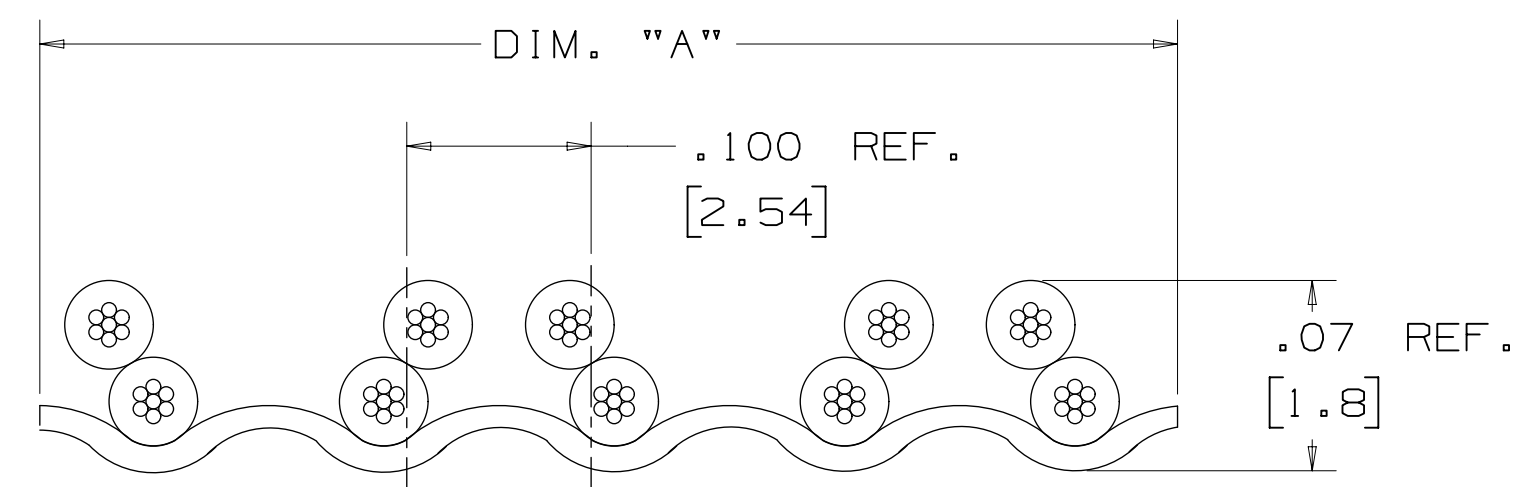
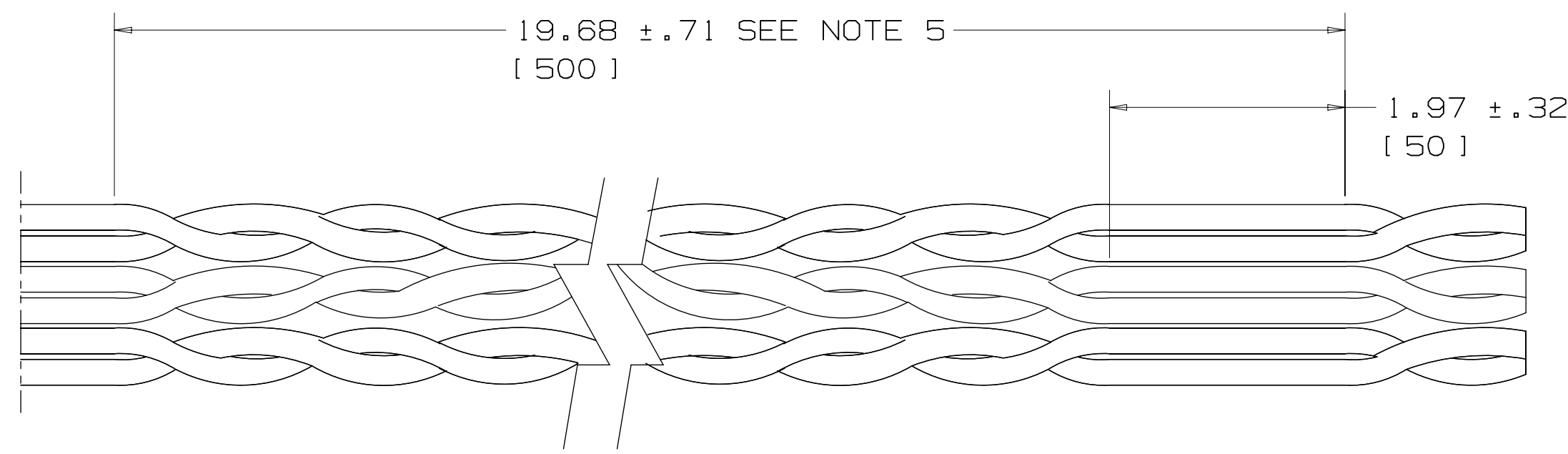
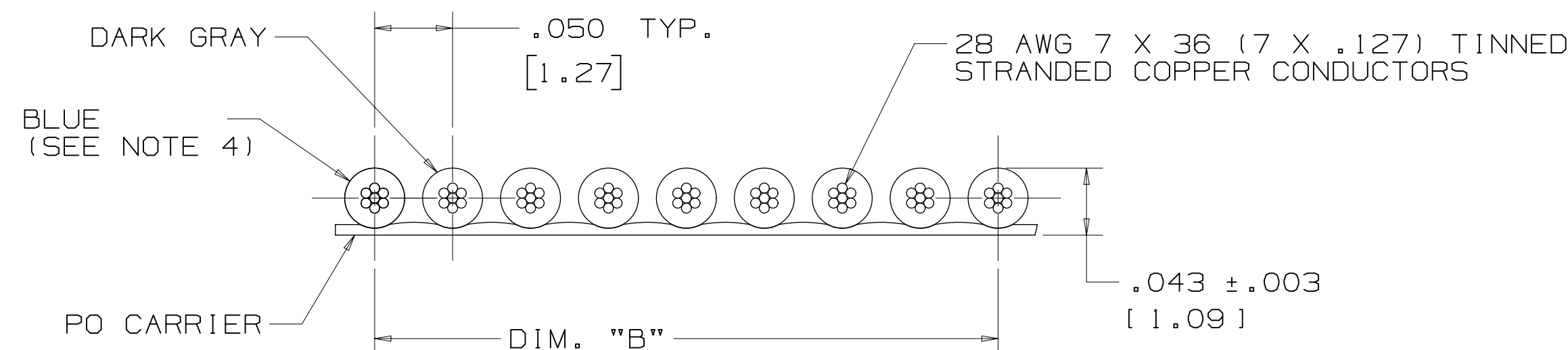


3M™ TWISTED PAIR FLAT CABLE, HF100 SERIES
 .050" 28 AWG STRANDED, MASS TERMINABLE, HALOGEN FREE PO



SECTION THRU TWIST



SECTION THRU FLAT

ORDERING INFORMATION

HF100/XX TP XX

NUMBER OF CONDUCTORS (SEE TABLE) BLANK = STANDARD
 SF = SPLICE FREE

NOTE:
 AVAILABLE IN STANDARD LENGTHS OF 100 FT AND 300 FT PER ROLL,
 PLEASE SPECIFY WHEN ORDERING.

NO. OF CONDUCTORS	3M PART NUMBER	DIM. "A"	DIM. "B"
10 (5 PAIR)	HF100/10TP	.50 [12.7]	.450+/- .010 [11.43]
14 (7 PAIR)	HF100/14TP	.70 [17.8]	.650+/- .010 [15.88]
16 (8 PAIR)	HF100/16TP	.80 [20.3]	.750+/- .010 [20.96]
20 (10 PAIR)	HF100/20TP	1.00 [25.4]	.950+/- .010 [22.23]
24 (12 PAIR)	HF100/24TP	1.20 [30.5]	1.150+/- .010 [24.77]
26 (13 PAIR)	HF100/26TP	1.30 [33.0]	1.250+/- .010 [31.12]
30 (15 PAIR)	HF100/30TP	1.50 [38.1]	1.450+/- .015 [36.80]
34 (17 PAIR)	HF100/34TP	1.70 [43.2]	1.650+/- .015 [37.47]
40 (20 PAIR)	HF100/40TP	2.00 [50.8]	1.950+/- .015 [42.55]
50 (25 PAIR)	HF100/50TP	2.50 [63.5]	2.450+/- .015 [50.17]
60 (32 PAIR)	HF100/60TP	3.00 [76.2]	2.950+/- .015 [62.87]
64 (32 PAIR)	HF100/64TP	3.20 [81.3]	3.150+/- .015 [80.01]

2 PHYSICAL :

INSULATION:
 MATERIAL: HALOGEN FREE POLYOLEFIN (PO)
 COLOR: BLUE / WHITE PAIRS

MARKING:
 STANDARD: NONE
 CANADIAN OPTION: SEE "PRINTING ILLUSTRATION" VIEW

CONDUCTORS: 28 AWG, 7 X 36 AWG [7 X Ø.127] TINNED STRANDED COPPER

2 ELECTRICAL :

VOLTAGE RATING: USA 150V CANADIAN 150V EU: <50V
 INSULATION RESISTANCE: >1 X 10¹⁰Ω/10ft. [3m]

CHARACTERISTIC IMPEDANCE:	UNBALANCED	BALANCED
	102Ω	119Ω
CAPACITANCE:	16.9 pF/ft [55.4 pF/m]	14.6 pF/ft [47.9 pF/m]
	INDUCTANCE:	.21μH/ft [.69μH/m]
PROPAGATION DELAY:	1.74 ns/ft [5.71 ns/m]	1.73 ns/ft [5.68 ns/m]
VELOCITY OF PROPAGATION:	58%	59%

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

2 ENVIRONMENTAL :

TEMPERATURE RATING: -40°C TO +105°C (EIA-364-32G, METHOD A, TEST CONDITION 2)
 -15°C TO +105°C (UL TEMPERATURE RATING)

FLAMMABILITY RATING: UL: HORIZONTAL

HALOGEN FREE IS DEFINED AS BOTH 1) NO HALOGEN COMPOUNDS THAT ARE INTENTIONALLY ADDED TO THE PRODUCT OR USED IN THE MANUFACTURING PROCESS FOR THE PRODUCT AND 2) ANY IMPURITIES PRESENT ARE LESS THAN 900ppm BROMINE, LESS THAN 900ppm CHLORINE AND/OR LESS THAN 1500ppm TOTAL BROMINE AND CHLORINE. THE LATTER ARE THE LEVELS SET FORTH IN CERTAIN INDUSTRY STANDARDS FOR PRINTED CIRCUIT BOARDS, SUCH AS THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) 61249-2-21 STANDARDS. THIS INFORMATION REPRESENTS 3M'S KNOWLEDGE AND BELIEF WHICH MAY BE BASED IN WHOLE OR IN PART ON INFORMATION PROVIDED BY 3RD PARTY SUPPLIERS TO 3M.

- * LOW SMOKE ZERO HALOGEN (LSZH) INSULATION. ADVANTAGES OF LSZH INSULATION ARE THE LOW SMOKE (IEC 61034-2-2005) AND LOW TOXICITY OF COMBUSTION GASES (NF X 70-100-2-2006), REDUCING THE RISK TO FIREFIGHTERS AND REDUCING THE SOOT AND CORROSION DAMAGE TO NEARBY EQUIPMENT.
- * 28 AWG WIRE ON .050 INCH CENTERS PERMITS MASS TERMINATION TO BROAD LINE OF IDC CONNECTORS.

- NOTES
- REGULATORY INFORMATION: VISIT 3M.com/regs OR CONTACT YOUR 3M REPRESENTATIVE TO FIND THE RoHS COMPLIANCE STATUS OF THE 3M PART YOU ARE INTERESTED IN.
 - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 - BLUE EDGE CONDUCTOR DESIGNATES WIRE ONE OF PAIR ONE.
 - STANDARD PRODUCT HAS A 2" FLAT ON 19.7" REPEAT (50MM BOND ON 500MM REPEAT). FOR SPECIAL REQUIREMENTS, PLEASE CONTACT YOUR 3M SALES REPRESENTATIVE. THE FLAT CAN BE SPECIFIED ANYTHING OVER 1" (25MM), THE REPEAT CAN BE SPECIFIED FROM 6.5" TO 48" (16.5CM TO 1.2M).

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

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

RU AWM 21008 105°C 150V HOR

cRU AWM 1A 105°C 150V FT2 EU <50V

CANADIAN OPTION
 "PRINTING ILLUSTRATION"

INCH [MM]		
TOLERANCE - UNLESS NOTED		
.X	.XX	.XXX
[INCH] ±.1	±.01	±.005
[] = DIM. FOR REFERENCE ONLY		

cRU us
 UL FILE NO: E42769,
 UL STYLE NO: 21008

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				JUN 08, 2018	JNC	BM
TOLERANCE CODES				DATE	DATE	DATE
CASTIGLIONE				JUN 11, 2018	MFG	
DIVISION				DATE	DATE	DATE
EMSD				B. MIZE		
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THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	MILLIMETERS		TITLE 3M TWISTED PAIR FLAT CABLE, .050", 28AWG STRANDED		
MAX SURFACE ROUGHNESS	MIN SURFACES	INCHES		CAGE NUMBER D 78-5100-2344-9		
MARKED ONLY	ANGLES	REVISIONS		MODEL HF100		

D REV. 1
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 78-5100-2344-9
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8 7 6 5 4 3 2 1

3M™ TWISTED PAIR FLAT CABLE, HF100 SERIES
 .050" 28 AWG STRANDED, MASS TERMINABLE, HALOGEN FREE PO

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


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 1-800-225-5373
 www.3M.com/interconnect

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				JUN 08, 2018	JNC	BM
REVISED AND REDRAWN		DRFT	DATE	MFG	DATE	
CASTIGLIONE		CHKD	DATE	JUN 11, 2018	APPRV	DATE
				B. MIZE		JUN 11, 2018
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DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED INCHES .00 ± .000 ± .0000 ±				
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	MILLIMETERS 0 ± .00 ± .000 ±				
MAX SURFACE ROUGHNESS	MARKED ONLY	CAGE NUMBER		SIZE	DRAWING NO.	REV.
		D 78-5100-2344-9		D	HF100	D
				MODEL	DET	SHT 2 OF 2
				HF100	LISTS	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>

78-5100-2344-9
 DRAWING NUMBER
 6
 Drr-set
 (hrs)
 6
 UTC
 6/11/2018
 Time
 Standard
 Central
 Image