



Product: [83803](#)

Electronic, 3 C #12 Str TC, FEP Ins, OS+TC Brd, Red FEP Jkt, CMP FPLP

[Request Sample](#)

Product Description

High Temperature Electronic, 3 Conductor 12AWG (7x20) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Red FEP Outer Jacket, CMP FPLP

Technical Specifications

Product Overview

Suitable Applications:	fire alarms; extreme high/low temperature environments; indoor/outdoor applications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage control (24v, ...)
------------------------	--

Construction Details

Conductor				
Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	12 AWG	7x20	TC - Tinned Copper

Insulation				
Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	FEP - Fluorinated Ethylene Propylene	0.016 in (0.41 mm)	0.123 in (3.12 mm)	Black, White, Red

Outer Shield		
Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%
Braid	Tinned Copper (TC)	85%

Outer Jacket		
Material	Nom. Thickness	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.015 in (0.38 mm)	0.294 in (7.47 mm)

Overall Cable Diameter (Nominal):	0.294 in (7.47 mm)
-----------------------------------	--------------------

Electrical Characteristics

Electricals				
Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
Conductor(s)	1.74 Ohm/1000ft	32 pF/ft (100 pF/m)	55 pF/ft (180 pF/m)	22 Amps per Conductor at 25°C

Voltage	
UL Voltage Rating	
300 V	

Mechanical Characteristics

Temperature	
UL Temperature	Operating
200°C	-70°C to +200°C

Bend Radius	
Stationary Min.	Installation Min.

3.0 in (76 mm)	3.0 in (76 mm)
Max. Pull Tension:	310 lbs (140 kg)
Bulk Cable Weight:	106 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262 (UL 910), FT6, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 760, Article 800
CEC / C(UL) Compliance:	CMP
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Gas Resistant
--------	---------------

History

Update and Revision:	Revision Number: 0.521 Revision Date: 11-27-2023
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
83803 002100	Red	Reel	100 ft	612825205753	C
83803 002500	Red	Reel	500 ft	612825205777	C
83803 0021000	Red	Reel	1,000 ft	612825205760	C

© 2024 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed 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. The 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable:](#)

[83803 002100](#) [83803 0021000](#) [83803 002500](#)