# **BELDEN**Cable<sup>\*\*</sup>

### 1420A Paired - Low Capacitance Computer Cable for EIA RS-232/422



#### **Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, PVC jacket.

#### **PHYSICAL CHARACTERISTICS:**

#### **CONDUCTOR:**

Number of Pairs	3	
Total Number of Conductors	6	
AWG	24	
Stranding	7x32	
Conductor Material	TC - Tinned Copper	

#### **INSULATION:**

Insulation Material Trade Name	Datalene®
Insulation Material	FPE - Foam Polyethylene

#### Pair Color Code Chart :

Number	Color	Number	Color
1	White/Blue & Blue/White	3	White/Green & Green/White
2	White/Orange & Orange/White		

### **OUTER SHIELD:**

Outer Shield Material Trade Name	Beldfoil®
Outer Shield Type	Таре
Outer Shield Material	Aluminum Foil-Polyester Tape
Outer Shield %Coverage	100 %
OUTER SHIELD DRAIN WIRE :	
Outer Shield Drain Wire AWG	24
Outer Shield Drain Wire Stranding	7x32
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

#### **OUTER JACKET:**

# **BELDEN**Cable<sup>\*\*</sup>

## 1420A Paired - Low Capacitance Computer Cable for EIA RS-232/422

OVERALL NOMINAL DIAMETER:	Outer Jacket Material	DVC Delwinyl Chloride
Averall Nominal Diameter261 in.MECHANCAL CHARACTERISTICS:Derating Temperature Range-0°C To +80°CSon-UL Temperature Range80°C (UL AWM Style 2919)Bulk Cable Weigh29 lbs/1000 ft.Bulk Cable Weigh20 lbs/1000 ft.Anx. Recommended Pulling Tension33 lbs.Arper Local Radius (Install)2.75 in.APPLICABLE SPECIFICATIONS AND AGENC-VENLINCE:APPLICABLE SPECIFICATIONS AND AGENC-VENLINCE:APPLICABLE SPECIFICATIONS AND AGENC-VENLINCE:APPLICABLE STANDARDS:VEC/(UL) SpecificationCMCEC/CUL) SpecificationCM20 CE Mark (VN)Yes20 CE Mark (VN)Yes20 CE Mark (VN)Yes20 UCE Mark (VN)Yes20 LOR Jack (VN)F120 LOR Jack (VN)F120 LOR Jack (VN)P120 LOR Jack (VN)N20 LOR Jack (VN)P120 LOR Jack (VN)P1<		PVC - Polyvinyl Chloride
MCHANICAL CHARACTERISTICS:Operating Temperature Range-0°C To +80°CNon-UL Temperature Range60°C (UL AWM Style 2919)Non-UL Temperature Range60°C (UL AWM Style 2919)Mak Cable Weight29 Ibs/1000 fn.Max. Recommended Pulling Tension33 Ibs.Atax. Recommended Pulling Tension33 Ibs.ATPLICABLE SPECIFICATIONS AND AGENCX////////////////////////////////////	OVERALL NOMINAL DIAMETER:	
Departing Temperature Range-20°C To +80°CNon-UL Temperature Raning80°C (UL AWM Style 2919)Sulk Cable Weight29 lbs/1000 ft.Atax. Recommended Pulling Tension31 lbs.Ain. Bend Radius (Install)2.75 in.APPLICABLE SPECIFICATIONS AND AGENCYVPLIANCE:APPLICABLE STANDARDS:VPLIANCE:VEC(UL) SpecificationCMCEC(UL) SpecificationCM20 Ce Mark (Y/N)Ves20 Ce Mark (Y/N)Yes20 Rohl Scompliant (Y/N)Yes21 Rohl Scompliante Date (mm/dd/yyyy):10/1200421 Lamar EstUL 1685 UL Loading2(UL) Flame TestTo2(UL) Flame TestF1PLENUMNON-PLENUM:PaPLENUMNON-PLENUM:NameVennum (Y/N)NameCECTRICAL CHARCTERISTICS:00 OhmsNon. Characteristic Impedance100 OhmsNon. Characteristic Impedance213 µH/ftNon. Characteristic Inpedance219 F/ftNon. Capc. Conductor to Conductor @ 1 KHz219 F/ftNon. Characteristic Inpedance219 F/ftNon. Capc. Conductor to Conductor @ 1 KHz219 F/ftNon. Characteristic Inpedance219 F/ftNon. Characteristic Romedia219 F/ftN	Overall Nominal Diameter	.261 in.
Non-UL cemperature Rating80°C (UL AWM Style 2919)Bulk Cable Weight29 lbs/1000 ft.Aux. Recommended Pulling Tension33 lbs.Ain. Bend Radius (Install)2.75 in.APPLICABLE SPECIFICATIONS AND AGENCYCMPLIANCE:APPLICABLE STANDARDS:CMVEC/(UL) SpecificationCMCEC/(UL) SpecificationCMCEC/(UL) SpecificationUL Style 2919 (30 V 80°C)SU CE Mark (Y/N)YesSU CE Mark (Y/N)YesSU RoHS Compliance Date (mm/dd/yyyy):01/01/2004FLAME TEST:JL Style 2919 (30 V 80°C)JL Flame TestUL (Lasse UL LoadingCUL) Flame TestUL 1685 UL LoadingCUL) Flame TestVEIPlenum (Y/N)NPlenum (Y/N)NCELECTRICAL CHARACTERISTICS:Non. Characteristic Impedance100 OhmsNon. Inductance213 µH/ftNon. Capacitance Conductor to Conductor 9 1 KHz13 F/ftNon. Capacitance Conductor to Conductor 9 1 KHz22 pF/ftNon. Capacitance Conductor to Conductor 9 1 KHz22 pF/ftNon. Capacitance @ 20 Deg. C4 Ohms/1000 ft	MECHANICAL CHARACTERISTICS:	
Salk Cable Weight29 lbs/1000 ft.Max. Recommended Pulling Tension33 lbs.Min. Bend Radius (Install)2.75 in.APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:APPLICABLE STANDARDS:VEC/(UL) SpecificationCMVEC/(UL) SpecificationCMVEC/(UL) SpecificationCMVEC/(UL) SpecificationCMVEC/(UL) SpecificationCMVEC/(UL) SpecificationUL Style 2919 (30 V 80°C)CU EMark (Y/N)YesVEC/UL Sourpliance Date (mm/dd/yyyy):0 //01/2004VELOWVELOWVELOWVELOWVELOWVELOWVELOWVELOWNon. Characteristic Impedance100 OhmsAugentance Conductor to Conductor @ 1 KHz13 µH/ftNon. Characteristic Impedance100 OhmsNon. Characteristic	Operating Temperature Range	-20°C To +80°C
Max. Recommended Pulling Tension33 lbs.Min. Bend Radius (Install)2.75 in.APPLICABLE SPECIFICATIONS AND AGENCYVPLIANCE:APPLICABLE STANDARDS:APPLICABLE STANDARDS:VPLIANCE:APPLICABLE STANDARDS:VPLIANCE:APPLICABLE STANDARDS:VPLICABLE STANDARDS:VPLICABLE STANDARDS:VPLICABLE STANDARDS:VPLICABLE STANDARDS:VPLICABLE STANDARDS:VPLICABLE STANDARDS:VPLICAGENTION:VPLICAGENTION:VPLICABLE STANDARDS:VPLICABLE STANDA	Non-UL Temperature Rating	80°C (UL AWM Style 2919)
Min. Bend Radius (Instal) 2.75 in.   APPLICABLE SPECIFICATIONS AND AGENCY CM   APPLICABLE STANDARDS: CM   SPEC(UL) Specification U.Style 2919 (30 V 80°C)   SPEC Mark (Y/N) Yes   SPEC Mark (Y/N) Yes   SPEC Mark TEST: U/10/2004   SPEC MARE TEST: UL 1685 UL Loading   SPEC MUNON-PLEENUM: Plane Test   Plane Test UL 1685 UL Loading   SPEC MUNON-PLEENUM: Planeum (Y/N)   Planeum (Y/N) N   SPEC MUNON-PLEENUM: SPEC MUNON-PLEENUM:   SPEC MUNON-PLEENUM: 100 Ohns   SPEC MUNON-PLECUMICON CONDUCTOR (T KIM) 13 µH/fn   SPEC MUNON- Conductor 0 To KIM (T KIM) 13 µH/fn   SPEC MUNON- Conductor 0 To KIM (T KIM) 13 µH/fn   SPEC MUNON CONDUCTOR (T S KIM) 13 µH/fn   SPEC MUNON CONDUCTOR (T S KIM) 13 µH/fn   SPEC MUNON CONDUCTOR (T S KIM) 13 µH/fn<	Bulk Cable Weight	29 lbs/1000 ft.
APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:APPLICABLE STANDARDS:VEC/UL) SpecificationCM2EC/CUL) SpecificationUL Style 2919 (30 V 80°C)VW SpecificationVesUC E Mark (Y/N)YesUR AGHS Compliant (Y/N)VesUR AGHS Compliant (Y/N)VesUR AGHS Compliant (Y/N)VesUL AGHS Compliant (Y/N)VesUL AGHS Compliant E Date (mm/dd/yyyy):VI10/2004UL 1685 UL LoadingTICUL) Flame TestVI1685 UL LoadingCUL) Flame TestFIVenum (Y/N)NPlenum (Y/N)NCHECTERICEVI100 OmmsNon. Characteristic Impedance100 OmmsNon. Characteristic Impedance100 OmmsNon. Characteristic Impedance13 µH/fitNon. Capacitance Conductor to Conductor I KHz13 pF/fitNon. Cap. Cond. to Other Cond. & Shield @ 1 KHz22 pF/fitNon. Conductor DC Resistance @ 20 Deg. C24 Omms/1000 fit	Max. Recommended Pulling Tension	33 lbs.
APPLICABLE STANDARDS:REC/(UL) SpecificationCMCEC/(UL) SpecificationCMWM SpecificationUL Style 2919 (30 V 80°C)WM SpecificationYesCE Mark (Y/N)YesBU RoHS Compliant (Y/N)YesBU RoHS Compliance Date (mm/dd/yyyy):01/01/2004FLAME TEST:VII (1685 UL LoadingCIUL) Flame TestUL 1685 UL LoadingCIUL) Flame TestVII (1685 UL LoadingCIUL) Flame TestNPlenum (Y/N)NPlenum (Y/N)NCHECTERTECTERTEST:Non. Characteristic Impedance100 OhmsNon. Characteristic Impedance100 OhmsNon. Characteristic Impedance13 µH/ftNon. Characteristic Impedance13 pF/ftNon. Conductor to Conductor 1 KHz2 pF/ftNon. Characteristic Impedance13 pF/ftNon. Characteristic Impedance20 PF/ftNom. Characteristic Impedance20 PF/	Min. Bend Radius (Install)	2.75 in.
REC/UL) Specification   CM     CEC/CUL) Specification   CM     VM Specification   UL Style 2919 (30 V 80°C)     VU Specification   Yes     SU CE Mark (Y/N)   Yes     SU RoHS Compliant (Y/N)   10/1/2004     FLAME TEST:   11/1/2004     JL Flame Test   UL 1685 UL Loading     C(UL) Flame Test   FT1     Plenum (Y/N)   N     Plenum (Y/N)   N     SU Conductor to Conductor of 1 KHz   13 µ/fr     Non. Characteristic Impedance   13 pF/fr     Non. Conductor DConductor of 1 KHz   2 pF/fr     Non. Conductor DConductor of 1 KHz   2 pF/fr     Non. Conductor DCreasitance @ 20 Deg. C   24 Omm/1000 fr	APPLICABLE SPECIFICATIONS AND AGENCY	COMPLIANCE:
EEC/CUL SpecificationCMAWM SpecificationUL Style 2919 (30 V 80°C)SU CE Mark (Y/N)YesSU RoHS Compliant (Y/N)YesSU RoHS Compliance Date (mm/dd/yyyy):01/01/2004FLAME TEST:UL 1685 UL LoadingCUL) Flame TestUL 1685 UL LoadingCUL) Flame TestUL 1685 UL LoadingCUL) Flame TestFT1Plenum (Y/N)NPlenum (Y/N)NELECTRICAL CHARACTERISTICS:Vom. Characteristic Impedance100 OhmsNom. Characteristic Impedance100 OhmsNom. Capacitance Conductor to Conductor @ 1 KHz13 pF/ftNom. Cap. Cond. to Other Cond. & Shield @ 1 KHz22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	APPLICABLE STANDARDS:	
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EU CE Mark (Y/N)YesEU RoHS Compliant (Y/N)YesEU RoHS Compliance Date (mm/dd/yyyy):01/01/2004FLAME TEST:Ul 1685 UL LoadingFL Flame TestUL 1685 UL LoadingC(UL) Flame TestFT1PLENUM/NON-PLENUM:NPlenum (Y/N)NELECTRICAL CHARACTERISTICS:Nom. Characteristic Impedance100 OhmsNom. Characteristic Impedance100 OhmsNom. Capacitance Conductor to Conductor @ 1 KHz13 pF/ftNom. Cap. Cond. to Other Cond, & Shield @ 1 KHz22 pF/ftNom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	CEC/C(UL) Specification	СМ
EU RoHS Compliant (Y/N)YesEU RoHS Compliance Date (mm/dd/yyyy):01/01/2004FLAME TEST:T. Flame TestUL1685 UL LoadingC(UL) Flame TestFT1PLENUM/NON-PLENUM:NPlenum (Y/N)NELECTRICAL CHARACTERISTICS:100 OhmsNom. Characteristic Impedance100 OhmsNom. Capacitance Conductor 0 Conductor @ 1 KHz13 pF/ftNom. Capacitance Conductor Conductor @ 1 KHz22 pF/ftNom. Capacitance Conductor 0 Conductor @ 1 KHz24 Ohms/1000 ft	AWM Specification	UL Style 2919 (30 V 80°C)
EU RoHS Compliance Date (mm/dd/yyyy):01/01/2004FLAME TEST:Ul 1685 Ul LoadingJL Flame TestUL 1685 Ul LoadingC(UL) Flame TestFT 1PLENUM/NON-PLENUM:NPlenum (Y/N)NELECTRICAL CHARACTERISTICS:Nom. Characteristic Impedance100 OhmsNom. Characteristic Impedance100 OhmsNom. Capacitance Conductor to Conductor @ 1 KHz13 pF/ftNom. Cap. Cond. to Other Cond. & Shield @ 1 KHz22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	EU CE Mark (Y/N)	Yes
FLAME TEST:   JL Flame Test UL1685 UL Loading   C(UL) Flame Test FT1   PLENUM/NON-PLENUM: N   Plenum (Y/N) N   ELECTRICAL CHARACTERISTICS: 100 Ohms   Nom. Characteristic Impedance 100 Ohms   Nom. Capacitance Conductor to Conductor @ 1 KHz 13 pF/ft   Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz 22 pF/ft   Nominal Velocity of Propagation 78 %   Nom. Conductor DC Resistance @ 20 Deg. C 24 Ohms/1000 ft	EU RoHS Compliant (Y/N)	Yes
JL Flame TestUL1685 UL LoadingC(UL) Flame TestFT1PLENUM/NON-PLENUM:Plenum (Y/N)NNom. Characteristic Impedance100 OhmsAugust 100 OhmsNom. Characteristic ImpedanceNom. Inductance.213 µH/ftNom. Capacitance Conductor to Conductor @1 KHz3 pF/ftNom. Capacitance Conductor to Conductor @1 KHz.22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C.24 Ohms/1000 ft	EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
C(UL) Flame TestFT1PLENUM/NON-PLENUM:NPlenum (Y/N)NELECTRICAL CHARACTERISTICS:Nom. Characteristic Impedance100 OhmsNom. Inductance2.13 μH/ftNom. Capacitance Conductor to Conductor @1 KHz13 pF/ftNom. Cap. Cond. to Other Cond. & Shield @1 KHz22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @20 Deg. C24 Ohms/1000 ft	FLAME TEST:	
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Plenum (Y/N)NELECTRICAL CHARACTERISTICS:Nom. Characteristic Impedance100 OhmsNom. Inductance.213 μH/ftNom. Capacitance Conductor to Conductor @ 1 KHz.3 pF/ftNom. Cap. Cond. to Other Cond. & Shield @ 1 KHz.22 pF/ftNominal Velocity of Propagation.78 %Nom. Conductor DC Resistance @ 20 Deg. C.24 Ohms/1000 ft	C(UL) Flame Test	FT1
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Nom. Inductance.213 µH/ftNom. Capacitance Conductor to Conductor @ 1 KHz13 pF/ftNom. Cap. Cond. to Other Cond. & Shield @ 1 KHz22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	ELECTRICAL CHARACTERISTICS:	
Nom. Capacitance Conductor to Conductor @ 1 KHz13 pF/ftNom. Cap. Cond. to Other Cond. & Shield @ 1 KHz22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	Nom. Characteristic Impedance	100 Ohms
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz22 pF/ftNominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	Nom. Inductance	.213 μH/ft
Nominal Velocity of Propagation78 %Nom. Conductor DC Resistance @ 20 Deg. C24 Ohms/1000 ft	Nom. Capacitance Conductor to Conductor @ 1 KHz	13 pF/ft
Nom. Conductor DC Resistance @ 20 Deg. C 24 Ohms/1000 ft	Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz	22 pF/ft
	Nominal Velocity of Propagation	78 %
Jominal Outer Shield DC Resistance @ 20 Deg. C15.1 Ohms/1000 ft	Nom. Conductor DC Resistance @ 20 Deg. C	24 Ohms/1000 ft
	Nominal Outer Shield DC Resistance @ 20 Deg. C	15.1 Ohms/1000 ft
Max. Operating Voltage - UL30 V RMS (UL AWM Style 2919); 300 V RMS	Max. Operating Voltage - UL	30 V RMS (UL AWM Style 2919); 300 V RMS
Max. Recommended Current1.8 Amps per conductor @ 25°C	Max. Recommended Current	1.8 Amps per conductor @ 25°C
NOTES:	NOTES:	

### Notes

Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low distortion data handling. Physical properties include good crush resistance and light weight.

## **BELDEN**Cable<sup>\*\*</sup>

### 1420A Paired - Low Capacitance Computer Cable for EIA RS-232/422

#### **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1420A 0601000	3 PR #24 FHDPE FS PVC	1000	34	CHROME	С
1420A 06010000	3 PR #24 FHDPE FS PVC	10000	340	CHROME	СҮ
1420A 060500	3 PR #24 FHDPE FS PVC	500	17	CHROME	С

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Revision Number: 1 Revision Date: 07-20-2005

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