

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:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.		.143"
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.		.174"
JACKET:	ZHFR POLYURETHANE, (COLOR, PER CHART 1) , .035" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER	.245" ± .005" (BY CALIPER)

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C
TEMPERATURE RATING, MIN.	-40°C
WT./M', NOM., NET.	32.6 LBS.
BEND RADIUS, MIN. (STATIC, 1 BEND IN ASSEMBLY)	1"
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 (1 LB LOAD, 360°, 71 CYCLES/MIN, @ 20°C)	3 MILLION CYCLE TEST
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 TO 68 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184	
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 68 METER LENGTH	

CHART 1:

QUABBIN P/N	JACKET COLOR
5075	BLACK
5076	BLUE
5077	TEAL
5078	RED
5079	YELLOW

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

NEC (ETL) TYPE CMX
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 ZERO HALOGEN INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e SF/UTP P/N **(P/N PER CHART 1)** -- C(ETL)US TYPE CMX OIL RES I 26 AWG 75C -- CE 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:

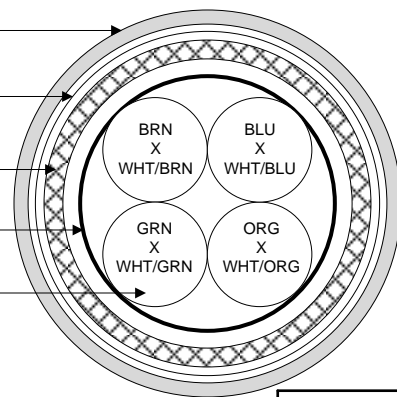
JACKET

FOIL SHIELD

BRAID

FOAM TAPE

PAIR



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REV. 06	CHECKED: ZRS 09/09/20



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

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3) ELECTRICAL CHARACTERISTICS:

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
PSNEXT	1 ≤ f ≤ 100 MHz	32.3 – 15 LOG(f/100) dB MIN
ACRF	1 ≤ f ≤ 100 MHz	23.8 – 20 LOG(f/100) dB MIN
PSACRF	1 ≤ f ≤ 100 MHz	20.8 – 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
COUPLING ATTENUATION PER IEC 62153-4-9	30 ≤ f ≤ 100 MHz	50 dB MINIMUM
VELOCITY OF PROPAGATION	68%	

*PER ODVA VOLUME 2 ETHERNET/IP

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