

# 3M™ ROUND CONDUCTOR FLAT CABLE, 3756 SERIES

.025" 30 AWG STRANDED, TPE

## ORDERING INFORMATION

3756/XX XX

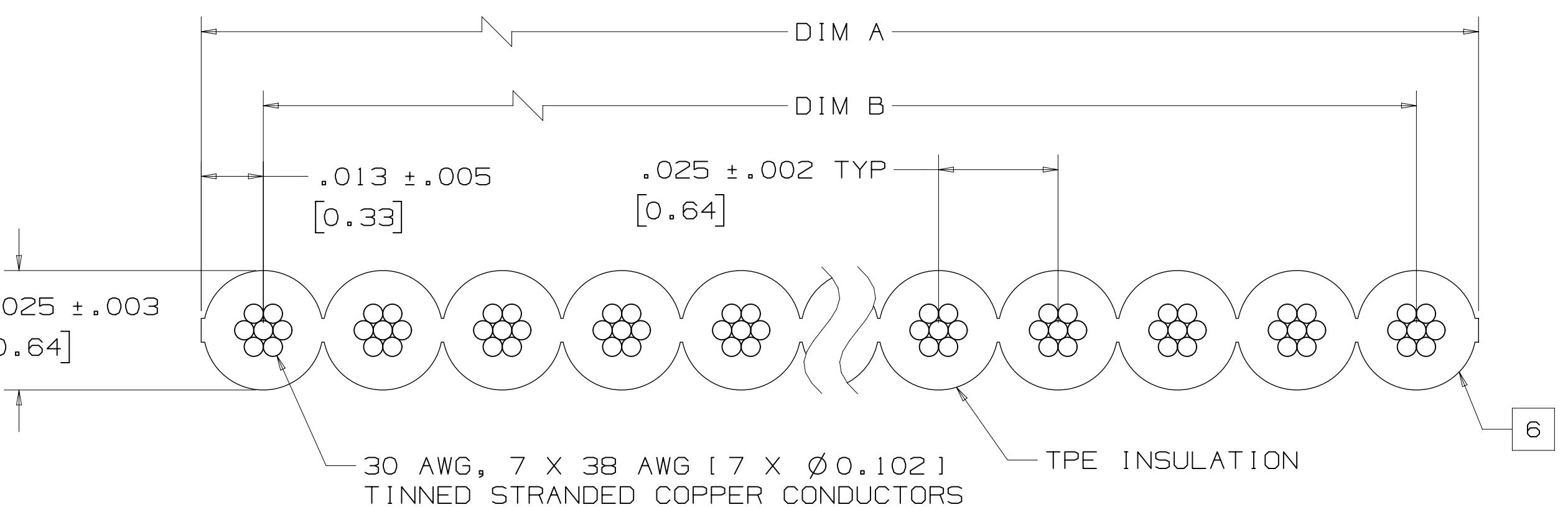
BLANK = STANDARD  
C = CANADIAN CERTIFIED  
VERSION

NUMBER OF CONDUCTORS  
(SEE TABLE)

BLANK = STANDARD  
SF = SPLICE FREE

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	3756/10	0.250±.006 [ 6.35 ]	0.225±.004 [ 5.72 ]
12	3756/12	0.300±.006 [ 7.62 ]	0.275±.004 [ 6.99 ]
14	3756/14	0.350±.006 [ 8.89 ]	0.325±.004 [ 8.26 ]
16	3756/16	0.400±.006 [ 10.16 ]	0.375±.004 [ 9.53 ]
20	3756/20	0.500±.006 [ 12.70 ]	0.475±.004 [ 12.07 ]
26	3756/26	0.650±.006 [ 16.51 ]	0.625±.004 [ 15.88 ]
30	3756/30	0.750±.009 [ 19.05 ]	0.725±.006 [ 18.42 ]
34	3756/34	0.850±.009 [ 21.59 ]	0.825±.006 [ 20.96 ]
36	3756/36	0.900±.009 [ 22.86 ]	0.875±.006 [ 22.23 ]
40	3756/40	1.000±.009 [ 25.40 ]	0.975±.006 [ 24.77 ]
50	3756/50	1.250±.009 [ 31.75 ]	1.225±.006 [ 31.12 ]
60	3756/60	1.500±.012 [ 38.10 ]	1.475±.009 [ 37.47 ]
68	3756/68	1.700±.012 [ 43.18 ]	1.675±.009 [ 42.55 ]
80	3756/80	2.000±.015 [ 50.80 ]	1.975±.011 [ 50.17 ]
100	3756/100	2.500±.015 [ 63.50 ]	2.475±.012 [ 62.87 ]



NOTES

- REGULATORY INFORMATION: FOR REGULATORY INFORMATION ABOUT THIS PRODUCT, VISIT [3m.com/regs](http://3m.com/regs) OR CONTACT YOUR 3M REPRESENTATIVE.  
UL FILE NO: E42769.  
STYLE NO: 20297
- .025 INCH WIRE SPACING INCREASES SIGNAL DENSITY
- TPE INSULATION PROVIDES EXCELLENT TRANSMISSION PROPERTIES.
- 30 AWG STRANDED CONDUCTORS ON .025 INCH WIRE SPACING IS DESIGNED FOR MASS TERMINATION AND FLEXIBILITY.
- MEETS THE SCSI-3 CHARACTERISTIC IMPEDANCE REQUIREMENTS.
- BLUE MARKING ON ONE EDGE OF CABLE DESIGNATES WIRE #1.

## PHYSICAL:

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

CONDUCTORS  
MATERIAL: 30 AWG, 7 X 38AWG [ 7 X Ø 0.102 ]  
TINNED STRANDED COPPER

## ELECTRICAL:

VOLTAGE RATING: USA 150V CANADIAN 150V EU: <50V  
INSULATION RESISTANCE: >1 X 10<sup>10</sup>Ω/10ft. [ 3m ]

CHARACTERISTIC IMPEDANCE:	UNBALANCED 82Ω	BALANCED 138Ω
CAPACITANCE:	17.3 pF/ft [ 56.8 pF/m ]	10.0 pF/ft [ 32.8 pF/m ]
INDUCTANCE:	0.12μH/ft [ 0.38μH/m ]	0.19μH/ft [ 0.62μH/m ]
PROPAGATION DELAY:	1.42 ns/ft [ 4.66 ns/m ]	1.38 ns/ft [ 4.53 ns/m ]
VELOCITY OF PROPAGATION:	72%	74%

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

## ENVIRONMENTAL:

TEMPERATURE RATING: -40°C TO +105°C  
FLAMMABILITY RATING: USA: UL HORIZONTAL CANADA: FT2



## CANADIAN OPTION "PRINTING ILLUSTRATION"

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<http://www.3m.com/interconnect>

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AWM 20297 105C 150V HB 3M NU  
AWM IA 105C 150V FT2 EU <50V

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

DIMENSIONS: INCH [ MM ]		ISSUE DATE AND DESCRIPTION	
REV	ECO	DATE	DRFT
L SCHMIDT DEC 14, 2021		APRVL	CHKD
D KLEPPYS JAN 04, 2022		APRVL	DATE
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DIMENSION: INCH [ MM ]			
DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO
ACCESS CODES	U.S. SCHMIDT DEC 14, 2021	DATE	DRFT
DIVISION	D KLEPPYS JAN 04, 2022	APRVL	CHKD
DO NOT SCALE DRAWING	INCHES		
SCALE 1	.0 ± .1		
	.00 ± .02		
	.000 ± .005		
	.0000 ± .0002		
THIRD ANGLE PROJECTION	TOLERANCES EXCEPT AS NOTED		
ASME Y14.5 - 2018	INCHES		
	.0 ± .005		
	.00 ± .002		
	.000 ± .0005		
	.0000 ± .0002		
INTERPRET PER	MILLIMETERS		
ASME Y14.5 - 2018	.0 ± .005		
	.00 ± .002		
	.000 ± .0005		
	.0000 ± .0002		
MAX SURFACE ROUGHNESS	ANGLES ± 1°		
125° / □ ALL SURFACES	MARKED ONLY		
	ANGLES ± 1°		
CAGE NUMBER	SIZE DRAWING NO.	REV.	DET.
125	D 78-5100-0508-1	H	LISTS
✓ MARKED ONLY	DET. LISTS	YES	NO
MODEL	SHT 1 OF 2		

# 3M™ ROUND CONDUCTOR FLAT CABLE, 3756 SERIES

.025" 30 AWG STRANDED, TPE

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

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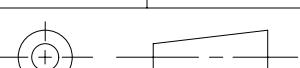
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DESIGN REFERENCE		NEXT ASSEMBLY		H	0101481	JAN 04, 2022	LDS	TRP
		REV	ECO	ISSUE DATE AND DESCRIPTION			DRFT	CHKD
ACCESS CODES				DRFT L SCHMIDT	DATE DEC 14, 2021	MFG	DATE	
				CHKD T PLEPYS	DATE JAN 04, 2022	APPVL	DATE	
DIVISION		DIVISION CODE				© 3M COPYRIGHT 2022 3M Center 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.		
DO NOT SCALE DRAWING	SCALE 4 1	TOLERANCES EXCEPT AS NOTED		INCHES .0 ± .1 .00 ± .02 .000 ± .005 .0000 ± .0002		TITLE ROUND CONDUCTOR FLAT CABLE SERIES 3756 .025" 30AWG STRANDED		
 THIRD ANGLE PROJECTION				MILLIMETERS 0 ± .0 ± .00 ± .000 ±	CAGE NUMBER	SIZE <b>D</b>	DRAWING NO. 78-5100-0508-1	REV. H
MAX SURFACE ROUGHNESS 125		<input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY		ANGLES ± 1°	MODEL	DET. LISTS	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	SHT 2 OF 2