



Product: [7704ELW](#) 

LonWorks, 2PR #22 Sol BC, PO ins, OS, LSNH Jkt, 300V, Cca

Product Description

LonWorks, 2 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, Overall Beldfoil® shielding, LSZH / FRNC jacket , 300V, CPR Cca

Technical Specifications

Product Overview

Suitable Applications:	LonWorks, instrumentation, Low capacitance
------------------------	--

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
22	Solid	BC - Bare Copper	0.64 mm	2

Conductor Count:	4
Total Number of Pairs:	2

Insulation

Material	Nominal Diameter	Min. Wall Thickness
PE - Polyethylene (Foam)	1.35 mm	0.3 mm

Color Chart

Number	Color
Pair 1	White/Blue & Blue/White
Pair 2	Orange/White & White/Orange

Table Notes:	Ring marking applied
--------------	----------------------

Outer Shield

Type	Material	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	100%	TC - Tinned Copper	0.51 mm	24

Table Notes:	Aluminum inside
--------------	-----------------

Outer Jacket

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.5 mm	0.4 mm	0.5 mm

Construction and Dimensions

Cabling

Description
2 pairs twisted to cable core

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
55 Ohm/km	17 Ohm/km

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
40 pF/m	65 pF/m

Inductance

Nominal Pair Inductance
0.65 μ H/m

Impedance

Frequency [MHz]	Nominal Characteristic Impedance
1 - 20	100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss	Nom. NEXT [dB]
0.772 MHz	1.8 dB/100m	
1 MHz	2 dB/100m	59 dB
4 MHz	3.6 dB/100m	50 dB
10 MHz	5.5 dB/100m	44 dB
16 MHz	7 dB/100m	41 dB
20 MHz	7.8 dB/100m	40 dB

Current

Element	Max. Recommended Current [A]
Conductor(s)	2.5 Amps per Conductor

Voltage

Voltage Rating [V]
300 V

Temperature Range

Operating Temperature Range:	-15°C To +80°C
------------------------------	----------------

Mechanical Characteristics

Bulk Cable Weight:	40.2 kg/km
Max. Pull Tension:	50 N
Min. Bend Radius During Installation:	80 mm

Standards

CPR Euroclass:	Cca-s1,d1,a1
----------------	--------------

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Cca
----------------------	------------------------

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 - Halogen Amount:	Zero

Related Part Numbers

Variants

Item #
7704ELW.00305

History

Update and Revision:	Revision Number: 0.43 Revision Date: 06-28-2024
----------------------	---

© 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.