

## 89705 Multi-Conductor - Multi-Pair Snake Cable

For more Information please call

1-800-Belden1



#### **General Description:**

24 AWG stranded (7x32) TC conductor, plenum, foam FEP insulation, twisted pairs, individually shielded w/Beldfoil (100% coverage), 24 AWG stranded TC drain wire, overall fluorocopolymer jacket.

Physical Characteristics (Overall)				
Conductor AWG:				
# Pairs AWG Stranding Conductor Material Dia. (in.)				
5 24 7x32 TC - Tinned Copper .024				
Total Number of Conductors: 10				
Insulation				
Insulation Material: Insulation Material Wall Thickness (in.)				
FFEP - Foam Fluorinated Ethylene Propylene 0.019				
Inner Shield Inner Shield Material:				
Inner Shield Trade Name Type Inner Shield Material Coverage (%				
Beldfoil® Tape Aluminum Foil-Polyester Tape 100				
Inner Shield Drain Wire AWG:				
AWG				
24				
Inner Shield Drain Wire Stranding: Strande				
	nned Copper			
Inner Shield Color Code Chart:				
Number AWG Color				
1 24 Red 2 24 Green				
2 24 Green 3 24 Blue				
4 24 Blue				
5 24 Blue				
Outer Jacket				
Outer Jacket Material Nom. Wall Thickness (in.)				
Outer Jacket Material         Nom. Wall Thickness (in.)           PVDF - Fluorocopolymer         0.014				
Overall Cable				
Overall Nominal Diameter: 0.327 in	l.			
Pair				
Pair Color Code Chart:				
Number Color				
White/Blue & Blue/White     White/Orange & Orange/White				
3 White/Green & Green/White				
4 White/Brown & Brown/White				
5 White/Gray & Gray/White				
Mechanical Characteristics (Overall)				
	o +150°C			
Bulk Cable Weight: 53 lbs/~	υυυ π.			
Max. Recommended Pulling Tension: 165 lbs				

Min. Bend Radius/Minor Axis:

3.500 in.

# **Detailed Specifications & Technical Data**

## ENGLISH MEASUREMENT VERSION



## 89705 Multi-Conductor - Multi-Pair Snake Cable

		an av Canalian	ce (Overall)				
Applicable \$	Specifications and Ag	ency Compliand					
	Standards & Environment		、 ,				
	Specification:		CMP				
CEC/C(UI	L) Specification:		CMP		 	 	
EU Direct	tive 2011/65/EU (ROHS II):		Yes				
EU CE Ma	ark:		Yes				
EU Direct	tive 2000/53/EC (ELV):		Yes				
EU Direct	tive 2002/95/EC (RoHS):		Yes				
	Compliance Date (mm/dd/yy	/y):	04/01/2005			 	
EU Direct	tive 2002/96/EC (WEEE):		Yes				
EU Direct	tive 2003/11/EC (BFR):		Yes				
CA Prop 6	65 (CJ for Wire & Cable):		Yes				
MII Order	#39 (China RoHS):		Yes				
	<i>"</i>						
Flame Test UL Flame	Tost		NFPA 262				
CSA Flam	ne Test:		FT6		 	 	
Plenum/Non							
Plenum ()	Y/N):		Yes				
Inductance .24	(µH/ft)						
Nom. Inductan Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct	(µH/ft) ance Conductor to Conductor ace (pF/ft) ance Cond. to Other Conductor ace (pF/ft) and Propagation:						
Nom. Inductan Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20°4 24	(µH/ft) ince Conductor to Conductor ie (pF/ft) ince Cond. to Other Conductor ie (pF/ft) ity of Propagation: c: ior DC Resistance:	or & Shield:	14.400 Ohm/11	000 ft			
Nom. Inductant Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ff 1.3 Nom. Conduct DCR @ 20°0 24 Ind. Pair N	(uH/ft) ince Conductor to Conductor (pF/ft) ince Cond. to Other Conductor (pF/ft) ity of Propagation: (c) (c) (c) (c) (c) (c) (c) (c)	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductan Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20°0 24 Ind. Pair N	(uH/ft) ince Conductor to Conductor (pF/ft) ince Cond. to Other Conductor (pF/ft) ity of Propagation: (c) (c) (c) (c) (c) (c) (c) (c)	or & Shield:	14.400 Ohm/11	000 ft			
Nom. Inductan Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20% 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384	(µH/ft)         innce Conductor to Conductor         ia (pF/ft)         innce Cond. to Other Conductor         ia (pF/ft)         ib (pF/ft)	or & Shield:	14.400 Ohm/10	200 ft			
Nom. Inductance .24 Nom. Capacitance .24 Nom. Capacitance 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20°0 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384 .7056	(µH/ft)         ance Conductor to Conductor         ae (pF/ft)         ance Cond. to Other Conductor         are (pF/ft)         bill         bill         cor DC Resistance:         C (Ohm/1000 ft)         Nominal Shield DC Resistance:         ition:         ) Attenuation (dB/100 ft.)         .74         .87	or & Shield:	14.400 Ohm/11	000 ft			
Jom. Inductan Inductance .24 Jom. Capacitanc 13.5 Jom. Capacitanc 22.5 Jominal Veloc VP (%) 76 Jominal Delay Mominal Delay Delay (ns/ft 1.3 Jom. Conduct DCR @ 20°4 24 Ind. Pair N Jom. Attenuat Freq. (MHz) .384 .7056 .768	(µH/ft)         ance Conductor to Conductor         ae (pF/ft)         ance Cond. to Other Conductor         are (pF/ft)         bit         bit         cor DC Resistance:         C (Ohm/1000 ft)         Nominal Shield DC Resistance:         ition:         ) Attenuation (dB/100 ft.)         .74         .89	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductant Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20% 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384 .7056 .768 1.024	(µH/ft)         ince Conductor to Conductor         ia (pF/ft)         ince Cond. to Other Conduct         ice (pF/ft)         icity of Propagation:         ////////////////////////////////////	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductant Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20% 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384 .7056 .768 1.024 1.4112	(µH/ft)         ince Conductor to Conductor         ie (pF/ft)         ince Cond. to Other Conductor         ie (pF/ft)         istriction         istrin         istrin	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductant Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20% 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384 .7056 .768 1.024	(µH/ft)         ince Conductor to Conductor         ia (pF/ft)         ince Cond. to Other Conduct         ice (pF/ft)         icity of Propagation:         ////////////////////////////////////	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductance i.24 Nom. Capacitance i.24 Nom. Capacitance i.3.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20% 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384 .7056 .768 1.024 1.4112 1.536	(µH/ft)         ance Conductor to Conductor         ae (pF/ft)         ance Cond. to Other Conductor         are (pF/ft)         bit         bit         cor DC Resistance:         C (Ohm/1000 ft)         Nominal Shield DC Resistance         ition:         Attenuation (dB/100 ft.)         .74         .89         .95         1.03         1.06	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductance Nom. Inductance Inductance 24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20% 24 Ind. Pair N Nom. Attenuat Freq. (MHz) .384 .7056 .768 1.024 1.4112 1.536 2.048	(µH/ft)         ance Conductor to Conductor         ae (pF/ft)         ance Cond. to Other Conductor         are (pF/ft)         bit         bit         cor DC Resistance:         C (Ohm/1000 ft)         Nominal Shield DC Resistance         iton:         Attenuation (dB/100 ft.)         .74         .89         .95         1.03         1.06         1.17	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductane Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Delay Capacitanc 22.5 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20°4 24 Ind. Pair N Treq. (MH2) .384 .7056 .768 1.024 1.4112 1.536 2.048 2.8224	(µH/ft)         ance Conductor to Conductor         ae (pF/ft)         ance Cond. to Other Conductor         ae (pF/ft)         bit         bit         cor DC Resistance:         C (Ohm/1000 ft)         Nominal Shield DC Resistance         iton:         Attenuation (dB/100 ft.)         .74         .87         .89         .95         1.03         1.06         1.17         1.37	or & Shield:	14.400 Ohm/10	000 ft			
Nom. Inductane Inductance .24 Nom. Capacitanc 13.5 Nom. Capacitanc 13.5 Nom. Capacitanc 22.5 Nominal Veloc VP (%) 76 Nominal Delay Delay (ns/ft 1.3 Nom. Conduct DCR @ 20°4 24 Ind. Pair N Treq. (MH2) .384 .7056 .768 1.024 1.4112 1.536 2.048 2.8224 3.072 4.096 5.6448	(µH/ft)         ance Conductor to Conductor         ae (pF/ft)         ance Cond. to Other Conductor         ae (pF/ft)         bit         bit         cor DC Resistance:         C (Ohm/1000 ft)         Nominal Shield DC Resistance         iton:         Attenuation (dB/100 ft.)         .74         .87         .89         .95         1.03         1.06         1.17         1.37         1.44	or & Shield:	14.400 Ohm/10	000 ft			
Nom.         Inductane           Inductance         .24           Nom.         Capacitane           13.5         .35           Nom.         Capacitane           22.5         .36           Nominal Veloc         VP (%)           76         .38           Nominal Delay         Delay (ns/ft           1.3         Nom.         Conduct           DCR @ 20°         24           Ind. Pair M         .384           .7056         .768           1.024         1.4112           1.536         2.048           2.8224         3.072           4.096         5.6448           6.144	(µH/ft)         annce Conductor to Conductor         ie (pF/ft)         annce Cond. to Other Conductor         is e (pF/ft)         annce Cond. to Other Conductor         is or DC Resistance:         C (Ohm/1000 ft)         .74         .87         .89         .95         1.03         1.06         1.17         1.37         1.44         1.67         1.89         1.96	or & Shield:	14.400 Ohm/10	000 ft			
Nom.         Inductance           Inductance         .24           Nom.         Capacitanc           13.5         Inductance           Nom.         Capacitanc           22.5         Inductance           Nom.         Capacitanc           22.5         Inductance           Nominal Veloc         VP (%)           76         Palay (ns/ft           1.3         Nominal Delay           Delay (ns/ft         I.3           Nom.         Conduct           Freq. (MH2)         .384           .7056         .768           1.024         1.4112           1.536         2.048           2.8224         3.072           4.096         5.6448	(µH/ft)         ance Conductor to Conductor         ie (pF/ft)         ance Cond. to Other Conductor         ie (pF/ft)         ance Cond. to Other Conductor         ie (pF/ft)         ance Cond. to Other Conductor         ie (pF/ft)         bit of Propagation:         :: <td::< td="">         ::<td>or &amp; Shield:</td><td>14.400 Ohm/10</td><td>000 ft</td><td></td><td></td><td></td></td::<>	or & Shield:	14.400 Ohm/10	000 ft			



#### ENGLISH MEASUREMENT VERSION

### 89705 Multi-Conductor - Multi-Pair Snake Cable

	12.288	2.71				
	24.576	3.73				
Ма	Max. Operating Voltage - UL:					
	Voltage					
	300 V RMS					
Ма	Max. Recommended Current:					
	Current					
	0.0.4					

2.0 Amps per conductor @ 25°C

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
89705 0081000	1,000 FT	62.000 LB	GRAY	С	5 #24 FS PR FFEP SLF
89705 008500	500 FT	30.500 LB	GRAY	С	5 #24 FS PR FFEP SLF

Notes:

C = CRATE REEL PUT-UP.

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product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).