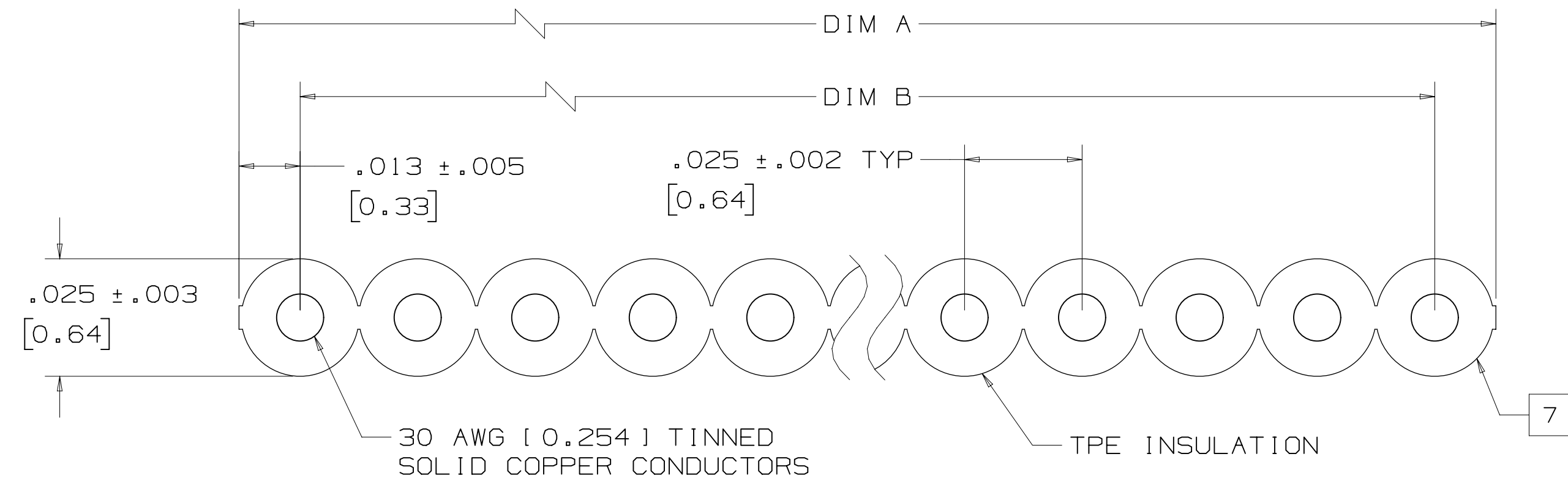


3M™ ROUND CONDUCTOR FLAT CABLE, 3749 SERIES
 .025" 30 AWG SOLID, TPE

- NOTES
- REGULATORY INFORMATION: FOR REGULATORY INFORMATION ABOUT THIS PRODUCT, VISIT 3m.com/regs OR CONTACT YOUR 3M REPRESENTATIVE.
 UL FILE NO: E42769.
 STYLE NO: 20297
 - 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 THE SCSI-3 FAST-20 CHARACTERISTIC IMPEDANCE REQUIREMENTS.
 - BLUE MARKING ON ONE EDGE OF CABLE DESIGNATES WIRE #1.



ORDERING INFORMATION

3749/XX XX

BLANK = STANDARD
 C = CANADIAN CERTIFIED VERSION

BLANK = STANDARD
 SF = SPLICE FREE

NUMBER OF CONDUCTORS (SEE TABLE)

NOTE:
 AVAILABLE IN STANDARD 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			
NUMBER OF CONDUCTORS	3M PART NUMBER	DIMENSION A	DIMENSION B
10	3749/10	0.250±.006 [6.35]	0.225±.004 [5.72]
12	3749/12	0.300±.006 [7.62]	0.275±.004 [6.99]
14	3749/14	0.350±.006 [8.89]	0.325±.004 [8.26]
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]

PHYSICAL :

INSULATION MATERIAL: THERMOPLASTIC ELASTOMER, TPE (TPO TYPE)
 COLOR: GRAY
 MARKING STANDARD: NONE
 CANADIAN: SEE "PRINTING ILLUSTRATION" VIEW

CONDUCTORS MATERIAL: 30 AWG [Ø0.254] TINNED SOLID COPPER

ELECTRICAL :

VOLTAGE RATING: USA 150V CANADIAN 150V
 INSULATION RESISTANCE: >1 X 10¹⁰Ω/10ft. [3m]
 CHARACTERISTIC IMPEDANCE: UNBALANCED 90Ω
 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: UL HORIZONTAL CANADA: FT2



CANADIAN OPTION
 "PRINTING ILLUSTRATION"

AWM 20297 105C 150V HB 3M NU

AWM 1A 105C 150V FT2 EU <50V

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

3M IS A TRADEMARK OF 3M COMPANY.
 FOR TECHNICAL, SALES OR ORDERING
 INFORMATION CALL 800-225-5373

INCH [MM]			
TOLERANCE - UNLESS NOTED			
INCH	±.1	±.05	±.010
[] = DIM.	FOR REFERENCE ONLY		

DIMENSIONS: INCH [MM]

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		L	SCHMIDT	DEC 14, 2021	MFG	DATE
		T	PLEPYS	JAN 04, 2022	APPL	DATE
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED		INCHES: .00 ±.01, .00 ±.02, .000 ±.005, .0000 ±.0002 MILLIMETERS: 0 ±, .0 ±, .00 ±, .00 ±, .000 ± ANGLES ±1°		
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	MAX SURFACE ROUGHNESS: 125, ALL SURFACES, MARKED ONLY		TITLE: ROUND CONDUCTOR FLAT CABLE SERIES 3749 .025" 30AWG SOLID CAGE NUMBER: D78-5100-0068-6 MODEL:		
G 0101481 JAN 04, 2022 REDRAWN WORK REQUEST 13221				LDS	TRP	

178-5100-0068-6
 1/20/2022 -- UTC
 1/20/2022 -- UTC
 1/20/2022 -- UTC
 1/20/2022 -- UTC

3M™ ROUND CONDUCTOR FLAT CABLE, 3749 SERIES
 .025" 30 AWG SOLID, TPE

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

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OR TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

3M Business Center
 Electronics Materials Solutions Division
 13011 McCallen Pass, BLDG C
 Austin, TX 78753-5380
 1-800-225-5373
www.3M.com/interconnect

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

3M IS A TRADEMARK OF 3M COMPANY.
 FOR TECHNICAL, SALES OR ORDERING
 INFORMATION CALL 800-225-5373

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
APPROVAL CODES		DRP		DATE		DATE
		L SCHMIDT		DEC 14, 2021		
		CHKD		DATE		DATE
		T PLEPYS		JAN 04, 2022		
DIVISION	DIVISION CODE	© 3M COPYRIGHT 2022 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.				
DO NOT SCALE DRAWING	SCALE $\frac{4}{1}$	TOLERANCES EXCEPT AS NOTED INCHES .0 ± .1 .00 ± .02 .000 ± .005 .0000 ± .0002 MILLIMETERS 0 ± .0 ± .00 ± .000 ± .000 ±				
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	TITLE ROUND CONDUCTOR FLAT CABLE SERIES 3749 .025" 30AWG SOLID				
MAX SURFACE ROUGHNESS 125	<input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY	CAGE NUMBER	SIZE	DRAWING NO.	REV.	
		D	78-5100-0068-6	G		
		MODEL		DET	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 2 OF 2	

78-5100-0068-6 DRAWING NUMBER
 6 REVISION
 B
 D
 C
 A
 1/20/2022 -- UTC
 Dfn.set (hrs) 6