

3M™ ROUND, JACKETED, FLAT CABLE, 3896 SERIES
.025: PITCH 30 AWG STRANDED, MASS-TERM, PVC/PVC

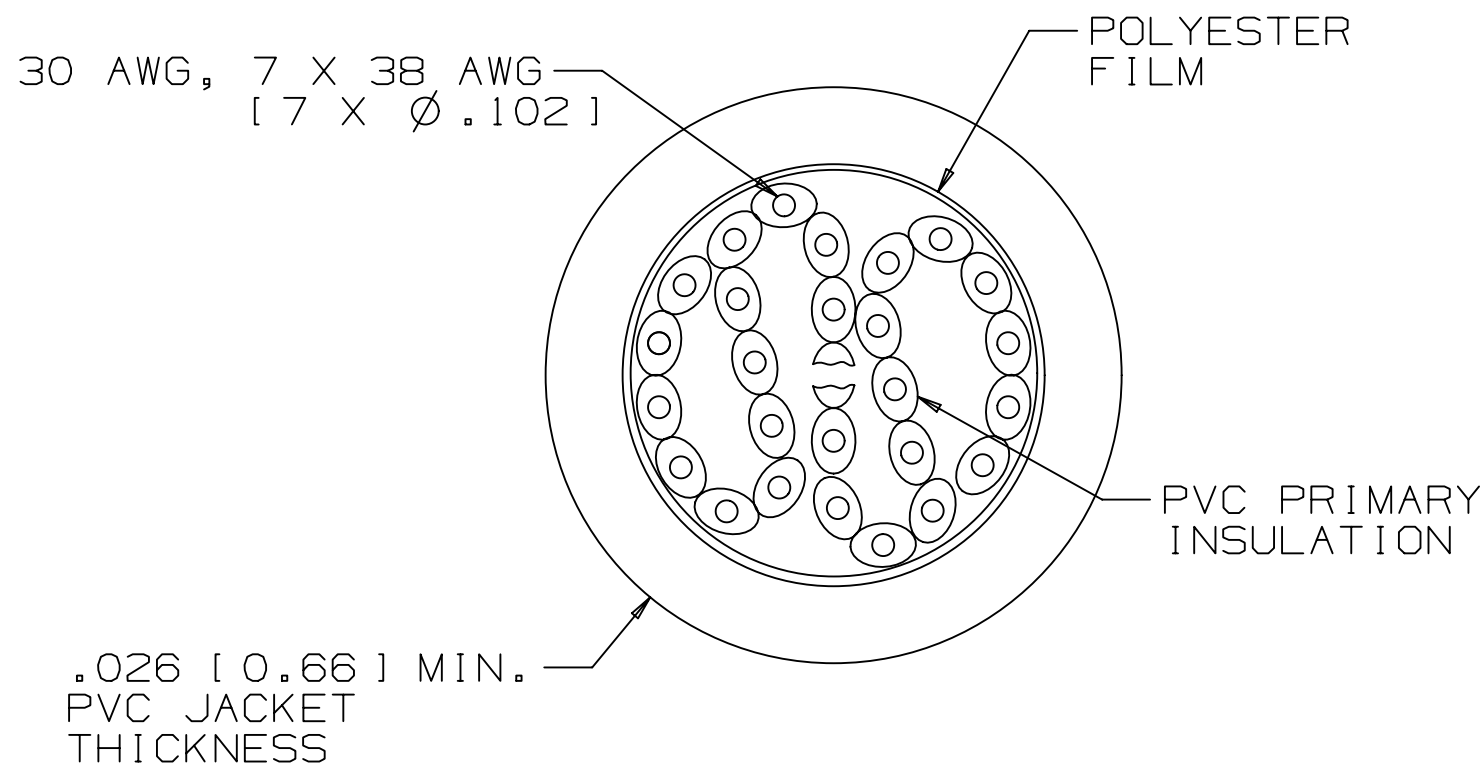
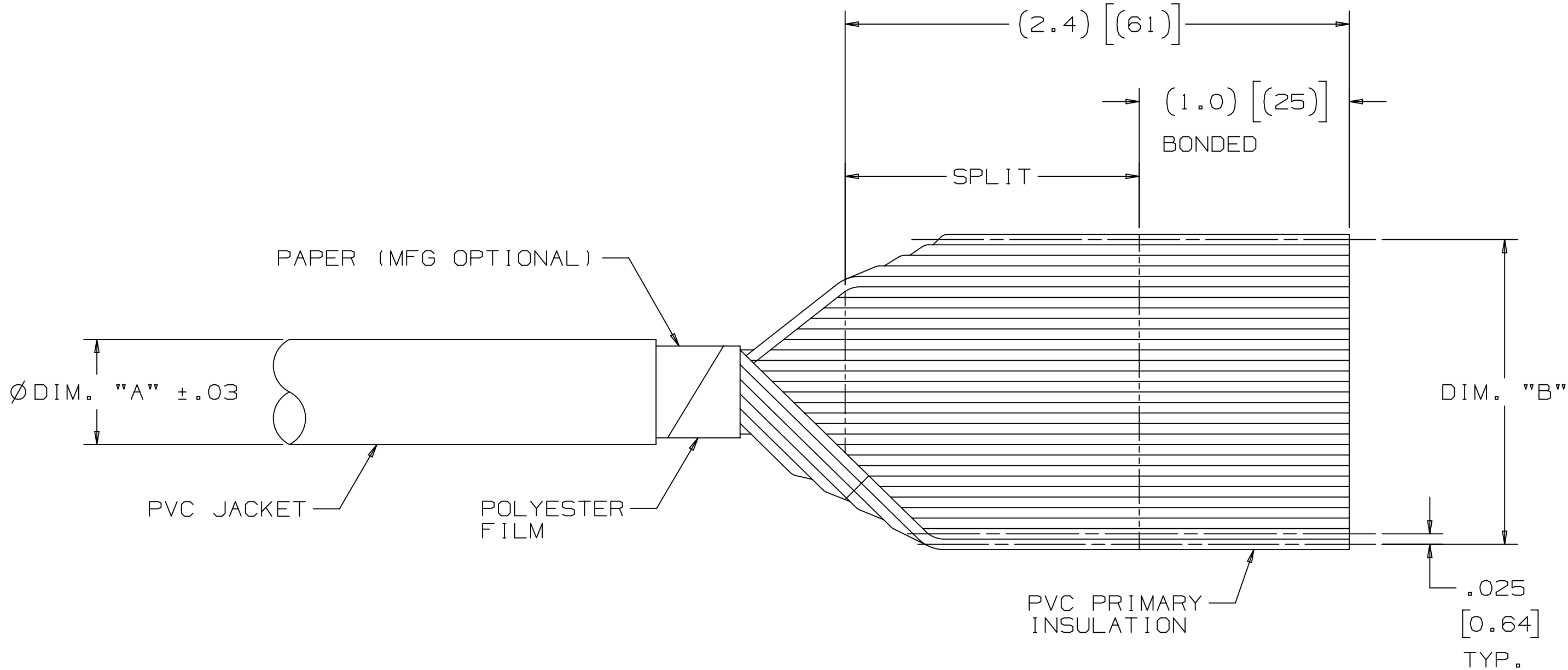


TABLE 1			
NUMBER OF CONDUCTORS	3M PART NUMBER	DIM. "A"	DIMENSION "B" SEE NOTE 4
20	3896/20	.26 [6.6]	.475±.004 [12.70]
26	3896/26	.27 [6.9]	.625±.004 [15.88]
30	3896/30	.27 [6.9]	.725±.006 [18.42]
32	3896/32	.27 [6.9]	.775±.006 [19.69]
34	3896/34	.27 [6.9]	.825±.006 [20.96]
36	3896/36	.27 [6.9]	.875±.006 [22.23]
40	3896/40	.30 [7.6]	.975±.006 [24.77]
50	3896/50	.33 [8.4]	1.225±.006 [31.12]
52	3896/52	.33 [8.4]	1.275±.009 [32.39]
60	3896/60	.37 [9.4]	1.475±.009 [37.47]
68	3896/68	.37 [9.4]	1.675±.009 [42.55]
80	3896/80	.39 [9.9]	1.975±.011 [50.17]
100	3896/100	.44 [11.2]	2.475±.025 [62.87]

ORDERING INFORMATION

3896/XX XX XX

NUMBER OF CONDUCTORS
(SEE TABLE 1)

BLANK = STANDARD
SF = SPLICE FREE

BLANK = STANDARD, REPEATING SPLIT/BONDED WIRES
SO = CONTINUOUSLY BONDED WIRE (NO SPLIT)

NOTE:
AVAILABLE IN STANDARD 275FT ROLLS. CONTACT 3M
FOR AVAILABILITY OF ADDITIONAL CONDUCTOR COUNTS
AND/OR CUSTOM ROLL LENGTHS.

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

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- * ROUND CONSTRUCTION PERMITS EASIER ROUTING.
- * 30 AWG WIRE ON .025 INCH CENTERS PERMITS MASS TERMINATION.
- * CONTINUOUS SPLIT/BOND ALLOWS FOR MASS TERMINATION ON 2.4 INCH CENTERS (APPROXIMATE).
- * CLOSE SPACING PERMITS HIGHER SIGNAL DENSITY.
- * PRIMARY CABLE IS ZIPPABLE FOR BRANCHING OR DISCRETE TERMINATIONS.
- * PVC INSULATION PROVIDES EXCELLENT FLEXIBILITY.
- * RECOMMENDED FOR USE WITH 3M™ TRIPOLARIZED WIREMOUNT SOCKET 82XXX-600X, .050" X .100" AND 3M™ PAK 50 IDC SOCKETS P25E-XXXs-XXX.

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 EDGE OF PRIMARY CABLE DESIGNATES WIRE #1.
4. DIMENSION B REFERS TO BONDED AREA ONLY.

2 PHYSICAL :

JACKET MATERIAL: POLYVINYL CHLORIDE (PVC)
JACKET COLOR: BLACK
PRIMARY MATERIAL: POLYVINYL CHLORIDE (PVC)
COLOR: GRAY
MARKING STANDARD: ULAWM 20596 105C 30V VW1 3M NU
INNER WRAP: POLYESTER FILM

2 ELECTRICAL :

VOLTAGE RATING	USA: 30V	EU: < 50V
INSULATION RESISTANCE	PRIMARY CABLE >1 X 10 ¹⁰ Ω/10ft [3m]	
CHARACTERISTIC IMPEDANCE	UNBALANCED 73Ω	BALANCED 121Ω
CAPACITANCE	20.8 pF/ft [68.2 pF/m]	12.0 pF/ft [39.4 pF/m]
INDUCTANCE	.11μH/ft [0.36μH/m]	.18μH/ft [0.57μH/m]
PROPAGATION DELAY	1.51 ns/ft [4.95 ns/m]	1.45 ns/ft [4.76 ns/m]
VELOCITY OF PROPAGATION	67%	70%

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

2 ENVIRONMENTAL :

TEMPERATURE RATING: -20°C TO +105°C
FLAMMABILITY RATING: VW-1

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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
3896		ECO		MAR 03,2023		
DIVISION	DIVISION CODE	CHKD	DATE	DATE	DATE	DATE
DO NOT SCALE DRAWING	SCALE	CHKD	DATE	DATE	DATE	DATE
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	CHKD	DATE	DATE	DATE	DATE
MAX SURFACE ROUGHNESS	MAX SURFACE ROUGHNESS	CHKD	DATE	DATE	DATE	DATE
MARKED ONLY	MARKED ONLY	CHKD	DATE	DATE	DATE	DATE
TOLERANCES EXCEPT AS NOTED		TOLERANCES EXCEPT AS NOTED				
INCHES		INCHES				
.00 ±.005		.00 ±.005				
.000 ±.010		.000 ±.010				
.0000 ±.0005		.0000 ±.0005				
MILLIMETERS		MILLIMETERS				
0 ±		0 ±				
.00 ±		.00 ±				
.000 ±		.000 ±				
ANGLES		ANGLES				
30° ±		30° ±				
45° ±		45° ±				
60° ±		60° ±				
90° ±		90° ±				
120° ±		120° ±				
150° ±		150° ±				
180° ±		180° ±				
210° ±		210° ±				
240° ±		240° ±				
270° ±		270° ±				
300° ±		300° ±				
330° ±		330° ±				
360° ±		360° ±				

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TITLE		
ROUND, JACKETED, FLAT CABLE, .025" PITCH, 30AWG STRANDED, 3896		
CAGE NUMBER	SIZE	DRAWING NO.
D	78-5100-2173-2	E
MODEL	3896	REV.
LISTS	YES	NO
SHT	1	OF 2

UL FILE NO: E42769,
STYLE NO: 20596

3M™ ROUND, JACKETED, FLAT CABLE, 3896 SERIES

.025: PITCH 30 AWG STRANDED, MASS-TERM, PVC/PVC

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

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E		109188		MAR 03, 2023		JNC	FJR
REVISED AND REDRAWN							
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT	CHKD
DRFT		CASTIGLIONE		DATE		DATE	DATE
CHKD				MAR 03, 2023		APPR	MAR 03, 2023
				F. RODRIGUEZ			
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2023			
EMSD				<div> <div>3M</div> <div>3M Center St. Paul, MN 55144</div> </div> <p>This document contains all the information on 3M property and may not be reproduced or further disseminated without the prior permission of 3M. All rights reserved. No part of this document may be disclosed other than for 3M authorized purposes.</p>			
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED		TITLE			
SCALE		INCHES		ROUND, JACKETED, FLAT			
		.0 ± .1		CABLE, .025" PITCH,			
THIRD ANGLE PROJECTION		.00 ± .05		30AWG, STRANDED, 3896			
INTERPRET PER ASME Y14.5 - 2018		.000 ± .010		CAGE NUMBER			
MAX. SURFACE ROUGHNESS		.000 ± .0005		SIZE		DRAWING NO.	
ALL SURFACES		MILLIMETERS		D		78-5100-2173-2	
MARKED ONLY		.0 ± .1		MODEL		REV.	
		.00 ± .05		3896		DET. LISTS	
		.00 ± .05				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
		.000 ± .010				SHT 2 OF 2	
		ANGLES ±					