

1) CONSTRUCTION:

CONDUCTOR:	26 AWG 7/34 STRANDED TINNED COPPER	NOM. DIA.	.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, ( <b>COLOR, PER CHART 1</b> ), .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)

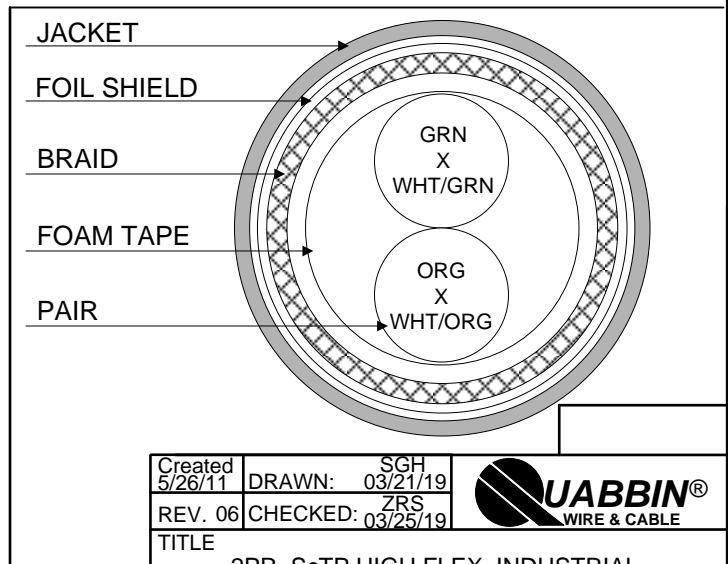
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD 2 PR CAT 5e SF/UTP P/N (**P/N PER CHART 1**) -- C(UL)US TYPE CMX OUTDOOR - CM 2PR 26 AWG 75C SUN RES -- CE RoHS -- (**LOT DESIGNATOR**) (**SEQUENTIAL FOOTAGE**)

7) COLOR CODE:

- GREEN X WHITE/GREEN
- ORANGE X WHITE/ORANGE

8) PACKAGING:

TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING



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REV. 06	CHECKED: ZRS 03/25/19



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

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 ≤ f < 10 MHz	20 + 6 LOG(f) dB MIN*
	10 ≤ f < 20 MHz	26 dB MIN*
	20 ≤ f ≤ 100 MHz	26 - 5 LOG(f/20) dB MIN*
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
INSERTION LOSS	1 ≤ f ≤ 100 MHz	1.5[1.967 √f + 0.023(f) + 0.050/√f] dB MAX
DELAY	1 ≤ f ≤ 100 MHz	534 + 36/√f ns MAX
DELAY SKEW	1 ≤ f ≤ 100 MHz	<25 ns
TCL	1 ≤ f ≤ 100 MHz	30 - 10 LOG(f) dB, 40 dB MAX
ELTCTL	1 ≤ f ≤ 30 MHz	35 - 20 LOG(f)
COUPLING ATTENUATION PER IEC 62153-4-9	30 ≤ f ≤ 100 MHz	60 dB MINIMUM
VELOCITY OF PROPAGATION	68%	

\*PER ODVA VOLUME 2 ETHERNET/IP

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DRAWING #		QW/C0027
		2 of 2

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