY

Flexible Colour Coded PVC Control Cables

Applications



Designed for applications which are installed in occasional flexing and fixed locations. Cable applications include precision control sensors, multi axis control machines, temperature controllers, control panels, machine cutting tools, auxiliary equipment, motor speed control, production machinery and many more.

General Reference Standards

- DIN VDE 0295, IEC 60228, BS 6360
- DIN EN 50290-2-22, DIN VDE 0207-363-4-1
- IEC 60227-5, EN 50525-2-51, VDE 0281-13
- DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2
- RoHS, REACH & CE Directives

Construction & Performance

| 1. | Conductor Material | Stranded bare copper (DIN VDE 0295 Class 5 / IEC 60228 class 5) | | |
|----|------------------------------|---|--|--|
| | | | | |
| 2. | Insulation Material & Colour | | | |
| | | A) G = with GN-YE protective conductor OR B) X = without protective earth conductor | | |
| | | N − Without protective earth conductor | | |
| 3. | Jacket / Sheath Material | PVC (polyvinyl chloride) | | |
| 4. | Flame Retardancy | VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2 | | |
| | | | | |
| 5. | Voltage Rating (Uo/U) | Up to 1.5 mm ² : 300 / 500 V | | |
| | | From 2.5 mm ² : 450 / 750 V | | |
| 6. | Oil Resistant | DIN EN 50290-2-22 (TM54) | | |
| 7. | Temperature Range | -5°C TO +70°C (Occasional movement) | | |
| | | -40°C TO +80°C (Fixed installation) | | |
| 8. | Bending Radius | 15 x OD (Occasional movement) | | |
| | | 4 x OD (Fixed installation) | | |
| 9 | Other Properties | Good LIV resistance, chemical resistance & flexibility | | |
| 9. | Other Properties | 4 x OD (Fixed installation) Good UV resistance, chemical resistance & flexibility | | |





TABLE A

| TABLE A | | | | | |
|-----------|-------------|--------|----------------|---------------|-------------------|
| Doub Code | Cable | No. Of | Nom. Conductor | Nom. Cable | Nom. Cable Weight |
| Part Code | Description | Cores | Size (mm²) | Diameter (mm) | (kg/km) |
| C2X0.5 | 2 X0.5 | 2 | 0.5 | 4.8 | 30 |
| C3X0.5 | 3 X0.5 | 3 | 0.5 | 5.1 | 38 |
| C3G0.5 | 3 G0.5 | 3 | 0.5 | 5.1 | 38 |
| C4X0.5 | 4 X0.5 | 4 | 0.5 | 5.6 | 48 |
| C4G0.5 | 4 G0.5 | 4 | 0.5 | 5.6 | 48 |
| C5X0.5 | 5 X0.5 | 5 | 0.5 | 6.2 | 59 |
| C5G0.5 | 5 G0.5 | 5 | 0.5 | 6.2 | 59 |
| C7X0.5 | 7 X0.5 | 7 | 0.5 | 6.8 | 74 |
| C7G0.5 | 7 G0.5 | 7 | 0.5 | 6.8 | 74 |
| C9X0.5 | 9 X0.5 | 9 | 0.5 | 8.4 | 99 |
| C9G0.5 | 9 G0.5 | 9 | 0.5 | 8.4 | 99 |
| C10X0.5 | 10 X0.5 | 10 | 0.5 | 8.8 | 109 |
| C10G0.5 | 10 G0.5 | 10 | 0.5 | 8.8 | 109 |
| C12X0.5 | 12 X0.5 | 12 | 0.5 | 9.1 | 125 |
| C12G0.5 | 12 G0.5 | 12 | 0.5 | 9.1 | 125 |
| C14X0.5 | 14 X0.5 | 14 | 0.5 | 9.6 | 143 |
| C14G0.5 | 14 G0.5 | 14 | 0.5 | 9.6 | 143 |
| C16X0.5 | 16 X0.5 | 16 | 0.5 | 10.2 | 162 |
| C16G0.5 | 16 G0.5 | 16 | 0.5 | 10.2 | 162 |
| C18X0.5 | 18 X0.5 | 18 | 0.5 | 10.8 | 183 |
| C18G0.5 | 18 G0.5 | 18 | 0.5 | 10.8 | 183 |
| C20X0.5 | 20 X0.5 | 20 | 0.5 | 11.4 | 203 |
| C20G0.5 | 20 G0.5 | 20 | 0.5 | 11.4 | 203 |
| C2X0.75 | 2 X0.75 | 2 | 0.75 | 5.3 | 39 |
| C3X0.75 | 3 X0.75 | 3 | 0.75 | 5.6 | 49 |
| C3G0.75 | 3 G0.75 | 3 | 0.75 | 5.6 | 49 |
| C4X0.75 | 4 X0.75 | 4 | 0.75 | 6.2 | 62 |
| C4G0.75 | 4 G0.75 | 4 | 0.75 | 6.2 | 62 |
| C5X0.75 | 5 X0.75 | 5 | 0.75 | 6.8 | 77 |
| C5G0.75 | 5 G0.75 | 5 | 0.75 | 6.8 | 77 |
| C7X0.75 | 7 X0.75 | 7 | 0.75 | 7.5 | 98 |
| C7G0.75 | 7 G0.75 | 7 | 0.75 | 7.5 | 98 |
| C9X0.75 | 9 X0.75 | 9 | 0.75 | 9.3 | 131 |
| C9G0.75 | 9 G0.75 | 9 | 0.75 | 9.3 | 131 |
| C10X0.75 | 10 X0.75 | 10 | 0.75 | 9.8 | 144 |
| C10G0.75 | 10 G0.75 | 10 | 0.75 | 9.8 | 144 |
| C12X0.75 | 12 X0.75 | 12 | 0.75 | 10.1 | 165 |
| C12G0.75 | 12 G0.75 | 12 | 0.75 | 10.1 | 165 |
| C14X0.75 | 14 X0.75 | 14 | 0.75 | 10.7 | 190 |
| C14G0.75 | 14 G0.75 | 14 | 0.75 | 10.7 | 190 |
| C16X0.75 | 16 X0.75 | 16 | 0.75 | 11.3 | 216 |
| C16G0.75 | 16 G0.75 | 16 | 0.75 | 11.3 | 216 |
| C18X0.75 | 18 X0.75 | 18 | 0.75 | 12.0 | 243 |
| C18G0.75 | 18 G0.75 | 18 | 0.75 | 12.0 | 243 |
| C20X0.75 | 20 X0.75 | 20 | 0.75 | 12.7 | 270 |
| C20G0.75 | 20 G0.75 | 20 | 0.75 | 12.7 | 270 |



Technical Data Sheet – Unshielded (YY) PVC Control Cable

| | Cable | No. Of | Nom. Conductor | Nom. Cable | Nom. Cable Weight |
|-----------|-------------|--------|----------------|---------------|-------------------|
| Part Code | Description | Cores | Size (mm²) | Diameter (mm) | (kg/km) |
| C2X1.0 | 2 X1.0 | 2 | 1.0 | 5.7 | 47 |
| C3X1.0 | 3 X1.0 | 3 | 1.0 | 6.1 | 60 |
| C3G1.0 | 3 G1.0 | 3 | 1.0 | 6.1 | 60 |
| C4X1.0 | 4 X1.0 | 4 | 1.0 | 6.7 | 77 |
| C4G1.0 | 4 G1.0 | 4 | 1.0 | 6.7 | 77 |
| C5X1.0 | 5 X1.0 | 5 | 1.0 | 7.4 | 95 |
| C5G1.0 | 5 G1.0 | 5 | 1.0 | 7.4 | 95 |
| C7X1.0 | 7 X1.0 | 7 | 1.0 | 8.1 | 122 |
| C7G1.0 | 7 G1.0 | 7 | 1.0 | 8.1 | 122 |
| C9X1.0 | 9 X1.0 | 9 | 1.0 | 10.1 | 163 |
| C9G1.0 | 9 G1.0 | 9 | 1.0 | 10.1 | 163 |
| C10X1.0 | 10 X1.0 | 10 | 1.0 | 10.5 | 180 |
| C10G1.0 | 10 G1.0 | 10 | 1.0 | 10.5 | 180 |
| C12X1.0 | 12 X1.0 | 12 | 1.0 | 10.9 | 208 |
| C12G1.0 | 12 G1.0 | 12 | 1.0 | 10.9 | 208 |
| C14X1.0 | 14 X1.0 | 14 | 1.0 | 11.5 | 239 |
| C14G1.0 | 14 G1.0 | 14 | 1.0 | 11.5 | 239 |
| C16X1.0 | 16 X1.0 | 16 | 1.0 | 12.3 | 271 |
| C16G1.0 | 16 G1.0 | 16 | 1.0 | 12.3 | 271 |
| C18X1.0 | 18 X1.0 | 18 | 1.0 | 13.0 | 306 |
| C18G1.0 | 18 G1.0 | 18 | 1.0 | 13.0 | 306 |
| C20X1.0 | 20 X1.0 | 20 | 1.0 | 13.8 | 340 |
| C20G1.0 | 20 G1.0 | 20 | 1.0 | 13.8 | 340 |
| C2X1.5 | 2 X1.5 | 2 | 1.5 | 6.2 | 58 |
| C3X1.5 | 3 X1.5 | 3 | 1.5 | 6.6 | 75 |
| C3G1.5 | 3 G1.5 | 3 | 1.5 | 6.6 | 75 |
| C4X1.5 | 4 X1.5 | 4 | 1.5 | 7.3 | 96 |
| C4G1.5 | 4 G1.5 | 4 | 1.5 | 7.3 | 96 |
| C5X1.5 | 5 X1.5 | 5 | 1.5 | 8.1 | 119 |
| C5G1.5 | 5 G1.5 | 5 | 1.5 | 8.1 | 119 |
| C7X1.5 | 7 X1.5 | 7 | 1.5 | 8.9 | 154 |
| C7G1.5 | 7 G1.5 | 7 | 1.5 | 8.9 | 154 |
| C9X1.5 | 9 X1.5 | 9 | 1.5 | 11.0 | 204 |
| C9G1.5 | 9 G1.5 | 9 | 1.5 | 11.0 | 204 |
| C10X1.5 | 10 X1.5 | 10 | 1.5 | 11.6 | 226 |
| C10G1.5 | 10 G1.5 | 10 | 1.5 | 11.6 | 226 |
| C12X1.5 | 12 X1.5 | 12 | 1.5 | 12.0 | 261 |
| C12G1.5 | 12 G1.5 | 12 | 1.5 | 12.0 | 261 |
| C14X1.5 | 14 X1.5 | 14 | 1.5 | 12.7 | 300 |
| C14G1.5 | 14 G1.5 | 14 | 1.5 | 12.7 | 300 |
| C16X1.5 | 16 X1.5 | 16 | 1.5 | 13.4 | 342 |
| C16G1.5 | 16 G1.5 | 16 | 1.5 | 13.4 | 342 |
| C18X1.5 | 18 X1.5 | 18 | 1.5 | 14.3 | 385 |
| C18G1.5 | 18 G1.5 | 18 | 1.5 | 14.3 | 385 |
| C20X1.5 | 20 X1.5 | 20 | 1.5 | 15.1 | 429 |
| C20G1.5 | 20 G1.5 | 20 | 1.5 | 15.1 | 429 |
| C2X2.5 | 2 X2.5 | 2 | 2.5 | 9.1 | 114 |



Technical Data Sheet – Unshielded (YY) PVC Control Cable

| | Cable | No. Of | Nom. Conductor | Nom. Cable | Nom. Cable Weight |
|-----------|-------------|--------|----------------|---------------|-------------------|
| Part Code | Description | Cores | Size (mm²) | Diameter (mm) | (kg/km) |
| C3X2.5 | 3 X2.5 | 3 | 2.5 | 9.8 | 147 |
| C3G2.5 | 3 G2.5 | 3 | 2.5 | 9.8 | 147 |
| C4X2.5 | 4 X2.5 | 4 | 2.5 | 10.9 | 189 |
| C4G2.5 | 4 G2.5 | 4 | 2.5 | 10.9 | 189 |
| C5X2.5 | 5 X2.5 | 5 | 2.5 | 12.0 | 234 |
| C5G2.5 | 5 G2.5 | 5 | 2.5 | 12.0 | 234 |
| C7X2.5 | 7 X2.5 | 7 | 2.5 | 13.3 | 301 |
| C7G2.5 | 7 G2.5 | 7 | 2.5 | 13.3 | 301 |
| C9X2.5 | 9 X2.5 | 9 | 2.5 | 16.6 | 401 |
| C9G2.5 | 9 G2.5 | 9 | 2.5 | 16.6 | 401 |
| C10X2.5 | 10 X2.5 | 10 | 2.5 | 17.4 | 447 |
| C10G2.5 | 10 G2.5 | 10 | 2.5 | 17.4 | 447 |
| C12X2.5 | 12 X2.5 | 12 | 2.5 | 18.1 | 516 |
| C12G2.5 | 12 G2.5 | 12 | 2.5 | 18.1 | 516 |
| C14X2.5 | 14 X2.5 | 14 | 2.5 | 19.1 | 594 |
| C14G2.5 | 14 G2.5 | 14 | 2.5 | 19.1 | 594 |
| C16X2.5 | 16 X2.5 | 16 | 2.5 | 20.3 | 677 |
| C16G2.5 | 16 G2.5 | 16 | 2.5 | 20.3 | 677 |
| C18X2.5 | 18 X2.5 | 18 | 2.5 | 21.6 | 764 |
| C18G2.5 | 18 G2.5 | 18 | 2.5 | 21.6 | 764 |
| C20X2.5 | 20 X2.5 | 20 | 2.5 | 22.9 | 852 |
| C20G2.5 | 20 G2.5 | 20 | 2.5 | 22.9 | 852 |
| C2X4 | 2 X4 | 2 | 4 | 10.5 | 165 |
| C3X4 | 3 X4 | 3 | 4 | 11.3 | 216 |
| C3G4 | 3 G4 | 3 | 4 | 11.3 | 216 |
| C4X4 | 4 X4 | 4 | 4 | 12.6 | 278 |
| C4G4 | 4 G4 | 4 | 4 | 12.6 | 278 |
| C5X4 | 5 X4 | 5 | 4 | 13.9 | 346 |
| C5G4 | 5 G4 | 5 | 4 | 13.9 | 346 |
| C7X4 | 7 X4 | 7 | 4 | 15.4 | 450 |
| C7G4 | 7 G4 | 7 | 4 | 15.4 | 450 |
| C9X4 | 9 X4 | 9 | 4 | 19.3 | 597 |
| C9G4 | 9 G4 | 9 | 4 | 19.3 | 597 |
| C10X4 | 10 X4 | 10 | 4 | 20.2 | 667 |
| C10G4 | 10 G4 | 10 | 4 | 20.2 | 667 |
| C12X4 | 12 X4 | 12 | 4 | 21.0 | 772 |
| C12G4 | 12 G4 | 12 | 4 | 21.0 | 772 |
| C2X6 | 2 X6 | 2 | 6 | 11.9 | 224 |
| C3X6 | 3 X6 | 3 | 6 | 12.8 | 297 |
| C3G6 | 3 G6 | 3 | 6 | 12.8 | 297 |
| C4X6 | 4 X6 | 4 | 6 | 14.2 | 384 |
| C4G6 | 4 G6 | 4 | 6 | 14.2 | 384 |
| C5X6 | 5 X6 | 5 | 6 | 15.8 | 478 |
| C5G6 | 5 G6 | 5 | 6 | 15.8 | 478 |
| C7X6 | 7 X6 | 7 | 6 | 17.4 | 625 |
| C7G6 | 7 G6 | 7 | 6 | 17.4 | 625 |
| C9X6 | 9 X6 | 9 | 6 | 21.9 | 828 |



Technical Data Sheet – Unshielded (YY) PVC Control Cable

| Part Code | Cable | No. Of | Nom. Conductor | Nom. Cable | Nom. Cable Weight |
|-----------|-------------|--------|----------------|---------------|-------------------|
| Part Code | Description | Cores | Size (mm²) | Diameter (mm) | (kg/km) |
| C9G6 | 9 G6 | 9 | 6 | 21.9 | 828 |
| C2X10 | 2 X10 | 2 | 10 | 14.3 | 335 |
| C3X10 | 3 X10 | 3 | 10 | 15.3 | 447 |
| C3G10 | 3 G10 | 3 | 10 | 15.3 | 447 |
| C4X10 | 4 X10 | 4 | 10 | 17.1 | 580 |
| C4G10 | 4 G10 | 4 | 10 | 17.1 | 580 |
| C5X10 | 5 X10 | 5 | 10 | 19.0 | 723 |
| C5G10 | 5 G10 | 5 | 10 | 19.0 | 723 |
| C7X10 | 7 X10 | 7 | 10 | 21.0 | 950 |
| C7G10 | 7 G10 | 7 | 10 | 21.0 | 950 |
| C9X10 | 9 X10 | 9 | 10 | 26.4 | 1256 |
| C9G10 | 9 G10 | 9 | 10 | 26.4 | 1256 |
| C2X16 | 2 X16 | 2 | 16 | 18.2 | 547 |
| C3X16 | 3 X16 | 3 | 16 | 19.6 | 730 |
| C3G16 | 3 G16 | 3 | 16 | 19.6 | 730 |
| C4X16 | 4 X16 | 4 | 16 | 21.9 | 949 |
| C4G16 | 4 G16 | 4 | 16 | 21.9 | 949 |
| C5X16 | 5 X16 | 5 | 16 | 24.3 | 1186 |
| C5G16 | 5 G16 | 5 | 16 | 24.3 | 1186 |
| C7X16 | 7 X16 | 7 | 16 | 26.9 | 1559 |
| C7G16 | 7 G16 | 7 | 16 | 26.9 | 1559 |
| C2X25 | 2 X25 | 2 | 25 | 20.8 | 776 |
| C3X25 | 3 X25 | 3 | 25 | 22.3 | 1048 |
| C3G25 | 3 G25 | 3 | 25 | 22.3 | 1048 |
| C4X25 | 4 X25 | 4 | 25 | 24.9 | 1367 |
| C4G25 | 4 G25 | 4 | 25 | 24.9 | 1367 |
| C5X25 | 5 X25 | 5 | 25 | 27.7 | 1709 |
| C5G25 | 5 G25 | 5 | 25 | 27.7 | 1709 |
| C2X35 | 2 X35 | 2 | 35 | 24.0 | 1022 |
| C3X35 | 3 X35 | 3 | 35 | 25.9 | 1378 |
| C3G35 | 3 G35 | 3 | 35 | 25.9 | 1378 |

Sheath / Jacket Colour

| | Colour | Colour Code |
|----|-----------------|-------------|
| 1) | Grey (RAL 7001) | G8U |
| 2) | Black | 010 |
| 3) | Blue | 006 |
| 4) | Orange | 003 |
| 5) | Violet | 007 |

Packaging

^{*}Belden can offer these cables with various packing options like coiled, plastic or wooden reels. This will be decided at the discretion of Belden based on the cable design and structure.





Put-up Length

Putup Length

- 1) 100 Meters
- 2) 200 Meters*
- 3) 300 Meters*

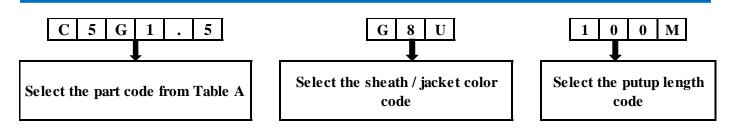
Putup Length Code

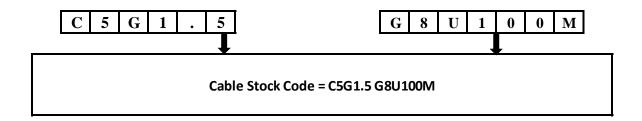
100M

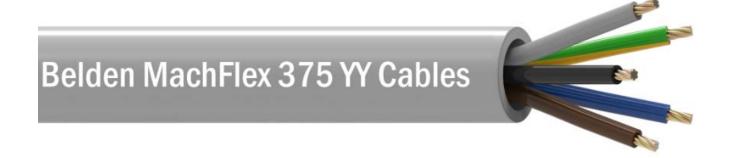
200M

300M

Stock Code Selection Procedure:







^{*}Applicable only for certain part codes, please check with Belden for more information.