### PLTC/ITC - 300 V - PVC Insulated, PVC Jacketed

Instrumentation PLTC / ITC, 300 V, PVC, 105°C - LEAD FREE, Unshielded Pairs or Triads with Overall Shield, Shielded Pairs or Triads with Overall Shield, Type PLTC - UL 13 - Type ITC - UL 2250

### Description

### Applications

The 300 V Instrumentation Cables are dual listed as Type PLTC per UL 13 and Type ITC per UL 2250. These cables are suitable for installations as outlined in NEC 2008 and NEC 2011 Article 725 for Type PLTC cables and NEC 2008 and NEC 2011 Article 727 for Type ITC cables. They are also a suitable substitute for General purpose Class 2 (CL2X) and Class 3 (CL3) wiring, as well as Dwelling unit Class 2 (CL2X) and Class 3 (CL3X) wiring as per NEC 2008 and NEC 2011 Article 725.

NEXANS Instrumentation Cables is LEAD FREE and RoHS compliant.

### Construction

**Conductor:** Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance to ASTM B8.

**Insulation:** Polyvinyl chloride in accordance with UL 13 and UL 2250, flame retardant, 105°C temperature rating.

**Insulation Shield(on shielded pair/triad constructions):** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is two gauge sizes smaller than the circuit conductors. These shields are electrically isolated from each other.

**Assembly:** Pairs/triads are cabled in concentric layers. In the case of unshielded pairs/triads, they are cabled at staggered lengths to reduce crosstalk.

**Communication Wire**: Orange communication wire is provided for calibration on 4 pair / triad and higher.

**Overall cable shield:** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is the same size as the circuit conductors, with the exception of single pair/triad constructions where the drain wire is two gauge sizes smaller than the circuit conductors.

**Jacket:**UL listed sunlight and moisture resistant, sequentially length marked, black, flame retardant polyvinyl chloride material. A nylon ripcord is included for ease of jacket removal.

#### **Conductor Identification**

Pairs:black/white and number coded Triads:black/white/red and number coded

#### Bending Radius

**Fixed Position:** 5 x cable overall diameter **During Installation:** 8 x cable overall diameter

### Standards

National UL 13; UL 2250

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### PLTC/ITC - 300 V - PVC Insulated, PVC Jacketed

### Characteristics

Construction characteristics	
Conductor material	Copper
Electrical characteristics	
Maximum operating voltage	300 V
Usage characteristics	
Maximum operating temperature	105 °C

### Selling information

### Options

The following constructions can be provided on special orders:

- Tinned copper conductors.
- When increased mechanical, chemical, or environmental protection is required, cables can be supplied with a continuously welded and corrugated impervious aluminum sheath armor and an outer PVC jacket.
- Interlocked aluminum armor with or without an additional outer PVC jacket.
- Direct Burial listed cable (when ordered as ITC/DB)
- · Conductors with alternate color / identification codes
- Alternate jacket colors

PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed

Individual and Overall Shielded Pairs

Instrumentation PLTC / ITC, 300 V, PVC, 105°C - LEAD FREE, Unshielded Pairs or Triads with Overall Shield, Shielded Pairs or Triads with Overall Shield, Type PLTC - UL 13 - Type ITC - UL 2250

### Description

### Applications

The 300 V Instrumentation Cables are dual listed as Type PLTC per UL 13 and Type ITC per UL 2250. These cables are suitable for installations as outlined in NEC 2008 and NEC 2011 Article 725 for Type PLTC cables and NEC 2008 and NEC 2011 Article 727 for Type ITC cables. They are also a suitable substitute for General purpose Class 2 (CL2X) and Class 3 (CL3) wiring, as well as Dwelling unit Class 2 (CL2X) and Class 3 (CL3X) wiring as per NEC 2008 and NEC 2011 Article 725.

NEXANS Instrumentation Cables is LEAD FREE and RoHS compliant.

#### Construction

**Conductor:** Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance to ASTM B8.

**Insulation:** Polyvinyl chloride in accordance with UL 13 and UL 2250, flame retardant, 105°C temperature rating.

**Insulation Shield(on shielded pair/triad constructions):** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is two gauge sizes smaller than the circuit conductors. These shields are electrically isolated from each other.

**Assembly:** Pairs/triads are cabled in concentric layers. In the case of unshielded pairs/triads, they are cabled at staggered lengths to reduce crosstalk.

**Communication Wire**: Orange communication wire is provided for calibration on 4 pair / triad and higher.

**Overall cable shield:** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is the same size as the circuit conductors, with the exception of single pair/triad constructions where the drain wire is two gauge sizes smaller than the circuit conductors.

**Jacket:**UL listed sunlight and moisture resistant, sequentially length marked, black, flame retardant polyvinyl chloride material. A nylon ripcord is included for ease of jacket removal.

#### **Conductor Identification**

Pairs:black/white and number coded Triads:black/white/red and number coded

#### **Bending Radius**

**Fixed Position:** 5 x cable overall diameter **During Installation:** 8 x cable overall diameter

Standards

National UL 13; UL 2250

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed

Individual and Overall Shielded Pairs

### Characteristics

Construction characteristics	
Conductor material	Copper
Electrical characteristics	
Maximum operating voltage	300 V
Usage characteristics	
Maximum operating temperature	105 °C

#### Conductor Insulation Nominal Diameter Approximate Net Maximum Jacket Thickness Part # of Cable Weight Size Thickness over Jacket **Pulling Tension** Number Pairs AWG mils inches lb/kft inches ka/km lbf Ν mm mm mm 669705 2 20 (7) 12 0.30 42 1.07 0.349 8.86 66 98 38 169 669820 20 (7) 12 0.30 52 1.32 0 4 2 3 10 74 101 150 73 325 4 669697 8 20 (7) 12 0.30 52 1.32 0.543 13.79 170 253 137 609 10 20 (7) 12 0.30 62 1.57 0.654 16.61 220 327 172 765 671263 12 20 (7) 12 0.30 62 1 57 0 674 17 12 250 372 209 930 671362 16 20 (7) 12 0.30 62 1.57 0.747 18.97 316 470 274 1219 20 20 (7) 12 0.30 62 1.57 0.827 21.01 382 568 343 1526 671370 24 20 (7) 12 0.30 72 1.83 0 939 23.85 466 693 416 1850 671388 36 20 (7) 12 0.30 72 1.83 1.071 27.20 655 975 617 2745 671396 50 20 (7) 12 0.30 82 2.08 1.278 32.46 1342 859 3821 902 669671 2 18 (7) 0.38 52 1.32 0.382 9.70 84 125 60 267 15 669689 4 18 (7) 15 0.38 52 1.32 0.443 11.25 121 180 115 512 8 18 (7) 62 1 57 0 577 211 314 217 669721 15 0.38 14 66 965 10 18 (7) 15 0.38 62 1.57 0.720 18.29 285 424 273 1214 669713 12 18 (7) 15 0.38 62 1.57 0.743 18.87 327 487 333 1481 0.38 62 671404 16 18 (7) 15 1.57 0.824 20.93 415 618 435 1935 20 18 (7) 15 0.38 72 1.83 0.935 23.75 521 775 545 2424 671412 24 18 (7) 15 0.38 72 1.83 1.038 26.37 614 914 660 2936 1295 36 72 1 187 870 980 671420 18 (7) 15 0.38 1 83 30 15 4359 671081 50 18 (7) 15 0.38 82 2.08 1.417 35.99 1201 1787 1363 6063 671222 2 16 (7) 15 0.38 52 1.32 0.446 11.33 120 179 96 427 259 671230 4 16 (7) 15 0.38 52 1 32 0 5 1 6 13 11 174 183 814 671248 8 16 (7) 15 0.38 62 1.57 0.690 17.53 317 472 346 1539 10 16 (7) 15 0.38 62 1.57 0.808 20.52 388 577 434 1931 671255 12 16 (7) 15 0.38 62 1.57 0.834 21.18 449 668 529 2353 671438 16 16 (7) 15 0.38 72 1.83 0.948 24.08 592 881 692 3078 3861 20 16 (7) 15 0.38 72 1 83 1 0 5 3 26 75 721 1073 868 4675 24 0.38 72 852 1268 1051 671446 16(7) 15 1.83 1.171 29.74 671453 36 16 (7) 15 0.38 82 2.08 1.362 34.59 1245 1853 1560 6939 671487 50 16 (7) 15 0.38 82 2.08 1.603 40.72 1684 2506 2170 9653

### Instrumentation PLTC / ITC, Shielded Pairs with an Overall Shield (SPOS), 300V

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Individual and Overall Shielded Pairs

### Selling information

### Options

The following constructions can be provided on special orders:

- Tinned copper conductors.
- When increased mechanical, chemical, or environmental protection is required, cables can be supplied with a continuously welded and corrugated impervious aluminum sheath armor and an outer PVC jacket.
- · Interlocked aluminum armor with or without an additional outer PVC jacket.
- Direct Burial listed cable (when ordered as ITC/DB)
- · Conductors with alternate color / identification codes
- Alternate jacket colors

PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed

Individual and Overall Shielded Triads

Instrumentation PLTC / ITC, 300 V, PVC, 105°C - LEAD FREE, Unshielded Pairs or Triads with Overall Shield, Shielded Pairs or Triads with Overall Shield, Type PLTC - UL 13 - Type ITC - UL 2250

### Description

### Applications

The 300 V Instrumentation Cables are dual listed as Type PLTC per UL 13 and Type ITC per UL 2250. These cables are suitable for installations as outlined in NEC 2008 and NEC 2011 Article 725 for Type PLTC cables and NEC 2008 and NEC 2011 Article 727 for Type ITC cables. They are also a suitable substitute for General purpose Class 2 (CL2X) and Class 3 (CL3) wiring, as well as Dwelling unit Class 2 (CL2X) and Class 3 (CL3X) wiring as per NEC 2008 and NEC 2011 Article 725.

NEXANS Instrumentation Cables is LEAD FREE and RoHS compliant.

#### Construction

**Conductor:** Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance to ASTM B8.

**Insulation:** Polyvinyl chloride in accordance with UL 13 and UL 2250, flame retardant, 105°C temperature rating.

**Insulation Shield(on shielded pair/triad constructions):** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is two gauge sizes smaller than the circuit conductors. These shields are electrically isolated from each other.

**Assembly:** Pairs/triads are cabled in concentric layers. In the case of unshielded pairs/triads, they are cabled at staggered lengths to reduce crosstalk.

**Communication Wire**: Orange communication wire is provided for calibration on 4 pair / triad and higher.

**Overall cable shield:** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is the same size as the circuit conductors, with the exception of single pair/triad constructions where the drain wire is two gauge sizes smaller than the circuit conductors.

**Jacket:**UL listed sunlight and moisture resistant, sequentially length marked, black, flame retardant polyvinyl chloride material. A nylon ripcord is included for ease of jacket removal.

#### **Conductor Identification**

**Pairs:**black/white and number coded **Triads:**black/white/red and number coded

#### **Bending Radius**

**Fixed Position:** 5 x cable overall diameter **During Installation:** 8 x cable overall diameter

Standards

National UL 13; UL 2250

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Individual and Overall Shielded Triads

Characteristics	
Construction characteristics	
Conductor material	Copper
Electrical characteristics	
Maximum operating voltage	300 V
Usage characteristics	
Maximum operating temperature	105 °C

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Individual and Overall Shielded Triads

### Shielded Triads with an Overall Shield (STOS), 300V

Part Number	# of Triads	Conductor Size	Insula Thick	ation	Jacket Thickness		Jacket Thickness		Jacket Nominal Diameter Approximate Ne Thickness over Jacket Cable Weight		ket Nominal Diameter kness over Jacket		Approximate Net Cable Weight		Approximate Net Cable Weight		Maximum Pulling Tension	
		AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lbf	N						
	2	20 (7)	12	0.30	42	1.07	0.357	9.07	77	115	46	204						
693770	4	20 (7)	12	0.30	52	1.32	0.433	11	122	182	97	432						
693788	8	20 (7)	12	0.30	52	1.32	0.556	14.12	212	315	194	863						
	10	20 (7)	12	0.30	62	1.57	0.670	17.02	272	405	237	1054						
693796	12	20 (7)	12	0.30	62	1.57	0.690	17.53	313	466	283	1259						
693804	16	20 (7)	12	0.30	62	1.57	0.765	19.43	399	594	380	1690						
	20	20 (7)	12	0.30	62	1.57	0.849	21.56	485	722	474	2108						
	24	20 (7)	12	0.30	72	1.83	0.963	24.46	591	880	571	2540						
	36	20 (7)	12	0.30	72	1.83	1.099	27.91	841	1252	854	3799						
	50	20 (7)	12	0.30	82	2.08	1.275	32.39	1155	1719	1185	5271						
	2	18 (7)	15	0.38	52	1.32	0.431	10.95	108	161	73	325						
669495	4	18 (7)	15	0.38	52	1.32	0.476	12.09	160	238	154	685						
676403	8	18 (7)	15	0.38	62	1.57	0.635	16.13	293	436	308	1371						
	10	18 (7)	15	0.38	62	1.57	0.741	18.82	360	536	376	1674						
671054	12	18 (7)	15	0.38	62	1.57	0.764	19.41	416	619	449	1998						
	16	18 (7)	15	0.38	62	1.57	0.849	21.56	533	793	603	2684						
	20	18 (7)	15	0.38	72	1.83	0.963	24.46	671	999	753	3348						
671040	24	18 (7)	15	0.38	72	1.83	1.070	27.18	793	1180	907	4033						
669929	36	18 (7)	15	0.38	72	1.83	1.224	31.09	1137	1692	1356	6032						
	50	18 (7)	15	0.38	82	2.08	1.420	36.07	1565	2329	1882	8370						
	2	16 (7)	15	0.38	52	1.32	0.460	11.68	146	217	116	517						
671271	4	16 (7)	15	0.38	52	1.32	0.533	13.53	221	329	245	1091						
671693	8	16 (7)	15	0.38	62	1.57	0.713	18.11	410	610	491	2182						
	10	16 (7)	15	0.38	62	1.57	0.836	21.23	504	750	599	2665						
672063	12	16 (7)	15	0.38	62	1.57	0.863	21.92	587	874	715	3181						
	16	16 (7)	15	0.38	72	1.83	0.981	24.92	777	1156	960	4272						
	20	16 (7)	15	0.38	72	1.83	1.089	27.66	953	1418	1198	5329						
631846	24	16 (7)	15	0.38	72	1.83	1.212	30.78	1130	1682	1443	6420						
	36	16 (7)	15	0.38	82	2.08	1.410	35.81	1660	2470	2159	9602						
	50	16 (7)	15	0.38	82	2.08	1.613	40.97	2252	3351	2995	13323						

### Selling information

Options

The following constructions can be provided on special orders:

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PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Individual and Overall Shielded Triads

- Tinned copper conductors.
- When increased mechanical, chemical, or environmental protection is required, cables can be supplied with a continuously welded and corrugated impervious aluminum sheath armor and an outer PVC jacket.
- Interlocked aluminum armor with or without an additional outer PVC jacket.
- Direct Burial listed cable (when ordered as ITC/DB)
- · Conductors with alternate color / identification codes
- · Alternate jacket colors

### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed

Instrumentation PLTC / ITC, 300 V, PVC, 105°C - LEAD FREE, Unshielded Pairs or Triads with Overall Shield, Shielded Pairs or Triads with Overall Shield, Type PLTC - UL 13 - Type ITC - UL 2250

### Description

#### Applications

The 300 V Instrumentation Cables are dual listed as Type PLTC per UL 13 and Type ITC per UL 2250. These cables are suitable for installations as outlined in NEC 2008 and NEC 2011 Article 725 for Type PLTC cables and NEC 2008 and NEC 2011 Article 727 for Type ITC cables. They are also a suitable substitute for General purpose Class 2 (CL2X) and Class 3 (CL3) wiring, as well as Dwelling unit Class 2 (CL2X) and Class 3 (CL3X) wiring as per NEC 2008 and NEC 2011 Article 725.

NEXANS Instrumentation Cables is LEAD FREE and RoHS compliant.

#### Construction

**Conductor:** Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance to ASTM B8.

**Insulation:** Polyvinyl chloride in accordance with UL 13 and UL 2250, flame retardant, 105°C temperature rating.

**Insulation Shield(on shielded pair/triad constructions):** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is two gauge sizes smaller than the circuit conductors. These shields are electrically isolated from each other.

**Assembly:** Pairs/triads are cabled in concentric layers. In the case of unshielded pairs/triads, they are cabled at staggered lengths to reduce crosstalk.

**Communication Wire**: Orange communication wire is provided for calibration on 4 pair / triad and higher.

**Overall cable shield:** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is the same size as the circuit conductors, with the exception of single pair/triad constructions where the drain wire is two gauge sizes smaller than the circuit conductors.

**Jacket:**UL listed sunlight and moisture resistant, sequentially length marked, black, flame retardant polyvinyl chloride material. A nylon ripcord is included for ease of jacket removal.

#### **Conductor Identification**

Pairs:black/white and number coded Triads:black/white/red and number coded

#### **Bending Radius**

**Fixed Position:** 5 x cable overall diameter **During Installation:** 8 x cable overall diameter

### Standards

National UL 13; UL 2250

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Overall Shielded Pairs

Characteristics	
Construction characteristics	
Conductor material	Copper
Electrical characteristics	
Maximum operating voltage	300 V
Usage characteristics	
Maximum operating temperature	105 °C

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Overall Shielded Pairs

### Unshielded Pairs with an Overall Shield (POS), 300V

Part # of Number Pairs		# of Size Pairs	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Maximum Pulling Tension	
		AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lbf	N
669606	1	20 (7)	12	0.30	37	0.94	0.212	5.38	27	40	16	73
	2	20 (7)	12	0.30	37	0.94	0.264	6.71	49	73	33	145
671206	4	20 (7)	12	0.30	42	1.07	0.353	8.97	74	110	57	254
671219	8	20 (7)	12	0.30	52	1.32	0.485	12.32	133	198	106	472
	10	20 (7)	12	0.30	52	1.32	0.529	13.44	158	235	131	581
671180	12	20 (7)	12	0.30	52	1.32	0.570	14.48	182	271	163	726
671305	16	20 (7)	12	0.30	62	1.57	0.662	16.81	243	362	212	944
676494	20	20 (7)	12	0.30	62	1.57	0.726	18.44	291	433	261	1162
671313	24	20 (7)	12	0.30	62	1.57	0.783	19.89	338	503	318	1416
671339	36	20 (7)	12	0.30	72	1.83	0.951	24.16	495	737	473	2105
671347	50	20 (7)	12	0.30	72	1.83	1.095	27.81	658	979	653	2904
		-					-					
669614	1	18 (7)	15	0.38	37	0.94	0.230	5.84	34	51	26	115
669739	2	18 (7)	15	0.38	42	1.07	0.302	7.67	67	100	52	231
671123	4	18 (7)	15	0.38	52	1.32	0.413	10.49	105	156	91	404
669633	8	18 (7)	15	0.38	52	1.32	0.541	13.74	176	262	168	749
	10	18 (7)	15	0.38	52	1.32	0.592	15.04	211	314	207	922
671115	12	18 (7)	15	0.38	62	1.57	0.670	17.02	258	384	259	1153
676411	16	18 (7)	15	0.38	62	1.57	0.742	18.85	326	485	337	1499
	20	18 (7)	15	0.38	62	1.57	0.851	21.62	393	585	415	1845
671107	24	18 (7)	15	0.38	72	1.83	0.901	22.89	476	708	505	2248
671099	36	18 (7)	15	0.38	72	1.83	1.071	27.2	675	1005	752	3344
671065	50	18 (7)	15	0.38	72	1.83	1.236	31.39	901	1341	1037	4612
669580	1	16 (7)	15	0.38	37	0.94	0.254	6.45	47	70	41	184
671156	2	16 (7)	15	0.38	42	1.07	0.339	8.61	91	135	83	367
671198	4	16 (7)	15	0.38	52	1.32	0.464	11.79	142	211	144	643
671164	8	16 (7)	15	0.38	62	1.57	0.633	16.08	256	381	268	1194
	10	16 (7)	15	0.38	62	1.57	0.693	17.60	307	457	330	1469
671172	12	16 (7)	15	0.38	62	1.57	0.748	19.00	357	531	413	1836
672220	16	16 (7)	15	0.38	62	1.57	0.844	21.44	454	676	537	2387
	20	16 (7)	15	0.38	72	1.83	0.949	24.10	570	848	660	2938
671297	24	16 (7)	15	0.38	72	1.83	1.026	26.06	667	993	805	3581
671131	36	16 (7)	15	0.38	72	1.83	1.224	31.09	956	1423	1197	5325
671149	50	16 (7)	15	0.38	82	2.08	1.437	36.50	1314	1955	1651	7345

### Selling information

### Options

The following constructions can be provided on special orders:

• Tinned copper conductors.

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Overall Shielded Pairs

- When increased mechanical, chemical, or environmental protection is required, cables can be supplied with a continuously welded and corrugated impervious aluminum sheath armor and an outer PVC jacket.
- Interlocked aluminum armor with or without an additional outer PVC jacket.
- Direct Burial listed cable (when ordered as ITC/DB)
- · Conductors with alternate color / identification codes
- Alternate jacket colors

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PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed

**Overall Shielded Triads** 

Instrumentation PLTC / ITC, 300 V, PVC, 105°C - LEAD FREE, Unshielded Pairs or Triads with Overall Shield, Shielded Pairs or Triads with Overall Shield, Type PLTC - UL 13 - Type ITC - UL 2250

### Description

#### Applications

The 300 V Instrumentation Cables are dual listed as Type PLTC per UL 13 and Type ITC per UL 2250. These cables are suitable for installations as outlined in NEC 2008 and NEC 2011 Article 725 for Type PLTC cables and NEC 2008 and NEC 2011 Article 727 for Type ITC cables. They are also a suitable substitute for General purpose Class 2 (CL2X) and Class 3 (CL3) wiring, as well as Dwelling unit Class 2 (CL2X) and Class 3 (CL3X) wiring as per NEC 2008 and NEC 2011 Article 725.

NEXANS Instrumentation Cables is LEAD FREE and RoHS compliant.

#### Construction

**Conductor:** Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance to ASTM B8.

**Insulation:** Polyvinyl chloride in accordance with UL 13 and UL 2250, flame retardant, 105°C temperature rating.

**Insulation Shield(on shielded pair/triad constructions):** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is two gauge sizes smaller than the circuit conductors. These shields are electrically isolated from each other.

**Assembly:** Pairs/triads are cabled in concentric layers. In the case of unshielded pairs/triads, they are cabled at staggered lengths to reduce crosstalk.

**Communication Wire**: Orange communication wire is provided for calibration on 4 pair / triad and higher.

**Overall cable shield:** Aluminum foil/polyester shield helically wrapped to provide 100% coverage with a tinned copper drain wire that is the same size as the circuit conductors, with the exception of single pair/triad constructions where the drain wire is two gauge sizes smaller than the circuit conductors.

**Jacket:**UL listed sunlight and moisture resistant, sequentially length marked, black, flame retardant polyvinyl chloride material. A nylon ripcord is included for ease of jacket removal.

#### **Conductor Identification**

**Pairs:**black/white and number coded **Triads:**black/white/red and number coded

#### **Bending Radius**

**Fixed Position:** 5 x cable overall diameter **During Installation:** 8 x cable overall diameter

### Standards

National UL 13; UL 2250

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Overall Shielded Triads

Characteristics	
Construction characteristics	
Conductor material	Copper
Electrical characteristics	
Maximum operating voltage	300 V
Usage characteristics	
Maximum operating temperature	105 °C

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Overall Shielded Triads

### Instrumentation PLTC/ITC, Unshielded Triads with an Overall Shield (TOS), 300 V

Part Number	# of Triads	Conductor Size	Insul Thick	ation	Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Maxiumum Pulling Tension	
		AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lbf	N
669747	1	20 (7)	12	0.30	37	0.94	0.222	5.64	33	49	24	109
	2	20 (7)	12	0.30	42	1.07	0.357	9.07	70	104	41	181
	4	20 (7)	12	0.30	52	1.32	0.433	11	107	159	82	363
	8	20 (7)	12	0.30	52	1.32	0.556	14.12	181	269	163	726
	10	20 (7)	12	0.30	62	1.57	0.670	17.02	233	347	196	871
	12	20 (7)	12	0.30	62	1.57	0.690	17.53	266	396	237	1053
	16	20 (7)	12	0.30	62	1.57	0.765	19.43	336	500	318	1416
	20	20 (7)	12	0.30	62	1.57	0.849	21.56	406	604	392	1742
	24	20 (7)	12	0.30	72	1.83	0.963	24.46	496	738	473	2105
	36	20 (7)	12	0.30	72	1.83	1.099	27.91	698	1039	710	3158
	50	20 (7)	12	0.30	82	2.08	1.312	33.32	961	1430	979	4356
669622	1	18 (7)	15	0.38	37	0.94	0.242	6.15	42	63	39	173
	2	18 (7)	15	0.38	52	1.32	0.413	10.49	96	143	65	288
675256	4	18 (7)	15	0.38	52	1.32	0.476	12.09	141	210	130	576
675215	8	18 (7)	15	0.38	62	1.57	0.635	16.13	254	378	259	1153
	10	18 (7)	15	0.38	62	1.57	0.741	18.82	311	463	311	1384
	12	18 (7)	15	0.38	62	1.57	0.764	19.41	358	533	376	1672
	16	18 (7)	15	0.38	62	1.57	0.849	21.56	454	676	505	2248
	20	18 (7)	15	0.38	72	1.83	0.963	24.46	571	850	622	2767
	24	18 (7)	15	0.38	72	1.83	1.070	27.18	674	1003	752	3344
	36	18 (7)	15	0.38	72	1.83	1.224	31.09	958	1426	1128	5015
	50	18 (7)	15	0.38	82	2.08	1.462	37.13	1321	1966	1555	6918
669598	1	16 (7)	15	0.38	37	0.94	0.267	6.78	58	86	62	275
	2	16 (7)	15	0.38	52	1.32	0.460	11.68	126	188	103	459
687907	4	16 (7)	15	0.38	52	1.32	0.533	13.54	192	286	206	918
671321	8	16 (7)	15	0.38	62	1.57	0.713	18.11	352	524	413	1836
	10	16 (7)	15	0.38	62	1.57	0.836	21.23	432	643	495	2203
	12	16 (7)	15	0.38	62	1.57	0.863	21.92	500	744	599	2663
688093	16	16 (7)	15	0.38	72	1.83	0.981	24.92	661	984	805	3581
	20	16 (7)	15	0.38	72	1.83	1.089	27.66	807	1201	991	4407
	24	16 (7)	15	0.38	72	1.83	1.212	30.78	954	1420	1197	5325
	36	16 (7)	15	0.38	82	2.08	1.410	35.81	1396	2077	1796	7988
	50	16 (7)	15	0.38	92	2.34	1.681	42.70	1923	2862	2477	11017

### Selling information

### Options

The following constructions can be provided on special orders:

• Tinned copper conductors.

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### PLTC / ITC - 300 V - PVC Insulated, PVC Jacketed Overall Shielded Triads

- When increased mechanical, chemical, or environmental protection is required, cables can be supplied with a continuously welded and corrugated impervious aluminum sheath armor and an outer PVC jacket.
- Interlocked aluminum armor with or without an additional outer PVC jacket.
- Direct Burial listed cable (when ordered as ITC/DB)
- · Conductors with alternate color / identification codes
- Alternate jacket colors

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