

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:	ZHFR POLYURETHANE, ( <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
TEMPERATURE RATING, MIN.	-40°C (MANUFACTURER'S RECOMMENDED)
TEMPERATURE RATING, MIN.	-20°C (PER UL 444 COLD BEND)
WT./M', NOM., NET.	35.5 LBS.
FLEX LIFE	1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS) 10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)
JACKET SMOKE GENERATION PER ASTM E662, NOM.	Ds = 251 (FLAMING, @ 4 MINUTES) Ds = 16 (NON-FLAMING, @ 4 MINUTES)
JACKET OIL RESISTANCE (IRM 902 OIL, 7 DAYS @ 100°C)	
TENSILE STRENGTH RETENTION, NOM.	100%
ELONGATION RETENTION, NOM.	80%
POE COMPLIANT (802.3af) TO 67 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184 CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 67 METER LENGTH	

CHART 1:

QUABBIN P/N	JACKET COLOR
5080	BLACK
5081	BLUE
5082	TEAL

3) ELECTRICAL CHARACTERISTICS:  
SEE PAGE 2

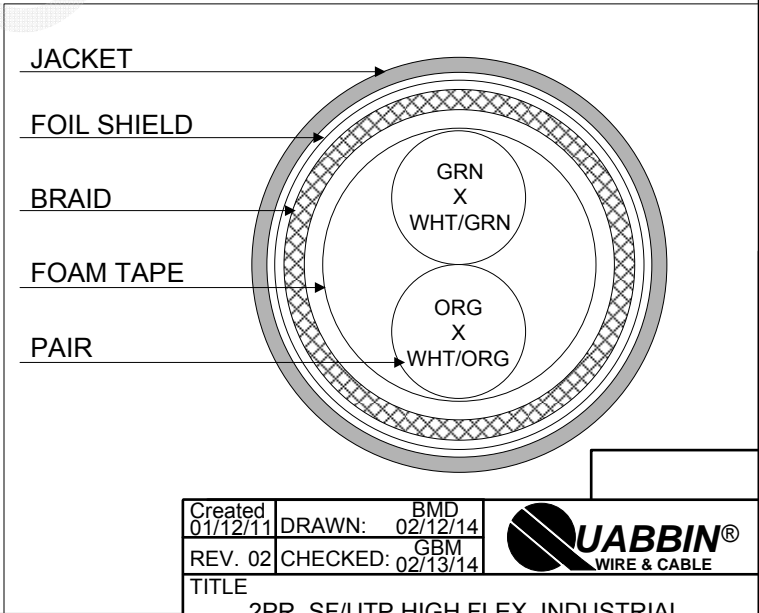
4) AGENCY APPROVALS:  
NEC (ETL) TYPE CMX

5) APPLICATION:  
RoHS COMPLIANT MATERIALS. PASSES VW-1

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)  
QUABBIN DATAMAX EXTREME HIGH FLEX ZERO HALOGEN INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e SF/UTP P/N (**P/N PER CHART 1**) -- C(ETL)US TYPE CMX 2 PR 26 AWG 75C -- 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 01/12/11	DRAWN: BMD 02/12/14	
REV. 02	CHECKED: GBM 02/13/14	
TITLE 2PR. SF/UTP HIGH FLEX INDUSTRIAL ETHERNET PATCH CORD -- CAT 5e		
DRAWING #		QWC0012
		1 of 2

CUSTOMER APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_

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

CAPACITANCE, MUTUAL, NOM. 13.5 PF/FT. AT 1 MHZ  
 DIELECTRIC WITHSTANDING, MIN. 1500V RMS  
 VOLTAGE RATING, MAX. 300V  
 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 + 6 LOG (F) DB MIN\*  
 10 - 20 MHZ 26 DB MIN\*  
 20 - 100 MHZ 26 - 5 LOG(F/20) DB MIN\*

NEXT 1-100 MHZ 67 - 15 LOG (F/.772) MIN

ELFEXT 1-100 MHZ 66 - 20 LOG(F/.772) MIN

ATTENUATION 1-100 MHZ 1.5[1.967 SQRT(F) +.023(F) +.05/SQRT(F)]MAX

DELAY 1-100 MHZ 534 + 36/SQRT(F)

DELAY SKEW 1-100 MHZ <25NS

TCL 1-100 MHZ 30-10 LOG(F) DB, 40 DB MAX

ELTCTL 1-30 MHZ 35-20 LOG(F)

COUPLING ATTENUATION 30-100 MHZ 60 DB MINIMUM  
 PER IEC 62153-4-9

VELOCITY OF PROPAGATION 68%

\*PER ODVA VOLUME 2 ETHERNET/IP

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

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TITLE  
 2PR. SF/UTP HIGH FLEX INDUSTRIAL  
 ETHERNET PATCH CORD -- CAT 5e

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