

1) CONSTRUCTION:

CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	NOM. DIA.	.0236"
INSULATION:	HIGH DENSITY POLYETHYLENE, .011" NOM. WALL THICKNESS		.046"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.092"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.		.210"
SHIELDS:	AN OVERALL SHIELD OF 38 AWG TINNED COPPER BRAID (75% MINIMUM COVERAGE), SHALL BE APPLIED OVER THE CABLE CORE. A SECOND SHIELD OF ALUMINIZED POLYESTER FOIL (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE BRAID.		.229"
JACKET:	THERMOPLASTIC ELASTOMER, (COLOR, PER CHART 1), .037" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER	.301" ± .010" BY PI TAPE

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C & 80°C
TEMPERATURE RATING, MIN.	-40°C (MANUFACTURER'S RECOMMENDED)
WT./M', NOM., NET.	43.0 LBS.
JACKET IS WELD SPATTER RESISTANT	
JACKET IS SUNLIGHT RESISTANT	
FLEX LIFE (PENDING)	1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)
(126 CYCLES/MIN)	10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)
TORSION TEST (PENDING)	3 MILLION CYCLE TEST
(1 LB LOAD, 360°, 71 CYCLES/MIN)	
JACKET CUTTING/MACHINING OIL RESISTANCE	
(6 MONTHS @ 20°C)	
TENSILE STRENGTH RETENTION, NOM.	80%
ELONGATION RETENTION, NOM.	100%
POE COMPLIANT (802.3af) TO 80 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184	
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 90 METER LENGTH	
CHART 1:	

QUABBIN P/N	JACKET COLOR
5089	BLACK
5090	TEAL

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

UL AWM STYLE 2463 (80C 600V)
 NEC (UL) TYPE CMX OUTDOOR - CM
 CEC C(UL) TYPE CMX OUTDOOR - CM

5) APPLICATION:

RoHS COMPLIANT MATERIALS

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)

QUABBIN DATAMAX EXTREME HIGH FLEX
 INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e
 SF/UTP P/N (P/N PER CHART 1) -- C(UL)US TYPE CMX
 OUTDOOR - CM 4PR 24 AWG 75C SUN RES OR AWM
 2463 80C 600V -- RoHS -- (LOT DESIGNATOR)
 (SEQUENTIAL FOOTAGE)

7) COLOR CODE:

1. BLUE X WHITE/BLUE
2. ORANGE X WHITE/ORANGE
3. GREEN X WHITE/GREEN
4. BROWN X WHITE/BROWN

8) PACKAGING:

TO BE PACKAGED AS PER QWC'S
 STANDARD PACKAGING

CUSTOMER APPROVAL:

DATE:

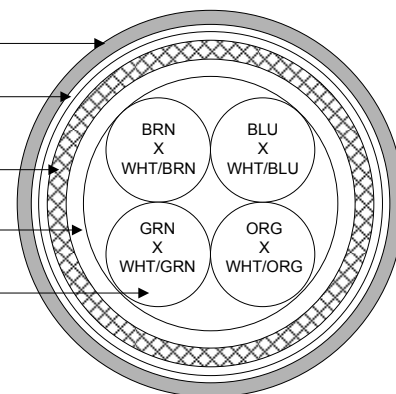
JACKET

FOIL SHIELD

BRAID

FOAM TAPE

PAIR



PS1470

Created 7/18/12
 REV. 04
 DRAWN: BMD 09/19/13
 CHECKED: GBM 09/20/13



TITLE
 4PR. ScTP HIGH FLEX INDUSTRIAL
 ETHERNET PATCH CORD -- CAT 5e

DRAWING # QWC0038

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3) ELECTRICAL CHARACTERISTICS: (FOR 100m OF CABLE)

CAPACITANCE, MUTUAL, NOM.	13.5 PF/FT. AT 1 MHz
DIELECTRIC WITHSTANDING, MIN	2000V RMS
VOLTAGE RATING, MAX.	600V
D.C. RESISTANCE, MAX.	14 Ω
IMPEDANCE	100+/- 15 Ω 1-100 MHz
IMPEDANCE, SMOOTHED	100 +/- 10 Ω TYPICAL 5 - 100 MHz

RETURN LOSS	1 - 10 MHz	20 + 5 LOG (F) dB MIN
	10 - 20 MHz	25 dB MIN
	20 - 100 MHz	25- 8.6 LOG(F/20) dB MIN
PS NEXT	1-100 MHz	32.3 - 15 LOG (F/100) dB MIN
NEXT	1-100 MHz	35.3 - 15 LOG (F/100) dB MIN
PSACRF	1-100 MHz	20.8 - 20 LOG(F/100) dB MIN
ACRF	1-100 MHz	23.8 - 20 LOG(F/100) dB MIN
INSERTION LOSS	1-100 MHz	1.2[1.967 SQRT(F) + 0.023(F) + 0.050/SQRT(F)] dB MAX
DELAY	1-100 MHz	534 + 36/SQRT(F) ns MAX
DELAY SKEW	1-100 MHz	<25ns
COUPLING ATTENUATION PER IEC 62153-4-9	30-100 MHz	50 dB MIN
VELOCITY OF PROPAGATION	68%	

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

PS1470

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