



Product: [4641FDV](#)

Life Cycle Status: Capability

OSDP RS485, 2 Pr #24 Str TC, PO Ins, OS, LSZH Jkt, B2ca



Product Description

OSDP RS-485, 2 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper drainwire, LSZH Outer Jacket, CPR B2ca

Technical Specifications

Product Overview

Suitable Applications:	Instrumentation and computer cable. For OSDP EIA RS-485 transmissions applications
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	2

Conductor Count:	4
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Insulation

Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness
PE - Polyethylene (Foam)	1.40 mm	0.05 mm	0.4 mm

Color Chart

Number	Color
wire 1	White & Orange
wire 2	Orange & White
wire 3	White & Blue
wire 4	Blue & White

Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	100%	TC - Tinned Copper	AWG24/7	7x32
	2						

Outer Jacket

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Orange	6.80 mm	0.9 mm

Construction and Dimensions

Cabling

Description
2 pairs and 2 fillers twisted to cable core

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
78.7 Ohm/km

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
42 pF/m	75.5 pF/m

Impedance

Frequency [MHz]	Nominal Characteristic Impedance
1 MHz	120 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]
1 MHz

Delay

Nominal Velocity of Propagation (VP) [%]
78%

Current

Max. Recommended Current [A]
2.1 Amps per Conductor

Voltage

Non-UL Voltage Rating
300 V

Temperature Range

Installation Temperature Range:	-15°C To +70°C
Storage Temperature Range:	-45°C To +70°C
Operating Temperature Range:	-45°C To +70°C
Operating Temp Range (Fixed Install):	-45°C To +70°C

Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Max. Pull Tension:	260 N
Min. Bend Radius During Installation:	68 mm

Standards

CPR Euroclass:	B2ca-s1a,d1,a1
CENELEC Compliance:	EN 50290-2-20

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass B2ca
EU CE Mark:	Yes

Suitability

Suitability - Non-Halogenated:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 - Halogen Amount:	Zero
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

Product Notes

Notes:	The estimated production lead time for the first order will be similar to the production lead time of 4641FDW
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History

Update and Revision:	Revision Number: 0.7 Revision Date: 02-06-2025
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