

.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

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

ORE EASY ROUTING.

TERS PERMITS MASS
IDC CONNECTORS.

ALLOWS FOR MASS
RS.

b AVERAGE SHIELDING.

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

UL FILE NO: E42769,
UL STYLE NO: 22170

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

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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E		80157		AUG 01, 2018		JNC		BM			
D		79295		MAY 29, 2018		JNC		BM			
				REVISED AND REDRAWN							
DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ADDRESS CODES				DRFT CASTIGLIONE		DATE MAY 29, 2018		MFG		DATE	
				CHKD		DATE		APPROV. B. MIZE		DATE MAY 29, 2018	
DIVISION		DIVISION CODE		3M Center		© 3M COPYRIGHT 2018					
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DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED		TITLE					
				INCHES		ROUND, SHIELDED / JACKETED, FLAT, CABLE, .050", HF659					
THIRD ANGLE PROJECTION				MILLIMETERS		CASE NUMBER					
INTERPRET PER ASME Y14.5 - 2009				0.000 ±		SIZE DRAWING NO.					
MAX. SURFACE ROUGHNESS				0.000 ±		D78-5100-2335-7					
ON SURFACES				0.000 ±		REV. E					
✓ UNMARKED ONLY				ANGLES		MODEL					
						HF659					
						DET. LISTS ☒ YES ☒ NO					
						SHT 2 OF 2					