

# Instrumentation Cables

Introduction . . . . .	2
<b>300V – PVC Insulated, PVC Jacketed ITC Rated</b>	
Applications and Description . . . . .	3
Overall Shielded Pairs . . . . .	4
Overall Shielded Triads . . . . .	5
Individual and Overall Shielded Pairs . . . . .	6
Individual and Overall Shielded Triads . . . . .	7
<b>600V – PVC/Nylon Insulated, PVC Jacketed TC Rated</b>	
Applications and Description . . . . .	8
Overall Shielded Pairs . . . . .	9
Overall Shielded Triads . . . . .	10
Individual and Overall Shielded Pairs . . . . .	11
Individual and Overall Shielded Triads . . . . .	12
<b>Technical Information</b>	
Electrical Properties . . . . .	13
Belden Cross-Reference by Part Number . . . . .	14-15
Belden Cross-Reference by Description . . . . .	16-17
Product and Copper Conductor Data . . . . .	18
Notices . . . . .	19

# Introduction

Nexans is one of the largest wire and cable manufacturers in the world, and in North America. In North America we manufacture in locations across the United States and Canada. We design and produce a wide range of cables used in power, industrial, construction and communication applications.

With more than nine decades of experience as a leader in the industrial and power cable markets, Nexans is contracted by heavy industry and utilities world wide to provide turnkey solutions for the bulk transmission of power – from generating station through the distribution system to commercial and residential areas.

This catalogue has been prepared for the convenience of those using electrical conductors in industrial applications.

It presents the important data pertaining to the various types of wires and cables in readily obtainable form. We believe that the information included in the many tabulations will be of particular value to the architect, engineer, electrician, and layperson alike.

Although we have listed herein the types of wires and cables suitable for most conditions, we are equipped to manufacture other types to suit special needs. We would be pleased to recommend the most suitable construction for any special condition that you may encounter.

The determination of the correct cable size and type, and the selection of methods of installation suitable for the type and location of particular circuits, should be made in accordance with local regulations. Any questions in this respect should be directed primarily to the local Electrical Inspection Authority.

# Instrumentation Cable

## 300V, PVC Insulated, 105°C Unshielded Pairs or Triads with Overall Shield Shielded Pairs or Triads with Overall Shield Type PLTC – UL 13 – NEC ART 725 Type ITC – UL 2250 – NEC ART 727

### Applications

The 300V 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 ART 725 for Type PLTC cables and NEC ART 727 for Type ITC cables.

### Construction

**Conductor:** bare, annealed copper conforming to ASTM B-3 and Class B stranded in accordance to ASTM B-8.

**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.

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

**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

### Specifications

- Conductor rated 105°C 300V
- Meets UL requirements for Type PLTC and ITC
- Designated Type PLTC per NEC ART 725
- Designated Type ITC per NEC ART 727

### Product Features

- UL approved Type PLTC and ITC, 300V
- UL approved insulated conductors
- Cables pass UL 1685 and IEEE 383 vertical fire tests at 70,000 BTU/hr
- Temperature rating 105°C dry
- Sunlight and moisture resistant jacket
- For use within Class 1 Division 2 and Class 2 Division 2 Hazardous Locations, and Intrinsically Safe applications as permitted by NEC ART 392, 501, 502, 504 and 505.\*

- As indicated in UL 13 and 2250: The overall jackets of these cables are a “gas/vapour tight continuous sheath” as discussed in NEC Sections 501.5(D) and 501.5(E).\*
- For use under raised floors in control rooms when arranged in such a fashion as to prevent damage to the cables.
- In Class 2 and Class 3 Circuits, as defined in NEC ART 725 for Type PLTC cables.

### 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 corrugated aluminum armor and an outer PVC jacket.
- Interlocked aluminum armor with or without an outer PVC jacket.
- Direct Burial listed cable (when ordered as ITC/DB)
- Conductors with alternate color / identification codes
- Alternate jacket colors

\* Use in hazardous locations: Please note that no investigation of these cables has been performed regarding the transmission of gases or vapours through the core. When these cables are used in hazardous locations they should be sealed properly as required by the NEC.

# Instrumentation Cable

**300V, PVC Insulated, 105°C, Overall Shield**

**UL 13 – Type PLTC – NEC ART 725**

**UL 2250 – Type ITC – NEC ART 727**

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

Part Number	# of Pairs	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
669606	1	20(7w)	12	.30	37	.94	.212	5.38	27	40	25	11
————	2	20(7w)	12	.30	37	.94	.264	6.71	49	73	40	18
671206	4	20(7w)	12	.30	42	1.07	.353	8.97	74	110	74	34
671219	8	20(7w)	12	.30	52	1.32	.485	12.32	133	198	140	64
————	10	20(7w)	12	.30	52	1.32	.529	13.44	158	235	172	78
671180	12	20(7w)	12	.30	52	1.32	.570	14.48	182	271	205	93
671305	16	20(7w)	12	.30	62	1.57	.662	16.81	243	362	270	122
676494	20	20(7w)	12	.30	62	1.57	.726	18.44	291	433	336	152
671313	24	20(7w)	12	.30	62	1.57	.783	19.89	338	503	401	182
671339	36	20(7w)	12	.30	72	1.83	.951	24.16	495	737	598	271
671347	50	20(7w)	12	.30	72	1.83	1.095	27.81	658	979	828	376
669614	1	18(7w)	15	.38	37	.94	.230	5.84	34	51	39	18
669739	2	18(7w)	15	.38	42	1.07	.302	7.67	67	100	64	29
671123	4	18(7w)	15	.38	52	1.32	.413	10.49	105	156	116	53
669633	8	18(7w)	15	.38	52	1.32	.541	13.74	176	262	220	100
————	10	18(7w)	15	.38	52	1.32	.592	15.04	211	314	271	123
671115	12	18(7w)	15	.38	62	1.57	.659	16.74	257	382	323	147
676411	16	18(7w)	15	.38	62	1.57	.742	18.85	326	485	426	193
————	20	18(7w)	15	.38	62	1.57	.851	21.62	393	585	530	240
671107	24	18(7w)	15	.38	72	1.83	.901	22.89	476	708	633	287
671099	36	18(7w)	15	.38	72	1.83	1.071	27.20	675	1005	944	428
671065	50	18(7w)	15	.38	72	1.83	1.236	31.39	901	1341	1306	592
669580	1	16(7w)	15	.38	37	.94	.254	6.45	47	70	62	28
671156	2	16(7w)	15	.38	42	1.07	.339	8.61	91	135	103	47
671198	4	16(7w)	15	.38	52	1.32	.464	11.79	142	211	268	122
671164	8	16(7w)	15	.38	62	1.57	.633	16.08	256	381	350	159
————	10	16(7w)	15	.38	62	1.57	.693	17.60	307	457	433	196
671172	12	16(7w)	15	.38	62	1.57	.748	19.00	357	531	516	234
672220	16	16(7w)	15	.38	62	1.57	.844	21.44	454	676	681	309
————	20	16(7w)	15	.38	72	1.83	.949	24.10	570	848	846	384
671297	24	16(7w)	15	.38	72	1.83	1.026	26.06	667	993	1011	459
671131	36	16(7w)	15	.38	72	1.83	1.224	31.09	956	1423	1507	684
671149	50	16(7w)	15	.38	82	2.08	1.437	36.50	1314	1955	2085	946

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

**300V, PVC Insulated, 105°C, Overall Shield**

**UL 13 - Type PLTC - NEC ART 725**

**UL 2250 - Type ITC - NEC ART 727**

## Unshielded Triads with an Overall Shield (TOS), 300V

Part Number	# of Triads	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
669747	1	20(7w)	12	.30	37	.94	.222	5.64	33	49	33	15
———	2	20(7w)	12	.30	42	1.07	.357	9.07	70	104	57	26
———	4	20(7w)	12	.30	52	1.32	.433	11.00	107	159	106	48
———	8	20(7w)	12	.30	52	1.32	.556	14.12	181	269	204	93
———	10	20(7w)	12	.30	62	1.57	.670	17.02	233	347	254	115
———	12	20(7w)	12	.30	62	1.57	.690	17.53	266	396	303	137
———	16	20(7w)	12	.30	62	1.57	.765	19.43	336	500	401	182
———	20	20(7w)	12	.30	62	1.57	.849	21.56	406	604	500	227
———	24	20(7w)	12	.30	72	1.83	.963	24.46	496	738	598	271
———	36	20(7w)	12	.30	72	1.83	1.099	27.91	698	1039	893	405
———	50	20(7w)	12	.30	82	2.08	1.312	33.32	961	1430	1238	562
669622	1	18(7w)	15	.38	37	.94	.242	6.15	42	63	51	23
———	2	18(7w)	15	.38	52	1.32	.413	10.49	96	143	90	41
675256	4	18(7w)	15	.38	52	1.32	.476	12.09	141	210	168	76
675215	8	18(7w)	15	.38	62	1.57	.635	16.13	254	378	323	147
———	10	18(7w)	15	.38	62	1.57	.741	18.82	311	463	401	182
———	12	18(7w)	15	.38	62	1.57	.764	19.41	358	533	478	217
———	16	18(7w)	15	.38	62	1.57	.849	21.56	454	676	633	287
———	20	18(7w)	15	.38	72	1.83	.963	24.46	571	850	789	358
———	24	18(7w)	15	.38	72	1.83	1.070	27.18	674	1003	944	428
———	36	18(7w)	15	.38	72	1.83	1.224	31.09	958	1426	1410	640
———	50	18(7w)	15	.38	82	2.08	1.462	37.13	1321	1966	1953	886
669598	1	16(7w)	15	.38	37	.94	.267	6.78	58	86	82	37
———	2	16(7w)	15	.38	52	1.32	.460	11.68	126	188	144	65
687907	4	16(7w)	15	.38	52	1.32	.533	13.54	192	286	268	122
671321	8	16(7w)	15	.38	62	1.57	.713	18.11	352	524	516	234
———	10	16(7w)	15	.38	62	1.57	.836	21.23	432	643	639	290
———	12	16(7w)	15	.38	62	1.57	.863	21.92	500	744	763	346
688093	16	16(7w)	15	.38	72	1.83	.981	24.92	661	984	1011	459
———	20	16(7w)	15	.38	72	1.83	1.089	27.66	807	1201	1259	571
———	24	16(7w)	15	.38	72	1.83	1.212	30.78	954	1420	1507	684
———	36	16(7w)	15	.38	82	2.08	1.410	35.81	1396	2077	2250	1021
———	50	16(7w)	15	.38	92	2.34	1.681	42.70	1923	2862	3117	1414

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

**300V, PVC Insulated, 105°C, Individual and Overall Shield  
UL 13 - Type PLTC - NEC ART 725  
UL 2250 - Type ITC - NEC ART 727**

## Shielded Pairs with an Overall Shield (SPOS), 300V

Part Number	# of Pairs	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
669705	2	20(7w)	12	.30	42	1.07	.349	8.86	66	98	52	24
669820	4	20(7w)	12	.30	52	1.32	.423	10.74	101	150	96	44
669697	8	20(7w)	12	.30	52	1.32	.543	13.79	170	253	184	83
————	10	20(7w)	12	.30	62	1.57	.654	16.61	220	327	228	103
671263	12	20(7w)	12	.30	62	1.57	.674	17.12	250	372	272	123
671362	16	20(7w)	12	.30	62	1.57	.747	18.97	316	470	360	163
————	20	20(7w)	12	.30	62	1.57	.827	21.01	382	568	448	203
671370	24	20(7w)	12	.30	72	1.83	.939	23.85	466	693	536	243
671388	36	20(7w)	12	.30	72	1.83	1.071	27.20	655	975	800	363
671396	50	20(7w)	12	.30	82	2.08	1.278	32.46	902	1342	1108	503
669671	2	18(7w)	15	.38	52	1.32	.382	9.70	84	125	81	37
669689	4	18(7w)	15	.38	52	1.32	.443	11.25	121	180	149	68
669721	8	18(7w)	15	.38	62	1.57	.577	14.66	211	314	285	129
————	10	18(7w)	15	.38	62	1.57	.720	18.29	285	424	353	160
669713	12	18(7w)	15	.38	62	1.57	.743	18.87	327	487	421	191
671404	16	18(7w)	15	.38	62	1.57	.824	20.93	415	618	558	253
————	20	18(7w)	15	.38	72	1.83	.935	23.75	521	775	694	315
671412	24	18(7w)	15	.38	72	1.83	1.038	26.37	614	914	830	376
671420	36	18(7w)	15	.38	72	1.83	1.187	30.15	870	1295	1239	562
671081	50	18(7w)	15	.38	82	2.08	1.417	35.99	1201	1787	1716	778
671222	2	16(7w)	15	.38	52	1.32	.446	11.33	120	179	129	59
671230	4	16(7w)	15	.38	52	1.32	.516	13.11	174	259	237	108
671248	8	16(7w)	15	.38	62	1.57	.690	17.53	317	472	454	206
————	10	16(7w)	15	.38	62	1.57	.808	20.52	388	577	537	244
671255	12	16(7w)	15	.38	62	1.57	.834	21.18	449	668	671	304
671438	16	16(7w)	15	.38	72	1.83	.948	24.08	592	881	888	403
————	20	16(7w)	15	.38	72	1.83	1.053	26.75	721	1073	1105	501
671446	24	16(7w)	15	.38	72	1.83	1.171	29.74	852	1268	1322	600
671453	36	16(7w)	15	.38	82	2.08	1.362	34.59	1245	1853	1972	894
671487	50	16(7w)	15	.38	82	2.08	1.603	40.72	1684	2506	2731	1239

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

**300V, PVC Insulated, 105°C, Individual and Overall Shield**  
**UL 13 - Type PLTC - NEC ART 725**  
**UL 2250 - Type ITC - NEC ART 727**

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

Part Number	# of Triads	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
_____	2	20(7w)	12	.30	42	1.07	.357	9.07	77	115	68	31
693770	4	20(7w)	12	.30	52	1.32	.433	11.00	122	182	128	58
693788	8	20(7w)	12	.30	52	1.32	.556	14.12	212	315	249	113
_____	10	20(7w)	12	.30	62	1.57	.670	17.02	272	405	310	141
693796	12	20(7w)	12	.30	62	1.57	.690	17.53	313	466	370	168
693804	16	20(7w)	12	.30	62	1.57	.765	19.43	399	594	491	223
_____	20	20(7w)	12	.30	62	1.57	.849	21.56	485	722	612	278
_____	24	20(7w)	12	.30	72	1.83	.963	24.46	591	880	732	332
_____	36	20(7w)	12	.30	72	1.83	1.099	27.91	841	1252	1095	497
_____	50	20(7w)	12	.30	82	2.08	1.275	32.39	1155	1719	1518	689
_____	2	18(7w)	15	.38	52	1.32	.431	10.95	108	161	106	48
669495	4	18(7w)	15	.38	52	1.32	.476	12.09	160	238	200	91
676403	8	18(7w)	15	.38	62	1.57	.635	16.13	293	436	389	176
_____	10	18(7w)	15	.38	62	1.57	.741	18.82	360	536	483	219
671054	12	18(7w)	15	.38	62	1.57	.764	19.41	416	619	577	262
_____	16	18(7w)	15	.38	62	1.57	.849	21.56	533	793	765	347
_____	20	18(7w)	15	.38	72	1.83	.963	24.46	671	999	953	432
671040	24	18(7w)	15	.38	72	1.83	1.070	27.18	793	1180	1141	518
669929	36	18(7w)	15	.38	72	1.83	1.224	31.09	1137	1692	1705	773
_____	50	18(7w)	15	.38	82	2.08	1.420	36.07	1565	2329	2363	1072
_____	2	16(7w)	15	.38	52	1.32	.460	11.68	146	217	170	77
671271	4	16(7w)	15	.38	52	1.32	.533	13.53	221	329	320	145
671693	8	16(7w)	15	.38	62	1.57	.713	18.11	410	610	619	281
_____	10	16(7w)	15	.38	62	1.57	.836	21.23	504	750	769	349
672063	12	16(7w)	15	.38	62	1.57	.863	21.92	587	874	919	417
_____	16	16(7w)	15	.38	72	1.83	.981	24.92	777	1156	1218	552
_____	20	16(7w)	15	.38	72	1.83	1.089	27.66	953	1418	1518	689
631846	24	16(7w)	15	.38	72	1.83	1.212	30.78	1130	1682	1817	824
_____	36	16(7w)	15	.38	82	2.08	1.410	35.81	1660	2470	2715	1232
_____	50	16(7w)	15	.38	82	2.08	1.613	40.97	2252	3351	3764	1707

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

## 600V, PVC/Nylon Insulated, 90°C Unshielded Pairs or Triads with Overall Shield Shielded Pairs or Triads with Overall Shield Type TC – UL 1277 – NEC ART 336

### Applications

The 600V Instrumentation Cables are listed as Type TC per UL 1277. These cables are suitable for installations as outlined in NEC ART 336.

### Construction

**Conductor:** bare, annealed copper conforming to ASTM B-3 and Class B stranded in accordance to ASTM B-8.

**Insulation:** PVC/Nylon Type TFN in accordance with UL 62, flame retardant, 90°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.

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

**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

### Specifications

- Meets UL 62, TFN rated 90°C 600V conductors
- Meets UL requirements for Type TC
- Designated Type TC per NEC ART 336

### Product Features

- UL approved Type TC, 600V
- UL approved insulated conductors
- Cables pass UL 1685 and IEEE 383 vertical fire tests at 70,000 BTU/hr
- Temperature rating 90°C dry, 75°C wet
- Sunlight and moisture resistant jacket
- For use within Class 1 Division 2 and Class 2 Division 2 Hazardous Locations, and Intrinsically Safe applications as permitted by NEC ART 392, 501, 502, 504 and 505.\*
- As indicated in UL 1277: The overall jackets of these cables are a “gas/vapour tight continuous sheath” as discussed in NEC Sections 501.5(D) and 501.5(E).\*

- Cables are rated for Direct Burial applications
- For use in cable trays, raceways, conduit or for aerial applications where installed with a messenger
- Cables may be used in Class 1 Circuits, as defined in NEC Section 336.10 and ART 725 for Type TC cables
- Cables may also be used as permitted for nonpower-limited fire alarm circuits as defined in NEC Sections 336.10 and 760.27
- The Nylon jacket over the PVC insulation provides excellent oil and gasoline protection

### 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 corrugated aluminum armor and an outer PVC jacket.
- Interlocked aluminum armor with or without an additional outer PVC jacket
- Conductors with alternate color/identification codes
- Alternate jacket colors

\* Use in hazardous locations: Please note that no investigation of these cables has been performed regarding the transmission of gases or vapours through the core. When these cables are used in hazardous locations they should be sealed properly as required by the NEC.



# Instrumentation Cable

**600V, PVC/Nylon Insulated, 90°C  
Overall Shield  
UL 1277 – Type TC – NEC ART 336**

## Unshielded Pairs with an Overall Shield (POS), 600V

Part Number	# of Pairs	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
669101	1	18(7w)	15/4	.38/.10	47	1.19	.270	6.86	42	63	39	18
631275	2	18(7w)	15/4	.38/.10	47	1.19	.340	8.64	77	115	64	29
631283	4	18(7w)	15/4	.38/.10	47	1.19	.442	11.23	114	170	116	53
697490	6	18(7w)	15/4	.38/.10	62	1.57	.557	14.15	162	241	170	77
627489	8	18(7w)	15/4	.38/.10	62	1.57	.617	15.67	208	310	220	100
627208	10	18(7w)	15/4	.38/.10	62	1.57	.675	17.15	248	369	271	123
697672	12	18(7w)	15/4	.38/.10	62	1.57	.728	18.49	286	426	323	147
627208	16	18(7w)	15/4	.38/.10	62	1.57	.821	20.85	361	537	426	193
————	20	18(7w)	15/4	.38/.10	82	2.08	.943	23.95	469	698	530	240
697276	24	18(7w)	15/4	.38/.10	82	2.08	1.018	25.86	544	810	633	287
627190	36	18(7w)	15/4	.38/.10	82	2.08	1.209	30.71	765	1138	944	428
631291	50	18(7w)	15/4	.38/.10	82	2.08	1.396	35.46	1017	1513	1306	592
697391	1	16(7w)	15/4	.38/.10	47	1.19	.294	7.47	55	82	62	28
631242	2	16(7w)	15/4	.38/.10	47	1.19	.377	9.58	103	153	103	47
631440	4	16(7w)	15/4	.38/.10	47	1.19	.494	12.55	152	226	268	122
631457	8	16(7w)	15/4	.38/.10	62	1.57	.690	17.53	279	415	350	159
————	10	16(7w)	15/4	.38/.10	62	1.57	.756	19.20	334	497	433	196
631259	12	16(7w)	15/4	.38/.10	62	1.57	.817	20.75	388	577	516	234
697474	16	16(7w)	15/4	.38/.10	82	2.08	.964	24.49	528	786	681	309
669408	20	16(7w)	15/4	.38/.10	82	2.08	1.058	26.87	636	946	846	384
697482	24	16(7w)	15/4	.38/.10	82	2.08	1.144	29.06	745	1109	1011	459
627216	36	16(7w)	15/4	.38/.10	82	2.08	1.354	34.39	1057	1573	1507	684
631267	50	16(7w)	15/4	.38/.10	82	2.08	1.578	40.08	1417	2109	2085	946

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

**600V, PVC/Nylon Insulated, 90°C  
Overall Shield  
UL 1277 – Type TC – NEC ART 336**

## Unshielded Triads with an Overall Shield (TOS), 600V

Part Number	# of Triads	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
669119	1	18(7w)	15/4	.38/.10	47	1.19	.283	7.19	51	76	51	23
————	2	18(7w)	15/4	.38/.10	47	1.19	.442	11.23	90	134	90	41
————	4	18(7w)	15/4	.38/.10	47	1.19	.513	13.03	153	228	168	76
————	8	18(7w)	15/4	.38/.10	62	1.57	.700	17.78	282	420	323	147
————	10	18(7w)	15/4	.38/.10	62	1.57	.820	20.83	345	513	401	182
————	12	18(7w)	15/4	.38/.10	82	2.08	.886	22.50	427	635	478	217
————	16	18(7w)	15/4	.38/.10	82	2.08	.982	24.94	538	801	633	287
————	20	18(7w)	15/4	.38/.10	82	2.08	1.088	27.64	651	969	789	358
676676	24	18(7w)	15/4	.38/.10	82	2.08	1.208	30.68	765	1138	944	428
————	36	18(7w)	15/4	.38/.10	82	2.08	1.382	35.10	1080	1607	1410	640
————	50	18(7w)	15/4	.38/.10	82	2.08	1.628	41.35	1451	2159	1953	886
697888	1	16(7w)	15/4	.38/.10	47	1.19	.309	7.85	68	101	82	37
————	2	16(7w)	15/4	.38/.10	47	1.19	.490	12.45	120	179	144	65
————	4	16(7w)	15/4	.38/.10	62	1.57	.601	15.27	222	330	268	122
————	8	16(7w)	15/4	.38/.10	62	1.57	.779	19.79	383	570	516	234
————	10	16(7w)	15/4	.38/.10	82	2.08	.955	24.26	503	749	639	290
————	12	16(7w)	15/4	.38/.10	82	2.08	.985	25.02	578	860	763	346
————	16	16(7w)	15/4	.38/.10	82	2.08	1.094	27.79	735	1094	1011	459
————	20	16(7w)	15/4	.38/.10	82	2.08	1.214	30.84	893	1329	1259	571
————	24	16(7w)	15/4	.38/.10	82	2.08	1.351	34.32	1055	1570	1509	684
687228	36	16(7w)	15/4	.38/.10	82	2.08	1.549	39.34	1505	2240	2250	1021
————	50	16(7w)	15/4	.38/.10	112	2.84	1.887	47.93	2142	3188	3117	1414

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

## 600V, PVC/Nylon Insulated, 90°C Individual and Overall Shield UL 1277 – Type TC – NEC ART 336

### Shielded Pairs with an Overall Shield (SPOS), 600V

Part Number	# of Pairs	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
631358	2	18(7w)	15/4	.38/.10	47	1.19	.429	10.90	96	143	81	37
631366	4	18(7w)	15/4	.38/.10	47	1.19	.498	12.65	139	207	149	68
631374	8	18(7w)	15/4	.38/.10	62	1.57	.678	17.22	257	382	285	129
————	10	18(7w)	15/4	.38/.10	62	1.57	.794	20.17	314	467	353	160
631382	12	18(7w)	15/4	.38/.10	62	1.57	.819	20.80	359	534	421	191
697532	16	18(7w)	15/4	.38/.10	82	2.08	.951	24.16	490	729	558	253
671735	20	18(7w)	15/4	.38/.10	82	2.08	1.053	26.75	592	881	694	315
697540	24	18(7w)	15/4	.38/.10	82	2.08	1.169	29.69	695	1034	830	376
697557	36	18(7w)	15/4	.38/.10	82	2.08	1.336	33.93	987	1469	1239	562
627919	50	18(7w)	15/4	.38/.10	82	2.08	1.572	39.93	1314	1955	1716	778
631309	2	16(7w)	15/4	.38/.10	47	1.19	.480	12.19	127	189	129	59
631317	3	16(7w)	15/4	.38/.10	47	1.19	.514	13.06	145	216	183	83
631325	4	16(7w)	15/4	.38/.10	62	1.57	.590	14.99	201	299	237	108
631333	6	16(7w)	15/4	.38/.10	62	1.57	.694	17.63	270	402	350	159
631341	8	16(7w)	15/4	.38/.10	62	1.57	.763	19.38	344	512	454	206
————	10	16(7w)	15/4	.38/.10	82	2.08	.937	23.80	455	677	537	244
697508	12	16(7w)	15/4	.38/.10	82	2.08	.966	24.54	521	775	671	304
697516	16	16(7w)	15/4	.38/.10	82	2.08	1.072	27.23	660	982	888	403
680405	20	16(7w)	15/4	.38/.10	82	2.08	1.190	30.23	801	1192	1105	501
697524	24	16(7w)	15/4	.38/.10	82	2.08	1.323	33.60	944	1405	1322	600
680413	36	16(7w)	15/4	.38/.10	92	2.34	1.536	39.01	1370	2039	1972	894
693564	50	16(7w)	15/4	.38/.10	112	2.84	1.849	46.96	1914	2848	2731	1239

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

## 600V, PVC/Nylon Insulated, 90°C Individual and Overall Shield UL 1277 – Type TC – NEC ART 336

### Shielded Triads with an Overall Shield (STOS), 600V

Part Number	# of Triads	Cond. Size	Insulation Thickness		Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Pulling Tension	
			AWG	mils	mm	mils	mm	inches	mm	lb/kft	kg/km	lb
689547	2	18(7w)	15/4	.38/.10	47	1.19	.453	11.51	117	170	106	48
631408	4	18(7w)	15/4	.38/.10	62	1.57	.557	14.15	190	283	200	91
631416	8	18(7w)	15/4	.38/.10	62	1.57	.718	18.24	327	487	389	176
————	10	18(7w)	15/4	.38/.10	82	2.08	.882	22.40	432	643	483	219
697565	12	18(7w)	15/4	.38/.10	82	2.08	.909	23.09	495	737	577	262
————	16	18(7w)	15/4	.38/.10	82	2.08	1.008	25.60	628	935	765	347
————	20	18(7w)	15/4	.38/.10	82	2.08	1.118	28.40	762	1134	953	432
631424	24	18(7w)	15/4	.38/.10	82	2.08	1.242	31.55	899	1338	1141	518
697565	36	18(7w)	15/4	.38/.10	82	2.08	1.421	36.09	1279	1903	1705	773
————	50	18(7w)	15/4	.38/.10	112	2.84	1.734	44.04	1826	2717	2363	1072
————	2	16(7w)	15/4	.38/.10	47	1.19	.509	12.93	156	232	170	77
631390	4	16(7w)	15/4	.38/.10	62	1.57	.624	15.85	253	377	320	145
627133	8	16(7w)	15/4	.38/.10	62	1.57	.810	20.57	444	661	619	281
————	10	16(7w)	15/4	.38/.10	82	2.08	.993	25.22	581	865	769	349
627141	12	16(7w)	15/4	.38/.10	82	2.08	1.024	26.01	671	999	919	417
688648	16	16(7w)	15/4	.38/.10	82	2.08	1.138	28.91	858	1277	1218	552
————	20	16(7w)	15/4	.38/.10	82	2.08	1.265	32.13	1046	1557	1518	689
683029	24	16(7w)	15/4	.38/.10	82	2.08	1.408	35.76	1238	1842	1817	824
————	36	16(7w)	15/4	.38/.10	82	2.08	1.615	41.02	1777	2644	2715	1232
————	50	16(7w)	15/4	.38/.10	112	2.84	1.967	49.96	2523	3755	3764	1707

**Note:** Specifications and weights shown are nominal and subject to standard industry tolerances.

# Instrumentation Cable

## Electrical Properties

### 300V – Unshielded Pairs/Triads with an Overall Cable Shield

Conductor Size (AWG)	DC Resistance (ohms/kft @ 20°C)	Capacitance			
		Pairs		Triads	
		Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)	Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)
20	10.50	48	95	51	102
18	6.64	49	98	52	104
16	4.18	53	107	56	112

### 300V – Shielded Pairs/Triads with an Overall Cable Shield

Conductor Size (AWG)	DC Resistance (ohms/kft @ 20°C)	Capacitance			
		Pairs		Triads	
		Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)	Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)
20	10.50	58	115	61	122
18	6.64	61	122	64	125
16	4.18	72	143	76	147

### 600V – Unshielded Pairs/Triads with an Overall Cable Shield

Conductor Size (AWG)	DC Resistance (ohms/kft @ 20°C)	Capacitance			
		Pairs		Triads	
		Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)	Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)
18	6.64	39	79	42	103
16	4.18	47	94	50	100

### 600V – Shielded Pairs/Triads with an Overall Cable Shield

Conductor Size (AWG)	DC Resistance (ohms/kft @ 20°C)	Capacitance			
		Pairs		Triads	
		Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)	Conductor- Conductor (pf/ft)	Conductor- Shield (pf/ft)
18	6.64	74	148	78	156
16	4.18	86	172	90	180

# Instrumentation Cable

## Belden Cross-Reference by Part Number

Belden Part Number	Nexans Part Number	Description		Belden Part Number	Nexans Part Number	Description
1030A	669580	1pr 16AWG OS 300V		1466A	671123	4pr 18AWG OS 300V
1031A	669598	1tr 16AWG OS 300V		1467A	669633	8pr 18AWG OS 300V
1032A	669614	1pr 18AWG OS 300V		1468A	671115	12pr 18AWG OS 300V
1033A	669606	1pr 20AWG OS 300V		1471A	671107	24pr 18AWG OS 300V
1034A		1tr 16AWG NS 300V		1472A	671099	36pr 18AWG OS 300V
1035A	669937	1pr 16AWG NS 300V		1474A	669671	2pr 18AWG SPOS 300V
1036A	669622	1tr 18AWG OS 300V		1475A	669689	4pr 18AWG SPOS 300V
1037A	631317	3pr 16AWG SPOS 600V		1476A	669721	8pr 18AWG SPOS 300V
1038A	627919	50pr 18AWG SPOS 600V		1477A	669713	12pr 18AWG SPOS 300V
1039A	631325	4pr 16AWG SPOS 600V		1480A	671412	24pr 18AWG SPOS 300V
1040A	631333	6pr 16AWG SPOS 600V		1481A	671420	36pr 18AWG SPOS 300V
1041A	631341	8pr 16AWG SPOS 600V		1484A	671198	4pr 16AWG OS 300V
1042A	697508	12pr 16AWG SPOS 600V		1485A	671164	8pr 16AWG OS 300V
1043A	697516	16pr 16AWG SPOS 600V		1486A	671172	12pr 16AWG OS 300V
1044A	680405	20pr 16AWG SPOS 600V		1489A	671297	24pr 16AWG OS 300V
1045A	697524	24pr 16AWG SPOS 600V		1490A	671131	36pr 16AWG OS 300V
1046A	680413	36pr 16AWG SPOS 600V		1492A	671222	2pr 16AWG SPOS 300V
1047A	693564	50pr 16AWG SPOS 600V		1493A	671230	4pr 16AWG SPOS 300V
1048A	631358	2pr 18AWG SPOS 600V		1494A	671248	8pr 16AWG SPOS 300V
1049A	631366	4pr 18AWG SPOS 600V		1495A	671255	12pr 16AWG SPOS 300V
1050A	631374	8pr 18AWG SPOS 600V		1498A	671446	24pr 16AWG SPOS 300V
1051A	631382	12pr 18AWG SPOS 600V		1499A	671453	36pr 16AWG SPOS 300V
1052A	697532	16pr 18AWG SPOS 600V		3025A	669739	2pr 18AWG OS 300V
1053A	697540	24pr 18AWG SPOS 600V		3030A	675256	4tr 18AWG OS 300V
1054A	697557	36pr 18AWG SPOS 600V		3031A		4tr 18AWG STOS 300V
1055A	631309	2pr 16AWG SPOS 600V		3032A	675215	8tr 18AWG OS 300V
1056A	671206	4pr 20AWG OS 300V		3033A	676403	8tr 18AWGST OS 300V
1057A	671219	8pr 20AWG OS 300V		3034A	676411	16pr 18AWG OS 300V
1058A	671180	12pr 20AWG OS 300V		3035A	671404	16pr 18AWG SPOS 300V
1059A	671305	16pr 20AWG OS 300V		3036A		16tr 18AWG OS 300V
1060A	671313	24pr 20AWG OS 300V		3037A		16tr 18AWG STOS 300V
1061A	671339	36pr 20AWG OS 300V		3038A		24tr 18AWG OS 300V
1062A	671347	50pr 20AWG OS 300V		3039A	671040	24tr 18AWG STOS 300V
1063A	631275	2pr 18AWG OS 600V		3041 A	671065	50pr 18AWG OS 300V
1064A	631283	4pr 18AWG OS 600V		3042A	671081	50pr 18AWG SPOS 300V
1065A	627489	8pr 18AWG OS 600V		3043A	671156	2pr 16AWG OS 300V
1066A	697672	12pr 18AWG OS 600V		3044A		2tr 16AWG OS 300V
1067A	627208	16pr 18AWG OS 600V		3045A		2tr 16AWG STOS 300V
1068A	697276	24pr 18AWG OS 600V		3046A		4tr 16AWG OS 300V
1069A	631242	2pr 16AWG OS 600V		3047A	671271	4tr 16AWG STOS 300V
1070A	631440	4pr 16AWG OS 600V		3048A	671321	8tr 16AWG OS 300V
1071A	631457	8pr 16AWG OS 600V		3049A	671693	8tr 16AWG STOS 300V
1072A	631259	12pr 16AWG OS 600V		3050A	671289	16pr 16AWG OS 300V
1073A	697474	16pr 16AWG OS 600V		3051A	671438	16pr 16AWG SPOS 300V
1074A	697482	24pr 16AWG OS 600V		3052A		16tr 16AWG OS 300V
1075A	669705	2pr 20AWG SPOS 300V		3053A		16tr 16AWG STOS 300V
1076A	669820	4pr 20AWG SPOS 300V		3054A		24tr 16AWG OS 300V
1077A	669697	8pr 20AWG SPOS 300V		3055A		24tr 16AWG STOS 300V

# Instrumentation Cable

## Belden Cross-Reference by Part Number *(continued)*

Belden Part Number	Nexans Part Number	Description		Belden Part Number	Nexans Part Number	Description
1078A	671263	12pr 20AWG SPOS 300V		3056A	671149	50pr 16AWG OS 300V
1079A	671362	16pr 20AWG SPOS 300V		3057A	671487	50pr 16AWG SPOS 300V
1080A	671370	24pr 20AWG SPOS 300V		3064A		2tr 18AWG STOS 600V
1081A	671388	36pr 20AWG SPOS 300V		3066A		16tr 18AWG STOS 600V
1082A	671396	50pr 20AWG SPOS 300V		3068A	671054	12tr 18AWG STOS 300V
1083A		4tr 20AWG STOS 300V		3069A	672063	12tr 16AWG STOS 300V
1084A		8tr 20AWG STOS 300V		3080A	669226	1pr 14AWG OS 600V
1085A		12tr 20AWG STOS 300V		3081A	669085	1tr 14AWG OS 600V
1086A		24tr 20AWG STOS 300V		3088A	669101	1pr 18AWG OS 600V
1087A	627190	36pr 18AWG OS 600V		3089A	669119	1tr 18AWG OS 600V
1088A	631291	50pr 18AWG OS 600V		3090A	697391	1pr 16AWG OS 600V
1089A	627216	36pr 16AWG OS 600V		3091A	697888	1tr 16AWG OS 600V
1090A	631267	50pr 16AWG OS 600V				
1091A		20pr 20AWG SPOS 300V				
1092A		16tr 20AWG STOS 300V				
1093A	631408	4tr 18AWG STOS 600V				
1094A	631416	8tr 18AWG STOS 600V				
1095A	697565	12tr 18AWG STOS 600V				
1096A		24tr 18AWG STOS 600V				
1097A	631390	4tr 16AWG STOS 600V				
1098A	627133	8tr 16AWG STOS 600V				
1099A	627141	12tr 16AWG STOS 600V				
1100A		24tr 16AWG STOS 600V				

The cross-reference to Belden part numbers are provided for informational purposes only, and Nexans makes no representation or warranty, either express or implied, as to the accuracy of any such cross-reference. Belden is not in any way associated with Nexans. Belden is a registered trademark of Belden Wire & Cable Company.

# Instrumentation Cable

## Belden Cross-Reference by Description

Description	300 Volt - OS Overall Shield		600 Volt - OS Overall Shield		300 Volt - SPOS Shielded Pairs/Triads Overall Shield		600 Volt - SPOS Shielded Pairs/Triads Overall Shield	
	Belden Part Number	Nexans Part Number	Belden Part Number	Nexans Part Number	Belden Part Number	Nexans Part Number	Belden Part Number	Nexans Part Number
1pr 20AWG	1033A	669606						
1tr 20AWG	1526A	669747						
2pr 20AWG					1075A	669705		
4pr 20AWG	1056A	671206			1076A	669820		
4tr 20AWG					1083A			
8pr 20AWG	1057A	671219			1077A	669697		
12pr 20AWG	1058A	671180			1078A	671263		
8tr 20AWG					1084A			
16pr 20AWG	1059A	671305			1079A	671362		
12tr 20AWG					1085A			
20pr 20AWG					1091A			
24pr 20AWG	1060A	671313			1080A	671370		
16tr 20AWG					1092A			
36pr 20AWG	1061A	671339			1081A	671388		
24tr 20AWG					1086A			
50pr 20AWG	1062A	671347			1082A	671396		
1pr 18AWG	1032A	669614	3088A	669101				
1tr 18AWG	1036A	669622	3089A	669119				
2pr 18AWG	3025A	669739	1063A	631275	1474A	669671	1048A	631358
2tr 18AWG							3064A	
4pr 18AWG	1466A	671123	1064A	631283	1475A	669689	1049A	631366
6pr 18AWG		675264		697490				687780
4tr 18AWG	3030A	675256			3031A		1093A	631408
8pr 18AWG	1467A	669633	1065A	627489	1476A	669721	1050A	631374
12pr 18AWG	1468A	671115	1066A	697672	1477A	669713	1051A	631382
8tr 18AWG	3032A	675215			3033A	676403	1094A	631416
16pr 18AWG	3034A	676411	1067A	627208	3035A	671404	1052A	697532
12tr 18AWG					3068A	671504	1095A	697565
24pr 18AWG	1471A	671107	1068A	697276	1480A	671412	1053A	697540
16tr 18AWG	3036A				3037A		3066A	
36pr 18AWG	1472A	671099	1087A	627190	1481A	671420	1054A	697557
24tr 18AWG	3038A				3039A	671040	1096A	
50pr 18AWG	3041 A	671065	1088A	631291	3042A	671081	1038A	627919



# Instrumentation Cable

## Belden Cross-Reference by Description *(continued)*

Description	300 Volt - OS Overall Shield		600 Volt - OS Overall Shield		300 Volt - SPOS Shielded Pairs/Triads Overall Shield		600 Volt - SPOS Shielded Pairs/Triads Overall Shield	
	Belden Part Number	Nexans Part Number	Belden Part Number	Nexans Part Number	Belden Part Number	Nexans Part Number	Belden Part Number	Nexans Part Number
1pr 16AWGNS	1035A	669937						
1pr 16AWG	1030A	669580	3090A	697391				
1tr 16AWG NS	1034A							
1tr 16AWG	1031A	669598	3091A	697888				
2pr 16AWG	3043A	671156	1069A	631242	1492A	671222	1055A	631309
3pr 16AWG							1037A	631317
2tr 16AWG	3044A				3045A			
4pr 16AWG	1484A	671198	1070A	631440	1493A	671230	1039A	631325
6pr 16AWG						669754	1040A	631333
4tr 16AWG	3046A				3047A	671271	1097A	631390
8pr 16AWG	1485A	671164	1071A	631457	1494A	671248	1041A	631341
12pr 16AWG	1486A	671172	1072A	631259	1495A	671255	1042A	697508
8tr 16AWG	3048A	671321			3049A	671693	1098A	627133
16pr 16AWG	3050A	671289	1073A	697474	3051A	671438	1043A	697516
12tr 16AWG					3069A	672063	1099A	627141
20pr 16AWG							1044A	
24pr 16AWG	1489A	671297	1074A	697482	1498A	671446	1045A	697524
16tr 16AWG	3052A				3053A			
36pr 16AWG	1490A	671131	1089A	627216	1499A	671453	1046A	680413
24tr 16AWG	3054A				3055A		1100A	
50pr 16AWG	3056A	671149	1090A	631267	3057A	671487	1047A	
1pr 14AWG			3080A	669226				
1tr 14AWG			3081A	669085				

The cross-reference to Belden part numbers are provided for informational purposes only, and Nexans makes no representation or warranty, either express or implied, as to the accuracy of any such cross-reference. Belden is not in any way associated with Nexans. Belden is a registered trademark of Belden Wire & Cable Company.

# Instrumentation Cable

## Product Data

		<i>Test Method</i>	<i>Insulation</i>	<i>Jacket</i>
Temperature Rating		UL 2250 and UL Subject 13	105°C	90°C
Physicals	Original Elongation	UL 2250 and UL Subject 13	100%	100%
	Original Tensile Strength Air Oven Aging	UL 2250 and UL Subject 13	1500 psi	1500 psi
	Elongation (% retention minimum)	UL 2250 and UL Subject 13	70%	70%
	Tensile Strength (% retention minimum)	UL 2250 and UL Subject 13	65%	45%
Flame	Horizontal	UL 2250 and UL Subject 13	pass	
	Vertical	UL 2250 and UL Subject 13	pass	pass
	Cable Tray (70,000 BTU – UL 1685)	UL 2250 and UL Subject 13		pass
Limiting Oxygen Index		ASTM D 2863	28	27
Cold Bend (temperature –25°C)		UL 2250 and UL Subject 13	no cracks	no cracks
Deformation		UL 2250 and UL Subject 13	pass	pass
Insulation Resistance Constant (minimum at 15.6°C)		UL 2250 and UL Subject 13	3000	

## Copper Data

AWG	Stranding	Diameter		AWG	Stranding	Diameter	
		<i>inches</i>	<i>mm</i>			<i>inches</i>	<i>mm</i>
22	Solid	.0254	.645	22	7 × .0100"	.0300	.762
20	Solid	.0320	.813	20	7 × .0121"	.0360	.914
19	Solid	.0359	.912	19	7 × .0142"	.0430	1.092
18	Solid	.0403	1.024	18	7 × .0152"	.0456	1.158
16	Solid	.0508	1.290	16	7 × .0192"	.0576	1.463
14	Solid	.0640	1.626	14	7 × .0242"	.0726	1.844
12	Solid	.0808	2.052	12	7 × .0305"	.0915	2.324

**WARNING****FLAMMABLE**

Non-metallic covering of electrical cables will burn and under certain conditions may transmit fire when ignited.

**TOXIC**

Burning non-metallic coverings may emit acid gases, which are highly toxic, and may generate dense smoke.

**CORROSIVE**

Emission of acid gases may corrode metal in the vicinity, such as sensitive instruments and reinforcing rod in concrete.

**NOTICE**

Nexans has endeavoured to ensure the accuracy of the data in this publication, however we cannot be liable for the consequences of errors or omissions. All data is subject to change without notice. The installer and/or user assumes all liability for the consequences of the installation and/or use of any of our products in contravention of any applicable law, regulation or code.