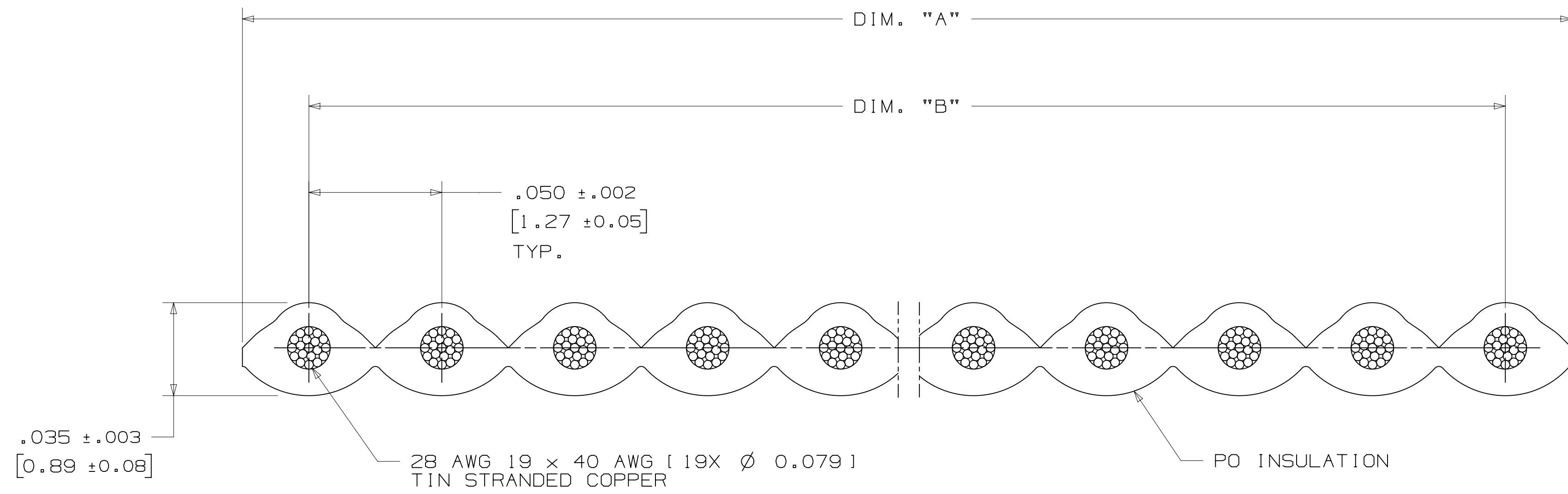


3M™ MEDIUM FLEX LIFE FLAT CABLE, HF539 SERIES
 .050" 28 AWG STRANDED, MEDIUM FLEX LIFE, HALOGEN FREE PO



Note: Available in standard 100 ft and 300 ft rolls, please specify when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

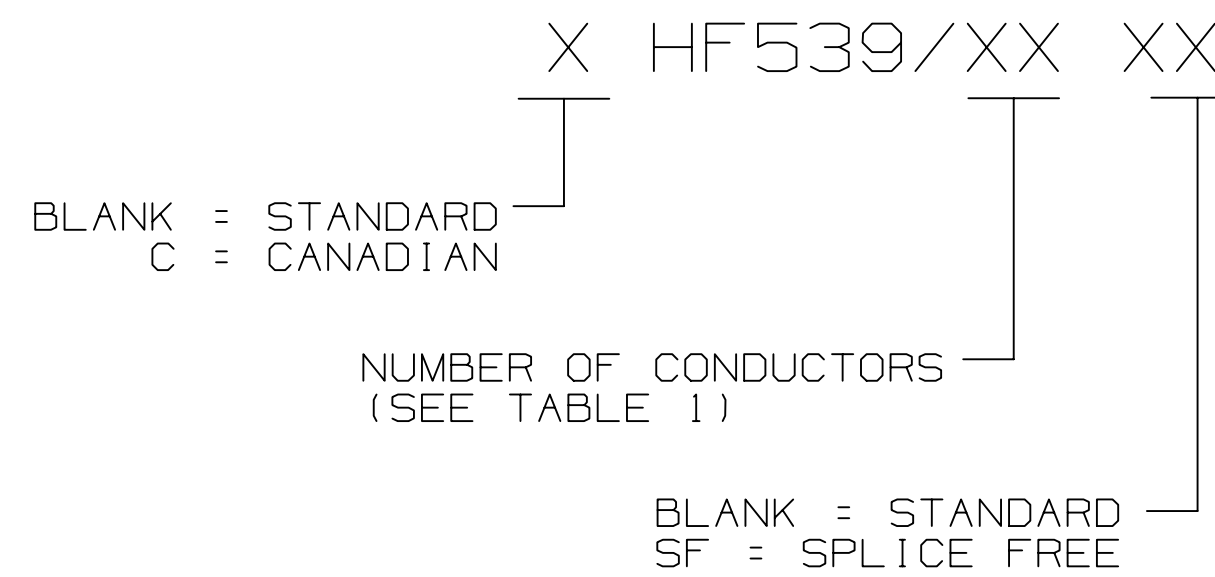
TABLE 1
 DIMENSION CHART

NUMBER OF CONDUCTORS	3M PART NUMBER	DIMENSION 'A' ± AS NOTED	DIMENSION 'B' (SEE NOTE 2)
6	HF539/06	0.300"±0.010"	0.250"±0.007"
9	HF539/09	0.450"±0.010"	0.400"±0.007"
10	HF539/10	0.500"±0.010"	0.450"±0.007"
14	HF539/14	0.700"±0.010"	0.650"±0.007"
15	HF539/15	0.750"±0.010"	0.700"±0.007"
16	HF539/16	0.800"±0.015"	0.750"±0.011"
20	HF539/20	1.000"±0.015"	0.950"±0.011"
24	HF539/24	1.200"±0.015"	1.150"±0.011"
25	HF539/25	1.250"±0.015"	1.200"±0.011"
26	HF539/26	1.300"±0.015"	1.250"±0.011"
30	HF539/30	1.500"±0.020"	1.450"±0.015"
34	HF539/34	1.700"±0.020"	1.650"±0.015"
36	HF539/36	1.800"±0.020"	1.750"±0.015"
37	HF539/37	1.850"±0.020"	1.800"±0.015"
40	HF539/40	2.000"±0.020"	1.950"±0.015"
50	HF539/50	2.500"±0.020"	2.450"±0.015"
60	HF539/60	3.000"±0.020"	2.950"±0.015"
64	HF539/64	3.200"±0.020"	3.150"±0.015"

TABLE 2
 ELECTRICAL CHARACTERISTICS

VOLTAGE RATING	USA: 300V, CANADA: 150V, EU: 50V	
INSULATION RESISTANCE	PRIMARY CABLE >1 X 10 ¹⁰ Ω/10 FT [3 m]	
	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE	100 Ω	168 Ω
CAPACITANCE	15.0 pF/ft [49.2 pF/m]	8.4 pF/ft [27.7 pF/m]
INDUCTANCE	0.15 μH/ft [0.49 μH/m]	0.24 μH/ft [0.79 μH/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 WITHIN A PAIR.



ROLLING FLEX CYCLES PER EIA-364-41

RADIUS	MINIMUM CYCLES
1/2"	0.4 MILLION
3/4"	5 MILLION
1 3/4"	10 MILLION

NOTE: REPRESENTS MINIMUM ROLLING FLEX CYCLES PERFORMED AT AMBIENT TEMPERATURES AT DATE OF PUBLICATION. ADDITIONAL TESTING IS ONGOING. CABLE CONSTRUCTION AND MATERIAL IS SIMILAR TO 3319 SERIES CABLE WHICH IS RATED TO 100 MILLION CYCLES AT 7/8" RADIUS. SEE TS-0732. CONTACT 3M FOR THE MOST UP-TO-DATE INFORMATION.

- NOTES
- MATERIAL:
 A) PRIMARY INSULATION: HALOGEN FREE POLYOLEFIN (PO).
 B) CONDUCTORS: 28 AWG, 19 X 40 AWG (19 X, Ø 0.079), TINNED STRANDED COPPER.
 - 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.

 UL FILE NO: E42769,
 UL STYLE NO: 21682.
 - MARKINGS:
 STANDARD: NONE
 CANADIAN: SEE "PRINTING ILLUSTRATION" VIEW
 PRIMARY CABLE: BLUE MARK ON EDGES DESIGNATES WIRE NUMBER 1.
 - THE SURFACE DEFINED BY THE "ZIP" PROCESS IS NOT REQUIRED TO BE BLUE.
 - ENVIRONMENTAL:
 TEMP RATING: -40°C TO +105°C (EIA-364-32G, METHOD A, TEST CONDITION 2).

 -10°C TO +105°C (UL TEMPERATURE RATING)
 FLAMABILITY RATING: 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.
 2) ANY IMPURITIES PRESENT ARE LESS THAN 900 ppm BROMINE, LESS THAN 900 ppm CHLORINE AND/OR LESS THAN 1500 ppm 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 STANDARD. 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

AWM 21682 105°C 300V HOR AWM 1A 105° 150V FT2 EU<50V

"PRINTING ILLUSTRATION"



DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DATE	DATE	DATE	DATE	DATE	DATE	DATE
DIVISION	DIVISION CODE	© 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.				
DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED INCHES: .0 ± .1 .00 ± .05 .000 ± .010 .0000 ± .0002 MILLIMETERS: 0 ± .5 .0 ± 1.3 .00 ± .25 .000 ± .005 MAX SURFACE ROUGHNESS SURFACES MARKED ONLY				
THIRD ANGLE PROJECTION		TITLE MEDIUM FLEX LIFE FLAT CABLE, .050", 28 AWG, HF539				
		CAGE NUMBER	SIZE	DRAWING NO.	REV.	
		D		78-5100-2565-9	B	
		MODEL		HF539	DET	ISTS YES NO SHT 1 OF 2

178-5100-2565-9
 DRAWING NUMBER
 6
 REV
 6/12/2018
 UTC
 6
 hrs
 6
 set
 6
 Time
 Standard
 Central
 Imaged:

3M™ MEDIUM FLEX LIFE FLAT CABLE, HF539 SERIES
 .050" 28 AWG STRANDED, MEDIUM FLEX LIFE, HALOGEN FREE PO

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
		A		DEC 06, 2012 PRODUCTION RELEASE	JNC	RE
		B		JUN 11, 2018 REVISE NOTES 2, 5 & CYCLES CHART	JNC	BM
DATE	DATE	DATE	DATE	DATE	DATE	DATE
CSTIGLIONE	NOV 05, 2012	MFG				
CHKD		APPRV				
		R. EDWARDS				
DIVISION	DIVISION CODE	 © 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.				
DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED INCHES: .0 ± .1 .00 ± .05 .000 ± .010 .0000 ± .0002 MILLIMETERS: 0 ± 2.5 .0 ± 1.3 .00 ± .25 .000 ± .005				
THIRD ANGLE PROJECTION		TITLE MEDIUM FLEX LIFE FLAT CABLE, .050" 28 AWG, HF539				
INTERPRET PER ASME Y14.5 - 2009		CAGE NUMBER	SIZE	DRAWING NO.	REV.	
MAX SURFACE ROUGHNESS		D		78-5100-2565-9	B	
MARKED SURFACES		MODEL		HF539		
MARKED ONLY		DET		LISTS	YES	NO
						SHT 2 OF 2

78-5100-2565-9
 DRAWING NUMBER
 6/12/2018
 Time
 6
 UTC
 Off-set
 (hrs)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Flat Cables](#) category:

Click to view products by [3M](#) manufacturer:

Other Similar products are found below :

[0002813](#) [0047106](#) [0048000](#) [0049005](#) [0049009](#) [0050009](#) [0051005](#) [0281000624](#) [033F30V96CR](#) [050F28V10CR](#) [050R10-102B](#) [050R10-152B](#)
[050R10-51B](#) [050R10-76B](#) [050R12-127B](#) [050R15-102B](#) [050R15-127B](#) [050R15-152B](#) [050R15-76B](#) [050R20-102B](#) [050R20-51B](#) [050R22-](#)
[102B](#) [050R22-51B](#) [050R24-102B](#) [050R24-76B](#) [050R26-51B](#) [050R30-102B](#) [050R30-152B](#) [050R30-51B](#) [050R30-76B](#) [050R36-127B](#)
[050R36-152B](#) [050R36-51B](#) [050R40-102B](#) [050R40-127B](#) [050R40-152B](#) [050R40-51B](#) [050R40-76B](#) [050R4-51B](#) [050R50-102B](#) [050R50-152B](#)
[050R50-76B](#) [050R5-152B](#) [050R6-51B](#) [050R8-102B](#) [050R8-76B](#) [09180067001](#) [09180097001](#) [09180097005](#) [09180097007](#)