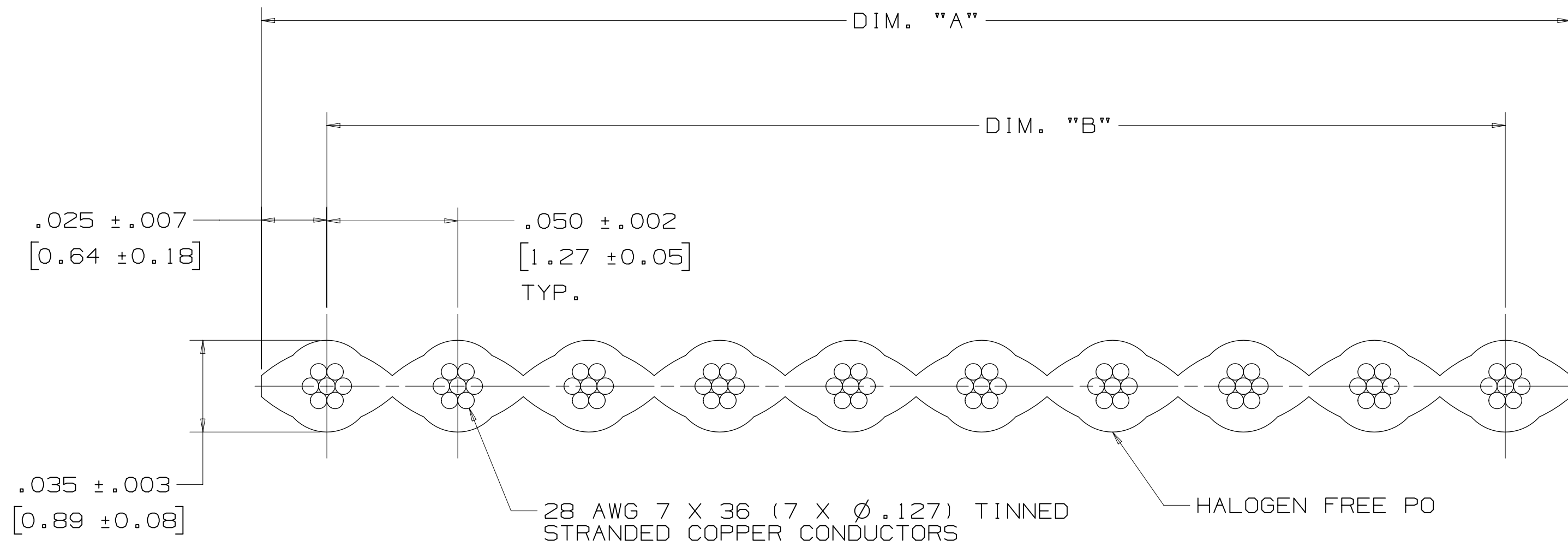


3M™ ROUND CONDUCTOR FLAT CABLE, HF365 SERIES

.050" 28 AWG STRANDED, HALOGEN FREE PO



NOTE: BLUE MARKING ON ONE EDGE OF CABLE DESIGNATES WIRE #1.

2 PHYSICAL :

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

MARKING: NONE
STANDARD: NONE
CONDUCTORS: 28 AWG 7 X 36AWG (7 X Ø .127) TINNED STRANDED COPPER

2 ELECTRICAL :

VOLTAGE RATING: USA 300V CANADIAN 150V EU: <50V
INSULATION RESISTANCE: >1 X 10¹⁰Ω/10ft. [3m]

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	100Ω	168Ω
CAPACITANCE:	15.0 pF/ft [49.2 pF/m]	8.4 pF/ft [27.7 pF/m]
INDUCTANCE:	.15μH/ft [.49μH/m]	.24μH/ft [.79μH/m]
PROPAGATION DELAY:	1.51 ns/ft [4.95 ns/m]	1.42 ns/ft [4.66 ns/m]
VELOCITY OF PROPAGATION:	68%	72%

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 (E1A-364-32G, METHOD A, TEST CONDITION 2)
-10°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.

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

- * 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.
- * ZIPPABLE FOR BRANCHING OR DISCRETE TERMINATION.

- 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.

NUMBER OF CONDUCTORS	3M PART NUMBER	DIM. "A"	DIM. "B"
04	HF365/04	.200+/- .010 [5.08]	.150+/- .007 [3.81]
06	HF365/06	.300+/- .010 [7.62]	.250+/- .007 [6.35]
08	HF365/08	.400+/- .010 [10.16]	.350+/- .007 [8.89]
09	HF365/09	.450+/- .010 [11.43]	.400+/- .007 [10.16]
10	HF365/10	.500+/- .010 [12.70]	.450+/- .007 [11.43]
11	HF365/11	.550+/- .010 [13.97]	.500+/- .007 [12.70]
12	HF365/12	.600+/- .010 [15.24]	.550+/- .007 [13.97]
14	HF365/14	.700+/- .010 [17.78]	.650+/- .007 [16.51]
15	HF365/15	.750+/- .010 [19.05]	.700+/- .007 [17.78]
16	HF365/16	.800+/- .015 [20.32]	.750+/- .011 [19.05]
18	HF365/18	.900+/- .015 [22.88]	.850+/- .011 [21.59]
20	HF365/20	1.000+/- .015 [25.40]	.950+/- .011 [24.13]
24	HF365/24	1.200+/- .015 [30.48]	1.150+/- .011 [29.21]
25	HF365/25	1.250+/- .015 [31.75]	1.200+/- .011 [30.48]
26	HF365/26	1.300+/- .015 [33.02]	1.250+/- .011 [31.75]
30	HF365/30	1.500+/- .020 [38.10]	1.450+/- .015 [36.83]
34	HF365/34	1.700+/- .020 [43.18]	1.650+/- .015 [41.91]
36	HF365/36	1.800+/- .020 [45.72]	1.750+/- .015 [44.45]
37	HF365/37	1.850+/- .020 [46.99]	1.800+/- .015 [45.72]
40	HF365/40	2.000+/- .020 [50.80]	1.950+/- .015 [49.53]
44	HF365/44	2.200+/- .020 [55.88]	2.150+/- .015 [54.61]
50	HF365/50	2.500+/- .020 [63.50]	2.450+/- .015 [62.23]
60	HF365/60	3.000+/- .020 [76.20]	2.950+/- .015 [74.93]
64	HF365/64	3.200+/- .020 [81.28]	3.150+/- .015 [80.01]

ORDERING INFORMATION

HF365/XX XX

BLANK = STANDARD
SF = SPLICE FREE

No. OF CONDUCTORS:
(SEE TABLE 1)

NOTE: AVAILABLE IN STANDARD 100FT OR 300FT ROLLS.
PLEASE SPECIFY WHEN ORDERING.
CONTACT 3M FOR AVAILABILITY OF ADDITIONAL
CONDUCTOR COUNTS AND/OR CUSTOM ROLL LENGTHS.



INCH [MM]		
TOLERANCE - UNLESS NOTED		
	.X	.XX
	±.1	±.01
	±.2	±.13
[] = DIM. FOR REFERENCE ONLY		

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				MAY 25, 2018	JNC	BM
DIVISION		DIVISION CODE		DATE		
EMSD		EMSD		MAY 25, 2018		
DO NOT SCALE DRAWING	SCALE 25 1	TOLERANCES EXCEPT AS NOTED		DATE		
THIRD ANGLE PROJECTION		INCHES		DATE		
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		DATE		
MAX SURFACE ROUGHNESS		INCHES		DATE		
SURFACES		MILLIMETERS		DATE		
MARKED ONLY		ANGLES		DATE		
3M				© 3M COPYRIGHT 2018		
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.		
TITLE				REV.		
ROUND CONDUCTOR FLAT CABLE, .050", 28AWG STRANDED, HAL-FREE				D		
CAGE NUMBER				REV.		
D78-5100-2334-0				C		
MODEL				REV.		
HF365				SHT 1 OF 2		

78-5100-2334-0
DRAWING NUMBER
REVISION
Time 5/25/2018 -- UTC Off-set (hrs) 6
Imaged: Central Standard

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 Electronics Materials Solutions Division
 6801 River Place Blvd.
 Austin, TX 78726-9000
 1-800-225-5373
www.3M.com/interconnect

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				MAY 25, 2018 REVISED AND REDRAWN	JNC	BM
DESIGN CODES		DRF	DATE	MFG	DATE	
		CASTIGLIONE	MAY 25, 2018			
DIVISION	DIVISION CODE	CHKD	DATE	APPRV	DATE	
	EMSD			B. MIZE	MAY 25, 2018	
DO NOT SCALE DRAWING	SCALE 1/1	TOLERANCES EXCEPT AS NOTED		 © 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	INTERPRET PER ASME Y14.5 - 2009	INCHES .00 ± .000 ± .0000 ±		MILLIMETERS 0 ± .00 ± .000 ±		
MAX SURFACE ROUGHNESS	MARKED ONLY	ANGLES 0 ± .00 ± .000 ±		TITLE ROUND CONDUCTOR FLAT CABLE, .050", 28AWG STRANDED, HAL-FREE		
		CAGE NUMBER	SIZE	DRAWING NO.	REV.	
		D		78-5100-2334-0	C	
		MODEL	HF365	DET	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	SHT 2 OF 2

78-5100-2334-0
 DRAWING NUMBER
 C
 REVISION
 B
 6
 Dfn-set
 (hrs)
 -- UTC
 5/25/2018
 Standard
 Central
 Time

The Netherlands



Elektrostraat 17
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33
F: +31 (0)53 573 33 30
E: nl@texim-europe.com

Belgium



Zuiderlaan 14 bus 10
B-1731 Zellik

T: +32 (0)2 462 01 00
F: +32 (0)2 462 01 25
E: belgium@texim-europe.com

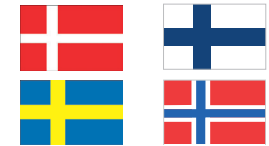
UK & Ireland



St. Mary's House, Church Lane
Carlton Le Moorland
Lincoln LN5 9HS

T: +44 (0)1522 789 555
F: +44 (0)845 299 22 26
E: uk@texim-europe.com

Nordic region



Sdr. Jagtvej 12
DK-2970 Hørsholm

T: +45 88 20 26 30
F: +45 88 20 26 39
E: nordic@texim-europe.com

Germany North



Bahnhofstrasse 92
D-25451 Quickborn

T: +49 (0)4106 627 07-0
F: +49 (0)4106 627 07-20
E: germany@texim-europe.com

Germany South



Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
F: +49 (0)89 436 086-19
E: germany@texim-europe.com

Austria



Warwitzstrasse 9
A-5020 Salzburg

T: +43 (0)662 216 026
F: +43 (0)662 216 026-66
E: austria@texim-europe.com

Italy



Via Matteotti 43
IT-20864 Agrate Brianza (MB)

T: +39 (0)39 971 3293
F: +39 (0)39 971 3293
E: italy@texim-europe.com