Screened power & VFD / motor supply cables

37-102 CIRVFDA 2kV MSHA

37-102 CIRVFDA 2 kV MSHA Heavy-Duty VFD Cable

2000 V MSHA flame-tested crush-resistant mining & rig VFD cable

MSHA 30 CFR 18.64 | U0/U 2000 V · 6 kV AC | EMC Screened



Application

37-102 CIRVFDA 2 kV MSHA pairs extra-flexible tinned copper conductors and 2000 V thermoset insulation with dual EMC screening and an MSHA-approved crush-resistant CPE jacket for mining and oilfield drives.

Typical uses: Variable frequency drive (VFD) motor bays, Industrial pumps, fans & compressor skids, Process plants, oil & gas & HVAC systems, Heavy manufacturing & plant MCC feeders

Construction





Cross-section, not to scale

1	Conductor	ASTM B172 Class K flexible tinned annealed copper · ASTM B172 Class K / UL 1277
2	Core insulation	2000 V thermoset EPR/XLPE (90 °C wet/dry) · MSHA 30 CFR 18.64
3	Core assembly & separator	Concentric cabled assembly with low-friction fleece or polyester binder tape · MSHA 30 CFR 18.64
4	EMC metallic screen	100% foil + ≥ 85% tinned copper braid + 3 symmetrical grounds · EMC ≥ 85% / 100% foil
5	Outer sheath	Black MSHA flame- & abrasion-resistant heavy-duty CPE jacket · MSHA Flame Test

Technical data

Typical values

Rated voltage U0/U	2000 V	AC test voltage	6 kV AC / 5 min
Conductor class	ASTM B172 Class K tinned Cu	EMC screen	100% foil + ≥ 85% tinned copper braid + 3
Insulation resistance	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-40 °C to +90 °C
Temp. range (flexing)	-30 °C to +90 °C	Short-circuit temp.	+250 °C (5 s)
Min. bending radius	10 × OD (fixed)	Flame retardance	MSHA Flame Test
Oil & chemical perf.	IEEE 1202 / FT4	Environmental / EMC	Oil, Mud & Crush Resistant
Outer sheath	Black MSHA flame- & abrasion-resistant		

Sizes

12 standard constructions

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

Cores × AWG/kcmil	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ 3×14 AWG + 3×18 AWG	17.5	9.070	129	364	175
☐ 3×12 AWG + 3×16 AWG	18.6	5.710	179	454	186
☐ 3×10 AWG + 3×14 AWG	20.0	3.590	257	589	200
☐ 3×8 AWG + 3×14 AWG	22.8	2.260	351	787	228
☐ 3×6 AWG + 3×12 AWG	25.0	1.420	526	1,080	250
☐ 3×4 AWG + 3×12 AWG	28.7	0.892	753	1,499	287
☐ 3×2 AWG + 3×10 AWG	33.2	0.561	1,160	2,201	332
☐ 3×1/0 AWG + 3×6 AWG	37.6	0.353	1,939	3,401	376
☐ 3×2/0 AWG + 3×6 AWG	40.2	0.280	2,328	4,030	402
☐ 3×4/0 AWG + 3×4 AWG	47.1	0.176	3,656	6,122	471
☐ 3×350 kcmil + 3×2 AWG	57.2	0.107	5,949	9,741	572
☐ 3×500 kcmil + 3×2 AWG	64.7	0.075	8,059	13,036	647

- Max. conductor DC resistance R20 at 20 °C per ASTM B172 / B8 (tinned copper).
- Minimum bending radius calculated at 10 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- MSHA 30 CFR 18.64
- ICEA S-75-381
- UL 1277 Type TC-ER
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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/37-102-cirvfda-2kv-msha-mining-vfd-cable

Typical values for this cable type, based on MSHA 30 CFR 18.64 · ICEA S-75-381 · UL 1277 Type TC-ER. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.