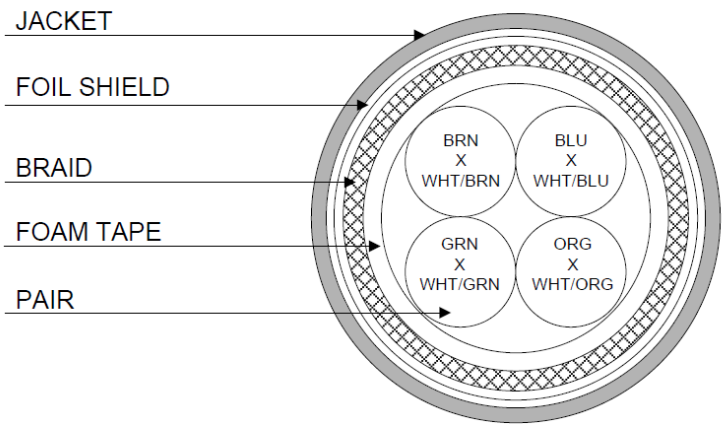
MV Type #: 5 & MI Type #: 7



COLOR CODE

1. BLUE X WHITE/BLUE
2. ORANGE X WHITE/ORANGE
3. GREEN X WHITE/GREEN
4. BROWN X WHITE/BROWN

PHYSICAL PROPERTIES

TEMPERATURE RATING, MAX.75°C
TEMPERATURE RATING, MIN.-20°C
WT./M', NOM., NET.35.6 LBS.
JACKET IS WELD SPATTER RESISTANT

CONSTRUCTION

CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	26 AWG 7/34 STRANDED TINNED COPPER	.019"
INSULATION:	HIGH DENSITY POLYETHYLENE, .009"NOM. WALL THICKNESS	.037"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.074"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.	
SHIELDS:	AN OVERALL SHIELD OF 38 AWG TINNED COPPER BRAID (75% MINIMUM COVERAGE),SHALL BE APPLIED OVER THE CABLE CORE. A SECOND SHIELD OF ALUMINIZEDPOLYESTER FOIL (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE BRAID.	.143”
JACKET:	THERMOPLASTIC ELASTOMER, **(BLACK OR VIOLET)**, .037" NOM. WALL THICKNESS (PRESSURE) OVERALL CABLE DIAMETER	.245" ± .005"

FLEX & TORSION TESTING

MINIMUM BEND RADIUS: 10X O.D.

FLEX LIFE (126 CYCLES/MIN)	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)	3 MILLIION CYCLE TEST
JACKET CUTTING/MACHING 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

ELECTRICAL CHARACTERISTICS SEE PAGE 2

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

Spec No. **ROBOTIC CABLE TYPE #5 (CAT 5E)**
Revision **7**
Date **8/8/19**

PRODUCT SPECIFICATION: **ROBOTIC CABLE TYPE #5 (CAT 5E)**

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.	14.0 Ω
IMPEDANCE, NOM.	100 +/- 15 Ω 1-100 MHz
RETURN LOSS	1 - 10 MHz 20 + 6 LOG(f) dB MIN* 10 - 20 MHz 26 dB MIN* 20 - 100 MHz 26- 5 LOG(f/20) dB MIN*
NEXT	1 ≤ f ≤ 100 MHz 35.3 - 15 LOG(f/100) dB MIN
PSNEXT	1 ≤ f ≤ 100 MHz 32.3 - 15 LOG(f/100) dB MIN
ACRF	1 ≤ f ≤ 100 MHz 23.8 - 20 LOG(f/100) dB MIN
PSACRF	1 ≤ f ≤ 100 MHz 20.8 - 20 LOG(f/100) dB MIN
INSERTION LOSS	1 ≤ f ≤ 100 MHz 1.5[1.967 $\sqrt{f}$ + 0.023(f) + 0.050/$\sqrt{f}$] dB MAX
DELAY	1 ≤ f ≤ 100 MHz 534 + 36/$\sqrt{f}$ ns MAX
DELAY SKEW	1 ≤ f ≤ 100 MHz <25ns
COUPLING ATTENUATION	30 ≤ f ≤ 100 MHz 50 dB MINIMUM
PER IEC 62153-4-9	
VELOCITY OF PROPAGATION	68%

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

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