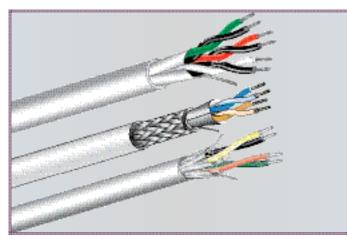
# WEST PENN WIRE



**West Penn Wire** manufactures a variety of Data Grade Cables to meet the specifications of data transmission systems. Many of today's electronic systems are using higher speed data transmission for control, signaling, electronic processing and micro-processing based operations. These systems place increased demands on a cable's electrical characteristics.

For more detailed information on our Data Grade Cables, contact our Customer Service Department at **1-800-245-4964**, or e-mail us at **sales@westpenn-wpw.com.** Information can also be found on our website- www.westpenn-wpw.com

Non-	Plenum Low Capacitance Cables
	Multiple Pair/ Overall Shield
	Multiple Pair Series/ Individually Shielded
Plenu	Im Low Capacitance Cables
	Multiple Pair Series/ Overall Shielded108
	Multiple Pair Series/ Individually Shielded 107
<b>RS-4</b> 8	35 Cables
	Non-Plenum RS-485109
	Plenum RS-485



Over 95% of West Penn Wire cables are RoHS Compliant. For a detailed specification on individual products, contact our engineering department.



• ASTM Tinned Copper • Polyolefin insulation

• Meets 300V requirements as specified in the NEC

• Overall shield 100% coverage of aluminum polyester foil with 24 AWG

strd. TC drain wire • Twisted Pair Construction • Overall PVC jacket

### Data Grade Cable Multiple Pair / Overall Shielded

### **Applications:**

#### Indoor for:

- Control
- Signaling
- Electronic Data
- Microprocessor Based
- Serial Data

• Flame Ratin	-	ents as speen	ieu in the iv				5	Standard spool	size 1000ft.
Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness Inches	Shielding & & Coverage	Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D2401	1 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.160	СМ	14.5pf/ft* 26pf/ft **	Gray
D2402	2 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.228	СМ	14.5pf/ft* 26pf/ft **	Gray
D2403	3 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.248	СМ	14.5pf/ft* 26pf/ft **	Gray
D2404	4 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.268	СМ	14.5pf/ft* 26pf/ft **	Gray
D3651	2 Pair	22 AWG (7x30) 17 Ω/Mft	Polyolefin .010	Al. Foil 100%	PVC .030	.235	СМ	26pf/ft* 47pf/ft **	Gray
D3652	3 Pair	22 AWG (7x30) 17 Ω/Mft	Polyolefin .010	Al. Foil 100%	PVC .030	.248	СМ	26pf/ft* 47pf/ft **	Gray
D3653	4 Pair	22 AWG (7x30) 17 Ω/Mft	Polyolefin .010	Al. Foil 100%	PVC .030	.268	СМ	26pf/ft* 47pf/ft **	Gray

### **Special Notes:**

- Select Cables are available in Easybox ®
- Orange ripcord included on cables containing 3 or more pairs.

**Electrical Characteristics** Nom. Vel of Propagation - 66% Nom. Impedance  $\Omega$  24 Awg.- 100 $\Omega$ Nom. Impedance  $\Omega$  22 Awg.- 55 $\Omega$ 

\* Capacitance between conductors.

\*\* Capacitance between one conductor and the other connected to the shield

Color Code						
Pair No.	Colors					
1	Black/Red					
2	Black/White					
3	Black/Green					
4	Black/Blue					
JACKET: Gray						

Rating: • NEC Type CM • (UL) Listed

## Data Grade Cable Multiple Pair Series / Individually Shielded

### **Applications:**

#### Indoor for:

- Control
- Signaling
- Electronic Data
- Microprocessor Based
- Serial Data

## WEST PENN WIRE



### **Description:**

- ASTM Tinned Copper Polyolefin insulation Each pair shielded 100% coverage of aluminum foil with 24 AWG Strd. TC drain wire • Twisted pair construction
- Overall PVC Jacket

#### **Rating:**

- NEC Type CM
- (UL) Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1685

#### Standard spool size 1000ft.

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness Inches	Shielding & & Coverage	Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D420 †	2	22 AWG Solid 17.5 Ω/Mft	Polyolefin .015	Individual Al. Foil 100%	PVC .030	.261	СМ	15.5 pf/ft* 28 pf/ft**	Gray

\* Capacitance between conductors.

\*\* Capacitance between one conductor and the other connected to the shield

Color Code					
Pair No. Colors					
1	Black/Yellow				
2	Red/Green				
JACKET: Gray					

### **Rating:**

- NEC Type CMP
- (UL)-C(UL) Listed or c(ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: NFPA-262 Smoke & Flame Test



### **Description:**

• ASTM Tinned Copper • Teflon insulation • Each pair shielded 100% coverage of aluminum foil with 24 AWG Strd. drain wire • Twisted pair construction

> Electrical Characteristics Nom. Vel of Propagation - 66% Nom. Impedance Ω D420 & D25420- 100Ω

• Flexible plenum jacket

#### Standard spool size 1000ft.

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness Inches		Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D25420†	2	22 AWG Solid 17.5 Ω/Mft	Teflon .012	Individual Al. Foil 100%	PVDF .015	.185	СМР	15.5 pf/ft* 28 pf/ft**	Gray

### Special Notes:

- † Drain wire 22 AWG Solid Tinned copper
- Selected cables are available in our Easybox®

\* Capacitance between conductors.

\*\* Capacitance between one conductor and the other connected to the shield

## WEST PENN WIRE



### Data Grade Plenum Cable Multiple Pair Series / Overall Shielded

### **Applications:**

Indoor within ducts, plenums and other spaces used for environmental air:

- Control
- Signaling
- Electronic Data

Standard spool size 1000ft.

- Microprocessor Based
- Serial Data

• NEC Type CMP

**Description:** 

- (UL)-C(UL) Listed or c(ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: NFPA-262 Smoke & Flame Test

Shielding Insulation Conductor NEC Catalog No. of Type & Type & & Jacket Type Nom. Nom. Jacket Nom. D.C.R No. Pairs Thickness & Coverage & Thickness Type Capacitance Color <u>O.D.</u> Inches Inches Inches Flexible 24 AWG Teflon Al. Foil 14.5 pf/ft\* D252401 1 Plenum .115 СМР (7x32) Gray 100% 26 pf/ft\*\* .013 26 Ω/Mft .015 Flexible 24 AWG Teflon Al. Foil 14.5 pf/ft\* D252402 2 Plenum .188 CMP (7x32) Gray .013 100% 26 pf/ft\*\* 26 Ω/Mft .015 24 AWG Flexible Teflon Al. Foil 14.5 pf/ft\* D252404 4 Plenum .224 CMP Gray (7x32) 100% 26 pf/ft\*\* .013 26 Ω/Mft .015 22 AWG Flexible Teflon Al. Foil 25 pf/ft\* Plenum D253651 2 .191 CMP (7x30) Gray 100% 45 pf/ft\*\* .010 .015 17 Ω/Mft 22 AWG Flexible Teflon Al. Foil 25 pf/ft\* D253652 3 .204 Gray (7x30) Plenum CMP .010 100% 45 pf/ft\*\* 17 Ω/Mft .015 Flexible 22 AWG Teflon Al. Foil 25 pf/ft\* D253653 4 (7x30) Plenum .224 CMP Gray 45 pf/ft\*\* 100%.010 17 Ω/Mft .015 **Electrical Characteristics** 

Color Code						
Pair No.	Colors					
1	Black/Red					
2	Black/White					
3	Black/Green					
4	Black/Blue					
JACKET: Gray						

Electrical Characteristics Nom. Vel of Propagation - 69% Nom. Impedance Ω 24 Awg.- 100Ω Nom. Impedance Ω 22 Awg.- 55Ω

\* Capacitance between conductors.

\*\* Capacitance between one conductor and the other connected to the shield

### Special Notes:

- Select cables available in our Easybox®
- Teflon®- Dupont Tradename for
  - FEP-Fluorinated Ethylene Propylene

• ASTM Tinned Copper • Teflon Insulation • Overall shield 100% coverage of aluminum polyester foil with 24 Awg. Strd. drain wire • Twisted Pair Construction • Flexible plenum jacket

**Rating:** 

108

### Data Grade Cable Multiple Pair Series / Overall Shielded RS-485 Data Cables

### **Applications:**

**Indoor for:** 

- Computer Application
- Low Capacitance Data
- RS-485 Data Applications

### **Description:**

• ASTM Tinned Copper • Polyolefin Insulation • Twisted pair construction • Polyester wrap • Overall shield 100% coverage of aluminum polyester foil with 24 Awg. Stranded drain wire

WEST PENN WIRE

• 90% Tinned Copper Braid • Overall PVC Jacket

#### Rating:

- NEC Type CM
- (UL) Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1685

Standard spool size 1000ft.

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness Inches		Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D4851	1	24 AWG (7x32) 26 Ω/Mft	Polyolefin .020	Al. Foil- 100% with drain wire TC Braid 90%	PVC .032	.275	СМ	12.8 pf/ft* 23 pf/ft**	Gray
D4852	2	24 AWG (7x32) 26 Ω/Mft	Polyolefin .020	Al. Foil- 100% with drain wire TC Braid 90%	PVC .032	.305	СМ	12.8 pf/ft* 23 pf/ft**	Gray
D4853	3	24 AWG (7x32) 26 Ω/Mft	Polyolefin .020	Al. Foil- 100% with drain wire TC Braid 90%	PVC .032	.320	СМ	12.8 pf/ft* 23 pf/ft**	Gray
D4854	4	24 AWG (7x32) 26 Ω/Mft	Polyolefin .020	Al. Foil- 100% with drain wire TC Braid 90%	PVC .032	.345	СМ	12.8 pf/ft* 23 pf/ft**	Gray

Color Code						
Pair No. Colors						
1	Blue- White					
2	Orange- White					
3	Green- White					
4	Brown- White					
JACKET: Gray						

Electrical Characteristics Nom. Vel of Propagation - 66% Nom. Impedance Ω 24 Awg.- 120Ω

\* Capacitance between conductors.

\*\* Capacitance between one conductor and the other connected to the shield

## WEST PENN WIRE



### Data Grade Plenum Cable Multiple Pair Series / Overall Shielded RS-485 Data Cables

### **Description:**

• ASTM Tinned Copper • Foam Teflon Insulation • Twisted Pair Construction • Polyester wrap • Overall shield 100% coverage of aluminum polyester foil with 24 Awg. Stranded drain wire

**Color Code** 

**JACKET:** Gray

Colors

**Blue-White** 

**Orange-White** 

Pair No.

1

2

• 90% Tinned Copper Braid • Overall Flexible Plenum Jacket

### Rating:

- NEC Type CMP
- (UL) Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: NFPA-262 Smoke & Flame Test

### **Applications:**

Indoor within ducts, plenums and other spaces used for environmental air:

Standard spool size 1000ft.

- Computer Application
- Low Capacitance Data
- RS-485 Data Applications

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness Inches	Shielding & & Coverage	Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D254851 New	1	24 AWG (7x32) 26 Ω/Mft	Foam Teflon®	Al. Foil- 100% with drain wire TC Braid 90%	Flex. Plenum	.202	СМР	12 pf/ft* 22 pf/ft**	Gray
D254852 New	2	24 AWG (7x32) 26 Ω/Mft	Foam Teflon®	Al. Foil- 100% with drain wire TC Braid 90%	Flex. Plenum	.305	СМР	12 pf/ft* 22 pf/ft**	Gray

Nom. Vel of Propagation - 76%
Nom. Impedance $\Omega$ 24 Awg 120 $\Omega$

**Electrical Characteristics** 

*	Capacitance	between	conductors.
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\*\* Capacitance between one conductor and the other connected to the shield

### **Special Notes:**

• Teflon®- Dupont Tradename for FEP-Fluorinated Ethylene Propylene