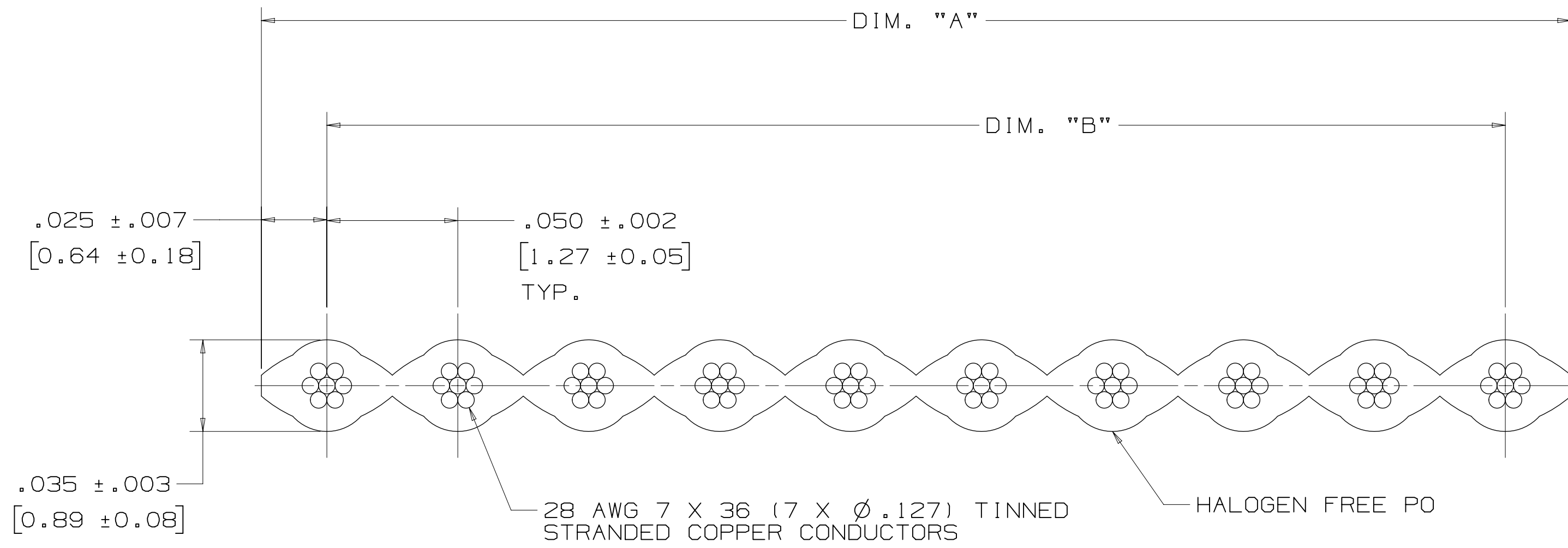


# 3M™ ROUND CONDUCTOR FLAT CABLE, HF365 SERIES

.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 10<sup>10</sup>Ω/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 (EIA-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>

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- \* 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.

1. REGULATORY INFORMATION:  
VISIT [3M.com/regs](http://3M.com/regs) OR CONTACT YOUR 3M REPRESENTATIVE TO FIND THE RoHS COMPLIANCE STATUS OF THE 3M PART YOU ARE INTERESTED IN.
2. 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
APPROVED	DATE	APPROVED	DATE	MAY 25, 2018		
CASTIGLIONE		B. MIZE				
DIVISION	DIVISION CODE	© 3M COPYRIGHT 2018				
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TOLERANCES EXCEPT AS NOTED		ROUND CONDUCTOR FLAT CABLE, .050", 28AWG STRANDED, HAL-FREE				
THIRD ANGLE PROJECTION		CAGE NUMBER D78-5100-2334-0				
INTERPRET PER ASME Y14.5 - 2009		REV. C				
MAX SURFACE ROUGHNESS		MODEL HF365				
LIT SURFACES		SHT 1 OF 2				

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


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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	
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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 <b>ROUND CONDUCTOR FLAT CABLE, .050", 28AWG STRANDED, HAL-FREE</b>		
CAGE NUMBER		DRAWING NO.		REV.		
D78-5100-2334-0		D78-5100-2334-0		C		
MODEL		HF365		DET. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> SHT 2 OF 2		

78-5100-2334-0  
 DRAWING NUMBER  
 178-5100-2334-0  
 Drawing Number  
 5/25/2018  
 Date  
 6  
 hrs  
 set  
 Drf-set  
 -- UTC  
 Standard  
 Central  
 Time