

# PowerCat 6 U/UTP C6 Underground Cable >

The Molex CAA-00340 is an outside plant Gel-Filled Category 6 4 Pair U/UTP cable. A HDPE compound insulates the cores while a PE (UV) sheath provides protection against moisture and UV. An additional nylon outer jacket provides protection against abrasion and termites. The rugged construction of this cable makes it ideal for outdoor/underground installations.



## FEATURES AND ADVANTAGES

Category 6 compliant

PE (UV) and nylon sheathed for greater protection

UV resistant

Suitable for outdoor/underground installations

Water resistant gel-filled design

## SPECIFICATIONS

### Mechanical

#### Conductor Size:

Solid 0.58 23 AWG Bare Annealed Copper

**Primary Insulation:** HDPE

**Nominal O.D.:** 1.0mm

#### Sheath Type:

Inner: PE(UV)

Outer: Nylon

#### Nominal O.D.:

Overall: 6.1mm

Inner: 0.5mm,

Outer: 0.4mm

**Operating Temperature:** -20° to 75°C

**NVP:** 65%

**Maximum Pulling force:** 50N/square mm

### Commercial Standards

Cat 6 ANSI/TIA/EIA-568-C.2

ISO/IEC 11801

UL444

AS/CA S008:2019

### PoE

**Our PowerCat 6 system is suitable for PoE applications as defined below:**

IEEE 802.3bt from Type 1 to Type 4, and

CISCO UPoE+

#### Notes:

For new installations of PoE Type 3 / Class 5 and above that wish to be eligible for the Molex 25 year Application Assurance Warranty, we require Category 6A cable to be used throughout.

To confirm your PoE / RP3 cabling design is eligible for the Molex 25 year Application Assurance Warranty, your design must be verified and validated with the Molex PoE Calculator. Read more

<https://www.molexces.com/poe-calculator>

Molex recommends that the PoE feature on an individual switch port are power disabled prior to unplugging the associated powered Device.

Molex recommends that the full range of PowerCat 6 products be used in a system to maximize cabling and PoE performance. Details on Molex requirements for Warranty can be found at

<https://www.molexces.com/about-us/our-warranty/>

[www.molexces.com/products/copper/cat6](https://www.molexces.com/products/copper/cat6)

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## TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

FREQ (MHz)	RL (dB)	ATT (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ELFEXT (dB)	PS-ELFEXT (dB)	PD (ns/100m)	Upper Characteristic impedance Zu( $\Omega$ )	Lower Characteristic impedance Zl( $\Omega$ )
1	-	-	74.3	72.3	67.8	64.8	570	-	-
4	23	3.8	65.3	63.3	55.8	52.8	552	115.2	86.8
8	24.5	5.3	60.8	58.8	49.7	46.7	546.7	112.6	88.8
10	25	6	59.3	57.3	47.8	44.8	545.4	111.9	89.4
16	25	7.6	56.2	54.3	43.7	40.7	543	111.9	89.4
20									
	25	8.5	54.8	52.8	41.8	38.8	542	111.9	89.4
25	24.3	9.5	53.3	51.3	39.8	36.8	541	112.9	88.5
31.25	23.6	10.7	51.9	49.9	37.9	34.9	540	114.1	87.7
62.5	21.5	15.4	47.4	45.4	31.9	28.9	538.6	118.3	84.5
100	20.1	19.8	44.3	42.3	27.8	24.8	537.6	121.9	82
250	18	29	39.8	37.8	21.8	18.8	536.5	128.8	77.6
							536.3	131.5	76

## ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-00340	Consult Molex	Cat6 4 Pair U/UTP Gel Filled OSP Cable PE(UV)/Nylon Sheathed

[www.molex.com/products/copper/cat6](http://www.molex.com/products/copper/cat6)