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3M™ Round Conductor Flat Cable, .025" Pitch, 3749/68, 100 ft.

68 conductors, 30 AWG Solid, TPE, Standard

GTIN(UPC/EAN) : 0 00 54007 66793 3

3M Id : 80-6104-2501-1

Characteristics

Cable Style	Flat
Canadian Option	AWM 20297 105C 150V VW1 3M NU C AWM IA 105C150V FT1 EU <50V
Capacitance -- Balanced	0 Picofarad
Capacitance -- Unbalanced	16.5 Picofarad
Characteristic Impedance -- Unbalanced	90 Ohm
Conductor Material	Copper
Conductor Resistance	112 Ohm
Conductors	30 AWG [0.254] Tinned Solid Copper
EPC Can View	Public
EU RoHS Compliant	Yes
First Position Marking	Blue
Flammability Rating -- Canada	FT1
Flammability Rating -- EU	None
Flammability Rating--USA	VW-1
Impedance -- Balanced	0 Ohm
Impedance -- Unbalanced	90 Ohm
Inductance -- Balanced	0 Microhenry
Inductance -- Unbalanced	.13 Microhenry
Insulation Color	Gray
Insulation Material	Thermoplastic Elastomer (TPE)
Insulation Resistance	(Primary Cable) >1x10 ¹⁰ Ohm/10ft [3m]
Jacket	No
Marking Standard	None
Number of Conductors	68

Pitch	0.025 Inch
Plating Material	Tin
Primary Configuration	Parallel
Propagation Delay -- Balanced	0 Nanosecond
Propagation Delay -- Unbalanced	1.48 Nanosecond
Shape	Flat
Shield	No
Stranding	Solid [0.254]
Temperature Rating	-40 Degree C to +105 Degree C
UL File Number	E42769
UL Listed -- USA	None
UL Recognized -- USA	AWM Style 20297
UL Recognized-- Canada	IA
Unbalanced Capacitance	16.5 pF/ft (54.1 pF/m)
Unbalanced Inductance	.13 microHenry/ft (0.43 microHenry/m)
Unbalanced Propagation Delay	1.48 ns/ft (4.86 ns/m)
Unbalanced Velocity of Propagation	69%
Voltage Rating -- Canada	150 Volt
Voltage Rating -- EU	>0 to <50 Volt
Voltage Rating--USA	150V
Voltage Rating: Canada	150V
Voltage Rating: EU	<50V
Wire Gauge	30 American Wire Gauge (AWG)

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3M™ Round Conductor Flat Cable, .025" Pitch, 3749/68, 100 ft.

Packaging

3M Id: 80-6104-2501-1

Minimum Order Quantity: 1.0 RLS

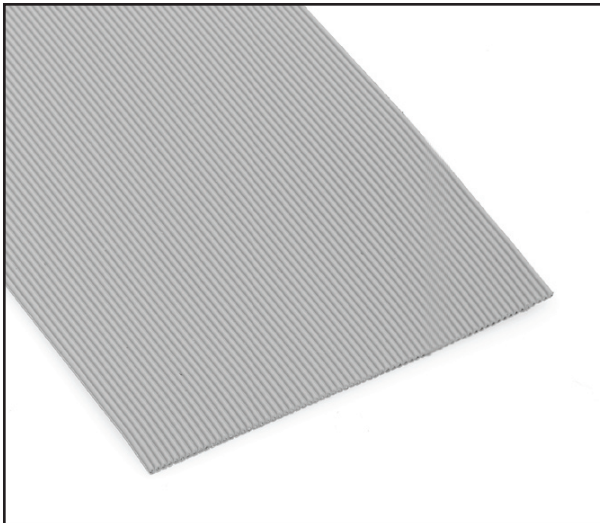
Case Quantity: 1.0 RLS

	English	Metric
Length	9.1 INCH	0.231 MTR
Width	9.1 INCH	0.231 MTR
Height	13.8 INCH	0.351 MTR
Gross Weight	20.8000 LBS	9.4347 KG

3M™ Round Conductor Flat Cable

.025" 30 AWG Solid, TPE

3749 Series



- Close spacing permits higher signal density
- TPE insulation provides excellent transmission properties
- 30 AWG solid conductors on .025 inch spacing allows for mass termination
- Zippable for branching or discrete termination
- Meets SCSI-3 Fast-20 characteristic impedance requirements
- See Regulatory Classification note in Environmental section below.

Date Modified: July 31, 2008

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Physical

Insulation:

Material: Thermoplastic Elastomer (TPE)

Color: Gray

Marking:

Standard: None

Canadian Option:  AWM 20297 105C 150V VW1 3M NU

C  AWM IA 105C 150V FT1 EU <50V

Conductors: 30 AWG [Ø 0.254] Tinned Solid Copper

Electrical

Voltage Rating: USA: 150V Canada: 150V

Insulation Resistance: (Primary Cable) >1 x 10¹⁰ Ω /10ft [3m]

Characteristic Impedance: Unbalanced
90 Ω

Capacitance: 16.5 pF/ft (54.1 pF/m)

Inductance: 0.13 µH/ft (0.43 µH/m)

Propagation Delay: 1.48 ns/ft (4.86 ns/m)

Velocity of Propagation: 69%

Note: Unbalanced is measured between ground-signal-ground conductors.

Environmental

Temperature Rating: -40°C to +105°C

Flammability Rating: USA: VW-1 Canada: FT1

Regulatory Classification: EU: Not compliant, see RIA note E4

CN:  see RIA note C1

Regulatory Information Appendix (RIA) attached

UL File No.: E42769, Style No: 20297

3M

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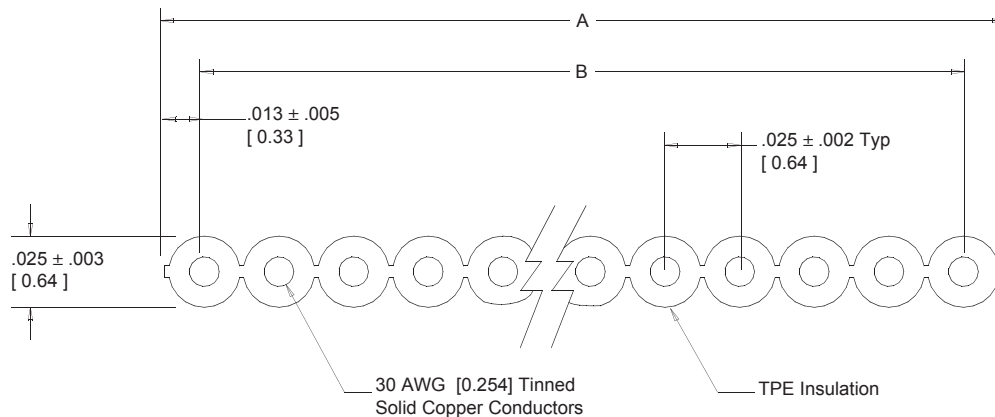
3M™ Round Conductor Flat Cable

.025" 30 AWG Solid, TPE

3749 Series



Number of Conductors	3M Part Number	Dimension A	Dimension B
10	3749/10	0.250 +/- .006 [6.35]	0.225 +/- .004 [5.72]
16	3749/16	0.400 +/- .006 [10.16]	0.375 +/- .004 [9.53]
20	3749/20	0.500 ± .006 [12.70]	0.475 ± .004 [12.07]
24	3749/24	0.600 +/- .006 [15.24]	0.575 +/- .004 [14.61]
26	3749/26	0.650 ± .006 [16.51]	0.625 ± .004 [15.88]
30	3749/30	0.750 +/- .009 [19.05]	0.725 +/- .006 [18.42]
34	3749/34	0.850 ± .009 [21.59]	0.825 ± .006 [20.96]
36	3749/36	0.900 ± .009 [22.86]	0.875 ± .006 [22.23]
40	3749/40	1.000 ± .009 [25.40]	0.975 ± .006 [24.77]
50	3749/50	1.250 ± .009 [31.75]	1.225 ± .006 [31.12]
60	3749/60	1.500 ± .012 [38.10]	1.475 ± .009 [37.47]
68	3749/68	1.700 ± .012 [43.18]	1.675 ± .009 [42.55]
80	3749/80	2.000 ± .015 [50.80]	1.975 ± .011 [50.17]
100	3749/100	2.500 ± .015 [63.50]	2.475 ± .012 [62.87]



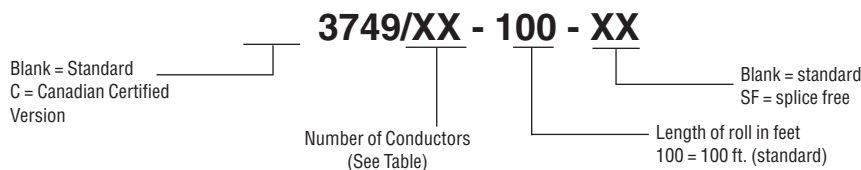
Inch
[mm]

Tolerance Unless Noted			
	.0	.00	.000
Inch	±.1	±.05	±.010

[] Dimensions for Reference Only

Note: Blue marking on one edge of cable designates wire #1.

Ordering Information



Note: Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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