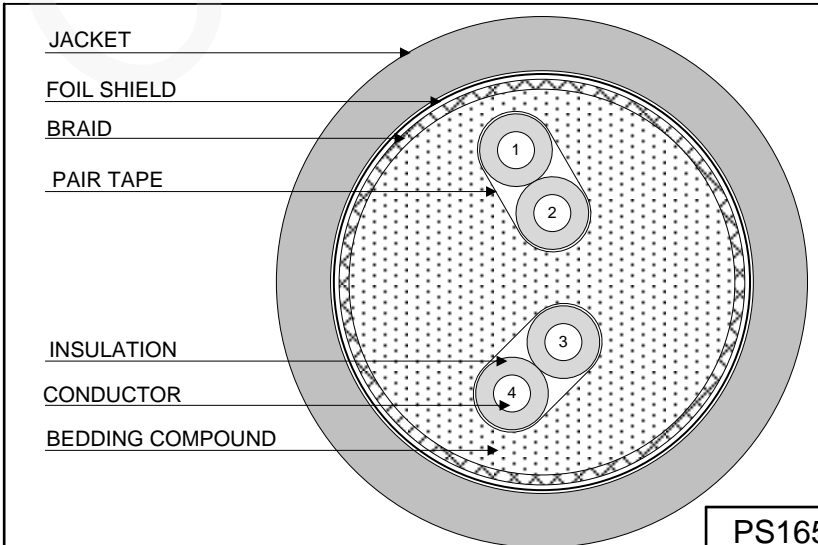


- 1) CONSTRUCTION:
- | | | | |
|-------------|--|------------------------|--------|
| CONDUCTOR: | 22 AWG 19/.0058 STRANDED TINNED COPPER | NOM. DIA. | .0280" |
| INSULATION: | HIGH DENSITY POLYETHYLENE, .013" NOM. WALL THICKNESS | | .055" |
| PAIRS: | COLOR CODED SINGLES TWISTED INTO PAIRS AND WRAPPED WITH AN OVERALL CLEAR POLYESTER TAPE | | .113" |
| CABLE: | (2) TWISTED PAIRS CABLED TOGETHER EMBEDDED WITHIN A CORE OF THERMOPLASTIC ELASTOMER. | | .292" |
| SHIELDS: | AN OVERALL SHIELD OF 36 AWG TINNED COPPER BRAID (65% MINIMUM COVERAGE), SHALL BE APPLIED OVER THE CABLE CORE. A SECOND SHIELD OF AN OVERALL ALUMINIZED POLYESTER FOIL SHIELD (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE BRAID. | | .318" |
| JACKET: | THERMOPLASTIC ELASTOMER, GREEN (CR# 70), .046" NOM. WALL THICKNESS (PRESSURE) | OVERALL CABLE DIAMETER | .410" |
- 2) PHYSICAL PROPERTIES:
- | | |
|--|---|
| TEMPERATURE RATING, MAX. | 75°C |
| TEMPERATURE RATING, MIN. (STATIC) | -40°C |
| WT./M', NOM., NET. | 86.1 LBS. |
| FLEX LIFE (PENDING)
(126 CYCLES/MIN, @ 20°C) | 1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)
10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS) |
| TORSION TEST (PENDING)
(1 LB LOAD, 360°, 71 CYCLES/MIN, @ 20°C) | 3 MILLION CYCLE TEST |
- 3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2
- 4) AGENCY APPROVALS:
NEC (UL) TYPE PLTC-ER
NEC (UL) TYPE CM
CEC C(UL) TYPE CM
- 5) APPLICATION:
PATCH CABLE FOR PROFINET TYPE B AND C AND ETHERNET/IP CAT 5e APPLICATIONS. MEETS EU DIRECTIVE 2011/65/EU (RoHS II).
- 6) PRINT:
QUABBIN DATAMAX EXTREME HIGH FLEX PROFINET TYPE B AND C P/N 5098 CAT 5e 2PR 22 AWG SHIELDED (UL) TYPE PLTC-ER 75C SUN RES -40C OR C(UL)US TYPE CM -- CE RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)
- 7) COLOR CODE:
1. WHITE X 2. BLUE
3. YELLOW X 4. ORANGE
- 8) PACKAGING:
TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING



PS1654

Created 02/06/18	BMD DRAWN: 03/23/18
REV. 03	ZRS CHECKED: 03/23/18



TITLE
2 PAIR, 22 AWG, PE/TPE SHIELDED HIGH FLEX
PROFINET CABLE -- CAT 5e

CUSTOMER APPROVAL:

DATE:

QUABBIN P/N 5098 1 of 2

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT (802.3af) TO 100 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184

CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 100 METER LENGTH

MUTUAL CAPACITANCE, MAX. 5.6 nF/100m AT 1 kHz @ 20°C

DIELECTRIC WITHSTANDING, MIN. 1500V RMS

VOLTAGE RATING, MAX. 300V

D.C. RESISTANCE, MAX. (GRP I & GRP II) 17.5 Ω/1000' @ 20°C

D.C. RESISTANCE UNBALANCE, MAX. 5% @ 20°C

COUPLING ATTENUATION 30 ≤ f ≤ 100 MHz ≥ 60 dB MIN

TESTED PER IEC 62153-4-9

SURFACE TRANSFER IMPEDANCE 1 ≤ f ≤ 100 MHz 10f mΩ/m

NOTE: TESTING FOR THE FOLLOWING IS CONDUCTED OFF THE REEL. (FOR 100m OF CABLE)

IMPEDANCE, CHARACTERISTIC 1 ≤ f ≤ 100 MHz 100 +/- 15 Ω

CAPACITANCE UNBALANCE, MAX.:

PAIR-TO-GROUND 330 pF/100m AT 1 kHz @ 20°C

RETURN LOSS

1 ≤ f < 10 MHz 20 + 5 LOG(f) dB MIN

10 ≤ f < 20 MHz 25 dB MIN

20 ≤ f ≤ 100 MHz 25 - 8.6 LOG(f/20) dB MIN

INSERTION LOSS

1 ≤ f ≤ 100 MHz 1.02(1.967 √f + 0.023(f) + 0.050/√f dB) MAX*

NEXT

1 ≤ f ≤ 100 MHz 35.3 - 15 LOG(f/100) dB MIN

ACRF

1 ≤ f ≤ 100 MHz 23.8 - 20 LOG(f/100) dB MIN

PROPAGATION DELAY

1 ≤ f ≤ 100 MHz 534 + 36/√f ns MAX

PROPAGATION DELAY SKEW

1 ≤ f ≤ 100 MHz ≤ 25ns

*2% HIGHER THAN HORIZONTAL CABLE SPECIFICATION PER TIA 568-C.2. CABLE MEETS THE CHANNEL REQUIREMENT AT 100M AND IS SUITABLE FOR 100M PLUG TO PLUG RUN.

PS1654

Created 02/06/18	DRAWN: BMD 03/23/18
REV. 03	CHECKED: ZRS 03/23/18



TITLE

2 PAIR, 22 AWG, PE/TPE SHIELDED HIGH FLEX
PROFINET CABLE -- CAT 5e

QUABBIN P/N

5098

2 of 2

CUSTOMER APPROVAL:

DATE: