



CSA TECK90 / ACWU90 & UL 2225 MC-HL Armoured Industrial Power Cables

TECK90

Armoured Industrial Cable

600 V / 1000 V / 5 kV CSA C22.2 No. 131 RW90 XLPE + PVC inner jacket + AIA armour + FT4 PV



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RW90 XLPE + PVC Inner + AIA Armour + FT4 PVC

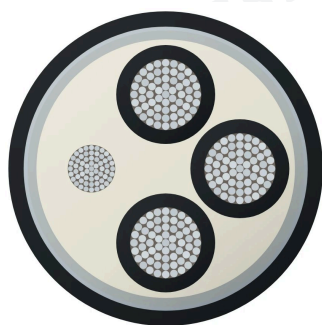
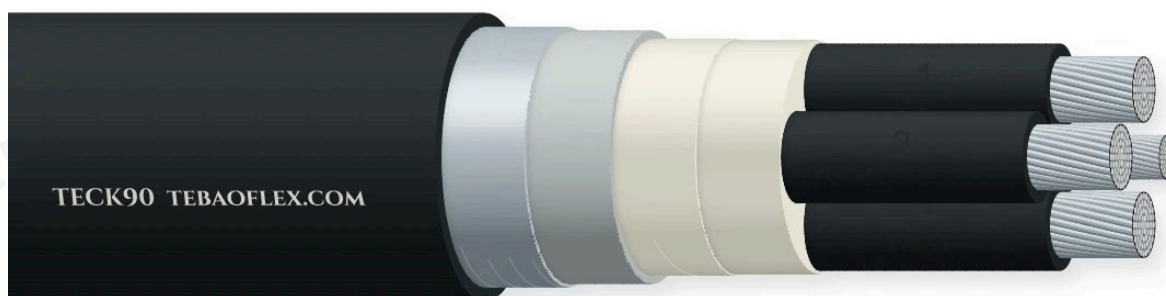
-40 to +90 °C HL Hazardous Location

Application

TECK90 is the iconic Canadian heavy-duty industrial and mining armoured power cable governed by CSA C22.2 No. 131. Originally developed for Teck-Hughes gold mines in northern Ontario, it features RW90 cross-linked polyethylene (XLPE, +90 °C wet/dry) copper con

Typical uses: Underground & surface mining, Pulp, paper & timber mills, Oil sands, refineries & petrochemical, Heavy industrial ladder cable trays, Class I / II / III hazardous zones

Construction



Cross-section, not to scale

1	Class B stranded copper + bare Cu bond	CSA C22.2 No. 131
2	RW90 cross-linked polyethylene (XLPE)	CSA C22.2 No. 38
3	Extruded PVC inner bedding jacket	CSA C22.2 No. 131
4	Interlocking aluminum armour (AIA)	CSA C22.2 No. 131
5	FT4 / AG14 outer PVC jacket	CSA C22.2 No. 131

Technical data

Typical values

Rated voltage	600 V (control) · 1,000 V (LV power) · 5,000 V (MV power)	Dielectric test voltage (1000 V grade)	3.5 kV AC rms for 5 minutes
Max. conductor temperature	+90 °C wet or dry · +130 °C emergency overload · +250 °C short-circuit	Low-temperature installation & service	-40 °C cold bend and -40 °C cold impact per CSA C22.2 No. 0.3
Continuous operating window	-40 °C to +90 °C	Minimum bending radius	12 × OD during pulling · 7 × OD final trained bend
Crush & impact protection	Interlocked AIA armour + dual PVC jackets pass CSA heavy crush & impact	Flame & acid-gas emission	CSA FT4 vertical tray flame (UL 1685) & AG14 (<14 % HCl acid gas)
Hazardous location ('HL') rating	CSA HL approved for Class I Div 2, Class II Div 1 & 2, and Class III (and CEC Zone 1/2)	Standards	CSA C22.2 No. 131, CSA C22.2 No. 38 (RW90) & Canadian Electrical Code (CEC)

Sizes

14 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation	Cores × AWG/MCM 1kV	Bond Wire / CEC 90°C A	Nom. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
TECK90 size schedule 14 sizes						
☐ TECK90 3C 14 AWG	3C × 14 AWG	14 AWG Bond · 25 A	15.80	68.0	295.0	110.6
☐ TECK90 3C 12 AWG	3C × 12 AWG	14 AWG Bond · 30 A	16.90	98.0	345.0	118.3
☐ TECK90 3C 10 AWG	3C × 10 AWG	12 AWG Bond · 40 A	18.40	152.0	430.0	128.8
☐ TECK90 3C 8 AWG	3C × 8 AWG	10 AWG Bond · 55 A	21.20	240.0	585.0	148.4
☐ TECK90 3C 6 AWG	3C × 6 AWG	8 AWG Bond · 75 A	24.10	382.0	810.0	168.7
☐ TECK90 3C 4 AWG	3C × 4 AWG	8 AWG Bond · 95 A	27.20	565.0	1,080.0	190.4
☐ TECK90 3C 2 AWG	3C × 2 AWG	6 AWG Bond · 130 A	30.80	895.0	1,520.0	215.6
☐ TECK90 3C 1/0 AWG	3C × 1/0 AWG	6 AWG Bond · 170 A	35.80	1,360.0	2,180.0	250.6
☐ TECK90 3C 2/0 AWG	3C × 2/0 AWG	6 AWG Bond · 195 A	38.40	1,685.0	2,610.0	268.8
☐ TECK90 3C 3/0 AWG	3C × 3/0 AWG	4 AWG Bond · 225 A	41.20	2,160.0	3,210.0	288.4
☐ TECK90 3C 4/0 AWG	3C × 4/0 AWG	4 AWG Bond · 260 A	44.50	2,670.0	3,880.0	311.5
☐ TECK90 3C 250 MCM	3C × 250 MCM	4 AWG Bond · 290 A	48.20	3,110.0	4,490.0	337.4
☐ TECK90 3C 350 MCM	3C × 350 MCM	3 AWG Bond · 350 A	53.60	4,310.0	5,980.0	375.2
☐ TECK90 3C 500 MCM	3C × 500 MCM	2 AWG Bond · 430 A	60.50	6,110.0	8,190.0	423.5

– Dimensions and tolerances conform to CSA C22.2 No. 131 / CEC Part I.

Electrical data

14 sizes

Cores × AWG/MCM 1kV	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
3C × 14 AWG	8.450	25	20
3C × 12 AWG	5.310	30	24
3C × 10 AWG	3.340	40	32
3C × 8 AWG	2.100	55	44
3C × 6 AWG	1.320	75	60
3C × 4 AWG	0.830	95	76
3C × 2 AWG	0.520	130	104
3C × 1/0 AWG	0.328	170	136
3C × 2/0 AWG	0.261	195	156
3C × 3/0 AWG	0.207	225	180
3C × 4/0 AWG	0.164	260	208

Cores × AWG/MCM 1kV	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
3C × 250 MCM	0.139	290	232
3C × 350 MCM	0.099	350	280
3C × 500 MCM	0.070	430	344

– Reference ampacities at +30 °C ambient; apply duty-cycle or grouping correction factors per standard.

Standards and approvals

- ✓ CSA C22.2 No. 131 Type TECK90
- ✓ CSA FT4 Vertical Tray Flame
- ✓ CSA HL (Hazardous Location) Rated
- ✓ AG14 Low Acid Gas (<14 %)
- ✓ RoHS 3 Compliant

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/teck90-armoured-industrial-cable



Typical values for this cable type, based on CSA C22.2 No. 131 / CEC Part I. Values for your order are confirmed in the quotation. Subject to change without notice.
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