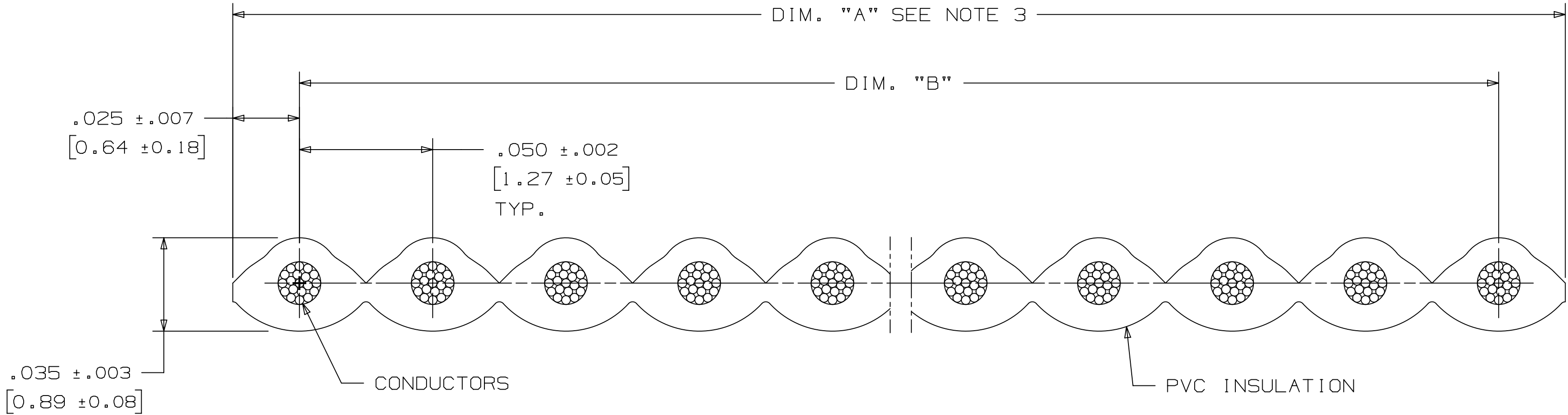


3M™ HIGH FLEX LIFE CABLE, 3319 SERIES
.050" 28 AWG STRANDED, PVC



ORDERING INFORMATION

X 3319 / XX XX
BLANK = STANDARD
C = CANADIAN CERTIFIED VERSION
BLANK = STANDARD
SF = SPLICE FREE
NUMBER OF CONDUCTORS (SEE TABLE 1)

NOTE:
AVAILABLE IN STANDARD LENGTHS OF 100 FT OR 300 FT ROLLS,
PLEASE SPECIFY WHEN ORDERING.
CONTACT 3M FOR AVAILABILITY OF ADDITIONAL CONDUCTOR COUNTS
AND/OR CUSTOM ROLL LENGTHS.

TABLE 1
DIMENSION CHART

NUMBER OF CONDUCTORS	3M PART NUMBER	DIMENSION "A"	DIMENSION "B"
06	3319/06	.300±.010 [7.62]	.250±.007 [6.35]
08	3319/08	.400±.010 [10.16]	.350±.007 [8.89]
09	3319/09	.450±.010 [11.43]	.400±.007 [10.18]
10	3319/10	.500±.010 [12.70]	.450±.007 [11.43]
14	3319/14	.700±.010 [17.78]	.650±.007 [16.51]
15	3319/15	.750±.010 [19.05]	.700±.007 [17.78]
16	3319/16	.800±.015 [20.32]	.750±.011 [19.05]
20	3319/20	1.000±.015 [25.40]	.950±.011 [24.13]
24	3319/24	1.200±.015 [30.48]	1.150±.011 [29.21]
25	3319/25	1.250±.015 [31.75]	1.200±.011 [30.48]
26	3319/26	1.300±.015 [33.02]	1.250±.011 [31.75]
30	3319/30	1.500±.020 [38.10]	1.450±.015 [36.83]
34	3319/34	1.700±.020 [43.18]	1.650±.015 [41.91]
36	3319/36	1.800±.020 [45.72]	1.750±.015 [44.45]
37	3319/37	1.850±.020 [46.99]	1.800±.015 [45.72]
40	3319/40	2.000±.020 [50.80]	1.950±.015 [49.53]
50	3319/50	2.500±.020 [63.50]	2.450±.015 [62.23]
60	3319/60	3.000±.020 [76.20]	2.950±.015 [74.93]
64	3319/64	3.200±.020 [81.28]	3.150±.015 [80.01]

"PRINTING ILLUSTRATION"



AWM 2651 105°C 300V VW1 3M NU



AWM IA 105°C 300V FT1 EU <50V



UL FILE NO: E42769
UL STYLE NO: 2651

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3M.com/interconnect>

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FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

- * FLEX LIFE OF 100 MILLION CYCLES AT 1-3/4 INCH DIAMETER.
- * 19 STRANDS OF HIGH STRENGTH COPPER ALLOY PROVIDE THE LONGEST FLEX LIFE AVAILABLE FOR DYNAMIC APPLICATIONS.
- * 28 AWG WIRE ON .050 INCH WIRE SPACING PERMITS MASS TERMINATION TO A BOARD LINE OF IDC CONNECTORS.
- * ZIPPABLE FOR BRANCHING OR DISCRETE TERMINATION.

- REGULATORY INFORMATION:
VISIT 3M.com/regs
- IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
- RED MARKING ON ONE EDGE OF CABLE DESIGNATES WIRE #1.

2 PHYSICAL :

INSULATION: POLYVINYL CHLORIDE (PVC)
MATERIAL: COLOR: BLACK

MARKING: NONE
STANDARD: SEE "PRINTING ILLUSTRATION" BELOW
CANADIAN: 28 AWG, 19 X 40 AWG [19 X Ø0.079] SILVER PLATED
CONDUCTORS: STRANDED COPPER ALLOY (89% CONDUCTIVITY)

2 TABLE 2
ELECTRICAL CHARACTERISTICS

VOLTAGE RATING	USA: 300V, CANADA: 300V, EU: <50V	
INSULATION RESISTANCE	PRIMARY CABLE >1 X 10 ¹⁰ Ω/10 FT [3 m]	
	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE	103 Ω	171 Ω
CAPACITANCE	13.6 pF/ft [44.62 pF/m]	7.9 pF/ft [25.91 pF/m]
INDUCTANCE	0.14 μH/ft [0.47 μH/m]	0.23 μH/ft [0.76 μH/m]
PROPAGATION DELAY	1.40 ns/ft [4.59 ns/m]	1.35 ns/ft [4.43 ns/m]
VELOCITY OF PROPAGATION	73%	75%

NOTE: UNBALANCED IS MEASURED BETWEEN GROUND-SIGNAL-GROUND CONDUCTORS.
BALANCED IS MEASURED BETWEEN SIGNAL CONDUCTORS WITHIN A PAIR.

2 ENVIRONMENTAL :

TEMPERATURE RATING: -20°C TO +105°C

FLAMMABILITY RATING: USA; VW1 CANADA; FT1

DIMENSIONS: INCHES [MM]
[MM] IS FOR REF. ONLY

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
XXXXX	XXXXX	ECO	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DIVISION	DIVISION CODE	DRFT	CAST	IGLONE	DATE	DATE
DO NOT SCALE DRAWING	SCALE	CHKD	DATE	DATE	DATE	DATE
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	APPR	F.	RODRIGUEZ	DATE	DATE
MAX. SURFACE ROUGHNESS	ALL SURFACES	DATE	DATE	DATE	DATE	DATE
MARKED ONLY	ANGLES	DATE	DATE	DATE	DATE	DATE
TOLERANCES EXCEPT AS NOTED		3M Center St. Paul, MN 55144				
INCHES .01 ± .01 .000 ± .005 .0000 ± .0005		© 3M COPYRIGHT 2024. This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.				
MILLIMETERS 0 ± .00 ± .000 ± .000		TITLE MEDIUM FLEX LIFE FLAT CABLE, .050", 28 AWG, 3319				
CAGE NUMBER		SIZE	DRAWING NO.	REV.	REV.	
D		78-5100-0059-5	D	D	D	
MODEL		3319	LISTS	YES	NO	SHT 1 OF 2

3M™ HIGH FLEX LIFE CABLE, 3319 SERIES

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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		D	I 18693	OCT 08, 2024		JNC	JG
		C	64249	ADD CABLE 3319/08		JNC	JJR
		B	23269	JUN 29, 2023 REVISED NOTES AND REDRAWN		JNC	JJR
		A	AT2268	APR 22, 2009 REVISE NOTES		RED	ARM
		A	AT2268	APR 23, 2007 UPDATE TO NEW FORMAT		RED	ARM
DESIGN REFERENCE		NEXT ASSEMBLY					
ACCESS CODES							
DIVISION		DIVISION CODE		DATE		DATE	
DO NOT SCALE DRAWING		EMSD		JUN 29, 2023		JUN 29, 2023	
SCALE		TOLERANCES EXCEPT AS NOTED		APPROVAL		DATE	
THIRD ANGLE PROJECTION		INCHES		F. RODRIGUEZ		JUN 29, 2023	
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS		3M Center		© 3M COPYRIGHT 2024	
MAX SURFACE ROUGHNESS		0 ±		St. Paul, MN 55144		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.	
ALL SURFACES		0.00 ±		TITLE		MEDIUM FLEX LIFE FLAT	
MARKED ONLY		0.000 ±		CABLE, 0.050" 28 AWG,		3319	
✓		0.000 ±		CAGE NUMBER		REV.	
		ANGLES		SIZE		D	
				DRAWING NO.		REV.	
				D 78-5100-0059-5		D	
				MODEL		DET.	
				3319		LISTS	
						YES YES NO	
						SHT 2 OF 2	