

**3M** Science.  
Applied to Life.™

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

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# 3M Connectors and Cable Mating Guide



Connectors					
<b>Connector Pitch</b>	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")
<b>Header Series</b>	3M™ Four-Wall Headers and PCB Connectors	3M™ Shrouded Boardmount Header	3M™ Tripolarized Header	3M™ Shrouded Boardmount Header	3M™ Mini Delta Ribbon (MDR) Connector
<b>Header Series</b>	2500, 3000, 4600, 78XX, 303XX	1552	810	452	101, 103 (Shell)
<b>Socket Series</b>	3M™ Wiremount Socket	3M™ Ribbon Cable Socket	3M™ Tripolarized Wiremount Socket	3M™ Ribbon Cable Wiremount Socket	3M™ Mini Delta Ribbon (MDR) Connector
<b>Socket Series</b>	3000, 891, CHG, 7964	1522	820	451	102

Cables					
<b>Cable Pitch (if flat)</b>	0.050"	1mm	0.025"	0.025"	0.025"
<b>Basic Cable Series #</b>	3365	3625	3754	3754	3600
<b>3M™ Round Conductor Flat Cable</b>	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
<b>3M™ Color Coded Flat Cable</b>	3302, 3811				
<b>3M™ Twisted Pair Flat Cable</b>	1700, HF100				
<b>3M™ Jacketed Flat Ribbon Cable</b>	3603, 3602, 3517, 90104, 90204, HF017		90111, 90101, 90202, 90201, 90211, 93101	90111, 90101, 90202, 90201, 90211, 93101	90111, 90101, 90202, 90201, 90211, 93101
<b>3M™ Round Jacketed Flat Cable</b>	3759, 3758, 3659, HF759, HF659		3896	3896	3896
<b>3M™ Twisted Pair Round Jacketed Cable</b>	3600B, 3644, 3647, 3750 HF644				3600B, 3644, 3647B, 3750 HF644

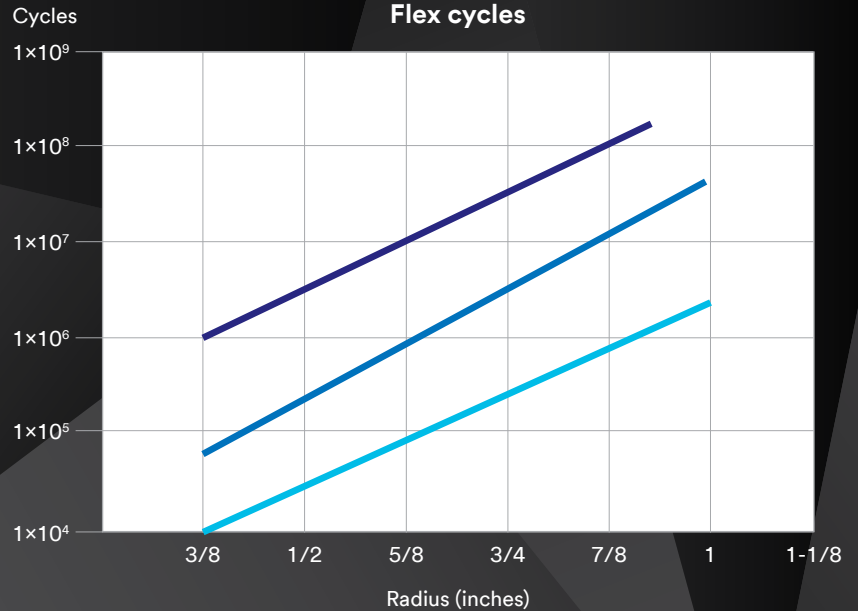
# 3M™ High Flex Life Cables

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

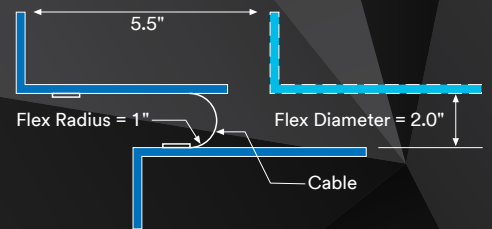
The 3M 3319/HF319/3250 cable represents conductors which consist of 19 strands, in which each of the strands are 40 AWG silver plated high-strength copper alloy (ex. at 7/8" bended radius = ~100 million flexes cycles).

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.

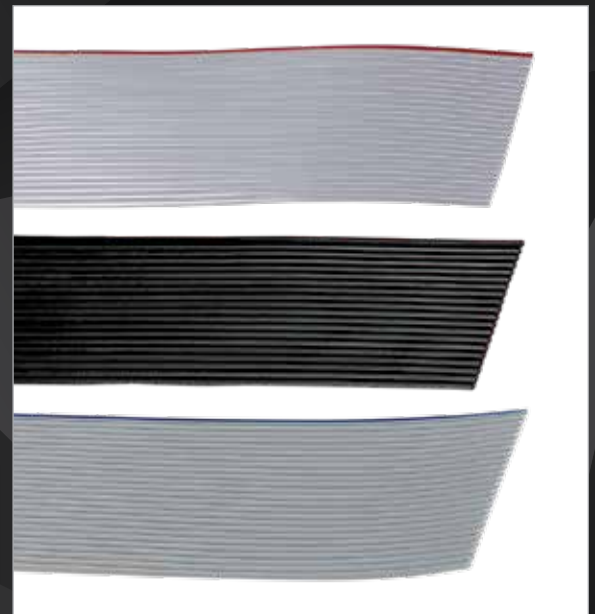


## AWG conversion table

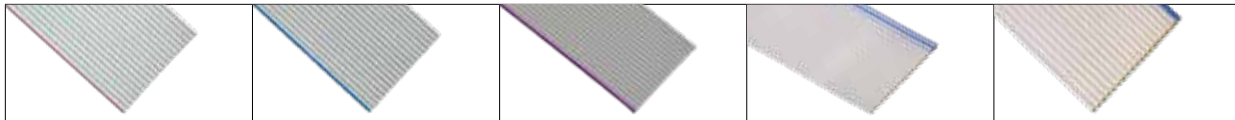
AWG	Stranded Wires		Conductor	
	Number	Outside Diameter (mm/inch)	Outside Diameter (mm/inch)	Cross Section
22	1	0.643/0.0253	0.64/0.0253	0.326/640
	7	0.254/0.0100	0.78/0.0300	0.355/700
	19	0.160/0.0063	0.81/0.0320	0.382/750
24	1	0.510/0.0201	0.51/0.0201	0.205/404
	7	0.203/0.0080	0.61/0.0240	0.227/448
	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.

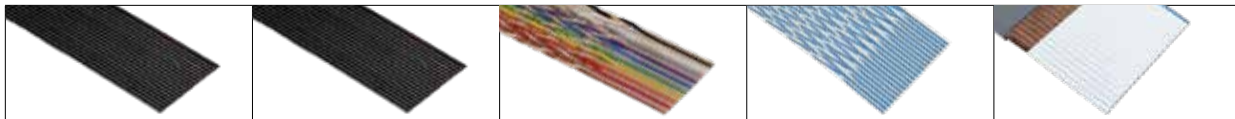


All 3M flat-and round-cables permit termination to a broad line of IDC connectors.



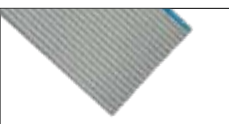

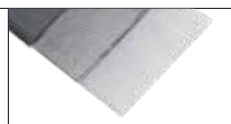
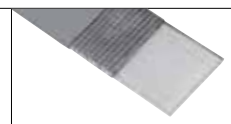
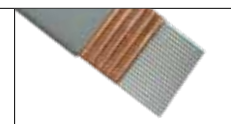
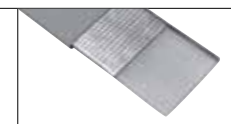

Cable Type/Description	3M™ Round Conductor Flat Cable	3M™ Round Conductor Flat Cable	3M™ Round Conductor Flat Cable	3M™ Round Conductor Flat Cable	3M™ Round Conductor Flat Cable
Pitch/Centerline (mm)	0.635	0.635	0.635	0.635	0.635
3M Cable Series	3754	3749	HF447	3604	3609
Features	<ul style="list-style-type: none"> <li>The "basic stranded cable" for 1.27mm IDC connectors</li> </ul>	<ul style="list-style-type: none"> <li>The "basic solid cable" for 1.27mm IDC connectors</li> <li>Meets SCSI-3 Fast-20 Zo requirements</li> </ul>	<ul style="list-style-type: none"> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> </ul>	<ul style="list-style-type: none"> <li>Excellent abrasion and chemical resistance</li> <li>Excellent mechanical durability</li> <li>For extreme temperature requirements</li> </ul>	<ul style="list-style-type: none"> <li>Excellent abrasion and chemical resistance</li> <li>Excellent mechanical durability</li> <li>For extreme temperature requirements</li> </ul>
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

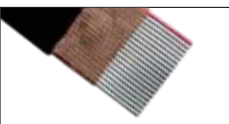





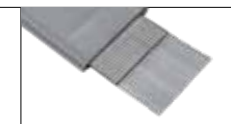
All 3M flat-and round-cables permit termination to a broad line of IDC connectors.










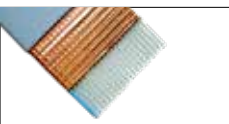



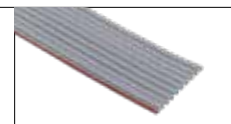
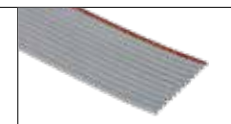

Cable Type/Description	3M™ Round Conductor High Flex Life Flat Cable	3M™ High Flex Life Flat Cable	3M™ Twisted Pair Flat Cable	3M™ Twisted Pair Flat Cable	3M™ Shielded Jacketed Flat Cable
Pitch/Centerline (mm)	1.27	1.0	1.27	1.27	1.27
3M Cable Series	3319	3250	1700	HF100	HF017
Features	<ul style="list-style-type: none"> <li>~100 Million flex cycles at 7/8" bended radius</li> </ul>	<ul style="list-style-type: none"> <li>High flex life of 100 million cycles at 1-3/4" diameter</li> <li>19 stands of high-strength copper alloy provide long flex life for dynamic applications</li> <li>28 AWG wire on 1mm wire spacing permits mass termination to a broad line of IDC connectors</li> <li>Zippable for branching or discrete termination</li> </ul>	<ul style="list-style-type: none"> <li>Color coded for wire identification</li> <li>Reduced crosstalk</li> <li>Different lengths of split bonded repeat sections available</li> </ul>	<ul style="list-style-type: none"> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> </ul>	<ul style="list-style-type: none"> <li>28 AWG stranded wire on 0.05" centers permits mass termination to broad line of IDC connectors</li> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> <li>360 degree expanded copper shielding provides 20 dB average shielding effectiveness</li> </ul>
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



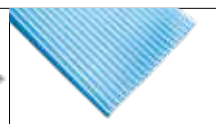
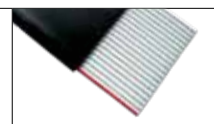
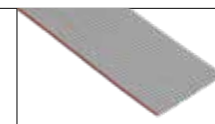
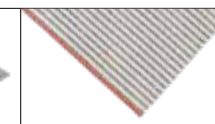
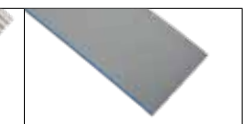


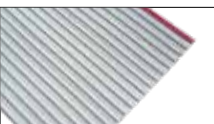





						
<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Pleated Foil Shielded Flat Cable</b>	<b>3M™ Pleated Foil Shielded Flat Cable</b>	<b>3M™ Pleated Foil Shielded Flat Cable</b>	<b>3M™ Pleated Foil Shielded Flat Cable</b>	<b>3M™ Pleated Foil Shielded Flat Cable</b>	<b>3M™ Low Skew Pleated Foil Shielded Flat Cable</b>
<b>0.635</b>	<b>0.635</b>	<b>0.635</b>	<b>0.635</b>	<b>0.635</b>	<b>0.635</b>	<b>0.635</b>
<b>3756</b>	<b>90101</b>	<b>90111</b>	<b>90201</b>	<b>90202</b>	<b>90211</b>	<b>93101</b>
<ul style="list-style-type: none"> <li>Meets SCSI-3 Zo requirements</li> </ul>	<ul style="list-style-type: none"> <li>Thick jacket for external applications</li> <li>50 Ohm unbalanced and 100 Ohm balanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>Thick jacket for external applications</li> <li>75 Ohm unbalanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>Thin cover for internal applications</li> <li>50 Ohm unbalanced and 100 Ohm balanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> </ul>	<ul style="list-style-type: none"> <li>Thin cover for internal applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> </ul>	<ul style="list-style-type: none"> <li>Thin cover for internal applications</li> <li>75 Ohm unbalanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> </ul>	<ul style="list-style-type: none"> <li>Thick jacket for external applications</li> <li>50 Ohm unbalanced and 100 Ohm balanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> <li>CL2 Listed</li> <li>Low Skew</li> </ul>
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

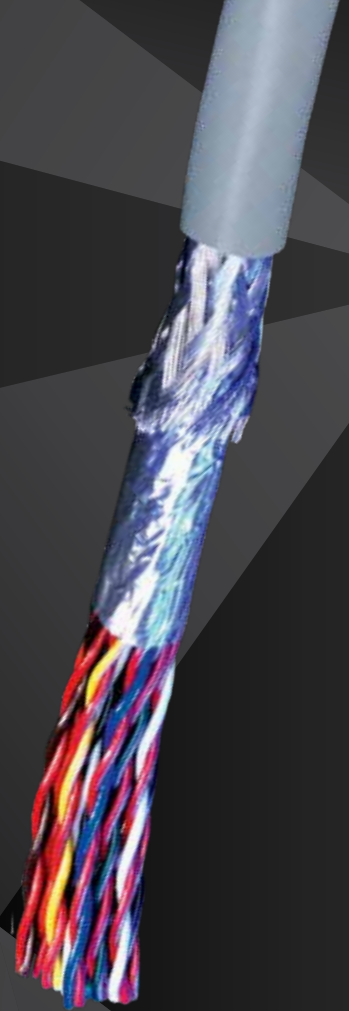
						
<b>3M™ Shielded Jacketed Flat Cable</b>	<b>3M™ Shielded Jacketed Twisted Pair Flat Cable</b>	<b>3M™ Round Jacketed Flat Cable</b>	<b>3M™ Round Shielded Jacketed Flat Cable</b>	<b>3M™ Round, Jacketed Flat Cable</b>	<b>3M™ Round, Shielded/Jacketed Flat Cable</b>	<b>3M™ Pleated Foil Shielded Flat Cable</b>
<b>1.27</b>	<b>1.27</b>	<b>1.27</b>	<b>1.27</b>	<b>1.27</b>	<b>1.27</b>	<b>1.27</b>
<b>3517</b>	<b>1785</b>	<b>3759</b>	<b>3659</b>	<b>HF759</b>	<b>HF659</b>	<b>90104</b>
<ul style="list-style-type: none"> <li>For external applications</li> <li>20 dB average shielding effectiveness</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>Reduced crosstalk</li> <li>Different lengths of split bonded repeat sections available</li> <li>For external applications</li> <li>20 dB average shielding effectiveness</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>For external applications</li> <li>Flat sections permit mass termination on 2.4" centers</li> <li>Construction allows easy routing</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>For external applications</li> <li>Flat sections permit mass termination on 2.4" centers</li> <li>Construction allows easy routing</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> </ul>	<ul style="list-style-type: none"> <li>LSZH – Low Smoke (IEC 61034-2:2005) to broad line of IDC connectors</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> <li>Dual shielding provides 35 dB average shielding</li> </ul>	<ul style="list-style-type: none"> <li>Thick jacket for external applications</li> <li>50 Ohm unbalanced and 100 Ohm balanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> <li>CL2 Listed</li> </ul>
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

						
<b>3M™ Round Conductor Flat Controlled Impedance Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>
<b>0.635</b>	<b>0.85</b>	<b>1.0</b>	<b>1.0</b>	<b>1.27</b>	<b>1.27</b>	<b>1.27</b>
<b>7700</b>	<b>3849</b>	<b>HF625</b>	<b>3625</b>	<b>HF365</b>	<b>3365</b>	<b>3302</b>
<ul style="list-style-type: none"> <li>Controlled Impedance</li> <li>Fast, flat, foldable ribbon cable construction fit for IDC</li> <li>Terminate it to IDC connector, or solder it directly to a PCB</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>3 row DIN connector compatible</li> </ul>	<ul style="list-style-type: none"> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> </ul>	<ul style="list-style-type: none"> <li>2mm IDC connectors</li> </ul>	<ul style="list-style-type: none"> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> <li>~ 1 Million flex cycles at 7/8" bended radius</li> </ul>	<ul style="list-style-type: none"> <li>The "basic stranded cable" for 2.54mm IDC connectors</li> <li>~1 Million flex cycles at 7/8" bended radius</li> </ul>	<ul style="list-style-type: none"> <li>Color coded for wire identification</li> </ul>
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

						
<b>3M™ Pleated Foil Shielded Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>
<b>1.27</b>	<b>1.27</b>	<b>1.27</b>	<b>1.27</b>	<b>2.54</b>	<b>2.54</b>	<b>3.96</b>
<b>90204</b>	<b>3801</b>	<b>3770</b>	<b>3811</b>	<b>8124</b>	<b>8125</b>	<b>3391</b>
<ul style="list-style-type: none"> <li>Thin cover for internal applications</li> <li>50 Ohm unbalanced and 100 Ohm balanced impedance applications</li> <li>35 dB average shielding effectiveness</li> <li>Very low crosstalk</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>For higher current applications</li> </ul>	<ul style="list-style-type: none"> <li>For higher current applications</li> <li>Extended temperature range</li> </ul>	<ul style="list-style-type: none"> <li>For higher current applications</li> <li>Color coded for wire identification</li> </ul>	<ul style="list-style-type: none"> <li>For higher current applications</li> </ul>	<ul style="list-style-type: none"> <li>For higher current applications</li> </ul>	<ul style="list-style-type: none"> <li>For higher current applications</li> <li>Color coded for wire identification</li> </ul>
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

						
<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Jacketed Flat Cable</b>	<b>3M™ Round Conductor Medium Flex Life Flat Cable</b>	<b>3M™ Round Conductor Medium Flex Life Flat Cable</b>	<b>3M™ High Flex Life Cable</b>
1.27	1.27	1.27	1.27	1.27	1.27	1.27
<b>3667</b>	<b>3355</b>	<b>3601</b>	<b>3603</b>	<b>HF539</b>	<b>3539</b>	<b>HF319</b>
<ul style="list-style-type: none"> <li>Split conductor sections allow for easier routing</li> </ul>	<ul style="list-style-type: none"> <li>Extended temperature range</li> </ul>	<ul style="list-style-type: none"> <li>Excellent abrasion and chemical resistance</li> <li>Excellent mechanical durability</li> <li>For extreme temperature requirements</li> </ul>	<ul style="list-style-type: none"> <li>For external applications</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>~10 Million flex cycles at 7/8" bended radius</li> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> </ul>	<ul style="list-style-type: none"> <li>~10 Million flex cycles at 7/8" bended radius</li> </ul>	<ul style="list-style-type: none"> <li>~100 Million flex cycles at 7/8" bended radius</li> <li>LSZH – Low Smoke (IEC 61034-2:2005)</li> <li>Low toxicity of combustion gases (NF X 70-100-2:2006)</li> </ul>
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

					
<b>3M™ Round Conductor Flat Cable</b>	<b>3M™ Round Shielded Jacketed Discrete Wire Cable</b>	<b>3M™ Round Shielded Jacketed Discrete Wire Cable</b>	<b>3M™ Round Shielded Jacketed Discrete Wire Cable</b>	<b>3M™ Round Shielded Jacketed Discrete Wire Cable</b>	<b>3M™ Round Shielded Jacketed Discrete Wire Cable</b>
3.96					
<b>8132</b>	<b>3600X</b>	<b>3644X</b>	<b>HF644</b>	<b>3647B</b>	<b>3750</b>
<ul style="list-style-type: none"> <li>For higher current applications</li> </ul>	<ul style="list-style-type: none"> <li>Twisted Pairs</li> <li>Dual shielding</li> <li>35 dB average shielding effectiveness</li> <li>Reduced crosstalk</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>1.1426"</li> </ul>	<ul style="list-style-type: none"> <li>Twisted Pairs</li> <li>Dual shielding</li> <li>35 dB average shielding effectiveness</li> <li>Reduced crosstalk</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>Twisted Pairs</li> <li>Dual shielding</li> <li>35 dB average shielding effectiveness</li> <li>Reduced crosstalk</li> <li>100 Ohm balanced impedance applications</li> <li>IEEE 1284 compliant</li> <li>CL2 Listed</li> </ul>	<ul style="list-style-type: none"> <li>Twisted Pairs</li> <li>Dual shielding</li> <li>35 dB average shielding effectiveness</li> <li>Reduced crosstalk</li> <li>For higher current applications</li> <li>50 Ohm balanced and 100 Ohm balanced impedance applications</li> <li>CL2 Listed</li> </ul>
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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**Electronics Materials Solutions Division**  
3M Center, Building 223-3S-32  
St. Paul, MN 55144-1000  
Phone: 1-800-251-8634  
Web: 3M.com/interconnect

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