# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

## 9116R Coax - CATV Cable

For more Information please call

1-800-Belden1



#### **General Description:**

Series 6, 18 AWG solid .040" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® II + aluminum braid shield (60% coverage), PVC jacket.

Conductor Material         Dia (mm)           # Coax         AWG         Static BCCS - Bare Copper Covered Steel 1016           Total Number of Conductors:         1           Insulation           Insulation Material:         1           Insulation Material:         1           Insulation Material:         1           Cotter Shield Material:         1           Cotter Shield Material:         1           Date Shield Material:         100           2         Braid AL - Auminum Feil Polyester Tape Auminum Feil 100           2         Braid AL - Auminum           Model Material:         100           Outer Jacket Material:         000           Outer Jacket Material:         000           Outer Jacket Material:         000           Outer Jacket Material:         000           Overal Nominal Diameter:         6.985 mm           Mechanical Characteristics (Overall)         00           Overal Nominal Diameter:         6.985 mm           Max. Recommended Pulling Tansion:         500.473 N           Max. Recommended Pulling Tansion:         500.473 N           Max. Recommended Pulling Tansion:         CATVR, CMG, CMR           EU Directive 2000/SIEC (EV): <th></th>	
# Coax         AVG         Stranding         Conductors         Dia. (mm)           1         18         Solid         BCCCS - Bare Cooper Covered Steel         1016           Total Number of Conductors:         1           Insulation         Material         Dia. (mm)           Case-Injected FPE - Foam Polyethylene         4.572           Cuter Shield         Coverage (%)           Cuter Shield Tade Name Type         Outer Shield Naterial:         Coverage (%)           1         Bonded Dudolile         Tape         Bonded Aluminum Foil-Polyester Tape-Aluminum Foil         100           2         Braid AL - Aluminum         60         000         60         000           Outer Jacket Material:         Dufer Jacket Material:         000000000000000000000000000000000000	
1         18         Solid         BCCS - Bare Copper Covered Steel         1.016           Total Number of Conductors:         1           Insulation Material:         Insulation Material         Insulation Material           Duter Shield         Dia. (mm)         Cas-injected FPE - Foam Polyethylene         4.572           Outer Shield         Duter Shield Alterial:         Coverage (%)         1           1         Bonded Dudolile         Tape IBonded Aluminum Foil-Polyester Tape-Aluminum Foil         100           2         Braid (AL - Aluminum Foil-Polyester Tape-Aluminum Foil         60         0           Outer Jacket         Material:         Coverage (%)         60           Outer Jacket Material:         Event         60         0           Outer Jacket Material:         Event         60         0           Outer Jacket Material:         Event         60         0           Outer Sheld Material:         Event         60         0         0           Outer Sheld Material:         Coverage (%)         0         0         0         0           Outer Sheld Material:         Coverage Cov	
Insulation Insulation Insulation Material: Insulation Material: Insulation Material: Insulation Material: Outer Shield Outer Shield Material:    Layer # Outer Shield Tade Name Type Outer Shield Material:   Coverage (%)   1   Bonded Duofolt®   Tape   Bonded Duofolt®   Outer Jacket Material:   Overall Cable   Overall Cable   Operating Temperature Range:   -30°C To +80°C   Bulk Cable Weight:   43.158 Kg/Km   Max. Recommended Pulling Tension:   560.473 N   Min. Bend Radius/Minor Axis:   69.850 mm   VpC//Club Standards & Environmental Programs   NEC/(UL) Specification:   Collinective 2000/53/EC (RoHS) II): <th></th>	
Insulation Material Dia. (mm) Gas.injected FPE - Fear Polyethylene 4.572 Outer Shield Outer Shield Material:    Cuter Shield Material:   Outer Shield Material:   Outer Shield Material:   0uter Jacket   1   2   9 rate   9 rate   9 rate   0uter Jacket Material:   Outer Jacket Material:   Bulk Cable Weight:   Re Jacket Material:   Sepo	
Insulation Material       Dis. (mm)         Gas-Injected FPE - Foam Polyethylene       4.572         Outer Shield Material:       Coverage (%)         1       Bonded Dufoli®       Tape         Braid       AL - Aluminum Foil-Polyester Tape-Aluminum Foil       100         2       Braid       AL - Aluminum Foil-Polyester Tape-Aluminum Foil       100         2       Braid       AL - Aluminum Foil-Polyester Tape-Aluminum Foil       100         30       Braid       AL - Aluminum Foil-Polyester Tape-Aluminum Foil       100         2       Braid       AL - Aluminum Foil-Polyester Tape-Aluminum Foil       100         30       Outer Jacket Material:       0uter Jacket Material:       0uter Jacket Material:         Outer Jacket Material:       Outer Jacket Material:       0uter Jacket Material:         Outer Jacket Material:       0uter Shield Characteristics (Overall)         Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         Septifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         MEC/(UL) Specifications:       CATVR, CMG, CMR	
Casi-ljected FPE - Foam Polyethylene   4.572         Otter Shield Material:         Diver Shield Material:         Layer # Outer Shield Tade Name Type Outer Shield Material Coverage (%)         1       Bonded Duofoli® Tape Bonded Aluminum Foil-Polyester Tape-Aluminum Foil 100         2       Braid AL - Aluminum         0       Outer Jacket Material:         Outer Jacket Material:       0         Outer Jacket Material:       0         Overall Robinal Diameter:       6.985 mm         Fochanical Characteristics (Overall)       0         Operating Temperature Range:       -30°C To +80°C         Buik Cable Weight:       43.158 Kg/km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         Spplicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specifications:       CATVR, CMG, CMR         EU Directive 2011/8/FU (ROHS II):       Yes         EU Directive 2000/53/EC (ELV):       Yes         EU Directive 2000/53/EC (ROHS):       Yes         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2003/11/EC (BFR):       Yes	
Outer Shield Material:         Coverage (%)           1         Bonded Duofoli@         Tape         Bonded Aluminum Foil-Polyester Tape-Aluminum Foil           2         Braid         AL - Aluminum         80           Outer Jacket           Outer Jacket Material:         80           Overall Nominal Diameter:         6.985 mm           Bulk Cable Weight:         43.158 Kg/Km           Max. Recommended Pulling Tension:         560.473 N           Min. Bend Radius/Minor Axis:         69.850 mm           EU Directive 2011/65/EU (ROHS II):         Yes           EU Directive 2000/53/EC (ELV):	
1       Bonded Duofoll®       Tape       Bonded Aluminum Foil-Polyester Tape-Aluminum Foil       100         2       Braid       AL - Aluminum       60         Outer Jacket       Bonded Material       60         Outer Jacket Material       PVC - Polyvinyl Chloride       60         Overall Cable       Overall Nominal Diameter:       6.985 mm         Dechanical Characteristics (Overall)       0       0         Operating Temperature Range:       -30°C To +80°C       80473 N         Bulk Cable Weight:       43.158 Kg/Km       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N       60.850 mm         Spplicable Specifications and Agency Compliance (Overall)       Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR       EU Directive 2011/65/EU (ROHS II);         EU Directive 2011/65/EU (ROHS II);       Yes       EU Directive 2002/95/EC (ReHS);         EU Directive 2002/95/EC (ReHS);       Yes       EU Directive 2002/95/EC (ReHS);         EU Directive 2002/95/EC (ReHS);       Yes       EU Directive 2002/95/EC (WEEE);         EU Directive 2002/95/EC (WEEE);       Yes       EU Directive 2002/95/EC (WEEE);         EU Directive 2002/95/EC (KEEE);       Yes       EU Directive 2002/95/EC (WEEE);	
2         Braid         AL - Aluminum         60           Outer Jacket         Material         60           Outer Jacket Material         Outer Jacket Material         PVC - Polyvinyl Chloride           Overall Nominal Diameter:         6.985 mm           Operating Temperature Range:         -30°C To +80°C           Buik Cable Weight:         43.158 Kg/Km           Max. Recommended Pulling Tension:         560.473 N           Min. Bend Radius/Minor Axis:         69.850 mm           ppplicable Specifications and Agency Compliance (Overall)         Agency Compliance (Overall)           Applicable Standards & Environmental Programs         Ves           NEC/(UL) Specification:         CATVR, CMG, CMR           EU Directive 2011/65/EU (ROHS II):         Yes           EU Directive 2002/95/EC (ReHS):         Yes           EU Directive 2002/95/EC (ReHS):         Yes           EU Directive 2002/95/EC (ReHS):         Yes           EU Directive 2002/95/EC (KEEE):         Yes           EU Directive 2003/11/EC (BFR):         Yes	
Duter Jacket         Outer Jacket Material:         Outer Jacket Material:         PVC - Polyvinyl Chloride         Overall Nominal Diameter:       6.985 mm         Itechanical Characteristics (Overall)         Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         applicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU Directive 2002/95/EC (ELV):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2002/96/EC (WEEE):       Yes	
Outer Jacket Material:         PVC - Polyvinyl Chloride         Overall Cable         Overall Characteristics (Overall)         Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         opplicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU Directive 2002/53/EC (ELV):       Yes         EU Directive 2002/55/EC (RoHS):       Yes	
Outer Jacket Material         PVC - Polyvinyl Chloride         Overall Nominal Diameter:       6.985 mm         Idechanical Characteristics (Overall)         Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         Applicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2001/53/EC (ELV):       Yes         EU Directive 2000/53/EC (RoHS):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/95/EC (WEEE):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/95/EC (WEEE):       Yes         EU Directive 2002/95/EC (WEEE):       Yes	
Overall Cable       6.985 mm         Overall Nominal Diameter:       6.985 mm         Rechanical Characteristics (Overall)          Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         opplicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU Directive 2001/53/EC (ELV):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU RoHS Compliance Date (mm/dd/yyyy):       01/01/2004         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2003/11/EC (BFR):       Yes	
Overall Nominal Diameter:         6.985 mm           Hechanical Characteristics (Overall)         -30°C To +80°C           Deprating Temperature Range:         -30°C To +80°C           Bulk Cable Weight:         43.158 Kg/Km           Max. Recommended Pulling Tension:         560.473 N           Min. Bend Radius/Minor Axis:         69.850 mm           Applicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs           NEC/(UL) Specification:         CATVR, CMG, CMR           EU Directive 2011/65/EU (ROHS II):         Yes           EU Directive 2000/53/EC (ELV):         Yes           EU Directive 2000/53/EC (ELV):         Yes           EU Directive 2002/95/EC (RoHS):         Yes           EU Directive 2002/95/EC (WEEE):         Yes           EU Directive 2003/11/EC (BFR):         Yes	
International Characteristics (Overall)         Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         pplicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU CE Mark:       No         EU Directive 2000/53/EC (ELV):       Yes         EU Directive 2000/53/EC (RoHS):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2003/11//EC (BFR):       Yes	
Operating Temperature Range:-30°C To +80°CBulk Cable Weight:43.158 Kg/KmMax. Recommended Pulling Tension:560.473 NMin. Bend Radius/Minor Axis:69.850 mmColspan="2">Compliance (Overall)Applicable Specifications and Agency Compliance (Overall)Applicable Specifications and Agency Compliance (Overall)Applicable Standards & Environmental ProgramsNEC/(UL) Specification:CATVR, CMG, CMREU Directive 2011/65/EU (ROHS II):YesEU CE Mark:NoEU Directive 2000/53/EC (ELV):YesEU Directive 2000/53/EC (ELV):YesEU ROHS Compliance Date (mm/dd/yyyy):01/01/2004EU Directive 2002/96/EC (WEEE):YesEU Directive 2003/11/EC (BFR):Yes	
Operating Temperature Range:       -30°C To +80°C         Bulk Cable Weight:       43.158 Kg/Km         Max. Recommended Pulling Tension:       560.473 N         Min. Bend Radius/Minor Axis:       69.850 mm         pplicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU Directive 2000/53/EC (ELV):       Yes         EU Directive 2000/53/EC (RoHS):       Yes         EU RoHS Compliance Date (mm/dd/yyyy):       01/01/2004         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2003/11/EC (BFR):       Yes	
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Min. Bend Radius/Minor Axis:       69.850 mm         Applicable Specifications and Agency Compliance (Overall)         Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU CE Mark:       No         EU Directive 2000/53/EC (ELV):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU RoHS Compliance Date (mm/dd/yyyy):       01/01/2004         EU Directive 2003/11/EC (BFR):       Yes	
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Applicable Standards & Environmental Programs         NEC/(UL) Specification:       CATVR, CMG, CMR         EU Directive 2011/65/EU (ROHS II):       Yes         EU CE Mark:       No         EU Directive 2000/53/EC (ELV):       Yes         EU Directive 2002/95/EC (RoHS):       Yes         EU RoHS Compliance Date (mm/dd/yyyy):       01/01/2004         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2003/11/EC (BFR):       Yes	
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EU CE Mark:NoEU Directive 2000/53/EC (ELV):YesEU Directive 2002/95/EC (RoHS):YesEU RoHS Compliance Date (mm/dd/yyyy):01/01/2004EU Directive 2002/96/EC (WEEE):YesEU Directive 2003/11/EC (BFR):Yes	
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EU Directive 2002/95/EC (RoHS):       Yes         EU RoHS Compliance Date (mm/dd/yyyy):       01/01/2004         EU Directive 2002/96/EC (WEEE):       Yes         EU Directive 2003/11/EC (BFR):       Yes	
EU RoHS Compliance Date (mm/dd/yyyy):         01/01/2004           EU Directive 2002/96/EC (WEEE):         Yes           EU Directive 2003/11/EC (BFR):         Yes	
EU Directive 2002/96/EC (WEEE):     Yes       EU Directive 2003/11/EC (BFR):     Yes	
EU Directive 2003/11/EC (BFR): Yes	
CA Prop 65 (CJ for Wire & Cable): Yes	
MII Order #39 (China RoHS): Yes	
Series Type: Series 6	
Flame Test	
UL Flame Test: UL1666 Vertical Riser	
CSA Flame Test: FT4	

## **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



#### 9116R Coax - CATV Cable

lenum/No	on-Plenum					
Plenum	n (Y/N):		No			
Plenum	n Number:		9116P			
ectrical	Characteristics (	Overall)				
	cteristic Impedance:					
Impedan 75.000	ce (Ohm)					
om. Induct	tance:					
Inductan 0.318257	ice (μH/m)					
om. Capac	citance Conductor to Sh	nield:				
Capacita 53.1522	ince (pF/m)					
minal Vel	locity of Propagation:					
<b>VP (%)</b> 83	ioony on ropugation.					
	1e					
ominal Del Delay (ns	-					
3.9372						
	uctor DC Resistance:					
	20°C (Ohm/km)					
91.868						
minal Ou	ter Shield DC Resistan	ce:				
	20°C (Ohm/km)					
29.529						
ax. Attenu	lation:					
	Hz) Attenuation (dB/10	0m)				
5	2.19827					
55	5.2496	_				
211	9.41647					
270	10.6304					
300	11.2538					
350 400	12.2053 13.124	_				
400	13.9771	_				
550	15.4535	_				
750	18.3408	-				
870	19.686	—				
1000	21.4577					
ax. Operat	ting Voltage - UL:					
Voltage						
350 V RM	//S					
inimum St	ructural Return Loss:					
Descripti	ion Freq. (MHz) Start F	req. (MHz) Stop Freq	. (MHz) Min. SRL (dB)			
	5	1000	20			
	et .	1				
weep Tes Sweep	St Testing:		5 MHz - 1 GF	17		
	-		5 WHZ - 1 GF	۱ <b>۲</b>		
t Ups a	nd Colors:					
u						

Revision Number: 4 Revision Date: 08-10-2012

1.000 FT

1,000 FT

32.000 LB

33.000 LB

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9116R 010U1000

9116R 0101000

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#18 GIFPE SH PVC

#18 GIFPE SH PVC

# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

## 9116R Coax - CATV Cable

and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product liself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.