

MI Type #: E

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 WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.	.197"
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.	.216"
JACKET: THERMOPLASTIC ELASTOMER, COLOR TEAL, .037" NOM. WALL THICKNESS (PRESSURE) OVERALL CABLE DIAMETER	.290" ± .010"

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C & 80°C
TEMPERATURE RATING, MIN.	-40°C (MANUFACTURER'S RECOMMENDED)
WT./M', NOM., NET.	46.7 LBS.
JACKET IS SUNLIGHT RESISTANT	
JACKET IS WELD SPATTER RESISTANT	

TENSILE STRENGTH RETENTION, NOM.	80%
ELONGATION RETENTION, NOM.	100%
FLEX LIFE (PENDING) (126 CYCLES/MIN, @ 20°C)	

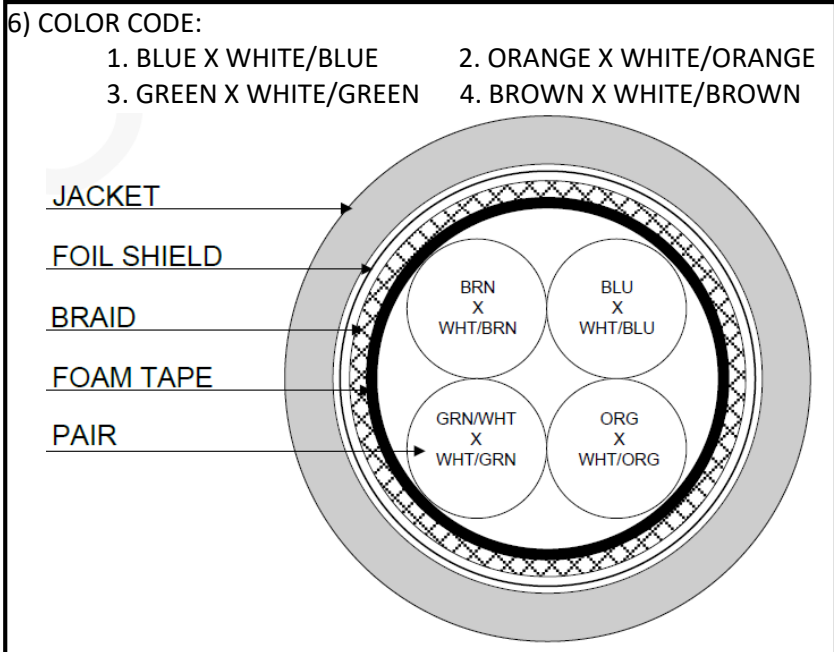
MINIMUM BEND RADIUS: 10X O.D.
 1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)
 10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)

TORSION TEST (PENDING) (1 LB LOAD, 360°, 71 CYCLES/MIN, @ 20°C)	4.8 MILLION CYCLE TEST
--	------------------------

3) ELECTRICAL CHARACTERISTICS: SEE PAGE 2

4) AGENCY APPROVALS:
 UL AWM STYLE 2463 (80C 600V)
 NEC (UL) TYPE CMX OUTDOOR - CM
 EU CE MARKS: MEETS EU DIRECTIVE
 2011/65/EU (RoHS II)

5) APPLICATION:
 INDUSTRIAL ETHERNET PATCH CABLE CAT 5e



COMPONENTS EXPRESS, INC.
 10330 Argonne Woods Drive, Ste100
 Woodridge, IL 60517

Rev. 11, 7/18/12

MI Type #: E

6) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 85 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184

CABLE WILL MEET CAT 5E CHANNEL REQUIREMENTS TO 85 METER LENGTH

CAPACITANCE, MUTUAL, NOM. 13.5 PF/FT. AT 1 MHz

DIELECTRIC WITHSTANDING, MIN. 2000V RMS

VOLTAGE RATING, MAX. 600V

D.C. RESISTANCE, MAX. 26.2 Ω /1,000' (14.0 Ω /100m)

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*

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
INSERTION LOSS 1 \leq f \leq 100 MHz 1.2[1.967v(f) + 0.023(f) + 0.050/v(f)] dB MAX
DELAY 1 \leq f \leq 100 MHz 534 + 36/v(f) ns MAX
DELAY SKEW 1 \leq f \leq 100 MHz < 45 ns

COUPLING ATTENUATION 30 \leq f \leq 100 MHz \leq 60 dB E3*
VELOCITY OF PROPAGATION 69%



COMPONENTS EXPRESS, INC.
10330 Argonne Woods Drive, Ste100
Woodridge, IL 60517

Rev. 11, 7/18/12