

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	24 AWG SOLID TINNED COPPER	.0216"
INSULATION:	HIGH DENSITY POLYETHYLENE, .013" NOM. WALL THICKNESS	.0485"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.097"
CABLE:	(2) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A CLEAR POLYESTER TAPE TO FORM A CABLE CORE	.184"
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.	.206"
JACKET:	THERMOPLASTIC ELASTOMER, TEAL, .032" NOM. WALL THICKNESS	.270" ± .010"
	(PRESSURE) OVERALL CABLE DIAMETER	

2) PHYSICAL PROPERTIES:	
TEMPERATURE RATING, MAX.	75°C (JACKET 105°C, 75°C OIL)
TEMPERATURE RATING, MIN.	-40°C
WT./M', NOM., NET.	38.3 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 5926 -- C(UL)US TYPE CM 2PR 24 AWG 75C SUN RES -- RoHS -- **(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

7) COLOR CODE:
1. WHITE/GREEN X GREEN
2. WHITE/ORANGE X ORANGE

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

JACKET

DRAIN

BRAID

TAPE

SHIELD

PAIR

WHT/GRN X GRN

WHT/ORG X ORG

PS1524

Created 03/07/14	DRAWN: BMD 03/10/14	
REV. 01	CHECKED: GBM 03/12/14	
TITLE		
DATAMAX EXTREME INDUSTRIAL ETHERNET/IP CABLE -- 2 PR -- TYPE CM -- CAT 5e		
QUABBIN P/N	5926	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 ≤ 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
ACRF	1 ≤ f ≤ 100 MHz	23.8 - 20 LOG(f/100) dB MIN
ATTENUATION	1 ≤ f ≤ 100 MHz	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	<25ns
COUPLING ATTENUATION	30 ≤ f ≤ 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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TITLE	DATAMAX EXTREME INDUSTRIAL ETHERNET/IP CABLE -- 2 PR -- TYPE CM -- CAT 5e
QUABBIN P/N	5926
	2 of 2

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