1) CONSTRUCTION: NOM. DIA.
    CONDUCTOR: 26 AWG 7/34 STRANDED TINNED COPPER   .019"
    INSULATION: HIGH DENSITY POLYETHYLENE, .009" NOM. WALL THICKNESS   .036"
    PAIRS: COLOR CODED SINGLES TWISTED INTO PAIRS   .072"
    CABLE: (4) TWISTED PAIRS TWISTED TOGETHER WITH A CENTRAL SPLINE AND
        WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.   .176"
    SHIELDS: AN OVERALL SHIELD OF 38 AWG TINNED COPPER BRAID (80% MINIMUM
        COVERAGE) SHALL BE APPLIED OVER THE CABLE CORE. AN ALUMINIZED
        POLYESTER FOIL SHIELD (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER
        THE BRAID SHIELD.   .195"
    JACKET: THERMOPLASTIC ELASTOMER, BLACK, .040" NOM. WALL THICKNESS
        OVERALL CABLE DIAMETER   .275" NOM. (± .010")
        (BY PI TAPE)

2) PHYSICAL PROPERTIES:
    TEMPERATURE RATING, MAX.   75°C
    TEMPERATURE RATING, MIN.   -20°C
    WT./M', NOM., NET.   40.6 LBS.
    JACKET IS WELD SPATTER RESISTANT
    JACKET IS SUNLIGHT RESISTANT
    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
    JACKET CUTTING/MACHINING OIL RESISTANCE
      (6 MONTHS @ 20°C)
        TENSILE STRENGTH RETENTION, NOM.   80%
        ELONGATION RETENTION, NOM.   100%
    POE COMPLIANT (802.3af) TO 64 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
    CABLE WILL MEET CAT 6a CHANNEL REQUIREMENTS TO 64 METER LENGTH

3) ELECTRICAL CHARACTERISTICS:
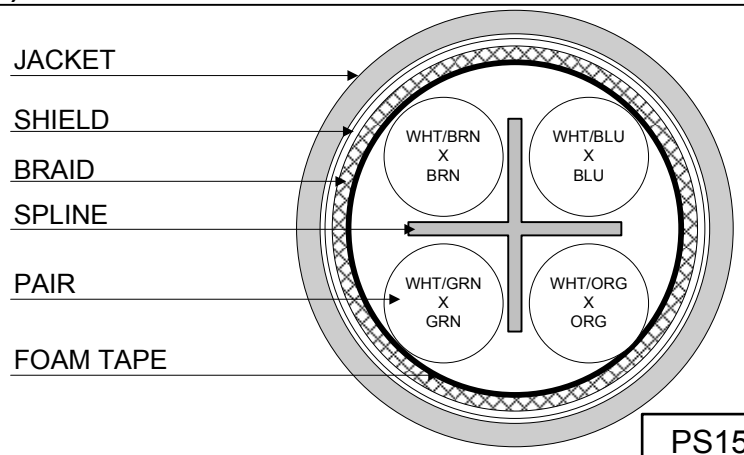   SEE PAGE 2

4) AGENCY APPROVALS:
    NEC (UL) TYPE CMX OUTDOOR - CM
    CEC C(UL) TYPE CMX OUTDOOR - CM

5) APPLICATION:
    SHIELDED FLEXIBLE PATCH/JUMPER CABLE TO SUPPORT SCREENED 568-C.2 CATEGORY 6 AND 6a APPLICATIONS.
    RoHS COMPLIANT MATERIALS.

6) PRINT: (WHITE INK)
    Intercon 1 90620 InfiniFlex - CAT 6a - RUGGED -- E118830 C(UL)US TYPE CMX OUTDOOR - CM 4PR 26 AWG 75C SUN RES --
    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

JACKET
SHIELD
BRAID
SPLINE
PAIR
FOAM TAPE

WHT/BRN X BRN
WHT/BLU X BLU
WHT/GRN X GRN
WHT/ORG X ORG

PS1579

| Created 06/16/14 | DRAWN: BMD 06/16/14 | **QUABBIN®** WIRE & CABLE |
| REV. 02 | CHECKED: GBM 06/17/14 | |

TITLE
4PR. SF/UTP HIGH FLEX INDUSTRIAL
ETHERNET/IP PATCH CORD -- CATEGORY 6/6a

1 of 2

PRELIMINARY SPECIFICATION IS FOR DESIGN REVIEW PURPOSES ONLY. A PRODUCT SPECIFICATION WITH A QWC PERMANENT PART NUMBER WILL BE PROVIDED FOR CUSTOMER SIGNATURE BEFORE AN ORDER WILL BE ACCEPTED.

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

CAPACITANCE, MUTUAL	13.5 PF/FT. AT 1 MHZ	
DIELECTRIC WITHSTANDING, MIN	1500V RMS	
VOLTAGE RATING, MAX.	300V	
D.C. RESISTANCE, MAX.	14.0 Ω	

IMPEDANCE, NOM.
$100 \pm 15\ \Omega$ 1 - 100 MHz
$100 \pm 20\ \Omega$ 100 - 500 MHz

RETURN LOSS
1-10 MHz $20 + 6\ \text{LOG}(F)$ dB MIN*
10-20 MHz   26 dB MIN*
20-100 MHz $26 - 5\ \text{LOG}(F/20)$ dB MIN*

PS NEXT $1 \leq f \leq 500$ MHz $42.3 - 15\ \text{LOG}(F/100)$ dB MIN

NEXT $1 \leq f \leq 500$ MHz $44.3 - 15\ \text{LOG}(F/100)$ dB MIN

PS ACRF $1 \leq f \leq 500$ MHz $24.8 - 20\ \text{LOG}(F/100)$ dB MIN

ACRF $1 \leq f \leq 500$ MHz $27.8 - 20\ \text{LOG}(F/100)$ dB MIN

ATTENUATION $1 \leq f \leq 500$ MHz $1.5[1.82\ \text{SQRT}(F) + 0.0091(F) + 0.25/\text{SQRT}(F)]$ dB MAX

DELAY $1 \leq f \leq 500$ MHz $534 + 36/\text{SQRT}(F)$ ns MAX

DELAY SKEW $1 \leq f \leq 500$ MHz   <25ns

PS ANEXT LOSS (6 AROUND 1) $1 \leq f \leq 500$ MHz $62.5 - 15\ \text{LOG}(F/100)$ dB   50 - 500 MHz
67 dB   1 - 50 MHz

PS AFEXT (6 AROUND 1) $1 \leq f \leq 500$ MHz $38.2 - 20\ \text{LOG}(F/100)$ dB

COUPLING ATTENUATION $30 \leq f \leq 250$ MHz $100 - 20\ \text{LOG}(F)$ dB MIN (MAX 60 dB) E3*
TESTED PER IEC 62153-4-9   Segregation class d acc. EN 50174-2

VELOCITY OF PROPAGATION   68%

*PER ODVA VOLUME 2 ETHERNET/IP

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

PS1579

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2 of 2

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