

GenSPEED® 6 MAX™ Category 6 OSP Cable (22 AWG)

The Most Versatile Cable in the Industry



PART NUMBERS

Standard packaging: 1000' Reel

Jacket Color	CMP (Plenum)
Black	8146100

PHYSICAL DATA

Nominal Cable Diameter (in)	0.295
Nominal Cable Weight (lbs/1000 ft)	40
Minimum Bend Radius (in)	1.0
Maximum Pulling Force (lbs)	32
Temperature Rating (°C)	
Installation:	-30 to +60
Operation:	-45 to +80

ELECTRICAL PERFORMANCE

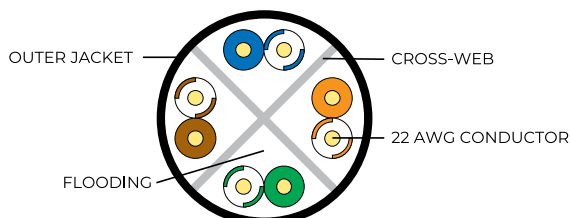
Frequency MHz	Insertion Loss (max)	NEXT (min)	Return Loss (min)
1	1.9	74.3	20.0
4	3.5	65.3	23.0
10	5.5	59.3	25.0
16	7.0	56.2	25.0
20	7.9	54.8	25.0
31.25	9.9	51.9	23.6
62.5	14.3	47.4	21.5
100	18.4	44.3	20.1
200	27.0	39.8	18.0
250	30.6	38.3	17.3

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C.

ELECTRICAL CHARACTERISTICS

	Max.	Nom.
DC Resistance Ohms/100 m (328 ft) @ 20°C	9.38	6.50
DC Resistance Unbalanced Individual Pair %	4.00	< 1
Delay Skew (max) ns/100 m	45	35
Nom. Velocity of Propagation % Speed of Light	66	
Characteristic Impedance Frequency (f): 1-350 MHz	Ohms 100 ± 15	

CROSS-SECTION



CONSTRUCTION:

Conductors

- 22 AWG solid bare annealed copper

Insulation

- Polyolefin

Color Code

- Pair 1: Blue-White/Blue
- Pair 2: Orange-White/Orange
- Pair 3: Green-White/Green
- Pair 4: Brown-White/Brown

Separator

- Cross-web

Flooding Compound

- Waterproof gel

Jacket

- UV- and abrasion-resistant polyethylene

Features and Benefits

- Innovative cross-web design allowing for maximum pair separation, increasing key electrical performance parameters
- Gel-filled construction to prevent moisture migration in underground and wet applications
- Wide temperature range for extreme weather environments
- TRU-Mark® print legend contains footage markings from 1000' to 0'

Applications

- IEEE 802.3: 1000 BASE-T, 100 BASE-TX, 10 BASE-T, PoE, PoE+, PoE++
- ANSI/TIA 854: 1000 BASE-TX
- CDDI, Token Ring, ATM
- Digital Video
- Broadband and Baseband Analog Video
- Duct and conduit installations
- Supports the growth of higher-wattage devices (IT/ IP, IoT, and IoE)

Standard Compliances

- UL 444
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ICEA S-102-700
- ISO/IEC 11801 Ed. 2.0 (Class E)
- Telcordia (Bellcore Specification GR-421-CORE Water Penetration Requirement