

1) CONSTRUCTION:		NOM. DIA.
<b>GRP I:</b>		
CONDUCTOR:	22 AWG 19/.0058 STRANDED TINNED COPPER	.0280"
INSULATION:	HIGH DENSITY POLYETHYLENE, .013" NOM. WALL THICKNESS	.054"
<b>GRP II:</b>		
CONDUCTOR:	22 AWG 19/.0058 STRANDED TINNED COPPER	.0280"
INSULATION:	HIGH DENSITY POLYETHYLENE, .030" NOM. WALL THICKNESS	.088"
PAIRS:	COLOR CODED GRP I SINGLES TWISTED INTO PAIRS AND WRAPPED WITH AN OVERALL CLEAR POLYESTER TAPE	.111"
CABLE:	(2) GRP I TWISTED PAIRS AND (2) GRP II SINGLES CABLED TOGETHER EMBEDDED WITHIN A CORE OF THERMOPLASTIC ELASTOMER	.278"
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.	.304"
JACKET:	THERMOPLASTIC ELASTOMER, GREEN (CR# 70), .051" NOM. WALL THICKNESS (PRESSURE) OVERALL CABLE DIAMETER	.406"

2) PHYSICAL PROPERTIES:  
 TEMPERATURE RATING, MAX. 75°C  
 TEMPERATURE RATING, MIN. (STATIC) -40°C  
 WT./M', NOM., NET. 79.8 LBS.

3) ELECTRICAL CHARACTERISTICS:  
 SEE PAGE 2

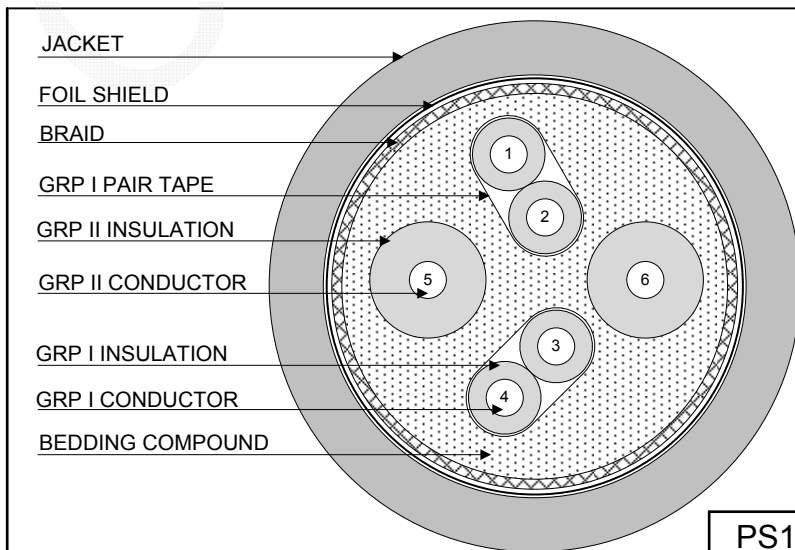
4) AGENCY APPROVALS:  
 NEC (UL) TYPE PLTC-ER  
 NEC (UL) TYPE CM  
 CEC C(UL) TYPE CM

5) APPLICATION:  
 PATCH CABLE FOR CAT 5e APPLICATIONS WITH POWER WIRES. DIRECT BURIAL CABLE. MEETS EU DIRECTIVE 2011/65/EU (RoHS II).

6) PRINT:  
 QUABBIN DATAMAX EXTREME HIGH FLEX PROFINET TYPE B AND C P/N 5128 CAT 5e 6C 22 AWG SHIELDED (UL) TYPE PLTC-ER 75C DIR BUR SUN RES -40C OR C(UL)US TYPE CM 75C -- CE RoHS -- **(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

7) COLOR CODE:  
**GRP I PAIRS:**  
 1. WHITE X 2. BLUE  
 3. YELLOW X 4. ORANGE  
**GRP II SINGLES:**  
 5. BLACK  
 6. RED

8) PACKAGING:  
 TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING



PS1627

Created 10/23/18	DRAWN: SGH 11/01/18
REV. 02	CHECKED: ZRS 11/02/18



TITLE	6/C COMPOSITE, 22 AWG, PE/TPE SHIELDED CABLE
QUABBIN P/N	5128
	1 of 2

CUSTOMER APPROVAL:

DATE:

## 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)	5.64 Ω/100m @ 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] + 4(0.04)√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	≤ 20 ns

\*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.

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TITLE		
6/C COMPOSITE, 22 AWG, PE/TPE SHIELDED CABLE		
QUABBIN P/N	5128	2 of 2

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