

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	22 AWG 19/.0058 STRANDED TINNED COPPER	.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, TEAL, .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

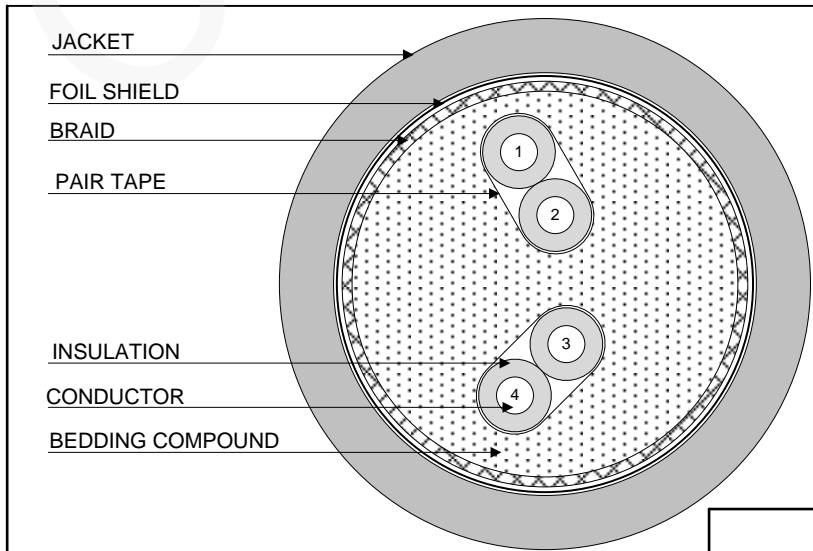
4) AGENCY APPROVALS:
NEC (UL) TYPE PLTC-ER
NEC (UL) TYPE CM
CEC C(UL) TYPE CM

5) APPLICATION:
PATCH CABLE FOR ETHERNET/IP CAT 5e APPLICATIONS. MEETS EU DIRECTIVE 2011/65/EU (RoHS II).

6) PRINT:
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD P/N 5096 CAT 5e 2PR 22 AWG SHIELDED (UL) TYPE PLTC-ER 75C SUN RES -40C OR C(UL)US TYPE CM -- Cc RoHS -- **(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

7) COLOR CODE:
1. GREEN X 2. WHITE/GREEN
3. ORANGE X 4. WHITE/ORANGE

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



Created 03/02/18	DRAWN: BMD 03/02/18	
REV. 01	CHECKED: ZRS 03/05/18	
TITLE 2 PAIR, 22 AWG, PE/TPE SHIELDED HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 5e		
QUABBIN P/N	5096	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.	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 10 ≤ f < 20 MHz 20 ≤ f ≤ 100 MHz	20 + 6 LOG(f) dB MIN* 26 dB MIN* 26 - 5 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

*PER ODVA VOLUME 2 ETHERNET/IP

**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 2 PAIR, 22 AWG, PE/TPE SHIELDED HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 5e		
QUABBIN P/N	5096	2 of 2

CUSTOMER APPROVAL:

DATE: