

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	.0236"
INSULATION:	HIGH DENSITY POLYETHYLENE, .011" NOM. WALL THICKNESS	.046"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.092"
CABLE:	4 TWISTED PAIRS TWISTED TOGETHER WITH A CENTRAL SPLINE AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.	.228"
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.	.247"
JACKET:	POLYURETHANE, BLACK, .022" NOM. WALL THICKNESS (PRESSURE) OVERALL CABLE DIAMETER	.291" ± .010" (BY PI TAPE)

2) PHYSICAL PROPERTIES:		
TEMPERATURE RATING, MAX.	75°C	
TEMPERATURE RATING, MIN.	-40°C	
WT./M', NOM., NET.	42.3 LBS.	
JACKET IS UV 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	

3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2

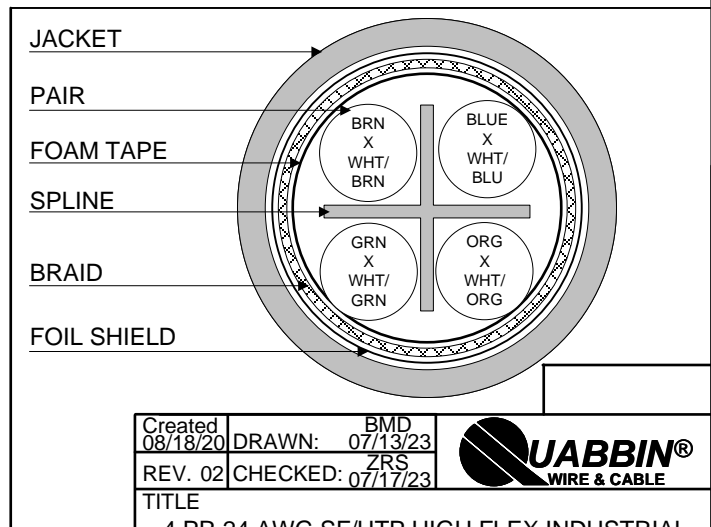
4) AGENCY APPROVALS:
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:
SHIELDED FLEXIBLE PATCH/JUMPER CABLE TO SUPPORT SCREENED INDUSTRIAL ETHERNET/IP, TIA-568.2-D CATEGORY 6 AND 6a APPLICATIONS. PATENT NO. US 8,487,184 B2

6) PRINT: (WHITE INK)
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP CAT 6/6a SF/UTP PATCH CORD P/N 5936 4PR 24 AWG -- PATENT NO. US 8,487,184 B2 -- CAT 6a TIA-568.2-D -- CE 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



Created 08/18/20	DRAWN: 07/13/23 BMD
REV. 02	CHECKED: 07/17/23 ZRS



TITLE	4 PR 24 AWG SF/UTP HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 6/6a
QUABBIN P/N	5936
	1 of 2

CUSTOMER APPROVAL: _____ DATE: _____

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 88 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
 CABLE WILL MEET CAT 6a CHANNEL REQUIREMENTS TO 88 METER LENGTH
 CAPACITANCE, MUTUAL, NOM. 13.5 PF/FT. AT 1 MHz
 DIELECTRIC WITHSTANDING, MIN. 1500V RMS
 VOLTAGE RATING, MAX. 300V
 D.C. RESISTANCE, MAX. 26.2 Ω /1,000'


NOTE: TESTING FOR THE FOLLOWING IS CONDUCTED OFF THE REEL. (FOR 100m OF CABLE)

IMPEDANCE, NOM.	100 \pm 15 Ω 1 - 100 MHz 100 \pm 20 Ω 100 - 500 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 < 100 MHz 26 - 5 LOG(f/20) dB MIN* 100 \leq f \leq 500 MHz 25 - 8.6 LOG(f/20) dB MIN	
PS NEXT	1 \leq f \leq 500 MHz 42.3 - 15 LOG(f/100) dB MIN	
NEXT	1 \leq f \leq 500 MHz 44.3 - 15 LOG(f/100) dB MIN	
PSACRF	1 \leq f \leq 500 MHz 24.8 - 20 LOG(f/100) dB MIN	
ACRF	1 \leq f \leq 500 MHz 27.8 - 20 LOG(f/100) dB MIN	
INSERTION LOSS	1 \leq f \leq 500 MHz 1.2 [1.82 \sqrt{f} + 0.0091(f) + 0.25/ \sqrt{f}] dB MAX	
DELAY	1 \leq f \leq 500 MHz 534 + 36/ \sqrt{f} ns MAX	
DELAY SKEW	1 \leq f \leq 500 MHz <45 ns	
PS ANEXT LOSS (6 AROUND 1)	1 \leq f \leq 500 MHz 62.5 - 15 LOG(f/100) dB MIN 50 - 500 MHz 67 dB MIN 1 - 50 MHz	
PSAACRF	1 \leq f \leq 500 MHz 38.2 - 20 LOG(f/100) dB MIN	
COUPLING ATTENUATION	30 \leq f \leq 250 MHz 100 - 20 LOG(f) (MAX 60 dB) E3*	
VELOCITY OF PROPAGATION	68%	

*PER ODVA VOLUME 2 ETHERNET/IP

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TITLE 4 PR 24 AWG SF/UTP HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 6/6a		
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