

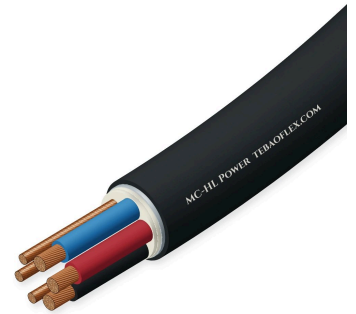


CSA TECK90 / ACWU90 & UL 2225 MC-HL Armoured Industrial Power Cables

MC-HL Power

Metal-Clad Power Cable

600 V to 15 kV UL 2225 Class I Div 1 continuously welded & corrugated aluminum MC-HL power



600 V / 2.4 kV / 5-15 kV UL 2225

Impervious Welded Corrugated Al (CWCMC)

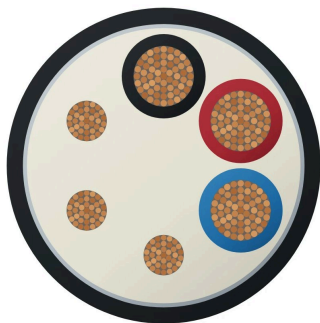
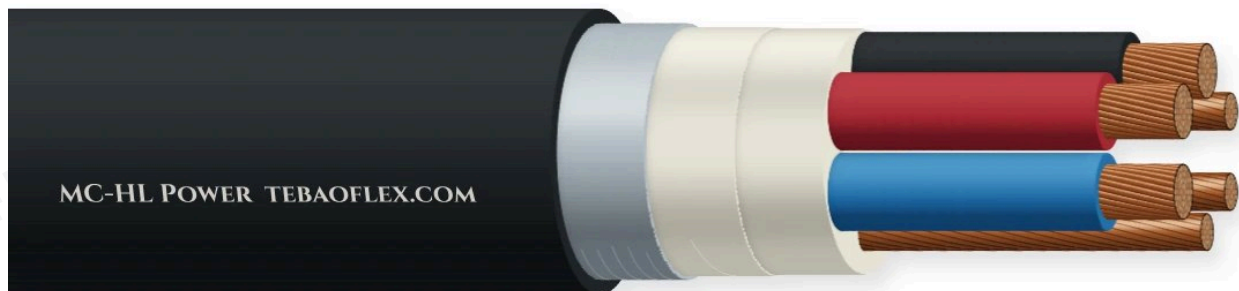
NEC Class I Div 1 / Zone 1 + VFD

Application

MC-HL Power (Metal-Clad Hazardous Location) is a gas- and vapour-tight armoured power and VFD cable listed to UL 2225 and UL 1569 for NEC Class I Division 1 (and Zone 1) explosive atmospheres. Unlike interlocked-strip Type MC or TECK90, MC-HL features an imper

Typical uses: Offshore oil & gas platforms / FPSOs, LNG terminals & gas processing, Refinery Class I Div 1 hazardous areas, Industrial VFD motor feeders, Chemical & pharmaceutical plants

Construction



Cross-section, not to scale

1	3 × stranded copper phase conductors	UL 1569
2	XHHW-2 XLPE (or EPR) 90 °C dielectric	UL 44
3	3 × symmetrical bare copper grounds	UL 2225
4	Continuously welded corrugated Al (CWCMC)	UL 2225
5	Oil, chemical & UV PVC / CPE outer jacket	UL 2225

Technical data

Typical values

Rated voltage	600 V / 1,000 V / 2,000 V VFD (plus 5 kV & 15 kV MV series)	Dielectric test & sheath pressure test	3.5 kV AC dielectric + 100 % continuous pneumatic/eddy-current weld integrity test
Conductor temperature rating	+90 °C wet or dry · +130 °C emergency overload · +250 °C short-circuit	Installation & operating temperature	-40 °C cold impact & cold bend to +90 °C continuous
Minimum bending radius	7 × OD (fixed training) · 12 × OD (pulling)	Crush & impact resistance	Passes UL 2225 severe Class I Div 1 crush & impact tests (comparable to rigid steel conduit)
Imperviousness to gas, vapour & liquids	Seamless welded aluminum tube blocks hydrocarbon migration and water ingress	Flame & oil resistance	UL 1685 / IEEE 1202 / CSA FT4 70,000 BTU/hr tray flame · Oil Resistant I & II
Standards	UL 2225, UL 1569, UL 1277, CSA C22.2 No. 123 & NEC Articles 330, 501, 505		

Sizes

13 standard constructions

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

Designation	3 Phase + 3 Split Ground	Ground AWG / NEC 90°C A	Nom. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
MC-HL Power size schedule 13 sizes						
☐ MC-HL 3C 14 AWG	3C × 14 AWG + 3G	3×18 AWG Gd · 25 A	14.20	68.0	235.0	99.4
☐ MC-HL 3C 12 AWG	3C × 12 AWG + 3G	3×16 AWG Gd · 30 A	15.20	108.0	285.0	106.4
☐ MC-HL 3C 10 AWG	3C × 10 AWG + 3G	3×14 AWG Gd · 40 A	16.80	172.0	370.0	117.6
☐ MC-HL 3C 8 AWG	3C × 8 AWG + 3G	3×14 AWG Gd · 55 A	19.60	248.0	510.0	137.2
☐ MC-HL 3C 6 AWG	3C × 6 AWG + 3G	3×12 AWG Gd · 75 A	22.10	395.0	710.0	154.7
☐ MC-HL 3C 4 AWG	3C × 4 AWG + 3G	3×12 AWG Gd · 95 A	25.40	602.0	990.0	177.8
☐ MC-HL 3C 2 AWG	3C × 2 AWG + 3G	3×10 AWG Gd · 130 A	28.70	955.0	1,430.0	200.9
☐ MC-HL 3C 1/0 AWG	3C × 1/0 AWG + 3G	3×10 AWG Gd · 170 A	33.80	1,455.0	2,060.0	236.6
☐ MC-HL 3C 2/0 AWG	3C × 2/0 AWG + 3G	3×8 AWG Gd · 195 A	36.60	1,875.0	2,550.0	256.2
☐ MC-HL 3C 4/0 AWG	3C × 4/0 AWG + 3G	3×6 AWG Gd · 260 A	42.40	2,975.0	3,890.0	296.8
☐ MC-HL 3C 250 MCM	3C × 250 MCM + 3G	3×6 AWG Gd · 290 A	46.20	3,415.0	4,460.0	323.4
☐ MC-HL 3C 350 MCM	3C × 350 MCM + 3G	3×4 AWG Gd · 350 A	51.60	4,800.0	6,050.0	361.2
☐ MC-HL 3C 500 MCM	3C × 500 MCM + 3G	3×4 AWG Gd · 430 A	58.40	6,600.0	8,180.0	408.8

– Dimensions and tolerances conform to UL 2225 / UL 1569 / NEC Art. 330 & 501.

Electrical data

13 sizes

3 Phase + 3 Split Ground	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
3C × 14 AWG + 3G	8.450	25	20
3C × 12 AWG + 3G	5.310	30	24
3C × 10 AWG + 3G	3.340	40	32
3C × 8 AWG + 3G	2.100	55	44
3C × 6 AWG + 3G	1.320	75	60
3C × 4 AWG + 3G	0.830	95	76
3C × 2 AWG + 3G	0.520	130	104
3C × 1/0 AWG + 3G	0.328	170	136
3C × 2/0 AWG + 3G	0.261	195	156
3C × 4/0 AWG + 3G	0.164	260	208
3C × 250 MCM + 3G	0.139	290	232
3C × 350 MCM + 3G	0.099	350	280

3 Phase + 3 Split Ground	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
3C × 500 MCM + 3G	0.070	430	344

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

Standards and approvals

- ✓ UL 2225 Listed Type MC-HL
- ✓ UL 1569 Type MC & UL 1277
- ✓ NEC Class I, II, III Div 1 & 2 (Zone 1 & 2)
- ✓ USCG & ABS Offshore Approved
- ✓ IEEE 1202 / CSA FT4

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/mc-hl-metal-clad-power-cable



Typical values for this cable type, based on UL 2225 / UL 1569 / NEC Art. 330 & 501. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.