

1) CONSTRUCTION:

CONDUCTOR:	24 AWG SOLID TINNED COPPER	NOM. DIA.	.0216"
INSULATION:	HIGH DENSITY POLYETHYLENE, .013" NOM. WALL THICKNESS		.047"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.094"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A CLEAR POLYESTER TAPE TO FORM A CABLE CORE		.194"
SHIELDS:	AN OVERALL ALUMINUM POLYESTER TAPE (FOIL OUT, 100% COVERAGE) SHALL BE APPLIED OVER THE CABLE CORE AND SHALL INCLUDE A 24 AWG STRANDED TINNED COPPER DRAIN WIRE IN CONTACT WITH THE METALIZED SURFACE. A SECOND SHIELD OF 38 AWG TINNED COPPER BRAID (80% MINIMUM COVERAGE) SHALL BE APPLIED OVER THE FOIL SHIELD.		
JACKET:	THERMOPLASTIC ELASTOMER, TEAL, .032" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER	.280" ± .010"

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C (JACKET 105°C, 75°C OIL)
TEMPERATURE RATING, MIN.	-40°C
WT./M', NOM., NET.	41.2 LBS.
JACKET IS SUNLIGHT RESISTANT	PER UL 2556
JACKET IS WELD SPATTER RESISTANT	
JACKET IS CUTTING/MACHINING OIL RESISTANT (PER QUABBIN TEST REPORT #TR 08-0001) (6 MONTHS @ 20°C)	
TENSILE STRENGTH RETENTION, NOM.	80%
ELONGATION RETENTION, NOM.	100%

POE COMPLIANT (802.3af) TO 100 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 100 METER LENGTH

3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2

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

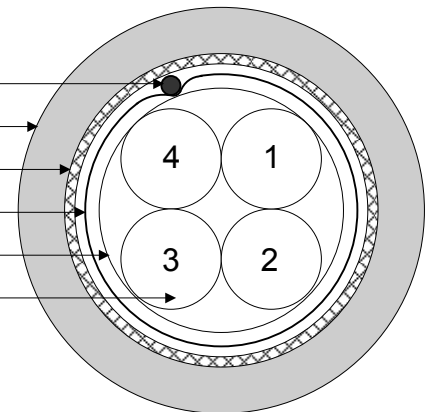
5) APPLICATION:
HORIZONTAL CABLE FOR CAT 5e APPLICATIONS. RoHS COMPLIANT MATERIALS

6) PRINT:
QUABBIN DATAMAX EXTREME DURABLE INDUSTRIAL ETHERNET/IP CAT 5e SF/UTP HORIZONTAL P/N 5927 -- C(UL)US TYPE CM 4PR 24 AWG 75C SUN RES -- RoHS -- **(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

7) COLOR CODE:
1. WHITE/BLUE X BLUE
2. WHITE/ORANGE X ORANGE
3. WHITE/GREEN X GREEN
4. WHITE/BROWN X BROWN

8) PACKAGING:
TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING

DRAIN
JACKET
BRAID
FOIL SHIELD
TAPE
PAIR



PS1514

Created 03/06/14	DRAWN: BMD 03/11/14
REV. 01	CHECKED: GBM 03/12/14



TITLE
DATAMAX EXTREME INDUSTRIAL ETHERNET/IP
CABLE -- 4 PR -- TYPE CM -- CAT 5e

DRAWING# 5927

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.	9.38 Ω	
IMPEDANCE	100 +/- 15 Ω 1-100 MHz	
RETURN LOSS	1 $\leq f < 10$ MHz	20 + 6 LOG(f) dB MIN*
	10 $\leq f < 20$ MHz	26 dB MIN*
	20 $\leq f \leq 100$ MHz	26 - 5 LOG($f/20$) dB MIN*
PS NEXT	1 $\leq f \leq 100$ MHz	32.3 - 15 LOG(F/100) dB MIN
NEXT	1 $\leq f \leq 100$ MHz	35.3 - 15 LOG(F/100) dB MIN
PSACRF	1 $\leq f \leq 100$ MHz	20.8 - 20 LOG(F/100) dB MIN
ACRF	1 $\leq f \leq 100$ MHz	23.8 - 20 LOG($f/100$) dB MIN
ATTENUATION	1 $\leq f \leq 100$ MHz	1.967 \sqrt{f} + 0.023(f) + 0.050/ \sqrt{f} dB MAX
DELAY	1 $\leq f \leq 100$ MHz	534 + 36/ \sqrt{f} ns MAX
DELAY SKEW	1 $\leq f \leq 100$ MHz	<25ns
COUPLING ATTENUATION	30 $\leq f \leq 100$ MHz	60 dB MIN E ₃ *

*PER ODVA VOLUME 2 ETHERNET/IP

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL

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2 of 2

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