QWC0027

1) CONSTRUCTION:

		NOM. DIA.
CONDUCTOR:	26 AWG 7/34 STRANDED TINNED COPPER	.019"
INSULATION:	HIGH DENSITY POLYETHYLENE, .009" NOM. WALL THICKNESS	.037"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.074"
CABLE:	(2) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYOLEFIN TAPE (100% COVERAGE) TO FORM A CABLE CORE.	.120"
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.	.139"
JACKET:	THERMOPLASTIC ELASTOMER, **(COLOR, PER CHART 1)**, .043" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER .225" ± .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	28.5 LBS.
JACKET IS WELD SPATTER RESISTANT	
JACKET IS SUNLIGHT RESISTANT	
FLEX LIFE	
(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
JACKET CUTTING/MACHINING OIL RESISTANCE	
(6 MONTHS @ 20°C)	
TENSILE STRENGTH RETENTION, NOM.	80%
ELONGATION RETENTION, NOM.	100%

CHART 1:

QUABBIN P/N	JACKET COLOR
5085	BLACK
5086	BLUE
5087	TEAL

3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2

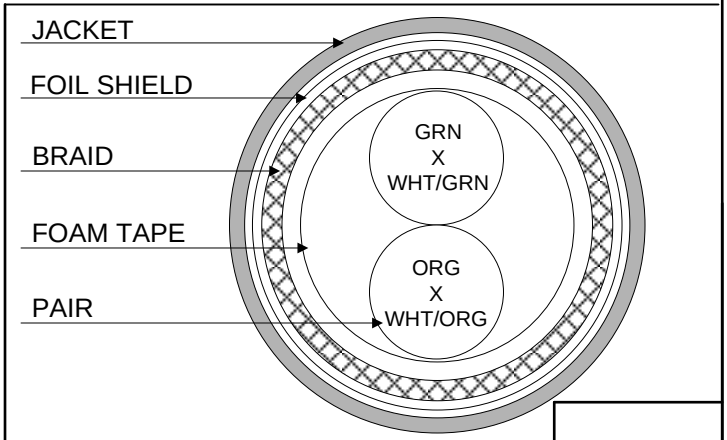
4) AGENCY APPROVALS:
NEC (UL) CMX OUTDOOR - CM
CEC C(UL) CMX OUTDOOR – CM
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:
PASSES VW-1.

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD 2 PR CAT 5e SF/UTP P/N **(P/N PER CHART 1)** -- C(UL)US TYPE CMX OUTDOOR - CM 2PR 26 AWG 75C SUN RES -- CE RoHS -- **(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

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

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



Created 5/26/11	DRAWN: SGH 03/21/19	QUABBIN® WIRE & CABLE
REV. 06	CHECKED: ZRS 03/25/19	

TITLE
2PR. ScTP HIGH FLEX INDUSTRIAL ETHERNET PATCH CORD -- CAT 5e

DRAWING # QWC0027 | 1 of 2

CUSTOMER APPROVAL: **DATE:**

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 68 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 68 METER LENGTH

CAPACITANCE, MUTUAL, NOM.	13.5 PF/FT. AT 1 MHz
DIELECTRIC WITHSTANDING, MIN.	1500V RMS
VOLTAGE RATING, MAX.	300V
D.C. RESISTANCE, MAX.	42.6 Ω/1,000'

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

IMPEDANCE	100 ± 15 Ω 1 - 100 MHz	
IMPEDANCE, SMOOTHED	100 ± 10 Ω TYPICAL 5 - 100 MHz	
RETURN LOSS	$1 \le f < 10$ MHz	$20 + 6 \log(f)$ dB MIN*
	$10 \le f < 20$ MHz	26 dB MIN*
	$20 \le f \le 100$ MHz	$26 - 5 \log(f/20)$ dB MIN*
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
INSERTION LOSS	$1 \le f \le 100$ MHz	$1.5[1.967 \sqrt{f} + 0.023(f) + 0.050/\sqrt{f}]$ dB MAX
DELAY	$1 \le f \le 100$ MHz	$534 + 36/\sqrt{f}$ ns MAX
DELAY SKEW	$1 \le f \le 100$ MHz	<25 ns
TCL	$1 \le f \le 100$ MHZ	$30 - 10 \log(f)$ dB, 40 dB MAX
ELTCTL	$1 \le f \le 30$ MHZ	$35 - 20 \log(f)$
COUPLING ATTENUATION PER IEC 62153-4-9	$30 \le f \le 100$ MHZ	60 dB MINIMUM
VELOCITY OF PROPAGATION	68%	

*PER ODVA VOLUME 2 ETHERNET/IP

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TITLE: 2PR. ScTP HIGH FLEX INDUSTRIAL ETHERNET PATCH CORD -- CAT 5e			
DRAWING # QWC0027			2 of 2

CUSTOMER APPROVAL: **DATE:**