# **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

### 83704 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information please call

1-800-Belden1



### **General Description:**

16 AWG stranded (19x29) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage) FEP jacket.

Physical Characteristics (Overall) Conductor	
Conductor	
AWG:	
# Conductors AWG Stranding Conductor Material	
4 16 19x29 TC - Tinned Copper	
Total Number of Conductors: 4	
Insulation	
Insulation Material: Insulation Trade Name Insulation Material Wall Thickness (in.)	
Teflon®  FEP - Fluorinated Ethylene Propylene  .007	
Outer Shield	
Outer Shield Material:	
Layer #         Outer Shield Trade Name         Type         Outer Shield Material         Coverage (%)           1         Beldfoil®         Tape         Aluminum Foil-Polyester Tape         100	
2 Braid TC - Tinned Copper 85	
Outer Jacket	
Outer Jacket Material:	
Outer Jacket Trade Name         Outer Jacket Material         Nom. Wall Thickness (in.)	
Teflon® FEP - Fluorinated Ethylene Propylene .014	
3     Red       4     Green	
Overall Nominal Diameter: 0.223 in.	
Mechanical Characteristics (Overall)	
Mechanical Characteristics (Overall)         Operating Temperature Range:       -70°C To +200°C	
Operating Temperature Range: -70°C To +200°C	
Operating Temperature Range:     -70°C To +200°C       Bulk Cable Weight:     58 lbs/1000 ft.	
Operating Temperature Range:     -70° C To +200° C       Bulk Cable Weight:     58 lbs/1000 ft.       Max. Recommended Pulling Tension:     121 lbs.       Min. Bend Radius/Minor Axis:     2.250 in.	
Operating Temperature Range:       -70°C To +200°C         Bulk Cable Weight:       58 lbs/1000 ft.         Max. Recommended Pulling Tension:       121 lbs.         Min. Bend Radius/Minor Axis:       2.250 in.	
Operating Temperature Range:     -70°C To +200°C       Bulk Cable Weight:     58 lbs/1000 ft.       Max. Recommended Pulling Tension:     121 lbs.       Min. Bend Radius/Minor Axis:     2.250 in.	
Operating Temperature Range:       -70°C To +200°C         Bulk Cable Weight:       58 lbs/1000 ft.         Max. Recommended Pulling Tension:       121 lbs.         Min. Bend Radius/Minor Axis:       2.250 in.         Applicable Specifications and Agency Compliance (Overall)         Applicable Specification:         NEC/(UL) Specification:       CMP         CEC/C(UL) Specification:       CMP	
Operating Temperature Range:     -70°C To +200°C       Bulk Cable Weight:     58 lbs/1000 ft.       Max. Recommended Pulling Tension:     121 lbs.       Min. Bend Radius/Minor Axis:     2.250 in.	
Operating Temperature Range:       -70°C To +200°C         Bulk Cable Weight:       58 lbs/1000 ft.         Max. Recommended Pulling Tension:       121 lbs.         Min. Bend Radius/Minor Axis:       2.250 in.         Applicable Specifications and Agency Compliance (Overally Specification:         NEC/(UL) Specification:       CMP         CEC/C(UL) Specification:       CMP         EU Directive 2011/65/EU (ROHS II):       Yes	
Operating Temperature Range:       -70°C To +200°C         Bulk Cable Weight:       58 lbs/1000 ft.         Max. Recommended Pulling Tension:       121 lbs.         Min. Bend Radius/Minor Axis:       2.250 in.         Applicable Specifications and Agency Compliance (Overall)         Applicable Specifications and Agency Compliance (Overall)         CMP         CEC/C(UL) Specification:         CEC/C(UL) Specification:       CMP         EU Directive 2011/65/EU (ROHS II):       Yes	
Operating Temperature Range:       -70°C To +200°C         Bulk Cable Weight:       58 lbs/1000 ft.         Max. Recommended Pulling Tension:       121 lbs.         Min. Bend Radius/Minor Axis:       2.250 in.         CMPPicable Specifications and Agency Compliance (Overall)         VEC/(UL) Specification:         NEC/(UL) Specification:       CMP         CEC/C(UL) Specification:       CMP         EU Directive 2011/65/EU (ROHS II):       Yes         EU Directive 2000/53/EC (ELV):       Yes	
Operating Temperature Range:       -70°C To +200°C         Bulk Cable Weight:       58 lbs/1000 ft.         Max. Recommended Pulling Tension:       121 lbs.         Min. Bend Radius/Minor Axis:       2.250 in.         Applicable Specifications and Agency Compliance (Overall)         Applicable Specifications and Agency Compliance (Overall)         MEC/(UL) Specification:       CMP         EU Directive 2011/65/EU (ROHS II):       Yes         EU Directive 2000/53/EC (ELV):       Yes         EU Directive 2000/53/EC (RoHS):       Yes	

## **Detailed Specifications & Technical Data**



#### ENGLISH MEASUREMENT VERSION

### 83704 Multi-Conductor - Audio, Control and Instrumentation Cable

CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Flame Test	
UL Flame Test:	NFPA 262
CSA Flame Test:	FT6
Plenum/Non-Plenum	
Plenum (Y/N):	Yes
Electrical Characteristics (Overall)	
Nom. Capacitance Conductor to Conductor:	
Capacitance (pF/ft) 35	
Nom. Capacitance Cond. to Other Conductor & Shield:	
Capacitance (pF/ft)	
63	
Nom. Conductor DC Resistance:	
DCR @ 20°C (Ohm/1000 ft) 4.43	
Nominal Outer Shield DC Resistance:	
DCR @ 20°C (Ohm/1000 ft) 2.67	
Max. Operating Voltage - UL:	
Voltage 300 V RMS	
Max. Recommended Current:	
Current 5.1 Amps per conductor @ 25°C	

#### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83704 002100	100 FT	8.000 LB	RED	С	4#16 FEP SH FEP
83704 0021000	1,000 FT	62.000 LB	RED	С	4#16 FEP SH FEP
83704 002500	500 FT	31.000 LB	RED	С	4#16 FEP SH FEP

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 08-14-2012

## © 2016 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities 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 showledge, information, and belief at the date of its publication. The information only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

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