

# 4286104/10 | 5NF4 BLACK REEL

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5NF4 Category 5e U/UTP filled Cable, outdoor direct burial, black jacket, 4 pair count, 1000 ft (305 m) length, reel

## Product Classification

<b>Regional Availability</b>	Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Twisted pair cable

## General Specifications

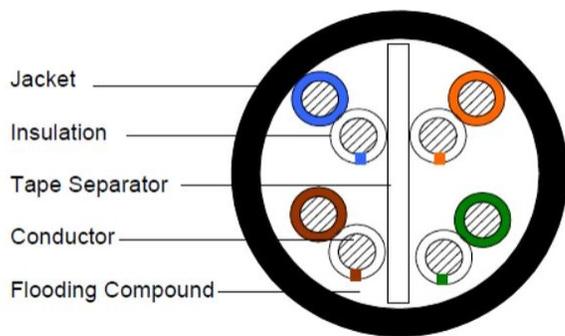
<b>Product Number</b>	5NF4
<b>ANSI/TIA Category</b>	5e
<b>Cable Component Type</b>	Horizontal
<b>Cable Type</b>	U/UTP (unshielded)
<b>Conductor Type, singles</b>	Solid
<b>Conductors, quantity</b>	8
<b>Jacket Color</b>	Black
<b>Note</b>	All electrical transmission tests include swept frequency measurements
<b>Pairs, quantity</b>	4
<b>Transmission Standards</b>	ANSI/TIA-568.2-D   CENELEC EN 50288-3-1   ISO/IEC 11801 Class D

## Dimensions

<b>Cable Length</b>	304.8 m   1000 ft
<b>Diameter Over Jacket, nominal</b>	6.096 mm   0.24 in
<b>Jacket Thickness</b>	0.762 mm   0.03 in
<b>Conductor Gauge, singles</b>	24 AWG

## Cross Section Drawing

# 4286104/10 | 5NF4 BLACK REEL



## Electrical Specifications

<b>Characteristic Impedance</b>	100 ohm
<b>dc Resistance Unbalance, maximum</b>	5 %
<b>dc Resistance, maximum</b>	9.38 ohms/100 m   2.859 ohms/100 ft
<b>Delay Skew, maximum</b>	45 ns
<b>Dielectric Strength, minimum</b>	1500 Vac   2500 Vdc
<b>Mutual Capacitance at Frequency</b>	4.6 nF/100 m @ 1 kHz
<b>Nominal Velocity of Propagation (NVP)</b>	65 %
<b>Operating Frequency, maximum</b>	350 MHz
<b>Operating Voltage, maximum</b>	80 V
<b>Remote Powering</b>	Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A
<b>Safety Voltage Rating</b>	300 V

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## Electrical Cable Performance

<b>CS</b>	CommScope	<b>NEXT</b>	Near End Crosstalk (dB/100m)
<b>STD</b>	Refers to the standard value listed under Transmission Standards in the Electrical Specifications above	<b>PSNEXT</b>	Power Sum Near End Crosstalk (db/100m)
<b>TYP</b>	Typical Electrical Performance	<b>ACRF</b>	Attenuation to Crosstalk Ratio - Far End (dB/100m)
<b>IL</b>	Insertion Loss (dB/100m)	<b>RL</b>	Return Loss (dB)
<b>ACR</b>	Attenuation to Crosstalk Ratio (dB/100m)	<b>ELTCTL</b>	Equal Level Transverse Conversion Transfer Loss (dB/100m)
<b>PSACR</b>	Power Sum Attenuation to Crosstalk Ratio (dB/100m)		
<b>PSACRF</b>	Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)		
<b>TCL</b>	Transverse Conversion Loss (dB/100m)		

Freq. MHz	IL			NEXT			ACR			PSNEXT			PSACR			ACRF			PSACRF			RL		
	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP
1	2	2	1.8	70.3	65.3	87.9	68.3	63.3	86.1	68.3	62.3	86	66.3	60.3	84.2	67.8	63.8	81	65	60.8	79.8	20	20	31.5
4	3.9	4.1	3.5	61.3	56.3	79	57.3	52.2	75.5	59.3	53.3	77	55.3	49.2	73.4	55.8	51.8	69	53.8	48.8	67.9	23.3	23	29.8
8	5.6	5.8	5	56.8	51.8	74	51.2	46	69	54.8	48.8	72	49.2	43	67	49.7	45.7	62.8	47.7	42.7	61.7	25	24.5	32.8
10	6.2	6.5	5.6	55.3	50.3	72.5	49.1	43.8	66.9	53.3	47.3	70.7	47.1	40.8	65.1	47.8	43.8	60.9	45.8	40.8	59.8	25.5	25	34.3
16	7.9	8.2	7.1	52.2	47.2	69.8	44.3	39	62.8	50.2	44.2	67.7	42.3	36	60.6	43.7	39.7	56.8	41.7	36.7	55.7	25.5	25	37.4
20	8.9	9.3	7.9	50.8	45.8	68.4	41.9	36.5	60.5	48.8	42.8	66.2	39.9	33.5	58.3	41.8	37.8	54.9	39.8	34.8	53.7	25.5	25	38.1
25	10	10.4	8.9	49.3	44.3	67.4	39.3	33.9	58.5	47.3	41.3	65.3	37.3	30.9	56.4	39.8	35.8	52.9	37.8	32.8	51.7	24.8	24.3	37.2
31.25	11.3	11.7	9.9	47.9	42.9	66.2	36.6	31.2	56.3	45.9	39.9	64.2	34.6	28.2	54.2	37.9	33.9	50.9	35.9	30.9	49.7	24.1	23.6	34.4
62.5	16.3	17	14.2	43.4	38.4	62.3	27.1	21.4	48.1	41.4	35.4	60.2	25.1	18.4	46	31.9	27.9	44.5	29.9	24.9	43.3	22	21.5	30.7
100	21	22	18.1	40.3	35.3	59.6	19.3	13.3	41.5	38.3	32.3	57.3	17.3	10.3	39.1	27.8	23.8	39.8	25.8	20.8	38.7	20.6	20.1	27.7
155	26.8		22.8	37.4		55.8	10.7		33	35.4		53.9	8.7		31.1	24		36.2	22		34.8	19.3		24.8
200	30.9		26.1	35.8		54.7	4.9		28.6	33.8		52.3	2.9		26.2	21.8		33.5	19.8		32.3	18.5		24
250	35		29.3	34.3		53.1	-0.7		23.7	32.3		50.9	-2.7		21.6	19.8		31.8	17.8		30.5	17.8		23.5
300	38.9		32.2	33.1		50.4	-5.8		18.1	31.1		48.3	-7.8		16.1	18.3		30.5	16.3		29.2	17.3		23.8
350	42.6		35	32.1		48.7	-10.4		13.6	30.1		46.7	-12.4		11.7	16.9		28.6	14.9		27.2	16.8		24.8

## Material Specifications

<b>Conductor Material</b>	Bare copper
<b>Insulation Material</b>	Polyolefin
<b>Jacket Material</b>	PE

## Mechanical Specifications

<b>Pulling Tension, maximum</b>	11.34 kg   25 lb
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## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Operating Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Environmental Note</b>	UV resistant for outdoor and/or direct burial installations
<b>Environmental Space</b>	Buried

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## Packaging and Weights

**Cable weight** 41.118 kg/km | 27.63 lb/kft

**Packaging Type** Reel

## Regulatory Compliance/Certifications

**Agency**

ISO 9001:2015

**Classification**

Designed, manufactured and/or distributed under this quality management system

