QWC0053

1) CONSTRUCTION:

		NOM. DIA.
CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	.0236"
INSULATION:	HIGH DENSITY POLYETHYLENE, .011" NOM. WALL THICKNESS	.047"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.092"
CABLE:	(2) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.	.160"
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.	.191"
JACKET:	THERMOPLASTIC ELASTOMER, **(COLOR PER CHART 1)**, .037" NOM. WALL THICKNESS (PRESSURE) OVERALL CABLE DIAMETER	.265" ± .010"

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C & 80°C (JACKET 105°C, 75°C OIL)
TEMPERATURE RATING, MIN. (STATIC)	-40°C (MANUFACTURER'S RECOMMENDED)
WT./M', NOM., NET.	37.1 LBS.
JACKET IS WELD SPATTER RESISTANT	
JACKET IS SUNLIGHT RESISTANT	
FLEX LIFE	
(126 CYCLES/MIN, @ 20ºC)	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, @ 20ºC)	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 80 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 90 METER LENGTH
CHART 1:

QUABBIN P/N	JACKET COLOR
5023	BLACK
5025	TEAL
5027	RED

3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2

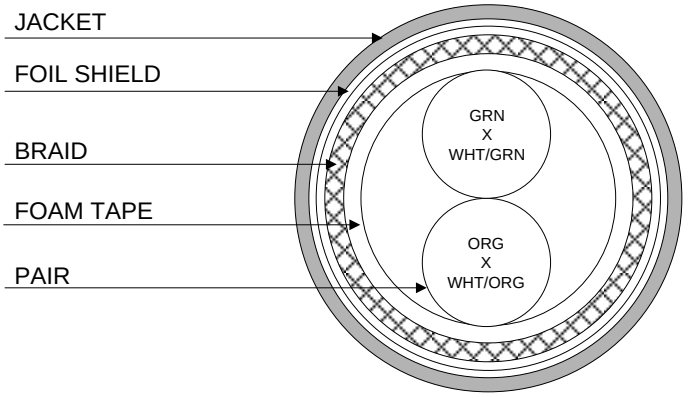
4) AGENCY APPROVALS:
UL AWM STYLE 2463 (80C 600V)
NEC (UL) TYPE CMX OUTDOOR - CM
CEC C(UL) TYPE CMX OUTDOOR - CM

5) APPLICATION:
RoHS COMPLIANT MATERIALS
U.S. PATENT NO. US 8,487,184 B2

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e SF/UTP P/N **(P/N PER CHART 1)** -- C(UL)US TYPE CMX OUTDOOR - CM 2PR 24 AWG 75C SUN RES OR AWM 2463 80C 600V -- 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 1/17/13	DRAWN:	BMD 11/17/15	QUABBIN® WIRE & CABLE
REV. 04	CHECKED:	GBM 11/18/15	

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

DRAWING# QWC0053 | 1 of 2

CUSTOMER APPROVAL: **DATE:**

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

CAPACITANCE, MUTUAL, NOM.	13.5 PF/FT. AT 1 MHz @ 20ºC	
DIELECTRIC WITHSTANDING, MIN.	2000V RMS	
VOLTAGE RATING, MAX.	600V	
D.C. RESISTANCE, MAX.	26.5 Ω/1,000' @ 20ºC	
IMPEDANCE	100+/- 15 Ω $1 \le f \le 100$ MHz	
IMPEDANCE, SMOOTHED	100 +/- 10 Ω TYPICAL $5 \le f \le 100$ 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
ATTENUATION	$1 \le f \le 100$ MHz	$1.2[1.967 \sqrt{f} + 0.023(f) + 0.050/\sqrt{f}]$ dB MAX
DELAY	$1 \le f \le 100$ MHz	$534 + 36/\sqrt{f}$ ns MAX
DELAY SKEW	$1 \le f \le 100$ MHz	<25ns
COUPLING ATTENUATION PER IEC 62153-4-9	$30 \le f \le 100$ MHz	50 dB MINIMUM
VELOCITY OF PROPAGATION	68%	

*PER ODVA VOLUME 2 ETHERNET/IP

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

Created 1/17/13	DRAWN: BMD 11/17/15	QUABBIN® WIRE & CABLE	
REV. 04	CHECKED: GBM 11/18/15		

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

DRAWING# QWC0053 2 of 2

CUSTOMER APPROVAL: **DATE:**