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## 3M™ Round, Jacketed, Flat Cable, 3759/09, 100 ft. SF



9 conductors, .050" 28 AWG Stranded, Mass-Term, PVC/PVC, 100 foot Splice-free roll.

GTIN(UPC/EAN) : 0 00 51138 42092 5  
3M Id : 80-6108-0256-5

### Characteristics

Balanced Capacitance	11.9 pF/ft (39.0 pF/m)
Balanced Inductance	.21 microHenry/ft (0.69 microHenry/m)
Balanced Propagation Delay	1.58 ns/ft (5.18 ns/m)
Cable Marking	UL CL2 75C 28 AWG OR AWM 20267 3M NU CUL AWM IIA/B 80C 300V
Cable Style	Round
Capacitance -- Balanced	11.9 Picofarad
Capacitance -- Unbalanced	16.7 Picofarad
Characteristic Impedance -- Balanced	133 Ohm
Characteristic Impedance --	90 Ohm

<b>Unbalanced</b>	
<b>Color</b>	Black
<b>Conductor Material</b>	Copper
<b>Conductor Resistance</b>	65 Ohm
<b>Conductors</b>	28 AWG 7x36 [7x0.127] Tinned Stranded Copper
<b>EPC Can View</b>	Public
<b>EU RoHS Compliant</b>	Yes
<b>First Position Marking</b>	Red
<b>Flammability Rating -- Canada</b>	FT1
<b>Flammability Rating -- EU</b>	None
<b>Flammability Rating--USA</b>	N.E.C. 725, CL2
<b>Impedance -- Balanced</b>	133 Ohm
<b>Impedance -- Unbalanced</b>	90 Ohm
<b>Inductance -- Balanced</b>	.21 Microhenry
<b>Inductance -- Unbalanced</b>	.14 Microhenry
<b>Inner Wrap</b>	Polyester Film
<b>Insulation Material</b>	Polyvinyl Chloride (PVC)
<b>Insulation Resistance</b>	(Primary Cable) >1x10 <sup>10</sup> Ohm/10ft. [3m]
<b>Jacket</b>	Yes
<b>Jacket Color</b>	Black
<b>Jacket Material</b>	Polyvinyl Chloride (PVC)
<b>Lower Temperature Rating</b>	-20 Degree Celsius
<b>Marking Standard</b>	(UL) CL2 75C 28 AWG OR AWM 20267 3M NU C AWM II A/B 80C 300V FT1 EU <50V
<b>Number of Conductors</b>	9
<b>Pitch</b>	0.050 Inch
<b>Plating Material</b>	Tin
<b>Primary Configuration</b>	Parallel Split
<b>Primary Insulation Color</b>	Gray
<b>Primary Insulation Material</b>	Polyvinyl Chloride (PVC)
<b>Primary Material</b>	PVC
<b>Propagation Delay -- Balanced</b>	1.58 Nanosecond
<b>Propagation Delay -- Unbalanced</b>	1.50 Nanosecond
<b>Repeat Length</b>	2.375 Inch
<b>Shape</b>	Round
<b>Shield</b>	No
<b>Stranding</b>	7 X 36 [ 7 X 0.127]
<b>Temperature Rating: Canada</b>	80 Degree C
<b>Temperature Rating: USA</b>	N.E.C. 725, CL2 or AWM: -20 DegreeC to +80 DegreeC
<b>UL File Number</b>	E118773
<b>UL Listed -- USA</b>	N.E.C. Article 725, CL2
<b>UL Recognized -- USA</b>	AWM Style 20267
<b>UL Recognized-- Canada</b>	IIA/B
<b>Unbalanced Capacitance</b>	16.7 pF/ft (54.8 pF/m)
<b>Unbalanced Inductance</b>	0.14 microHenry/ft (0.46 microHenry/m)

<b>Unbalanced Propagation Delay</b>	1.50 ns/ft (4.92 ns/m)
<b>Upper Temperature Rating -- Canada</b>	80 Degree Celsius
<b>Upper Temperature Rating -- USA</b>	80 Degree Celsius
<b>Velocity of Propagation--Balanced</b>	64%
<b>Velocity of Propagation--Unbalanced</b>	68%
<b>Voltage Rating -- Canada</b>	300 Volt
<b>Voltage Rating -- EU</b>	>0 to <50 Volt
<b>Voltage Rating--USA</b>	N.E.C. 725, CL2 or AWM; 300V
<b>Voltage Rating: Canada</b>	300V
<b>Voltage Rating: EU</b>	<50V
<b>Wire Gauge</b>	28 American Wire Gauge (AWG)

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3M™ Round, Jacketed, Flat Cable, 3759/09,  
100 ft. SF

Packaging

3M Id:

80-6108-0256-5

Minimum Order Quantity:

3.0 RLS

Case Quantity:

3.0 RLS

	English	Metric
Length	10.8 INCH	0.274 MTR
Width	10.4 INCH	0.264 MTR
Height	4.9 INCH	0.124 MTR
Gross Weight	4.5000 LBS	2.0412 KG

# 3M™ Round, Jacketed, Flat Cable

.050" 28 AWG Stranded, Mass-Term, PVC/PVC

3759 Series




- Round construction permits easier routing
- 28 AWG wire on .050 inch centers permits mass termination to broad line of IDC connectors
- Continuous bond and continuous split/bond allows for mass termination of IDC connectors
- Available in continuous bond (non-split) wire for ease of cable fabrication
- Meets external wiring requirements of National Electrical Code, Article 725 (CL2)
- Primary cable is zippable for branching or discrete terminations
- UL listed for USA and Canadian markets
- RoHS\* compliant

Date Modified: November 15, 2006

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## Physical

**Jacket Material:** Polyvinyl Chloride (PVC); **Color:** Black  
**Primary Material:** PVC; **Color:** Gray  
**Marking Standard:** (UL) CL2 75C 28 AWG or AWM 20267 3M NU C  WM II A/B 80C 300V FT1 EU <50V  
**Conductors:** 28 AWG, 7 x 36 AWG [ 7 x ø 0.217 ] Tinned Stranded Copper  
**Inner Wrap:** Polyester Film

## Electrical

<b>Voltage Rating:</b>	USA: N.E.C. 725, CL2 or AWM; 300V	Canada: 300V	EU: <50V
<b>Insulation Resistance:</b>	(Primary Cable) > 1 x 10 <sup>10</sup> Ω/10 ft. [ 3m ]		
	<b>Unbalanced</b>	<b>Balanced</b>	
<b>Characteristic Impedance:</b>	90 Ω	133 Ω	
<b>Capacitance:</b>	16.7 pF/ft [ 54.8 pF/m ]	11.9 pF/ft [ 39.0 pF/m ]	
<b>Inductance:</b>	0.13 μH/ft [ 0.44 μH/m ]	0.21 μH/ft [ 0.69 μH/m ]	
<b>Propagation Delay:</b>	1.50 ns/ft [ 4.92 ns/m ]	1.58 ns/ft [ 5.18 ns/m ]	
<b>Velocity of Propagation:</b>	68%	64%	

Note: Unbalanced is measured between ground-signal-ground conductors. Balanced is measured between conductors within a pair.

## Environmental

**Temperature Rating:** USA: CL2; 75°C or AWM; -20°C to + 80°C Canada: 80°C  
**Flammability Rating:** USA: N.E.C. 725, CL2 Canada: FT1

"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

UL File No.: E118773, Power Limited Circuit Cable: CL2 (or AWM Style 20267)

# 3M™ Round, Jacketed, Flat Cable

.050" 28 AWG Stranded, Mass-Term, PVC/PVC

3759 Series



Inch  
[mm]

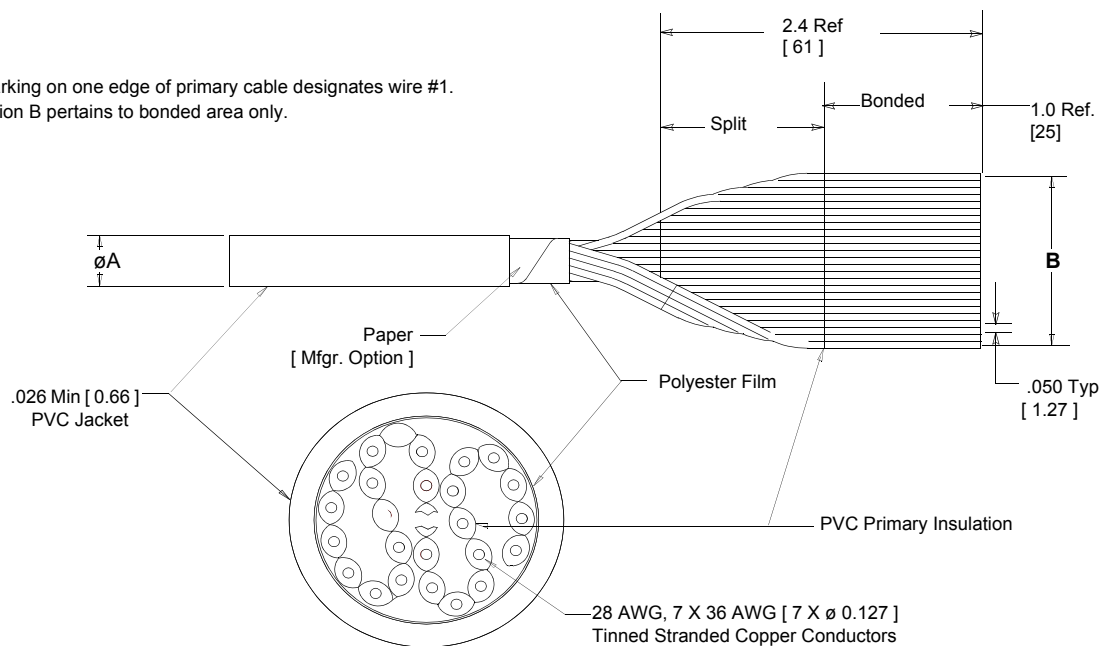
Tolerance Unless Noted			
Inch	.0	.00	.000
	±.1	±.05	±.010

[ ] Dimensions for  
Reference only

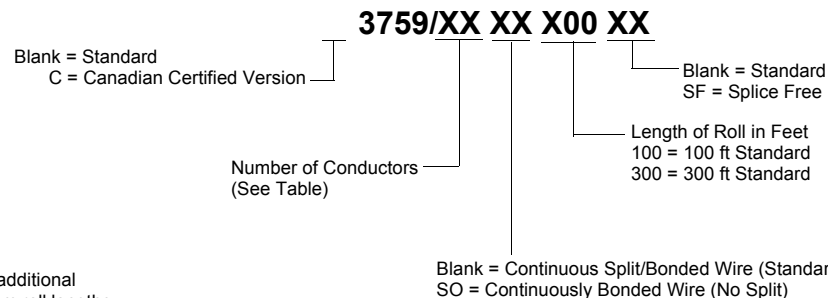
Number of Conductors	3M Part Number	Diameter A ± .03	Dimension B (See Note 2)
09	3759/09	0.26 [ 6.6 ]	0.40 [ 10.2 ]
10	3759/10	0.26 [ 6.6 ]	0.45 [ 11.4 ]
14	3759/14	0.27 [ 6.9 ]	0.65 [ 16.5 ]
15	3759/15	0.27 [ 6.9 ]	0.70 [ 17.8 ]
16	3759/16	0.27 [ 6.9 ]	0.75 [ 19.1 ]
20	3759/20	0.30 [ 7.6 ]	0.95 [ 24.1 ]
24	3759/24	0.33 [ 8.4 ]	1.15 [ 29.2 ]
25	3759/25	0.33 [ 8.4 ]	1.20 [ 30.5 ]
26	3759/26	0.33 [ 8.4 ]	1.25 [ 31.8 ]
30	3759/30	0.37 [ 9.4 ]	1.45 [ 36.8 ]
34	3759/34	0.37 [ 9.4 ]	1.65 [ 41.9 ]
36	3759/36	0.39 [ 9.9 ]	1.75 [ 44.5 ]
37	3759/37	0.39 [ 9.9 ]	1.80 [ 45.7 ]
40	3759/40	0.39 [ 9.9 ]	1.95 [ 49.5 ]
50	3759/50	0.44 [ 11.2 ]	2.45 [ 62.2 ]
60	3759/60	0.47 [ 11.9 ]	2.95 [ 74.9 ]
64	3759/64	0.50 [ 12.7 ]	3.15 [ 80.0 ]

## Notes:

1. Red marking on one edge of primary cable designates wire #1.
2. Dimension B pertains to bonded area only.



## Ordering Information



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

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