5099

1) CONSTRUCTION:

		NOM. DIA.
CONDUCTOR:	22 AWG 7/30 STRANDED TINNED COPPER	.030"
INSULATION:	HIGH DENSITY POLYETHYLENE, .010" NOM. WALL THICKNESS	.050 ± .001"
CABLE:	(4) COLOR CODED WIRES CABLED TOGETHER AND WRAPPED WITH A CLEAR POLYESTER TAPE EMBEDDED WITHIN A CORE OF THERMOPLASTIC ELASTOMER.	.190"
SHIELDS:	AN OVERALL SHIELD OF 38 AWG TINNED COPPER BRAID (85% 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.	.208"
JACKET:	THERMOPLASTIC ELASTOMER, GREEN (CR# 70), .047" NOM. WALL THICKNESS	
	(PRESSURE) OVERALL CABLE DIAMETER	.305" (± .010") (BY CALIPER)

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C
TEMPERATURE RATING, MIN. (STATIC)	-40°C
WT./M', NOM., NET.	56.2 LBS.
JACKET IS SUNLIGHT RESISTANT	
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

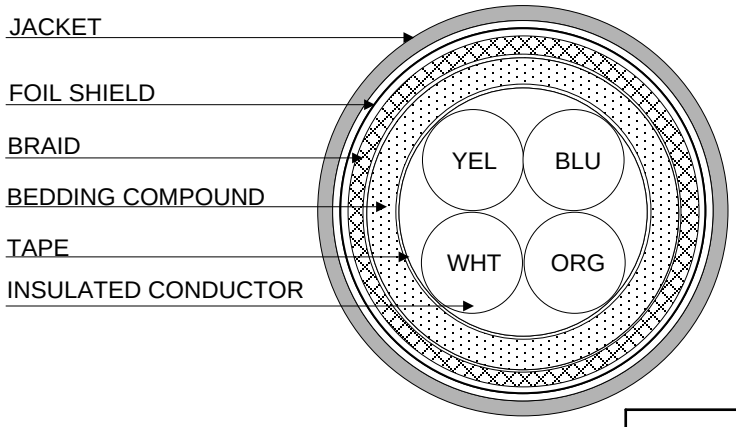
4) AGENCY APPROVALS:
NEC (UL) TYPE PLTC-ER
NEC (UL) TYPE CM
CEC C(UL) TYPE CM
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:
PATCH CABLE FOR PROFINET TYPE B AND C AND ETHERNET/IP CAT 5e APPLICATIONS.

6) PRINT:
QUABBIN DATAMAX EXTREME HIGH FLEX PROFINET TYPE B AND C CAT 5E SHIELDED P/N 5099 (UL) TYPE PLTC-ER 4C 22 AWG SF/QUAD 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



Created 08/29/18	DRAWN:	SGH 03/31/23	QUABBIN® WIRE & CABLE
REV. 04	CHECKED:	ZRS 04/10/23	

TITLE
QUAD, 22 AWG, PE/TPE SHIELDED PROFINET CABLE

QUABBIN P/N 5099 — 1 of 2

CUSTOMER APPROVAL: **DATE:**

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT 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	$30 \le f \le 100$ MHZ	≥ 60 dB MIN
TESTED PER IEC 62153-4-9		
SURFACE TRANSFER IMPEDANCE	$1 \le f \le 100$ MHz	$10f$ mΩ/m

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

IMPEDANCE, CHARACTERISTIC	$1 \le f \le 100$ MHz	100 ± 15 Ω
CAPACITANCE UNBALANCE, MAX.:		
PAIR-TO-GROUND	330 pF/100m AT 1 kHz @ 20°C	
RETURN LOSS	$1 \le f < 10$ MHz	20 + 5 LOG(f) dB MIN
	$10 \le f < 20$ MHz	25 dB MIN
	$20 \le f \le 100$ MHz	25 - 8.6 LOG(f/20) dB MIN
INSERTION LOSS	$1 \le f \le 100$ MHz	$1.02[1.967\sqrt{f} + 0.023(f) + 0.050/\sqrt{f}] + 4*0.040*\sqrt{f}$ dB MAX
NEXT	$1 \le f \le 100$ MHz	35.3 - 15 LOG(f/100) dB MIN
ACRF	$1 \le f \le 100$ MHz	23.8 - 20 LOG(f/100) dB MIN
PROPAGATION DELAY	$1 \le f \le 100$ MHz	$534 + 36/\sqrt{f}$ ns MAX
PROPAGATION DELAY SKEW	$1 \le f \le 100$ MHz	≤ 20 ns

CABLE MEETS THE CHANNEL REQUIREMENT AT 100M AND IS SUITABLE FOR 100M PLUG TO PLUG RUN.

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REV. 04	CHECKED: ZRS 04/10/23	

TITLE

QUAD, 22 AWG, PE/TPE SHIELDED PROFINET CABLE

QUABBIN P/N 5099 — 2 of 2

CUSTOMER APPROVAL: **DATE:**