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1. CONSTRUCTION:

1. CONDUCTOR: STRANDED BARE COPPER WIRE 19/0.105±0.008mm (26AWG)
2. INSULATION: PP, 1.09±0.05mm
3. TWISTED PAIR COLOR CODE: WHITE/BLUE
4. INNER JACKET: TPV/TPE
5. SHIELDING: Al-PET (NOM 25% OVERLAPPING, Al SIDE FACE OUT)
TINNED COPPER WIRE BRAIDING WITH NOM 90% COVERAGE
6. JACKET: TPU, OUTER DIAMETER: 5.4±0.3 mm (MIN THICKNESS 0.80mm)
JACKET COLOR: GREEN

2. MECHANICAL PROPERTIES:

1. MIN BEND RADIUS: 8X OD
2. TRAILING CHAIN TEST: BENDING RADIUS: 15X OD, OPERATING WAY: MAX 1m, CYCLES: MIN 5 MILLION
3. TORSION TEST: TORSION STRESS: ±180°/m, WEIGHT: 300g, CYCLES: MIN 5 MILLION
4. TEMPERATURE RANGE:
DURING OPERATION: -40°C UP TO 80°C
DURING INSTALLATION: 0°C UP TO 50°C
5. FIRE RATING: VW-1
6. OIL RESISTANCE TO UL 758 60°C
7. UV RESISTANCE TO IEC 60068-2-5

MECHANICAL PROPERTIES	TESTING METHOD	SPECIFICATION
TENSILE INITIAL	UL 1581	MIN 10.3 Mpa
ELONGATION INITIAL		MIN 100%
HEAT AGING (TENSILE)		MIN 70% OF UNAGED SPECIMENS
HEAT AGING (ELONGATION)		MIN 65% OF UNAGED SPECIMENS
HYDROLYSIS (TENSILE)		±30% OF UNHYDROLYZED SPECIMENS
HYDROLYSIS (ELONGATION)	VDE HD 22.10	MIN 300%
		±30% OF UNHYDROLYZED SPECIMENS

3. ELECTRICAL PROPERTIES (AT 20°C ±5°C)

1. DC RESISTANCE: MAX 14.5Ω /100m AT 20°C
2. RESISTANCE UNBALANCE: MAX 2% AT 20°C
3. INSULATION RESISTANCE (500V): MIN 5000 MΩ/Km AT 20°C
4. MUTUAL CAPACITANCE: MAX 5.6nf/100m AT 1kHz
5. CAPACITANCE UNBALANCE (PAIR TO GROUND): MAX 160pf/100m AT 1kHz
6. NOMINAL VELOCITY OF PROPAGATION: NOM 67%
7. TEST VOLTAGE (AC, 1 min): 2kV/1min

4. TRANSMISSION PERFORMANCE ACC. TO IEC 61156-12 (AT 20°C/100m):

FREQUENCY (MHz)	FITTED IMPEDANCE (Ω)	INSERTION LOSS (dB) MAX	RETURN LOSS (dB) MIN	PROPAGATION DELAY (ns) MAX
1	100±5 AT 100MHz	3.1	20.0	570
4		5.6	23.0	552
10		8.7	25.0	545
16		11.0	25.0	543
20		12.2	25.0	542
31.25		15.5	23.2	541
62.5		21.8	20.8	538
100		27.8	19.0	538
125		31.2	18.2	537
200		39.7	16.4	537
250		44.6	15.6	536
300		49.0	15.6	536
500		64.1	15.6	536
600		70.7	15.6	536

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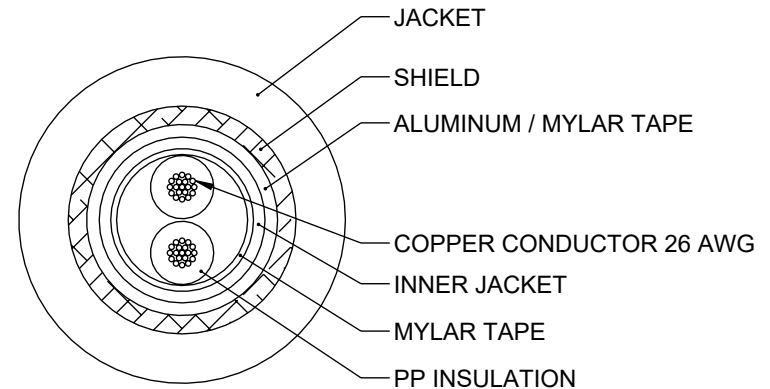
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REVISION

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	02/17/2025	HBAKKE	GUTTADAURO

CROSS-SECTIONAL
VIEW

CABLE LENGTH

PART NO.	FEET	METERS
TSPE07-10M	32.8	10
TSPE07-50M	164.0	50

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
X = ±.2 [5] FRACTIONS ± 1/32
.XX = ±.02 [0.5] ANGLES ± 1°
.XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE.
UN-DIMENSIONED/NON-CRITICAL FEATURES
MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY

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INTERPRET ALL DIMENSIONS AND
TOLERANCES PER ASME Y14.5

SCALE NONE SHEET 1 OF 1

DESCRIPTION

SINGLE PAIR ETHERNET (SPE) BULK CABLE, 26AWG
STRANDED, NO FILLER 5.4mm, DOUBLE SHIELDED, SF/TP, HIGH
FLEX INDUSTRIAL OUTDOOR PUR GRN

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	43321	HBAKKE	TSPE07	A