

METRIC MEASUREMENT VERSION

# 9165 Composite - ENG, EFP and CCTV Cable



For more Information please call

1-800-Belden1



# **General Description:**

22 AWG stranded (7x30) conductors, foam polyethylene (coax) and PVC (Pairs) insulation, coax w/BC braid shield (95% cverage), (3) STP, each pair w/Beldfoil shield, 22 AWG drain wire, PVC jacket.

Physical Characteristics Conductor AWG:	Coax			
Conductor   AWC:   # Coax AWG Stranding Conductor Material Dia. (mm)   1 2   7x80 BC - Bare Copper   0.762   Insulation Material:   Insulation Material   Type Innor Shield Material   Braid (BC - Bare Copper   Bog C - Bare Copper   9      Applicable Standards & Environmental Programs   EU CE Mark:   No   RG Type:   59/U    Electrical Characteristics  Nom. Characteristic Impedance:   Inductance (offm)   0.295   Nom. Inductance:   Inductance (offm)   0.295   Nom. Capacitance Conductor to Shield:   Capacitance Conductor to Shield:   Capacitance (offm)   0.5.7 <th></th> <th></th> <th></th> <th></th>				
i         Coase         Cooper         0.782           Insulation         issue in the insulation Material         issue in the insulation Material         issue insulation           insulation         insulation         issue insulation         issue insulation         issue insulation           insulation         issue insulation         issue insulation         issue insulation         issue insulation           insulation         issue insulation         issue insulation         issue insulation         issue insulation           insulation         issue insulation         issue insulation         issue insulation         issue insulation           issue insulation         issue insulation         issue insulation         issue insulation         issue insulation           issue insulation         issue insulation         issue insulation         issue insulation         issue insulation           issue insulation         issue insue insue insue insue insue insulation         i	Conductor			
1 22 7x30 BC - Bare Copper 0.762   Insulation Material:   Insulation Material:   Insulation Material:   Type Inner Shield Naterial:   Nom. Characteristic Inner Shield:   Type Inner Shield Naterial:   Nom. Characteristic Inner Shield:   Type Inner Shield Naterial:   Nom. Inductance:   Inner Shield Naterial:   Nom. Characteristic Inner Shield:   Type Inner Shield Naterial:   Nom. Characteristic Inner Shield Naterial:   Nom. Inductance:   Inner Shield Naterial:   Nom. In	-			
Insulation Material: Insulation Shield Material: Insulations and Agency Compliance Applicable Specifications and Agency Compliance Nom. Characteristic Impedance: Insulation (Ohm) 75 Nom. Inductance: Insulation (Ohm) 75 Nom. Inductance (plfm) 65.761 Nominal Velocity of Propagation: Vef (6) 78.000 Nominal Delay: Belay (nois) Applicable Specifications: Delay (nois) Applicable Specifications: Applicable Specificat				
Insulation Material: Insulation Material: IFFE-Foam Polyettylene 3.708 Inner Shield Material: Type Inner Shield Material % Coverage (%) Brad BC - Sare Coper 95 Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU CE Mark: No RG Type: 59/U Electrical Characteristics Nom. Characteristic Impedance: Impedance (0Hm) 75 Nom. Inductance: Maddance (pHm) 5.761 Nom. Inductance: Sare Conductor to Shield: Capacitance (pHm) 5.761 Nom.inal Velocity of Propagation: VP (%) Nom.inal Velocity of Propagation: VP (%) Nom. Conductor DC Resistance: Design (m) 4.265 Nom. Conductor DC Resistance:				
Insulation Material Dia. (mm)   FFE - Foam Polyethylene 3.708   Inner Shield Haterial % Coverage (%)   Braid BC - Bare Copper   95 95   Applicable Specifications and Agency Compliance   Applicable Standards & Environmental Programs   EU CE Mark: No   RG Type: 59/U   Electrical Characteristics   Nom. Characteristic Impedance:   Impedance (0hm)   76   Nom. Inductance:   Inductance (pifm)   58.761   Nominal Delay:   Delay (num)   4.285   Nom. Conductor DC Resistance:   Dick @ 20° (Ohm)(m)   42.15   Nom. Indry Did DC Resistance:				
Inner Shield Inner Shield Material: Type Inner Shield Material: Type Inner Shield Material: Type Inner Shield Material: Type Inner Shield DC Bare Copper 98 Applicable Standards & Environmental Programs EU CE Mark: No RG Type: 59/U Electrical Characteristics Nom. Inductance: Inngedance (Dhm) 75 Nom. Inductance: Inngedance (pHm) 0.295 Nom. Capacitance Conductor to Shield: Capacitance (pHm) 56.761 Nominal Velocity of Propagation: YP (%) 72 Nom. Conductor DC Resistance: Delay (nsim) 4.265 Nom. Conductor DC Resistance:		nm)		
Inner Shield Material: Type Inner Shield Material % Coverage (%) Prad BC - Bare Copper 95 Applicable Standards & Environmental Programs EU CE Mark: No RG Type: 59/U Electrical Characteristics Nom. Characteristic Impedance: mgedance (Dhm) 75 Nom. Inductance: Inductance (pfm) 59.701 Nom. Capacitance Conductor to Shield: Capacitance (pfm) 59.701 Nominal Velocity of Propagation: V (%) 78.000 Nominal Delay: Delay (ns/m) 4.265 Nom. Conductor DC Resistance: Delay (ns/m) 4.265 Nom. Inner Shield DC Resistance:	FPE - Foam Polyethylene 3.708			
Type inner Shield Material % Coverage (%)   Braid   <	Inner Shield			
Braid BC- Bare Copper 95     Applicable Specifications and Agency Compliance   Applicable Standards & Environmental Programs   EU CE Mark: No   RG Type: 59/U   Electrical Characteristics Nom. Inductance:  Impedance (Ohm)    75 Nom. Inductance:   Inductance (pf/m)   0.295   Nom. Capacitance Conductor to Shield:   Capacitance (pf/m)   56.761   Nominal Velocity of Propagation:   VP (%)   78.000   Nominal Delay:   Delay (ms/m)   4.285   Nom. Conductor DC Resistance:   DPIay (ms/m)   4.215   Nom. Inner Shield DC Resistance:				
Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU CE Mark: No RG Type: 59/U Electrical Characteristics Nom. Characteristic Impedance: medance (Ohm) 75 Nom. Inductance: Inductance (µHm) 0.295 Nom. Capacitance Conductor to Shield: Capacitance (µHm) 10.295 Nom. Capacitance Conductor to Shield: Capacitance (µHm) 10.295 Nom. Capacitance (Pfm) 56.701 Nominal Velocity of Propagation: VP (%) 78.000 Nominal Delay: Delay (ns/m) 42.05 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km) 49.215 Nom. Inner Shield DC Resistance:		overage (%)		
Applicable Standards & Environmental Programs         EU CE Mark:       No         RG Type:       59/U         Electrical Characteristics       Nom. Characteristic Impedance:         Impedance (Ohm)       75         75       Nom. Inductance:         Inductance (uH/m)       0.295         Nom. Capacitance Conductor to Shield:       Capacitance (uF/m)         66.761       Nominal Velocity of Propagation:         VP (%)       78.000         Nominal Delay:       Delay (ns/m)         0.295       Nom. Conductor DC Resistance:         Delay (ns/m)       4205         Nom. Space (us/m)       4205         Nom. Sheld DC Resistance:       Delay (ns/m)         042.15       Nom. Inner Shield DC Resistance:				
RG Type:       59/U         Electrical Characteristics       Nom. Characteristic Impedance:         Impedance (Ohm)       75         Nom. Inductance:       Inductance (IHm)         0.295       Nom. Capacitance Conductor to Shield:         Capacitance (pFm)       56.761         56.761       Nominal Velocity of Propagation:         VP (%)       78.000         Nominal Delay:       Delay (ns/m)         0.4265       Nom. Conductor DC Resistance:         DCR @ 20°C (Ohm/km)       49.215         Nom. Inner Shield DC Resistance:       Electrical Characteristica				
Electrical Characteristics Nom. Characteristic Impedance: Impedance (Ohm) 75 Nom. Inductance: Inductance (µH/m) 0.296 Nom. Capacitance Conductor to Shield: Capacitance (pF/m) 56.761 Nominal Velocity of Propagation: VP (%) 78.000 Nominal Delay: Delay (ns/m) 4.265 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km) 49.215 Nom. Inner Shield DC Resistance:	EU CE Mark:	No		
Nom. Characteristic Impedance:   Impedance (Ohm)   75   Nom. Inductance:   Inductance (µH/m)   0.295   Nom. Capacitance Conductor to Shield:   Capacitance (pF/m)   56.761   Nominal Velocity of Propagation:   VP %)   78.000   Nominal Delay:   Delay (ns/m)   4.265   Nom. Conductor DC Resistance:   DCR @ 20°C (Ohm/km)   49.215   Nom. Inner Shield DC Resistance:	RG Type:	59/U		
DCR @ 20°C (Ohm/km)	75 Nom. Inductance: Inductance (µH/m) 0.295 Nom. Capacitance Conductor to Capacitance (pF/m) 56.761 Nominal Velocity of Propagation VP (%) 78.000 Nominal Delay: Delay (ns/m) 4.265 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km) 49.215 Nom. Inner Shield DC Resistance	:		
	DCR @ 20°C (Ohm/km)			



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8.531

Nom. Attenuation:

**Twisted Pair** 

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.984
5.000	2.297
10.000	3.281
50.000	6.890
100.000	9.843
400.000	24.279

# Pairs	AWG	Stranding	Conduc	ctor	Material	Dia. (m
3	22	7x30	TC - Tir	ned	Copper	0.762
sulation Insulation Material:						
1			<b>D</b> '. (			
Insulat	ion Ma	terial	Dia. (mi	n)		
			<b>Dia. (m</b> i 1.372	n)		
	Polyviny	yl Chloride		n)		
PVC - F ner Shie Inner Shi	Polyviny Id eld Ma	yl Chloride	1.372		er Shield	Materia

**Physical Characteristics** 

AWG	Stranding	Dia. (mm)	Conductor Material
22	7x30	0.762	TC - Tinned Copper

Aluminum Foil-Polyester Tape 100

#### **Inner Jacket**

Inner Jacket Color Code Chart:

Number	Color
1	Black and Red
2	Orange and Brown
3	Green and White

### **Electrical Characteristics**

Nom. Characteristic Impedance:



35

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

167.331

Nominal Velocity of Propagation:

VP (%) 58.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 36.091

# **Physical Characteristics (Overall)**

**Outer Jacket** 

**Outer Jacket Material:** 

Outer Jacket Material PVC - Polyvinyl Chloride

**Overall Cable** 

Coverage (%)



### METRIC MEASUREMENT VERSION

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Overall Nominal Diameter:	7.366 x 14.249 mm
lechanical Characteristics (Overall)	
Operating Temperature Range:	-40°C To +60°C
Non-UL Temperature Rating:	60°C
Bulk Cable Weight:	126.497 Kg/Km
Max. Recommended Pulling Tension:	653.885 N
Min. Bend Radius/Minor Axis:	76.200 mm
Applicable Specifications and Agency Co	ompliance (Overall)
Applicable Standards & Environmental Prog	
NEC/(UL) Specification:	CL2X
AWM Specification:	UL Style 20006
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No

#### Electrical Characteristics (Overall)

Max. Operating Voltage - UL:

Voltage 30 V RMS

#### Notes (Overall)

Notes: Siamese Type Construction.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9165 0101000	305 MT	42.638 KG	BLACK	С	3 SH PR#22,1 75 OHM COAX
9165 010500	152 MT	22.680 KG	BLACK	С	3 SH PR#22,1 75 OHM COAX

Notes:

C = CRATE REEL PUT-UP.

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