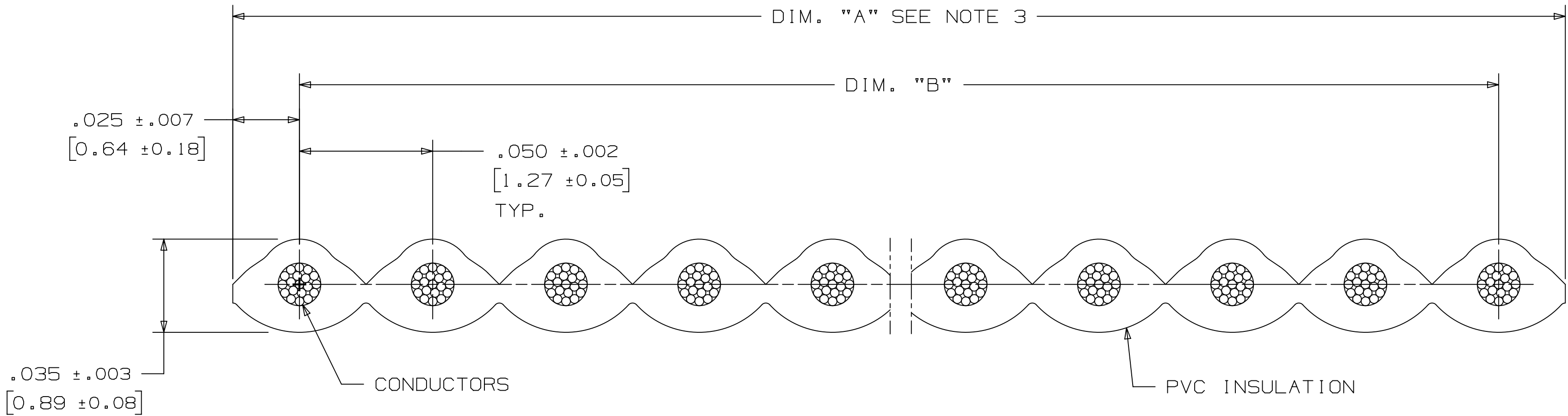


3M™ HIGH FLEX LIFE CABLE, 3319 SERIES
.050" 28 AWG STRANDED, PVC



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:
MATERIAL: POLYVINYL CHLORIDE (PVC)
COLOR: BLACK

MARKING:
STANDARD: NONE
CANADIAN: SEE "PRINTING ILLUSTRATION" BELOW
CONDUCTORS: 28 AWG, 19 X 40 AWG [19 X Ø0.079] SILVER PLATED 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
ADDRESS CODES	
DIVISION	DIVISION CODE
DO NOT SCALE DRAWING	SCALE
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018
MAX. SURFACE ROUGHNESS	ALL SURFACES
MARKED ONLY	
TOLERANCES EXCEPT AS NOTED	
INCHES	
MILLIMETERS	
ANGLES	

D	118693	OCT 08, 2024	JNC	JG
C	64249	JUN 29, 2023	JNC	FJR
B	23269	APR 22, 2009	RED	ARM
A	AT2268	APR 23, 2007	RED	ARM
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	CST	10NE	DATE	DATE
CHKD	DATE	DATE	DATE	DATE
3M	3M Center St. Paul, MN 55144	© 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.		
TITLE	MEDIUM FLEX LIFE FLAT CABLE, .050", 28 AWG, 3319			
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D	78-5100-0059-5	D		
MODEL	3319	LISTS	YES	NO
SHT	1	OF	2	

3M™ HIGH FLEX LIFE CABLE, 3319 SERIES

.050" 28 AWG STRANDED, PVC

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

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Austin, TX 78753-5380
1-800-225-5373
www.3M.com/interconnect

		D	118693	OCT 08, 2024	JNC	JG
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		UPDATE TO NEW FORMAT				
DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION
ACCESS CODES		DRFT CASTIGLIONE		DATE JUN 29, 2023		MFG DATE
DIVISION		DIVISION CODE EM5D		CHKD DATE		APPR. F. RODRIGUEZ DATE JUN 29, 2023
DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED		© 3M COPYRIGHT 2024 This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission only, or used or disclosed otherwise than for 3M authorized purposes. All rights reserved.
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		3M Center St. Paul, MN 55144
INTERPRET PER ASME Y14.5 - 2018		MAX. SURFACE ROUGHNESS		ALL SURFACES		TITLE MEDIUM FLEX LIFE FLAT CABLE , .050" , 28 AWG , 3319
MAX. SURFACE ROUGHNESS		ALL SURFACES		CAGE NUMBER		SIZE DRAWING NO.
✓ MARKED ONLY		ANGLES		D 78-5100-0059-5		REV. D
		MODEL		3319		LISTS YES ☒ NO ☐
				SHT 2 OF 2		

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