

.050" 28 AWG STRANDED, MASS TERMINATABLE, HALOGEN FREE PO/PO

HF659/XX XX XX

- BLANK = STANDARD
SF = SPLICE FREE

NOTE:
AVAILABLE IN STANDARD 275FT ROLLS. CONTACT 3M
FOR AVAILABILITY OF ADDITIONAL CONDUCTOR COUNTS
AND/OR CUSTOM ROLL LENGTHS.

2 PHYSICAL :

MARKING: STANDARD: NONE
CONDUCTORS: 28 AWG, 7 X 36 AWG [7 X Ø.127] TINNED STRANDED COPPER
SHIELDING: .001 [.03] THICK ALUMINUM/POLYESTER FILM FOIL AND 90%
COVERAGE TINNED COPPER BRAID.

2 ELECTRICAL :

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	54Ω	107Ω
CAPACITANCE:	28.7 pF/ft [84.2 pF/m]	14.4 pF/ft [47.2 pF/m]
INDUCTANCE:	.08μH/ft [.27μH/m]	.16μH/ft [.52μH/m]
PROPAGATION DELAY:	1.55 ns/ft [4.95 ns/m]	1.54 ns/ft [4.95 ns/m]
VELOCITY OF PROPAGATION:	66%	66%

NOTE: UNBALANCED IS MEASURED BETWEEN GROUND-SIGNAL-GROUND CONDUCTORS.
BALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR.
"MEASURED VALUES ARE TYPICAL"

2 ENVIRONMENTAL :

FLAMMABILITY RATING: INTERNAL: HORIZONTAL FLAME PER UL758
EXTERNAL: CABLE FLAME (VERTICAL) PER UL758

- o INSULATION.
- o ARE THE LOW
- o LOW TOXICITY
- o (-100-2-2006),
- o HTERS AND
- o ION DAMAGE TO

ORE EASY ROUTING.

HTERS PERMITS MASS
IDC CONNECTORS.

ALLOWS FOR MASS
RS.

- o AVERAGE SHIELDING.
- o R BRANCHING OR

1.	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.
2.	IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

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INFORMATION CALL 800-225-5373



INCH [MM]			
TOLERANCE - UNLESS NOTED			
	.X	.XX	.XXX
[INCH]	±.1	±.05	±.010
[] = DIM. FOR REFERENCE ONLY			

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ACCESS CODES				DRFT CASTIGLIONE		DATE MAY 29, 2018		MRG	DATE
				CHKD		DATE		APRVL B. MIZE	DATE MAY 29, 2018
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2018					
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DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED							
SCALE		INCHES		TITLE		ROUND, SHIELDED / JACKETED, FLAT, CABLE, .050", HF659			
		 THIRD ANGLE PROJECTION							
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		CAGE NUMBER D 78-5100-2335-7		REV.			
MAX. SURFACE ROUGHNESS		 MAX. SURFACES							
☒ UNMARKED SURFACES ☐ MARKED ONLY		ANGLES		MODEL		DET. LISTS ☒ YES ☒ NO SHT 1 OF 2			
		HF659							

3M™ ROUND, SHIELDED/JACKETED, FLAT CABLE, HF659 SERIES

.050" 28 AWG STRANDED, MASS TERMINATABLE, HALOGEN FREE PO/PO

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

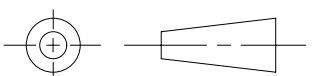
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D		79295		MAY 29,2018		JNC		BM									
				REVISED AND REDRAWN													
REVISION REFERENCE				NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD			
ADDRESS CODES				DRAFT CASTIGLIONE		DATE MAY 29,2018		MFG		DATE							
				CHKD		DATE		APPROV. B. MIZE		DATE MAY 29,2018							
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				INCHES		TITLE		ROUND, SHIELDED / JACKETED, FLAT, CABLE, .050", HF659									
THIRD ANGLE PROJECTION				.0000 ±		MILLIMETERS		CAGE NUMBER									
INTERPRET PER ASME Y14.5 - 2009				.000 ±		.000 ±		SIZE		DRAWING NO.		REV.					
MAX SURFACE ROUGHNESS				.000 ±		.000 ±		D		578-5100-2335-7		E					
✓ ☐ MARKED SURFACES ONLY				.000 ±		ANGLES		MODEL		HF659		DET. LISTS		YES ☐ NO ☐		SHT 2 OF 2	