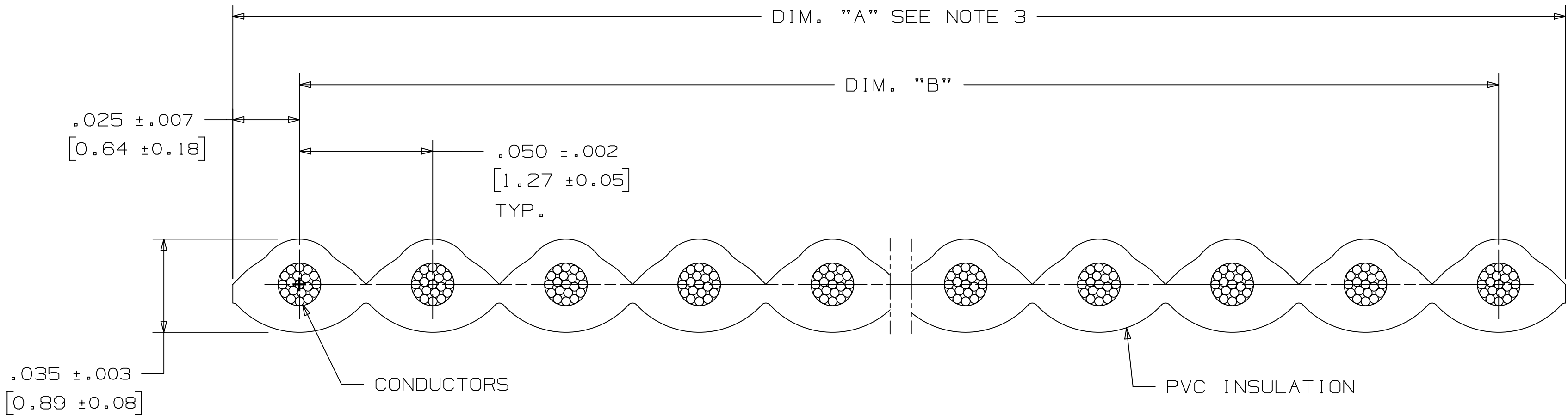


3M™ HIGH FLEX LIFE CABLE, 3319 SERIES
.050" 28 AWG STRANDED, PVC



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

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



UL FILE NO: E42769
UL STYLE NO: 2651

- * 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.

- NOTES
1. REGULATORY INFORMATION:
VISIT 3M.com/regs
 2. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 3. 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	DRFT	CAST	IGLONE	DATE	JUN 29, 2023
DIVISION	DIVISION CODE	CHKD	DATE	APPR	DATE	JUN 29, 2023
DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED	INCHES	0.0 ± .1	0.00 ± .01	0.000 ± .005
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	MILLIMETERS	0 ± .0	0.00 ± .00	0.000 ± .000	0.000 ± .000
MAX. SURFACE ROUGHNESS	ALL SURFACES	MARKED ONLY	ANGLES	0 ± .0	0.00 ± .00	0.000 ± .000
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TITLE		CAGE NUMBER		SIZE	DRAWING NO.	REV.
MEDIUM FLEX LIFE FLAT CABLE, .050", 28 AWG, 3319		D		78-5100-0059-5	D	REV.
MODEL		3319		LISTS		YES NO SHT 1 OF 2

8	7	6	5	4	3	2	1
3M™ HIGH FLEX LIFE CABLE, 3319 SERIES .050" 28 AWG STRANDED, PVC							
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8	7	6	5	4	3	2	1

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
XREF CODES				DRFT	CASTIGLIONE		DATE JUN 29, 2023	MFR	DATE
				CHKD			DATE	APPRV	DATE
								F. RODRIGUEZ	JUN 29, 2023
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2024					
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DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED		TITLE			
				INCHES -0 ±.1 .00 ±.01 .000 ±.005 .0000 ±.0005		MEDIUM FLEX LIFE FLAT CABLE, .050" 28 AWG, 3319			
THIRD ANGLE PROJECTION				MILLIMETERS 0 ± .0 ± .00 ± .000 ±		CAGE NUMBER			
INTERPRET PER ASME Y14.5 - 2018				ALL SURFACES		DRAWING NO.			
MAX SURFACE ROUGHNESS				MARKED ONLY		D78-5100-0059-5			
				ANGLES ±		REV.			
						D			
						SHT 2 OF 2			