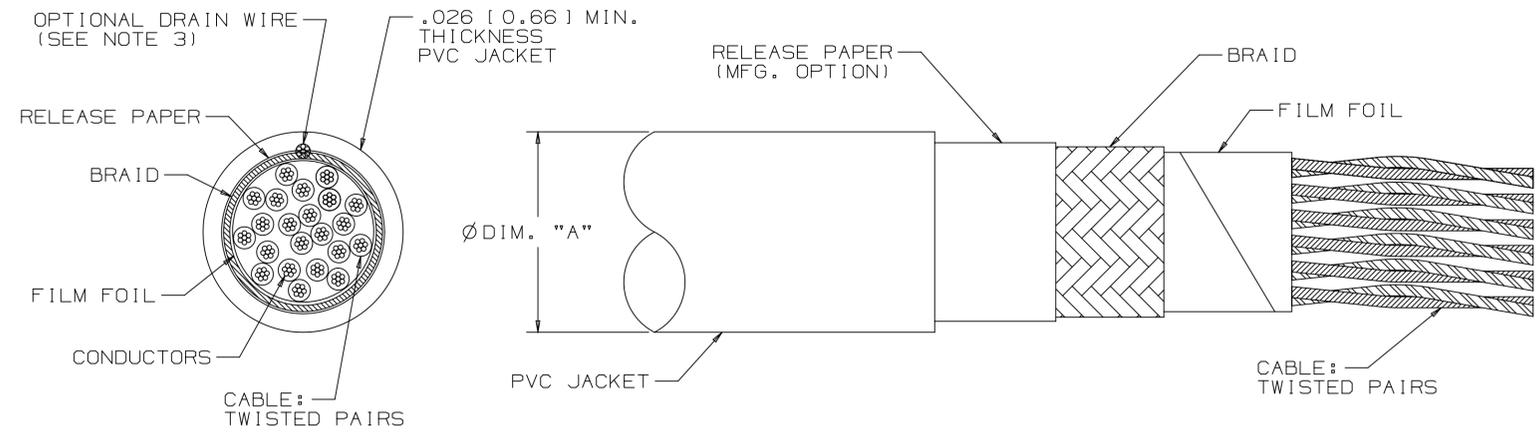


3M™ ROUND, SHIELDED/JACKETED, DISCRETE WIRE CABLE, 3600X SERIES

28 AWG STRANDED, TWISTED PAIR, PVC/PVC



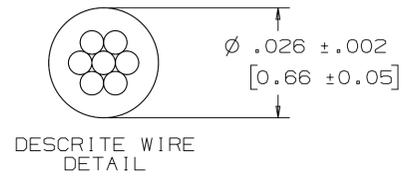
ORDERING INFORMATION

3600X/XX XX DW

JACKET COLOR OPTIONS:
A = BLACK JACKET (SPECIAL)
B = BEIGE JACKET (STANDARD)
C = GRAY JACKET (SPECIAL)

OPTIONAL DRAIN WIRE (SPECIAL)
BLANK = STANDARD
SF = SPLICE FREE

NUMBER OF CONDUCTORS (SEE TABLE 1)



NOTE:
AVAILABLE IN STANDARD 100ft, 200ft AND 300ft ROLLS.
PLEASE SPECIFY WHEN ORDERING.
CONTACT 3M FOR AVAILABILITY OF ADDITIONAL CONDUCTOR COUNTS AND/OR CUSTOM ROLL LENGTHS.

| PAIR | COND | 1st CONDUCTOR | | COND | 2nd CONDUCTOR | | PAIR | COND | 1st CONDUCTOR | | COND | 2nd CONDUCTOR | |
|------|------|---------------|--------|------|---------------|-------|------|------|---------------|--------|------|---------------|--------|
| | | SOLID | BAND | | SOLID | BAND | | | SOLID | BAND | | SOLID | BAND |
| 1 | 1 | BLACK | RED | 2 | RED | BLACK | 26 | 51 | BROWN | YELLOW | 52 | YELLOW | BROWN |
| 2 | 3 | BLACK | WHITE | 4 | WHITE | BLACK | 27 | 53 | BROWN | ORANGE | 54 | ORANGE | BROWN |
| 3 | 5 | BLACK | GREEN | 6 | GREEN | BLACK | 28 | 55 | ORANGE | YELLOW | 56 | YELLOW | ORANGE |
| 4 | 7 | BLACK | BLUE | 8 | BLUE | BLACK | 29 | 57 | VIOLET | ORANGE | 58 | ORANGE | VIOLET |
| 5 | 9 | BLACK | YELLOW | 10 | YELLOW | BLACK | 30 | 59 | VIOLET | RED | 60 | RED | VIOLET |
| 6 | 11 | BLACK | BROWN | 12 | BROWN | BLACK | 31 | 61 | VIOLET | WHITE | 62 | WHITE | VIOLET |
| 7 | 13 | BLACK | ORANGE | 14 | ORANGE | BLACK | 32 | 63 | VIOLET | GREEN | 64 | GREEN | VIOLET |
| 8 | 15 | RED | WHITE | 16 | WHITE | RED | 33 | 65 | VIOLET | BLUE | 66 | BLUE | VIOLET |
| 9 | 17 | RED | GREEN | 18 | GREEN | RED | 34 | 67 | VIOLET | YELLOW | 68 | YELLOW | VIOLET |
| 10 | 19 | RED | BLUE | 20 | BLUE | RED | 35 | 69 | VIOLET | BROWN | 70 | BROWN | VIOLET |
| 11 | 21 | RED | YELLOW | 22 | YELLOW | RED | 36 | 71 | VIOLET | BLACK | 72 | BLACK | VIOLET |
| 12 | 23 | RED | BROWN | 24 | BROWN | RED | 37 | 73 | GRAY | WHITE | 74 | WHITE | GRAY |
| 13 | 25 | RED | ORANGE | 26 | ORANGE | RED | 38 | 75 | GRAY | BROWN | 76 | BROWN | GRAY |
| 14 | 27 | GREEN | WHITE | 28 | WHITE | GREEN | 39 | 77 | GRAY | RED | 78 | RED | GRAY |
| 15 | 29 | GREEN | BLUE | 30 | BLUE | GREEN | 40 | 79 | GRAY | ORANGE | 80 | ORANGE | GRAY |
| 16 | 31 | GREEN | YELLOW | 32 | YELLOW | GREEN | 41 | 81 | GRAY | YELLOW | 82 | YELLOW | GRAY |
| 17 | 33 | GREEN | BROWN | 34 | BROWN | GREEN | 42 | 83 | GRAY | GREEN | 84 | GREEN | GRAY |
| 18 | 35 | GREEN | ORANGE | 36 | ORANGE | GREEN | 43 | 85 | GRAY | BLUE | 86 | BLUE | GRAY |
| 19 | 37 | WHITE | BLUE | 38 | BLUE | WHITE | 44 | 87 | TAN | ORANGE | 88 | ORANGE | TAN |
| 20 | 39 | WHITE | YELLOW | 40 | YELLOW | WHITE | 45 | 89 | TAN | GREEN | 90 | GREEN | TAN |
| 21 | 41 | WHITE | BROWN | 42 | BROWN | WHITE | 46 | 91 | TAN | BLACK | 92 | BLACK | TAN |
| 22 | 43 | WHITE | ORANGE | 44 | ORANGE | WHITE | 47 | 93 | TAN | BLUE | 94 | BLUE | TAN |
| 23 | 45 | BLUE | YELLOW | 46 | YELLOW | BLUE | 48 | 95 | TAN | WHITE | 96 | WHITE | TAN |
| 24 | 47 | BLUE | BROWN | 48 | BROWN | BLUE | 49 | 97 | TAN | YELLOW | 98 | YELLOW | TAN |
| 25 | 49 | BLUE | ORANGE | 50 | ORANGE | BLUE | 50 | 99 | TAN | BROWN | 100 | BROWN | TAN |

| NUMBER OF CONDUCTORS | 3M PART NUMBER | DIM. "A" ± .02 |
|----------------------|----------------|----------------|
| 14 (7) PAIR | 3600X/14 | .22 [5.6] |
| 20 (10) PAIR | 3600X/20 | .24 [6.1] |
| 24 (12) PAIR | 3600X/24 | .25 [6.4] |
| 26 (13) PAIR | 3600X/26 | .25 [6.4] |
| 36 (18) PAIR | 3600X/36 | .29 [7.4] |
| 40 (20) PAIR | 3600X/40 | .30 [7.6] |
| 50 (25) PAIR | 3600X/50 | .32 [8.1] |
| 68 (34) PAIR | 3600X/68 | .36 [9.1] |
| 80 (40) PAIR | 3600X/80 | .39 [9.9] |
| 100 (50) PAIR | 3600X/100 | .44 [11.2] |

- * MEETS EXTERNAL WIRING REQUIREMENTS OF NATIONAL ELECTRICAL CODE: ARTICAL 725 (CL2).
- * 28 AWG STRANDED WIRE PROVIDES FLEXIBILITY.
- * TWISTED PAIRS REDUCE CROSSTALK FOR BALANCE DRIVE APPLICATIONS.
- * DUAL SHIELDING WITH ALUMINUM FILM FOIL AND COPPER BRAID PROVIDES EXCELLENT EMI/ESD PROTECTION.
- * WIRES ARE COLOR CODED FOR EASY IDENTIFICATION.
- * 35db AVERAGE SHIELDING EFFECTIVENESS.

- NOTES
- REGULATORY INFORMATION: VISIT 3M.com/regs
 - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 - OPTIONAL DRAIN WIRE, SPECIAL ORDER:
28 AWG, 7 X 36 AWG (7 X Ø0.127) TPC.



2 PHYSICAL :

JACKET MATERIAL: POLYVINYL CHLORIDE (PVC)
COLOR: BEIGE
PRIMARY MATERIAL: PVC

MARKING:
STANDARD: SEE "PRINTING ILLUSTRATION" BELOW
CONDUCTORS: 28 AWG, 7 X 36 AWG (7 X Ø0.127) TINNED STRANDED COPPER
SHIELDING: 0.001 [0.03] THICK ALUMINUM/POLYESTER FILM FOIL AND 90% COVERAGE TINNED COPPER BRAID

2 ELECTRICAL :

VOLTAGE RATING: USA: N.E.C. 725, CL2 CANADIAN 150V, EU: <50V
INSULATION RESISTANCE: (PRIMARY CABLE) >1 X 10¹⁰Ω/10ft. [3m]

| | |
|---|------------------------|
| CHARACTERISTIC IMPEDANCE: UNBALANCED 58Ω | BALANCED 91Ω |
| CAPACITANCE: 29.2 pF/ft [95.8 pF/m] | 18.5 pF/ft [60.7 pF/m] |
| INDUCTANCE: 0.10μH/ft [0.33μH/m] | 0.15μH/ft [0.49μH/m] |
| PROPAGATION DELAY: 1.69 ns/ft [5.54 ns/m] | 1.69 ns/ft [5.54 ns/m] |
| VELOCITY OF PROPAGATION: 60% | 60% |

NOTE: UNBALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR WITH ONE CONDUCTOR CONNECTED TO THE SHIELD.
BALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR WITH THE SHIELD FLOATING.

2 ENVIRONMENTAL :

TEMPERATURE RATING: USA: CL2: 75°C
CANADA: 80°C

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

"PRINTING ILLUSTRATION"

UL® CL2 75°C 28 AWG 3M NU **UL**® AWM II A/B 80°C 150V FT1 EU <50V

UL® **us**
UL FILE NO: E118773,
POWER LIMITED CIRCUIT
CABLE: CL2

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

| | | | | |
|-----|--------|--|------|------|
| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
| D | 116059 | MAY 07, 2024 REVISE AND REDRAW | JNC | FJR |
| C | 41014 | MAY 24, 2012 CORRECT ERRORS | TB | TB |
| B | 23275 | APR 24, 2009 REVISE TABLE AND NOTES | RE | RE |

| | |
|---------------------------------|--|
| DESIGN REFERENCE | NEXT ASSEMBLY |
| SCALE | TOLERANCES EXCEPT AS NOTED |
| DO NOT SCALE DRAWING | INCHES 0 ± .1 .00 ± .05 .000 ± .010 .0000 ± .0005 |
| THIRD ANGLE PROJECTION | MILLIMETERS 0 ± .1 .00 ± .05 .000 ± .010 .0000 ± .0005 |
| INTERPRET PER ASME Y14.5 - 2018 | MAX SURFACE ROUGHNESS |
| MARKED ONLY | ANGLES |

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TITLE: SHIELDED/JACKETED, ROUND, DISC. WIRE CABLE, 28AWG

CAGE NUMBER: **D** 78-5100-0388-8
DRAWING NO.: 78-5100-0388-8
REV. **D**

MODEL: 3600X
SHT 1 OF 2

8 7 6 5 4 3 2 1
3M™ ROUND, SHIELDED/JACKETED, DISCRETE WIRE CABLE, 3600X SERIES
 28 AWG STRANDED, TWISTED PAIR, PVC/PVC

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|---------------------------------|---------------|---|---|----------------------------|--------------|--------------|
| DESIGN REFERENCE | NEXT ASSEMBLY | REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
| | | DRFT | CASTIGLIONE | DATE MAY 07, 2024 | MFG | DATE |
| | | CHKD | | DATE | APPRV | DATE |
| | | | | | F. RODRIGUEZ | MAY 07, 2024 |
| DIVISION | DIVISION CODE | © 3M COPYRIGHT 2025 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 |  3M Center St. Paul, MN 55144 | | | |
| THIRD ANGLE PROJECTION | INCHES | 0 ± .1 | TITLE SHIELDED/JACKETED, ROUND, DISC. WIRE CABLE, 28AWG | | | |
| INTERPRET PER ASME Y14.5 - 2018 | 0 ± .05 | .00 ± .010 | CAGE NUMBER D 78-5100-0388-8 | | | |
| MAX. SURFACE ROUGHNESS | .0000 ± .0005 | 0 ± .000 | DRAWING NO. 78-5100-0388-8 | | | |
| MARKED SURFACES | 0 ± .000 | 0 ± .000 | MODEL 3600X | | | |
| MARKED ONLY | 0 ± .000 | 0 ± .000 | DET 1/15 YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> SHT 2 OF 2 | | | |

DRAWING NUMBER 78-5100-0388-B REVISION