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## PowerMAX Blue Cat.6 F/UTP 23AWG LSZH Cable

DINTEK PowerMAX™ shielded Cat.6 solutions are guaranteed to exceed Class E channel specifications as set down in international standards.

Our PowerMAX™ shielded solution comprises Cat.6 compliant patch panels, keystones and patch cords. When combined with DINTEK's Cat.6 F/UTP cable, an end-to-end channel exists that maximises data throughput and provides headroom for all future technologies operating beyond one Gigabit. Combined with other DINTEK PowerMAX™ shielded products, our Cat.6 F/UTP cable is the perfect solution to your voice and data communications needs.



### Features & Applications

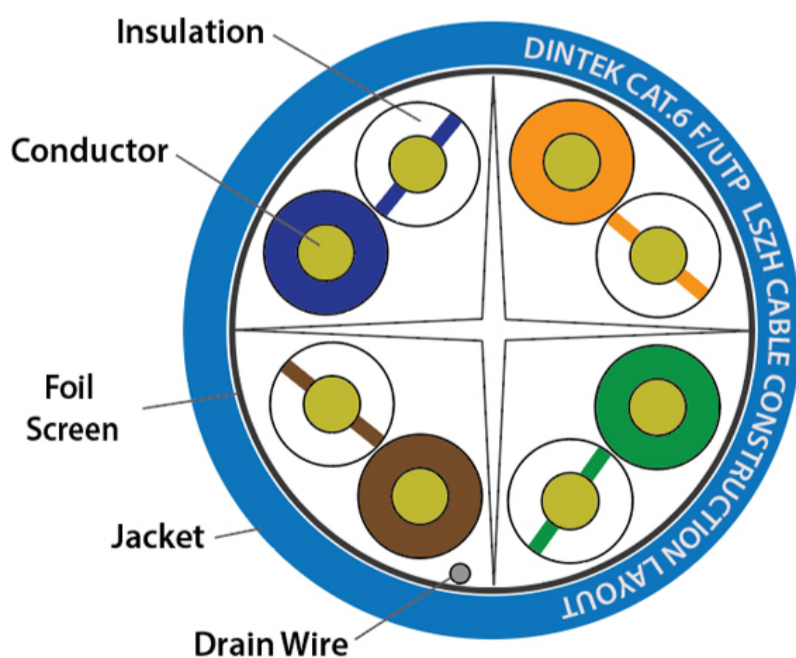
- Conductor sizes for Cat.6 are set at 23AWG
- By keeping the gauge size of the conductor larger, there is less heat generation caused and less drop of voltage over distance
- Capable of handling the latest version of power over Ethernet
- 100BASE-T Ethernet (IEEE802.3) | 1000Mbps Gigabit Ethernet
- 155/622Mbps 1.2/2.4 Gbps ATM | Voice; T1; ISDN

### Standards Conformance

- ISO/IEC11801 2nd edition CLASS E | ANSI/TIA-568-2.D standard
- CENELEC EN 50173-1, EN 13501-6:2014
- EN 50288-5-1, IEC 61156-5 | EN 50575:2014 including amendment A1: 2016
- EN 60332-1-2:2004 including amendments A1:2015 and A11:2016
- PoE++ & 4PPoE - IEEE 802.3bt level 3 & 4

### Independent Verified Certifications

- DELTA Attestation of Conformity - No. 2017-1019



### Performance Statistics

Frequency Mhz	Insertion Loss dB/100mtrs	NEXT (dB)	Return Loss (dB)
1	2.1	75.0	20.0
4	3.8	66.3	23.0
10	6.0	60.3	25.0
16	7.6	57.2	25.0
20	8.5	55.8	25.0
31.25	10.7	52.9	23.6
62.5	15.5	48.4	21.5
100	19.9	45.3	20.1
200	29.1	40.8	18.0
250	33.0	39.3	17.3

### Ordering Information

Product Number	Product Name	Jacket Type	Color	Length Qty
1103-04005	PowerMAX Cat.6 F/UTP 23AWG LSZH Cable	LSZH	Blue	305m / Reel

## Technical Specifications

### Construction

Conductor	
Material	Bare Copper
Wire Size	23AWG
Insulation	
Material	PE
Thickness	Min: 0.24 mm
Diameter	1.08mm ± 0.05
Colors	Blue/White-Blue   Orange/White-Orange   Green/White-Green   Brown/White-Brown
Unaged Elongation (%)	Min. 100%
Unaged Tensile Strength	Min. 0.816 Kgf/mm <sup>2</sup>
Jacket	
Material	LSZH
Thickness	Nominal: 0.5 mm
Diameter	6.86 mm ± 0.3
Color	Blue
Fire Rated Class	CPR Class Dca-s2,d2,a1

### Physical Ranges

Insulation	
Min. Tension Strength	Before Aging : 2400 psi   After Aging : 75% before aging (100°C X 48hrs)
Min Elongation (%)	Before Aging : 300%   After Aging : 75% before aging (100°C X 48hrs)
Jacket	
Min. Tension Strength	Before Aging : 1300 psi   After Aging : 60% before aging (100°C X 168hrs)
Min Elongation (%)	Before Aging : 100%   After Aging : 60% before aging (100°C X 168hrs)
Cold Bend Test	-20 ± 2°C X 4hrs no. crack
Dielectric Strength	AC 1.7 KV for 2Sec.
Min. Bending Radius	50
Max. Pulling Tension	25
Installation Temperature	-10°C to +60°C
Operating Temperature	-10°C to +60°C

### Electrical

Conductor Resistance	Max. 9.5Ω /100m @ 20°C
DC Resistance Unbalance	Max. 4%
Pair-to-Ground Capacitance Unbalance	1600 pF/km
Dielectric Strength of Insulation	AC 1.7 KV for 2Sec
Insulation Resistance Test	Min. 5000 MΩ·Km
Mutual Capacitance	Max. 5600 pF/100m
Impedance 1~100MHz	100Ω ± 15%
Impedance 100-250MHz	100Ω ± 22%

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