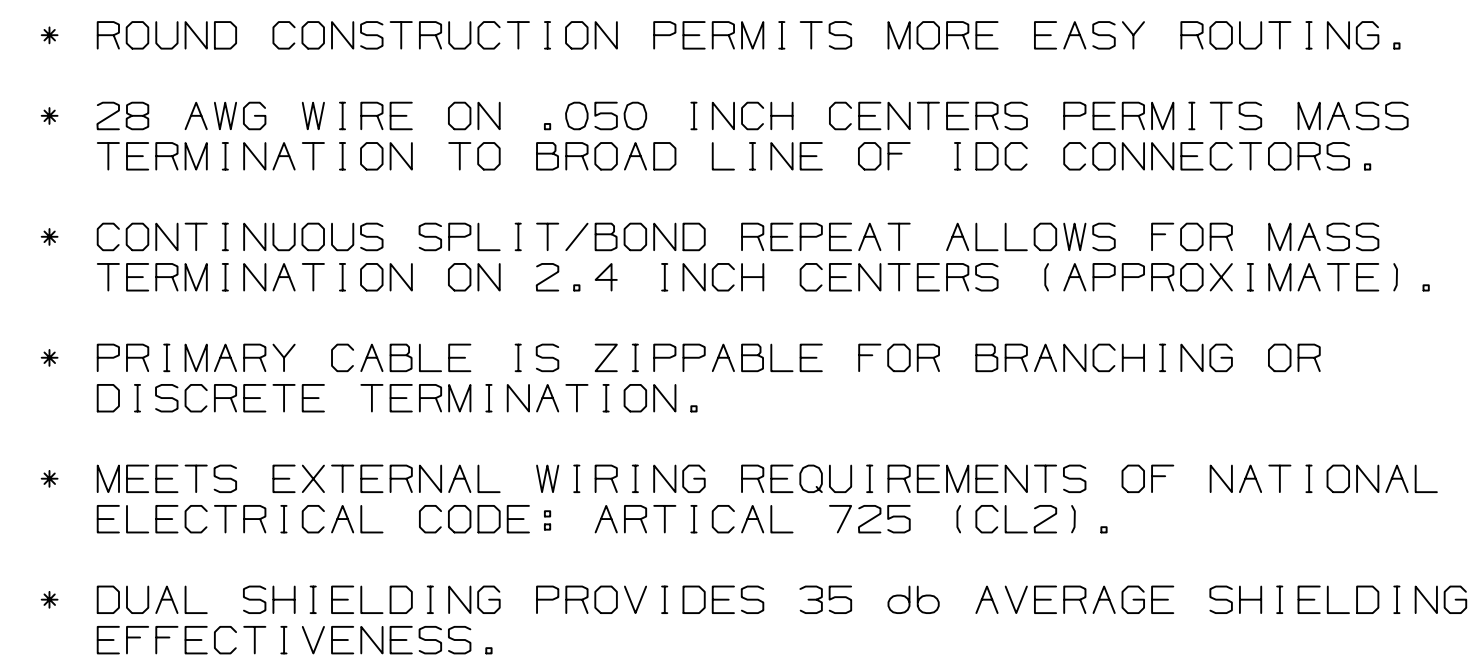


.050" 28 AWG STRANDED, MASS TERMINATABLE, PVC/PVC



1. REGULATORY INFORMATION:
VISIT 3M.com/regs
2. IN THE EVENT OF CONFLICT
BETWEEN THIS DATA AND THAT
CONTAINED IN THE PRODUCT
SPECIFICATION, THE PRODUCT
SPECIFICATION TAKES PRECEDENT.
3. RED MARKING ON ONE EDGE OF
PRIMARY CABLE DESIGNATES
WIRE #1.
4. DIMENSION "B" PERTAINS TO
BONDED AREA ONLY.

3659/XX XX XX

- BLANK = STANDARD
SF = SPLICE FREE

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

2 PHYSICAL :

MARKING: SEE "PRINTING ILLUSTRATION" BELOW
STANDARD: 28 AWG, 7 X 36 AWG [7 X Ø.127] TINNED STRANDED COPPER
CONDUCTORS: .001 [.03] THICK ALUMINUM/POLYESTER FILM FOIL AND 90%
SHIELDING: COVERAGE TINNED COPPER BRAID.

2 ELECTRICAL :

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	62Ω	106Ω
CAPACITANCE:	27.7 pF/ft [90.88 pF/m]	15.2 pF/ft [49.9 pF/m]
INDUCTANCE:	0.11 μH/ft [0.35 μH/m]	0.17 μH/ft [0.57 μH/m]
PROPAGATION DELAY:	1.72 ns/ft [5.64 ns/m]	1.62 ns/ft [5.31 ns/m]
VELOCITY OF PROPAGATION:	59%	62%

NOTE: UNBALANCED IS MEASURED BETWEEN GROUND-SIGNAL-GROUND CONDUCTORS
WITH SHIELD GROUNDED.
BALANCED IS MEASURED BETWEEN SIGNAL CONDUCTORS WITHIN A PAIR.
WITH THE SHIELD FLOATING.

2 ENVIRONMENTAL :

FLAMMABILITY RATING: USA; N.E.C. 725, CL2
CANADA; FT1

CONTACT 3M FOR AVAILABLE OF ADDITIONAL
CONDUCTOR COUNTS.

"PRINTING ILLUSTRATION"

UL® CL2 75°C 28 AWG OR AWM 20267 3M NU **UL® AWM II A/B 80°C 300V FT1 EU <50V**



UL FILE NUMBER:
E118773, CL2 (VOLUME 1, SECTION 1)
E42769, STYLE 20267

DIMENSIONS: INCHES [MM]
[MM] IS FOR REF. ONLY

D	122370	APR 16, 2025 REVISE DIM A	JNC	FJR
C	64249	JUN 28, 2023 REVISE NOTES AND REDRAW	JNC	FJR
B	23307	APR 24, 2009 REVISE NOTES	RED	ARM
A	23052	APR 07, 2009 REVISE ORDERING INFO	RED	ARM

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ACCORDS				BYP	CASTIGLIONE	DATE JUN 28, 2023		INFO	DATE
				CHKD		DATE		APPRV.	DATE JUN 28, 2023
								F. RODRIGUEZ	
DIVISION		DIVISION CODE				© 3M COPYRIGHT 2025			
		DEPP				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		TOLERANCES EXCEPT AS NOTED		 3M Center St. Paul, MN 55144					
		INCHES .0 .00 ± .1 .00 ± .05 .000 ± .010 .0000 ± .0005		TITLE RD SHIELDED/JACKETED , FLAT CABLE , 3659 SERIES					
THIRD ANGLE PROJECTION		MILLIMETERS 0 ±							
INTERPRET PER ASME Y14.5 - 2018		.0 .00 ± .000 ±		CAGE NUMBER D 78-5100-0083-5		SIZE DRAWING NO.		REV. D	
MAX SURFACE ROUGHNESS 		ALL SURFACES ☒ MARKED ONLY		MODEL 3659		DET. STS ☐ YES ☒ NO		SHT 1 OF 2	

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FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

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3M™ ROUND SHIELDED/JACKETED, FLAT CABLE, 3659 SERIES
.050" 28 AWG STRANDED, MASS TERMINATABLE, PVC/PVC

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

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Austin, TX 78753-5380
1-800-225-5373
www.3M.com/interconnect

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INTERCONNECT SOLUTIONS
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DESIGN REFERENCE
NEXT ASSEMBLY

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

MAX. SURFACE ROUGHNESS
ALL SURFACES
MARKED ONLY

SCALE

TOLERANCES EXCEPT AS NOTED

INCHES
±.1
±.05
±.010
±.0005

MILLIMETERS
0 ±
±.0
±.00
±.000

REV
ECO

DATE
JUN 28, 2023

ISSUE DATE AND DESCRIPTION
REVISE DIM A

DRFT
CHKD

DATE
JUN 28, 2023

DATE
JUN 28, 2023

DRFT
CASTIGLIONE

DATE
JUN 28, 2023

APPR.
F. RODRIGUEZ

DATE
JUN 28, 2023

3M

3M Center
St. Paul,
MN 55144

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CAGE NUMBER
D78-5100-0083-5

SIZE
3659

DRAWING NO.
78-5100-0083-5

REV.
D

DET
LISTS

YES

NO

SHT 2 OF 2

8

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2

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78-5100-0083-5
Drawing Number

Revision