

Residential/Commercial/Industrial Phone: 905-944-4300 buildingwire.canada@nexans.com

### FIREX®-II TECK90 (XLPE) 600 V

FIREX®-II TECK90 14 AWG (XLPE) 600 V

Nexans ref.: 14 AWG

Nexans FIREX®-II TECK90 Cables are intended for use in various primary and secondary industries, including chemical processing plants, refineries and general factory environments.

#### Description

Even in the most demanding industrial and resource industry applications, Nexans FIREX®-II TECK90 cables have proven to have a superior service and maintenance record.

FIREX®-II TECK90 Cables utilize low acid gas, low flame spread PVC jacket compounds to ensure maximum safety to personnel and equipment in the event of fire.

#### **Applications**

FIREX®-II TECK90 Cables, originally developed for use in Canadian mines, are flexible, resistant to mechanical abuse, corrosion resistant, compact and reliable. They are suitable for a wide range of applications, including ALL hazardous locations.

Industries such as pulp and paper, chemical, petroleum and other primary and secondary manufacturing industries have used FIREX®-II TECK90 Cables, particularly in areas where cables are subject to the risk of mechanical damage and chemical attack.

Commercial applications for FIREX®-II TECK90 Cables include apartment buildings and commercial complexes.

FIREX®-II TECK90 Cables can be relocated easily because they are rugged and flexible. They can be used in both dry and wet locations in open wiring, in ventilated, non-ventilated and ladder-type cable troughs, in ventilated flexible cableways, and for direct burial.

TECK90 Cables are also suitable for service entrance installations - above and below ground.

#### **Highlights**

Nexans FIREX®-II TECK90 Cables are:

- Available from stock
- Versatile
- Flexible
- Resistant to Mechanical Abuse and Corrosion
- · Compact and Reliable
- "HL" and "FT4" Rated per CSA
- 90°C to -40°C
- Low Acid Gas (AG14)
- Inner and outer jackets are sunlight resistant
- LEAD FREE
- RoHS compliant

#### Standards

**National** CSA C22.2 N° 131; CSA C22.2 N° 239



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#### **Marking and Identification**

The inner jackets of Nexans FIREX®-II TECK90 cables are printed: SUN RES.

The outer jackets of Nexans FIREX®-II TECK90 cables are printed: (mon/year) NEXANS FIREX®-II TECK90 XLPE (-40°C) CSA LL19376 F HL FT4 AG14 SUN RES along with conductor size, number of conductors and sequential metre

#### **Conductor Identification:**

2 Conductors: Black, White 3 Conductors: Red, Black, Blue 4 Conductors: Red, Black, Blue, White

5 or More Conductors: Black with Number Coding

#### Characteristics

Construction characteristics	
Conductor material	Copper
Electrical characteristics	
Maximum operating voltage	600 V
Usage characteristics	
Maximum operating temperature	90 °C



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#### 14 AWG TECK90 600 V 14 AWG Bonding Conductor Ampacity 15 A\*

Number of Conductors	Insulation Thickness		Inner Jacket Thickness		Nominal Diameters					Approximate Net		Approximate	
					Inner Jacket		Armour		Outer Covering		Cable Weight with Aluminum Armour		Copper Content
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	lb/kft	kg/km	kg/km
2	0.030	0.76	0.045	1.14	0.369	9.37	0.600	15.24	0.688	17.48	191	284	57
3	0.030	0.76	0.045	1.14	0.390	9.91	0.621	15.77	0.709	18.01	225	335	77
4	0.030	0.76	0.045	1.14	0.444	11.27	0.676	17.17	0.761	19.33	266	396	96
	•	•							•			•	
5	0.030	0.76	0.045	1.14	0.472	11.99	0.703	17.86	0.787	19.99	306	455	115
6	0.030	0.76	0.045	1.14	0.515	13.08	0.743	18.87	0.828	21.03	316	471	134
7	0.030	0.76	0.045	1.14	0.522	13.26	0.755	19.18	0.844	21.44	338	502	154
		•							•			•	
8	0.030	0.76	0.060	1.52	0.597	15.16	0.825	20.96	0.909	23.09	384	571	173
9	0.030	0.76	0.060	1.52	0.608	15.45	0.836	21.23	0.923	23.44	409	609	192
10	0.030	0.76	0.060	1.52	0.671	17.04	0.898	22.81	0.984	24.99	448	667	212
11	0.030	0.76	0.060	1.52	0.679	17.25	0.906	23.01	0.992	25.18	466	693	231
12	0.030	0.76	0.060	1.52	0.700	17.78	0.927	23.55	1.013	25.73	489	728	250
15	0.030	0.76	0.060	1.52	0.750	19.05	0.990	25.15	1.090	27.69	583	868	308
19	0.030	0.76	0.060	1.52	0.835	21.21	1.073	27.25	1.157	29.39	748	1113	385
20	0.030	0.76	0.060	1.52	0.850	21.59	1.105	28.07	1.189	30.20	766	1140	404
25	0.030	0.76	0.080	2.03	0.983	24.99	1.239	31.47	1.326	33.68	852	1268	501
30	0.030	0.76	0.080	2.03	1.060	26.92	1.311	33.30	1.399	35.53	995	1481	597
35	0.030	0.76	0.080	2.03	1.152	29.26	1.372	34.85	1.488	37.80	1066	1587	693
40	0.030	0.76	0.080	2.03	1.179	29.95	1.431	36.35	1.519	38.86	1224	1822	790
50	0.030	0.76	0.080	2.03	1.282	32.56	1.535	38.99	1.642	41.71	1468	2184	982
60	0.030	0.76	0.080	2.03	1.435	36.45	1.710	43.43	1.850	46.99	1613	2400	1175
80	0.030	0.76	0.080	2.03	1.604	40.74	1.954	49.63	2.094	53.18	2132	3173	1561
90	0.030	0.76	0.080	2.03	1.689	42.90	2.039	51.79	2.183	55.44	2347	3494	1753
*Conndian Flor		<del>.</del>											

<sup>\*</sup>Canadian Electrical Code Table 5C will apply if cable is used for power applications or the conductors are continuously loaded



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#### TECK90 14 AWG 600 V Fitting Sizes

Number		Fitting	gs		
of Conductors	Appleton	T & B	CMP Products	Cooper Crouse - Hinds	
2	TMC5076	10464/ST050-464	TCM050A	TECK050-2	
3	TMC5076	10464/ST050-464	TCM050A	TECK050-2	
4	TMC5099	10465-TB/ST050-465	TCM075A	TECK050-3	
5	TMC5099	10465-TB/ST050-465	TCM075A	TECK050-3	
6	TMC5099	10465-TB/ST050-465	TCM075A	TECK050-3	
7	TMC5099	10465-TB/ST050-465	TCM075A	TECK050-3	
8	TMC5099	10466/ST050-466	TCM075A	TECK050-4	
9	TMC5099	10467/ST075-467	TCM075A	TECK075-5	
10	TMC75121	10467/ST075-467	TCM075A	TECK075-5	
11	TMC75121	10467/ST075-467	TCM100A	TECK075-5	
12	TMC75121	10467/ST075-467	TCM100A	TECK075-5	
15	TMC75121	10468/ST075-468	TCM100A	TECK075-6	
19	TMC75121	10468/ST075-468	TCM100A	TECK075-6	
20	TMC100138	10469/ST100-469	TCM100A	TECK075-6	
25	TMC100138	10469/ST100-469	TCM125A	TECK100-7	
30	TMC125163	10470/ST125-470	TCM125A	TECK125-8	
35	TMC125163	10550/ST125-550	TCM150A	TECK125-8	
40	TMC125163	10550/ST125-550	TCM150A	TECK125-8	
50	TMC125188	10471/ST125-471	TCM150A	TECK125-10	
60	TMC150200	10472/ST150-472	TCM200SA	TECK125-10	
80	TMC150200	10551/ST200-551	TCM200A	TECK150-12	
90	TMC200238	10474/ST200-474	TCM200A	TECK200-14	

<sup>\*</sup>Canadian Electrical Code Table 5C will apply if cable is used for power applications or the conductors are continuously loaded.

### Selling information

#### **Caution Notice**

In case of fire, well maintained early warning smoke detectors will give an alarm long before non-metallic coverings become combustible.

However, in spite of the widespread and long-standing use of PVC in residential and commercial buildings, all purchasers of PVC insulated/ jacketed products should be aware of the following:

- · Non-metallic coverings of electrical cables can burn and may transmit fire when ignited.
- Burning non-metallic coverings may emit acid gases which are toxic and may generate dense smoke.
- · Emission of acid gases may corrode metal in the vicinity; e.g. sensitive instruments and reinforcing rods in cement.