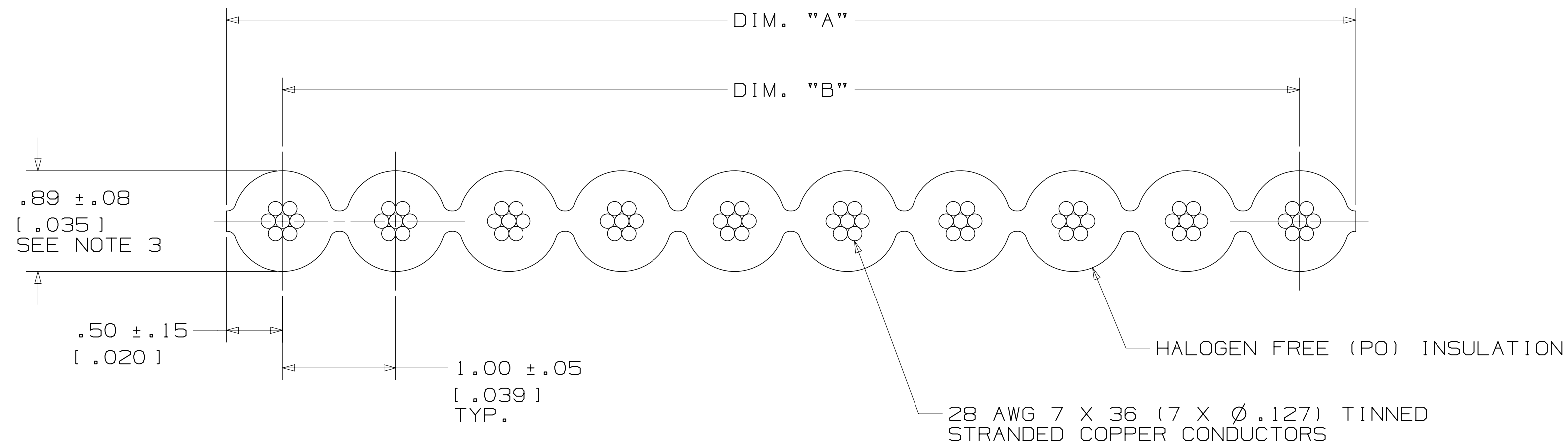


3M™ ROUND CONDUCTOR FLAT CABLE, HF625 SERIES

1MM, 28 AWG STRANDED, HALOGEN FREE PO



NUMBER OF CONDUCTORS	3M PART NUMBER	DIMENSION A	DIMENSION B
06	HF625/06	6.00±.20 [.236]	5.00±.18 [.197]
08	HF625/08	8.00±.20 [.315]	7.00±.18 [.276]
10	HF625/10	10.00±.20 [.394]	9.00±.18 [.354]
12	HF625/12	12.00±.20 [.472]	11.00±.18 [.433]
14	HF625/14	14.00±.20 [.551]	13.00±.18 [.512]
16	HF625/16	16.00±.22 [.630]	15.00±.20 [.591]
18	HF625/18	18.00±.22 [.709]	17.00±.20 [.669]
20	HF625/20	20.00±.22 [.787]	19.00±.20 [.748]
22	HF625/22	22.00±.22 [.866]	21.00±.20 [.827]
24	HF625/24	24.00±.22 [.945]	23.00±.20 [.906]
26	HF625/26	26.00±.22 [1.024]	25.00±.20 [.984]
28	HF625/28	28.00±.22 [1.102]	27.00±.20 [1.063]
30	HF625/30	30.00±.25 [1.181]	29.00±.23 [1.142]
32	HF625/32	32.00±.25 [1.260]	31.00±.23 [1.220]
34	HF625/34	34.00±.25 [1.339]	33.00±.23 [1.299]
36	HF625/36	36.00±.25 [1.417]	35.00±.23 [1.378]
38	HF625/38	38.00±.25 [1.496]	37.00±.23 [1.457]
40	HF625/40	40.00±.25 [1.575]	39.00±.23 [1.535]
42	HF625/42	42.00±.25 [1.654]	41.00±.23 [1.614]
44	HF625/44	44.00±.25 [1.732]	43.00±.23 [1.693]
46	HF625/46	46.00±.25 [1.811]	45.00±.23 [1.772]
48	HF625/48	48.00±.25 [1.890]	47.00±.23 [1.850]
50	HF625/50	50.00±.25 [1.969]	49.00±.23 [1.929]

ORDERING INFORMATION

HF625/XX XX

NUMBER OF CONDUCTORS — BLANK = STANDARD
(SEE TABLE 1) SF = SPLICE FREE

NOTE:
AVAILABLE IN STANDARD 30M AND 100M ROLLS.
PLEASE SPECIFY WHEN ORDERING. CONTACT 3M
FOR AVAILABILITY OF ADDITIONAL CONDUCTOR
COUNTS AND/OR CUSTOM ROLL LENGTHS.

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



UL FILE NO: E42769
STYLE NO: 22089

MM [INCH]	
TOLERANCE - UNLESS NOTED	
	INCHES
	MILLIMETERS
	MAX. SURFACE ROUGHNESS
	MARKED ONLY

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				JUL 17, 2018	JNC	BM
DIVISION				DIVISION CODE		
DO NOT SCALE DRAWING				EMSD		
THIRD ANGLE PROJECTION				TOLERANCES EXCEPT AS NOTED		
INTERPRET PER ASME Y14.5 - 2009				INCHES		
MAX. SURFACE ROUGHNESS				MILLIMETERS		
SURFACES				0		
MARKED ONLY				0		
ANGLES				0		
TITLE				CAGE NUMBER		
HF625 ROUND CONDUCTOR FLAT CABLE, 1MM, 28AWG STRANDED				D 78-5100-2338-1		
MODEL				REV.		
HF625				D		

2 PHYSICAL :

INSULATION MATERIAL: HALOGEN FREE POLYOLEFIN (PO)
COLOR: DARK GRAY

MARKING: NONE
STANDARD: NONE
CONDUCTORS: 28 AWG, 7 X 36 AWG [7 X $\phi .127$] TINNED STRANDED COPPER

2 ELECTRICAL :

VOLTAGE RATING: USA 300V CANADIAN 150V EU: <50V
INSULATION RESISTANCE: $>1 \times 10^{10} \Omega / 3m$ [10 FT.]

CHARACTERISTIC IMPEDANCE:	UNBALANCED 85 Ω	BALANCED 144 Ω
CAPACITANCE:	60.5 pF/ft [18.44 pF/m]	33.8 pF/ft [10.29 pF/m]
INDUCTANCE:	.43 μ H/ft [.13 μ H/m]	.69 μ H/ft [.21 μ H/m]
PROPAGATION DELAY:	5.15 ns/ft [1.57 ns/m]	4.86 ns/ft [1.48 ns/m]
VELOCITY OF PROPAGATION:	65%	69%

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)
-10°C TO +90°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 STRANDED CONDUCTORS ON 1MM PITCH PERMITS MASS TERMINATIONS TO A BROAD LINE OF METRIC IDC CONNECTORS.

* ZIPPABLE FOR BRANCHING OR DISCRETE TERMINATIONS.

- 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 MARKING ON ONE EDGE OF PRIMARY CABLE DESIGNATES WIRE #1.

78-5100-2338-1
DRAWING NUMBER
11/12/2018
UTG Orfset (hrs) 6
Imaged: Central Standard

8 7 6 5 4 3 2 1

3M™ ROUND CONDUCTOR FLAT CABLE, HF625 SERIES
 1MM, 28 AWG STRANDED, HALOGEN FREE P0

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


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 Austin, TX 78726-9000
 1-800-225-5373
www.3M.com/interconnect

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		D	79845	JUL 17, 2018 REVISED & REDRAWN	JNC	BM
APPROVALS	DATE	DATE	DATE	DATE	DATE	DATE
CHKD	CASTIGLIONE	JUL 17, 2018	MFG			
APPRV	B. MIZE	JUL 17, 2018				
DIVISION		DIVISION CODE		TITLE		
DO NOT SCALE DRAWING		EMSD		 © 3M COPYRIGHT 2018 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.		
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED		HF625 ROUND CONDUCTOR FLAT CABLE, 1MM, 28AWG STRANDED		
INTERPRET PER ASME Y14.5 - 2009		INCHES		CAGE NUMBER		
MAX SURFACE ROUGHNESS		MILLIMETERS		D 78-5100-2338-1 D		
<input type="checkbox"/> UNMARKED SURFACES <input checked="" type="checkbox"/> MARKED ONLY		.00 ± .000 ± .0000 ± 0 ± .00 ± .000 ± .000 ±		MODEL HF625		
		.00 ± .000 ± .000 ±		DET <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 2 OF 2		

78-5100-2338-1 DRAWING NUMBER
 D REVISION
 B
 A
 Time 11/12/2018 -- UTC Offset (hrs) 6