

3M Science.
Applied to Life.™

3M Connectors and Cable Mating Guide **Power inside.**



3M Connectors and Cable Mating Guide



| Connectors | | | | | |
|------------------------|---|--|--|--|---|
| Connector Pitch | 2.54mm x 2.54mm (0.100" x 0.100") | 2.00mm x 2.00mm (0.079" x 0.079") | 1.27mm x 2.54mm (0.050" x 0.100") | 1.27mm x 1.27mm (0.050" x 0.050") | 1.27mm x 1.27mm (0.050" x 0.050") |
| Header Series | 3M™ Four-Wall Headers and PCB Connectors 2500, 3000, 4600, 78XX, 303XX | 3M™ Shrouded Boardmount Header 1552 | 3M™ Tripolarized Header 810 | 3M™ Shrouded Boardmount Header 452 | 3M™ Mini Delta Ribbon (MDR) Connector 101, 103 (Shell) |
| Socket Series | 3M™ Wiremount Socket 3000, 891, CHG, 7964 | 3M™ Ribbon Cable Socket 1522 | 3M™ Tripolarized Wiremount Socket 820 | 3M™ Ribbon Cable Wiremount Socket 451 | 3M™ Mini Delta Ribbon (MDR) Connector 102 |

| Cables | | | | | |
|--|---|-------------------|---|---|--|
| Cable Pitch (if flat) | 0.050" | 1mm | 0.025" | 0.025" | 0.025" |
| Basic Cable Series # | 3365 | 3625 | 3754 | 3754 | 3600 |
| 3M™ Round Conductor Flat Cable | 3365, 3667, 3539, 3319, 3801, 3355, 3770, HF365, 3601 | 3625, HF625, 3250 | 3754, 3447, 3756, 3749, 3609, 3604, HF447, 7700 | 3754, 3447, 3756, 3749, 3609, 3604, HF447, 7700 | 3754, 3447, 3756, 3749, 3609, 3604 |
| 3M™ Color Coded Flat Cable | 3302, 3811 | | | | |
| 3M™ Twisted Pair Flat Cable | 1700, HF100 | | | | |
| 3M™ Jacketed Flat Ribbon Cable | 3603, 3602, 3517, 90104, 90204, HF017 | | 90111, 90101, 90202, 90201, 90211, 93101 | 90111, 90101, 90202, 90201, 90211, 93101 | 90111, 90101, 90202, 90201, 90211, 93101 |
| 3M™ Round Jacketed Flat Cable | 3759, 3758, 3659, HF759, HF659 | | 3896 | 3896 | 3896 |
| 3M™ Twisted Pair Round Jacketed Cable | 3600B, 3644, 3647, 3750 HF644 | | | | 3600B, 3644, 3647B, 3750 HF644 |

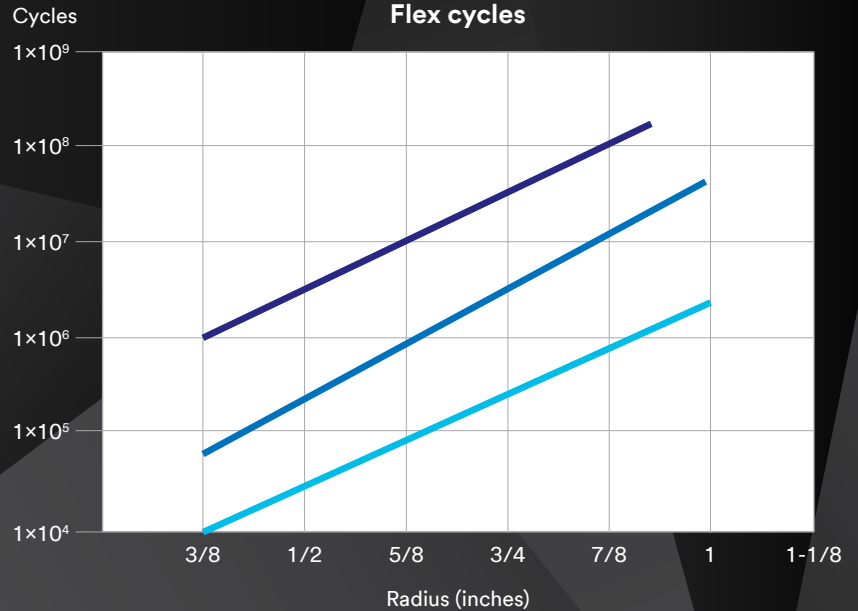
3M™ High Flex Life Cables

Each of the three cables represented in this chart consist of 28 AWG stranded conductors on 0.050" (1.27mm) wire spacing.

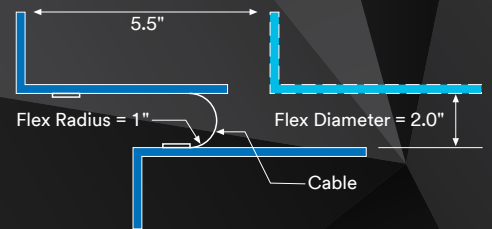
The 3M 3319/HF319/3250 cable represents conductors which consist of 19 strands, in which each of the strands are 40 AWG silver plated high-strength copper alloy (ex. at 7/8" bended radius = ~100 million flexes cycles).

The 3M 3539/HF539 cable represents conductors which consist of 19 strands, in which each of the strands are 40 AWG tinned soft copper (ex. at 7/8" bended radius = ~10 million flexes cycles).

The 3M 3365/HF365 cable represents conductors which consist of 7 strands, in which each of the strands are 36 AWG tinned soft copper (ex. at 7/8" bended radius = ~1 million flexes cycles).



The "Rolling Flex Test" flexed the cable 180° around a radius closely resembling typical usage, as represented in the illustration to the right. For more details download the tech sheet TS-0732.

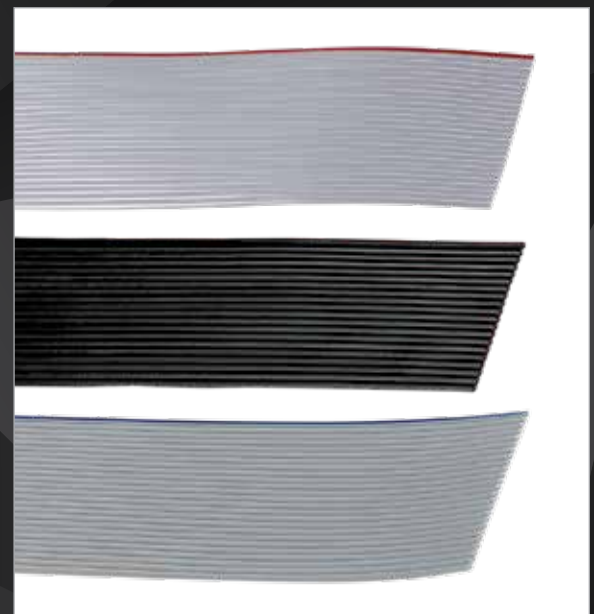


AWG conversion table

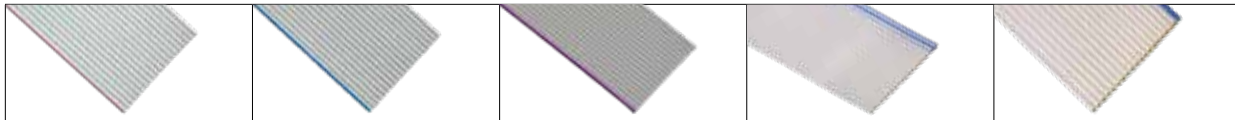
| AWG | Stranded Wires | | Conductor | |
|-----|----------------|----------------------------|----------------------------|---------------|
| | Number | Outside Diameter (mm/inch) | Outside Diameter (mm/inch) | Cross Section |
| 22 | 1 | 0.643/0.0253 | 0.64/0.0253 | 0.326/640 |
| | 7 | 0.254/0.0100 | 0.78/0.0300 | 0.355/700 |
| | 19 | 0.160/0.0063 | 0.81/0.0320 | 0.382/750 |
| 24 | 1 | 0.510/0.0201 | 0.51/0.0201 | 0.205/404 |
| | 7 | 0.203/0.0080 | 0.61/0.0240 | 0.227/448 |
| | 19 | 0.127/0.0050 | 0.64/0.0250 | 0.241/475 |
| 26 | 1 | 0.404/0.0159 | 0.40/0.0159 | 0.128/253 |
| | 7 | 0.160/0.0063 | 0.48/0.0190 | 0.141/275 |
| | 19 | 0.102/0.0040 | 0.51/0.0200 | 0.149/304 |
| 28 | 1 | 0.320/0.0126 | 0.32/0.0126 | 0.080/124 |
| | 7 | 0.127/0.0050 | 0.38/0.0150 | 0.089/175 |
| | 19 | 0.080/0.0031 | 0.40/0.0160 | 0.092/201 |
| 30 | 1 | 0.250/0.0100 | 0.25/0.0100 | 0.050/100 |
| | 7 | 0.102/0.0040 | 0.30/0.0120 | 0.057/112 |

3M™ Flat Ribbon Cable

Ask your local 3M contact.

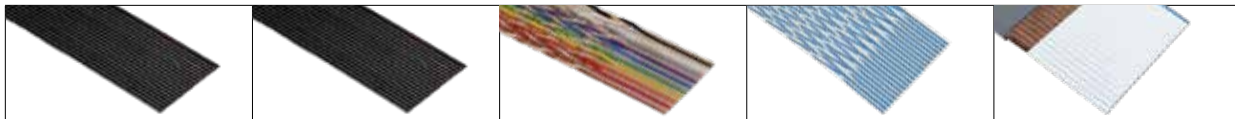


All 3M flat-and round-cables permit termination to a broad line of IDC connectors.

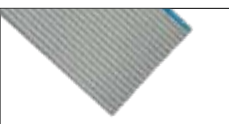

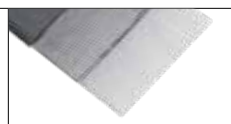
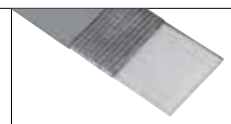
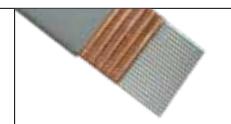
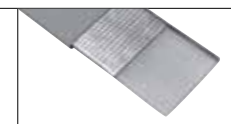



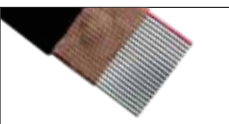





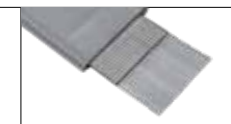
| Cable Type/Description | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable |
|---|--|---|--|---|---|
| Pitch/Centerline (mm) | 0.635 | 0.635 | 0.635 | 0.635 | 0.635 |
| 3M Cable Series | 3754 | 3749 | HF447 | 3604 | 3609 |
| Features | <ul style="list-style-type: none"> The "basic stranded cable" for 1.27mm IDC connectors | <ul style="list-style-type: none"> The "basic solid cable" for 1.27mm IDC connectors Meets SCSI-3 Fast-20 Zo requirements | <ul style="list-style-type: none"> LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) | <ul style="list-style-type: none"> Excellent abrasion and chemical resistance Excellent mechanical durability For extreme temperature requirements | <ul style="list-style-type: none"> Excellent abrasion and chemical resistance Excellent mechanical durability For extreme temperature requirements |
| Conductor Size | 30 AWG | 30 AWG | 30 AWG | 30 AWG | 30 AWG |
| Conductor Material | Tinned Copper | Tinned Copper | Tinned Copper | Silver Plated Copper | Silver Plated Copper |
| Conductor Stranding | 7 × 0.102 | Solid | Solid | Solid | 7 × 0.102 |
| Conductor Quantity | 10 to 100 | 10 to 100 | 10 to 100 | 4 to 100 | 4 to 100 |
| Primary Insulation | PVC | TPE | LSHF EVA/PO | FEP | FEP |
| Primary Color | Gray | Gray | Dark Gray | Opaque White | Opaque White |
| Jacket Insulation | | | | | |
| Jacket Color | | | | | |
| Shield | | | | | |
| Voltage Rating USA/EU (V) | 30/<50 | 150/<50 | 150/<150 | 150/<50 | 150/<50 |
| Temperature Min. (°C) | -20 | -40 | -40 | -55 | -55 |
| Temperature Max. (°C) | +105 | +105 | +90 | +150 | +150 |
| UL Recognition | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- |
| Flammability UL/CSA | VW-1 | Horizontal/FT2 | Horizontal | VW-1/- | VW-1/- |
| RoHS compliant | ✓ | ✓ | ✓ | ✓ | ✓ |
| Download by Tech Sheet Number: 3M.com (use the search window) | TS-0875 | TS-0068 | TS-2343 | TS-0653 | TS-0654 |








All 3M flat-and round-cables permit termination to a broad line of IDC connectors.

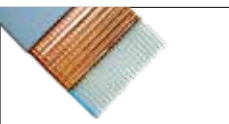



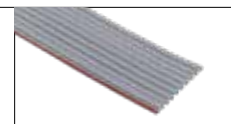
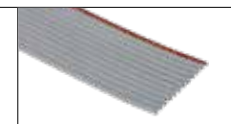





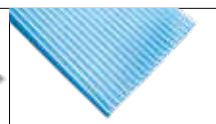
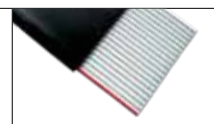
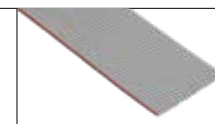
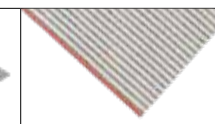
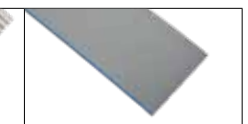
| Cable Type/Description | 3M™ Round Conductor High Flex Life Flat Cable | 3M™ High Flex Life Flat Cable | 3M™ Twisted Pair Flat Cable | 3M™ Twisted Pair Flat Cable | 3M™ Shielded Jacketed Flat Cable |
|---|--|--|---|--|---|
| Pitch/Centerline (mm) | 1.27 | 1.0 | 1.27 | 1.27 | 1.27 |
| 3M Cable Series | 3319 | 3250 | 1700 | HF100 | HF017 |
| Features | <ul style="list-style-type: none"> ~100 Million flex cycles at 7/8" bended radius | <ul style="list-style-type: none"> High flex life of 100 million cycles at 1-3/4" diameter 19 stands of high-strength copper alloy provide long flex life for dynamic applications 28 AWG wire on 1mm wire spacing permits mass termination to a broad line of IDC connectors Zippable for branching or discrete termination | <ul style="list-style-type: none"> Color coded for wire identification Reduced crosstalk Different lengths of split bonded repeat sections available | <ul style="list-style-type: none"> LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) | <ul style="list-style-type: none"> 28 AWG stranded wire on 0.05" centers permits mass termination to broad line of IDC connectors LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) 360 degree expanded copper shielding provides 20 dB average shielding effectiveness |
| Conductor Size | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG |
| Conductor Material | Silver Plated Copper Alloy | Silver Plated Copper Alloy | Tinned Copper | Tinned Copper | Tinned Stranded Copper |
| Conductor Stranding | 19 × 0.079 | 19 × 0.080 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 |
| Conductor Quantity | 6 to 64 | 6 to 50 | 10 to 64 (5 to 32 Pair) | 10 to 64 (5 to 32 Pair) | 25 |
| Primary Insulation | PVC | PVC | PVC | Halogen-Free Polyolefin | Halogen-Free Polyolefin |
| Primary Color | Black | Black | 10 Color Repeat | Blue/White | Gray |
| Jacket Insulation | | | | | PO |
| Jacket Color | | | | | Gray |
| Shield | | | | | Expanded Copper |
| Voltage Rating USA/EU (V) | 300/<50 | 300/<50 | 300/<50 | 150/<50 | <50 |
| Temperature Min. (°C) | -20 | -20 | -20 | -40 | -40 |
| Temperature Max. (°C) | +105 | +105 | +105 | +105 | +105 |
| UL Recognition | ✓/- | ✓/✓ | ✓/- | ✓/- | ✓/- |
| Flammability UL/CSA | VW-1/FT1 | VW-1/FT1 | VW-1/FT1 | Horizontal | VW-1/FT1 |
| RoHS compliant | ✓ | ✓ | ✓ | ✓ | - |
| Download by Tech Sheet Number: 3M.com (use the search window) | TS-0059 | TS-2694 | TS-0115 | TS-2344 | TS-2345 |

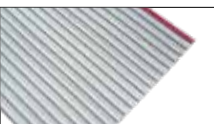





| | | | | | | |
|--|--|---|--|---|---|--|
|  |  |  |  |  |  |  |
| 3M™ Round Conductor Flat Cable | 3M™ Pleated Foil Shielded Flat Cable | 3M™ Pleated Foil Shielded Flat Cable | 3M™ Pleated Foil Shielded Flat Cable | 3M™ Pleated Foil Shielded Flat Cable | 3M™ Pleated Foil Shielded Flat Cable | 3M™ Low Skew Pleated Foil Shielded Flat Cable |
| 0.635 | 0.635 | 0.635 | 0.635 | 0.635 | 0.635 | 0.635 |
| 3756 | 90101 | 90111 | 90201 | 90202 | 90211 | 93101 |
| <ul style="list-style-type: none"> Meets SCSI-3 Zo requirements | <ul style="list-style-type: none"> Thick jacket for external applications 50 Ohm unbalanced and 100 Ohm balanced impedance applications 35 dB average shielding effectiveness Very low crosstalk CL2 Listed | <ul style="list-style-type: none"> Thick jacket for external applications 75 Ohm unbalanced impedance applications 35 dB average shielding effectiveness Very low crosstalk CL2 Listed | <ul style="list-style-type: none"> Thin cover for internal applications 50 Ohm unbalanced and 100 Ohm balanced impedance applications 35 dB average shielding effectiveness Very low crosstalk | <ul style="list-style-type: none"> Thin cover for internal applications 35 dB average shielding effectiveness Very low crosstalk | <ul style="list-style-type: none"> Thin cover for internal applications 75 Ohm unbalanced impedance applications 35 dB average shielding effectiveness Very low crosstalk | <ul style="list-style-type: none"> Thick jacket for external applications 50 Ohm unbalanced and 100 Ohm balanced impedance applications 35 dB average shielding effectiveness Very low crosstalk CL2 Listed Low Skew |
| 30 AWG | 30 AWG | 30 AWG | 30 AWG | 30 AWG | 30 AWG | 30 AWG |
| Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper |
| 7 × 0.102 | Solid | Solid | Solid | 7 × 0.102 | Solid | Solid |
| 10 to 100 | 20 to 100 | 20 to 100 | 20 to 100 | 20 to 100 | 20 to 100 | 50 to 100 |
| TPE | TPE | TPE | TPE | TPE | TPE | TPE |
| Gray | Translucent | Translucent | Translucent | Translucent | Translucent | Natural |
| | PVC | PVC | TPE | TPE | TPE | PVC |
| | Gray | Gray | Gray | Gray | Gray | Gray |
| | Pleated Copper Foil | Pleated Copper Foil | Pleated Copper Foil | Pleated Copper Foil | Pleated Copper Foil | Pleated Copper Foil |
| 150/<50 | N.E.C. 725, CL2/<50 | N.E.C. 725, CL2/<50 | 150/<50 | 150/<50 | 150/<50 | N.E.C. 725 CL2/<50 |
| -40 | - | - | -20 | -20 | -20 | - |
| +105 | +75 | +75 | +105 | +105 | +105 | +75 |
| ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- |
| Horizontal/FT2 | N.E.C. 725, CL2/FT1 | N.E.C. 725, CL2/FT1 | VW-1/FT1 | VW-1/FT1 | VW-1/FT1 | N.E.C. 725, CL2/FT1 |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TS-0508 | TS-0285 | TS-0451 | TS-0402 | TS-0730 | TS-0598 | TS-0876 |

| | | | | | | |
|--|--|--|--|--|---|--|
|  |  |  |  |  |  |  |
| 3M™ Shielded Jacketed Flat Cable | 3M™ Shielded Jacketed Twisted Pair Flat Cable | 3M™ Round Jacketed Flat Cable | 3M™ Round Shielded Jacketed Flat Cable | 3M™ Round, Jacketed Flat Cable | 3M™ Round, Shielded/Jacketed Flat Cable | 3M™ Pleated Foil Shielded Flat Cable |
| 1.27 | 1.27 | 1.27 | 1.27 | 1.27 | 1.27 | 1.27 |
| 3517 | 1785 | 3759 | 3659 | HF759 | HF659 | 90104 |
| <ul style="list-style-type: none"> For external applications 20 dB average shielding effectiveness CL2 Listed | <ul style="list-style-type: none"> Reduced crosstalk Different lengths of split bonded repeat sections available For external applications 20 dB average shielding effectiveness CL2 Listed | <ul style="list-style-type: none"> For external applications Flat sections permit mass termination on 2.4" centers Construction allows easy routing CL2 Listed | <ul style="list-style-type: none"> For external applications Flat sections permit mass termination on 2.4" centers Construction allows easy routing CL2 Listed | <ul style="list-style-type: none"> LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) | <ul style="list-style-type: none"> LSZH – Low Smoke (IEC 61034-2:2005) to broad line of IDC connectors Low toxicity of combustion gases (NF X 70-100-2:2006) Dual shielding provides 35 dB average shielding | <ul style="list-style-type: none"> Thick jacket for external applications 50 Ohm unbalanced and 100 Ohm balanced impedance applications 35 dB average shielding effectiveness Very low crosstalk CL2 Listed |
| 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG |
| Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper |
| 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 |
| 9 to 64 | 10 to 64 (5 to 32 pair) | 9 to 64 | 9 to 64 | 9 to 64 | 9 to 64 | 15 to 64 |
| PVC | PVC | PVC | PVC | Halogen-Free Polyolefin | Halogen-Free Polyolefin | TPE |
| Gray | 10 Color Repeat/White | Gray | Gray | Dark Gray | Dark Gray | Natural |
| PVC | PVC | PVC | PVC | Halogen-Free Polyolefin | Halogen-Free Polyolefin | PVC |
| Black | Black | Black | Black | Dark Gray | Dark Gray | Gray |
| Expanded Copper | Expanded Copper | | Copper Braid | | Aluminum Foil/Copper Braid | Pleated Copper Foil |
| 300/<50 | 150/<50 | 300/<50 | 300/<50 | 150/<50 | 150/<50 | Article 725 CL2/<50 |
| -20 | -20 | -20 | -20 | -40 | -40 | - |
| +80 | +80 | +80 | +80 | +105 | +105 | +75 |
| ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- |
| N.E.C. 725, CL2/FT1 | N.E.C. 725, CL2/FT1 | N.E.C. 725, CL2/FT1 | N.E.C. 725, CL2/FT1 | VW-1 -/- | VW-1 -/- | N.E.C. 725, CL2/FT1 |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TS-0069 | TS-0308 | TS-0070 | TS-0083 | TS-2336 | TS-2335 | TS-0288 |

| | | | | | | |
|---|--|--|--|---|--|---|
|  |  |  |  |  |  |  |
| 3M™ Round Conductor Flat Controlled Impedance Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable |
| 0.635 | 0.85 | 1.0 | 1.0 | 1.27 | 1.27 | 1.27 |
| 7700 | 3849 | HF625 | 3625 | HF365 | 3365 | 3302 |
| <ul style="list-style-type: none"> Controlled Impedance Fast, flat, foldable ribbon cable construction fit for IDC Terminate it to IDC connector, or solder it directly to a PCB 95 Ohm impedance cable delivers up to 5 Gbps over 1 meter using the 3M™ Wire-to-Board System, 1.27 mm, 450 Series connectors | <ul style="list-style-type: none"> 3 row DIN connector compatible | <ul style="list-style-type: none"> LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) | <ul style="list-style-type: none"> 2mm IDC connectors | <ul style="list-style-type: none"> LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) ~ 1 Million flex cycles at 7/8" bended radius | <ul style="list-style-type: none"> The "basic stranded cable" for 2.54mm IDC connectors ~1 Million flex cycles at 7/8" bended radius | <ul style="list-style-type: none"> Color coded for wire identification |
| 30 AWG | 30 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG |
| Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper |
| Solid | 7 × 0.102 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 |
| 10 to 50 | 96 | 6 to 50 | 6 to 50 | 4 to 64 | 6 to 64 | 9 to 64 |
| Polyolefin | PVC | Halogen-Free Polyolefin | PVC | Halogen-Free Polyolefin | PVC | PVC |
| Silver | Gray | Dark Gray | Gray | Dark Gray | Gray | 10 Color Repeat |
| Polyolefin | | | | | | |
| Aluminum Foil, Polyester | | | | | | |
| 30/- | 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 |
| - | -20 | -40 | -20 | -40 | -20 | -20 |
| +80 | +105 | +105 | +105 | +105 | +105 | +105 |
| ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- |
| Horizontal/- | VW-1/FT1 | Horizontal | VW-1/FT1 | Horizontal | VW-1/FT1 | VW-1/FT1 |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TS-2667 | TS-0573 | TS-2338 | TS-0452 | TS-2334 | TS-0080 | TS-0123 |

| | | | | | | |
|--|---|---|--|--|---|--|
|  |  |  |  |  |  |  |
| 3M™ Pleated Foil Shielded Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable |
| 1.27 | 1.27 | 1.27 | 1.27 | 2.54 | 2.54 | 3.96 |
| 90204 | 3801 | 3770 | 3811 | 8124 | 8125 | 3391 |
| <ul style="list-style-type: none"> Thin cover for internal applications 50 Ohm unbalanced and 100 Ohm balanced impedance applications 35 dB average shielding effectiveness Very low crosstalk CL2 Listed | <ul style="list-style-type: none"> For higher current applications | <ul style="list-style-type: none"> For higher current applications Extended temperature range | <ul style="list-style-type: none"> For higher current applications Color coded for wire identification | <ul style="list-style-type: none"> For higher current applications | <ul style="list-style-type: none"> For higher current applications | <ul style="list-style-type: none"> For higher current applications Color coded for wire identification |
| 28 AWG | 26 AWG | 26 AWG | 26 AWG | 22 AWG | 24 AWG | 22 AWG |
| Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper |
| 7 × 0.127 | 7 × 0.160 | 7 × 0.160 | 7 × 0.160 | 7 × 0.254 | 7 × 0.203 | 7 × 0.254 |
| 15 to 64 | 4 to 64 | 9 to 64 | 9 to 64 | 5 to 40 | 4 to 20 | 4 to 22 |
| TPE | PVC | TPE | PVC | PVC | PVC | PVC |
| Natural | Gray (Optional Black) | Gray | 10 Color Repeat | Dark Gray | Dark Gray | 10 Color Repeat |
| TPE | | | | | | |
| Gray | | | | | | |
| Pleated Copper Foil | | | | | | |
| 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 | 600/<50 |
| -20 | -20 | -40 | -20 | -20 | -20 | -20 |
| +105 | +105 | +105 | +105 | +105 | +105 | +80 |
| ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- | ✓/- |
| VW-1/FT1 | VW-1/FT1 | Horizontal | VW-1/FT1 | VW-1/FT1 | VW-1/- | VW-1/- |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TS-0403 | TS-0063 | TS-0342 | TS-0122 | TS-0084 | TS-0259 | TS-0079 |

| | | | | | | |
|---|--|---|---|---|---|--|
|  |  |  |  |  |  |  |
| 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Round Conductor Flat Cable | 3M™ Jacketed Flat Cable | 3M™ Round Conductor Medium Flex Life Flat Cable | 3M™ Round Conductor Medium Flex Life Flat Cable | 3M™ High Flex Life Cable |
| 1.27 | 1.27 | 1.27 | 1.27 | 1.27 | 1.27 | 1.27 |
| 3667 | 3355 | 3601 | 3603 | HF539 | 3539 | HF319 |
| <ul style="list-style-type: none"> Split conductor sections allow for easier routing | <ul style="list-style-type: none"> Extended temperature range | <ul style="list-style-type: none"> Excellent abrasion and chemical resistance Excellent mechanical durability For extreme temperature requirements | <ul style="list-style-type: none"> For external applications CL2 Listed | <ul style="list-style-type: none"> ~10 Million flex cycles at 7/8" bended radius LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) | <ul style="list-style-type: none"> ~10 Million flex cycles at 7/8" bended radius | <ul style="list-style-type: none"> ~100 Million flex cycles at 7/8" bended radius LSZH – Low Smoke (IEC 61034-2:2005) Low toxicity of combustion gases (NF X 70-100-2:2006) |
| 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG |
| Tinned Copper | Tinned Copper | Silver Plated Copper | Tinned Copper | Tinned Copper | Tinned Copper | Silver Plated Copper Alloy |
| 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 19 × 0.079 | 19 × 0.079 | 19 × 0.079 |
| 10 to 64 | 9 to 64 | 4 to 64 | 10 to 64 | 6 to 64 | 9 to 64 | 6 to 64 |
| PVC | TPE | FEP | PVC | Halogen-Free Polyolefin | PVC | Halogen-Free Polyolefin |
| Gray | Gray | Opaque White | Gray | Dark Gray | Gray | Dark Gray |
| | | | PVC | | | |
| | | | Black | | | |
| | | | | | | |
| 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 | 300/<50 |
| -20 | -40 | -55 | -20 | -40 | -20 | -40 |
| +105 | +105 | +200 | +80 | +105 | +105 | +105 |
| ✓/- | ✓/- | ✓/- | ✓/✓ | ✓/✓ | ✓/- | ✓ |
| VW-1/FT1 | Horizontal/- | VW-1/- | N.E.C. 725, CL2/FT1 | Horizontal | VW-1/FT1 | Horizontal |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TS-0247 | TS-0317 | TS-0553 | TS-0060 | TS-2565 | TS-0058 | TS-2342 |

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| 3M™ Round Conductor Flat Cable | 3M™ Round Shielded Jacketed Discrete Wire Cable | 3M™ Round Shielded Jacketed Discrete Wire Cable | 3M™ Round Shielded Jacketed Discrete Wire Cable | 3M™ Round Shielded Jacketed Discrete Wire Cable | 3M™ Round Shielded Jacketed Discrete Wire Cable |
| 3.96 | | | | | |
| 8132 | 3600X | 3644X | HF644 | 3647B | 3750 |
| <ul style="list-style-type: none"> For higher current applications | <ul style="list-style-type: none"> Twisted Pairs Dual shielding 35 dB average shielding effectiveness Reduced crosstalk CL2 Listed | <ul style="list-style-type: none"> 1.1426" | <ul style="list-style-type: none"> Twisted Pairs Dual shielding 35 dB average shielding effectiveness Reduced crosstalk CL2 Listed | <ul style="list-style-type: none"> Twisted Pairs Dual shielding 35 dB average shielding effectiveness Reduced crosstalk 100 Ohm balanced impedance applications IEEE 1284 compliant CL2 Listed | <ul style="list-style-type: none"> Twisted Pairs Dual shielding 35 dB average shielding effectiveness Reduced crosstalk For higher current applications 50 Ohm balanced and 100 Ohm balanced impedance applications CL2 Listed |
| 18 AWG | 28 AWG | 28 AWG | 28 AWG | 28 AWG | 26 AWG |
| | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper | Tinned Copper |
| 19 × 0.254 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.127 | 7 × 0.160 |
| 4 to 24 | 14 to 100 (7 to 50 Pair) | 14 to 100 (7 to 50 Pair) | 14 to 100 (7 to 50 Pair) | 36 (18 Pair) | 10 to 60 (5 to 30 Pair) |
| PVC | PVC | PO | Halogen-Free Polyolefin | PO | PVC |
| Dark Gray | Color Coded | Color Coded | Color Coded | Color Coded | Color Coded |
| | PVC | PVC | Halogen-Free Polyolefin | PVC | PVC |
| | Beige (Black Optional) | Beige (Black Optional) | Gray | Beige | Gray |
| | Aluminum/Foil/Copper Braid | Aluminum/Foil/Copper Braid | Aluminum/Foil/Copper Braid | Aluminum/Foil/Copper Braid | Aluminum/Foil/Copper Braid |
| 300/<50 | N.E.C. 725, CL2/<50 | N.E.C. 725, CL2/<50 | 300/<50 | N.E.C. 725, CL2/<50 | 300/<50 |
| -20 | -20 | - | -40 | - | - |
| +80 | +75 | +75 | 105 | +75 | +75 |
| ✓/- | ✓/- | ✓/- | -/- | ✓/- | ✓/- |
| VW-1/FT1 | N.E.C. 725, CL2/FT1 | N.E.C. 725, CL2/FT1 | VW-1/- | N.E.C. 725, CL2/FT1 | N.E.C. 725, CL2/FT1 |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TS-0057 | TS-0388 | TS-0826 | TS-2355 | TS-0582 | TS-0072 |



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