

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

87778 Multi-Conductor - CMP Rated (Plenum) Cable



For more Information
please call

1-800-Belden1



General Description:

22 AWG stranded (7x30) TC conductor, FEP insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall jacket per table below, 22 AWG stranded TC drain wire.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
6	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors: 12

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.254

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVDF - Fluorocopolymer	0.356

Overall Cable

Overall Nominal Diameter: 7.849 mm

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



87778 Multi-Conductor - CMP Rated (Plenum) Cable

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +150°C
Bulk Cable Weight:	98.221 Kg/Km
Max. Recommended Pulling Tension:	725.057 N
Min. Bend Radius/Minor Axis:	82.550 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	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

Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	8778

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (μH/m)
0.59058

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
101.711

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)
219.827

Nominal Velocity of Propagation:

VP (%)
69

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
52.496

Ind. Pair Nominal Shield DC Resistance @ 20
Deg. C: 37.075 Ohm/km

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Recommended Current:

Current

1.96 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
87778 0021000	305 MT	32.205 KG	RED	C	6 SH PR #22 FEP SOLEF
87778 002500	152 MT	16.783 KG	RED	C	6 SH PR #22 FEP SOLEF

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-19-2012

© 2013 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 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 itself 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.