



Heavy-duty rubber cables (NSSHÖU)

1-CHBU / 3-CHBU / 6-CHBU

CHBU Mining Equipment Interconnection

French NF M 82-376/377 1 kV, 3 kV & 6 kV braided-armour mining rubber cable



NF M 82-376 / 82-377

1 kV · 3 kV · 6 kV

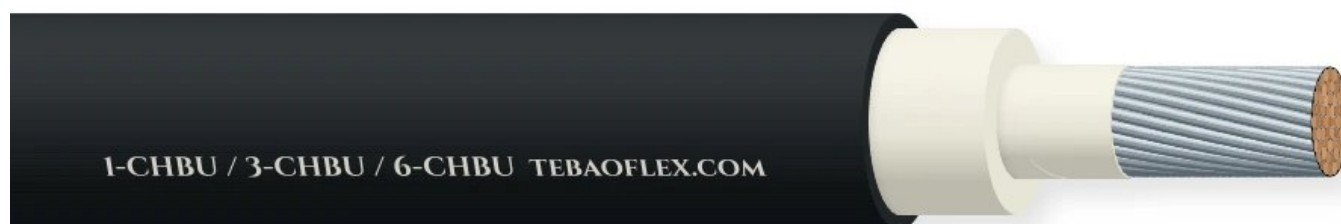
EPR H · Braid B · Sheath U

Application

Heavy-duty French mining equipment interconnection cable to NF M 82-376 and NF M 82-377 across 1-CHBU (0.6/1 kV), 3-CHBU (1.8/3 kV) and 6-CHBU (3.6/6 kV) with Class 5 copper ('C'), EPR insulation ('H'), Cu/steel armour braid ('B') and PCP sheath ('U').

Typical uses: Underground coal, potash & uranium mines, Longwall shearers & roadheader feeders, Flameproof transformer & gate-end links, Tunnel boring & subterranean civil works, Heavy mineral processing & slurry skids

Construction



Cross-section, not to scale

1	Flexible copper conductor (C)	IEC 60228 Class 5
2	High-grade EPR insulation (H)	NF M 82-376 / 82-377
3	Elastomeric inner bedding	
4	Metallic armour screen braid (B)	NF M 82-376 / 82-377
5	Extra-heavy outer sheath (U)	NF C 32-070 C2 / IEC 60332-1-2

Technical data

Typical values

Rated voltage U ₀ /U	1-CHBU: 0.6/1 kV · 3-CHBU: 1.8/3 kV · 6-CHBU: 3.6/6 kV	Max. system voltage U _m	1-CHBU: 1.2 kV · 3-CHBU: 3.6 kV · 6-CHBU: 7.2 kV
AC test voltage (5 min)	1-CHBU: 3.0 kV · 3-CHBU: 6.5 kV · 6-CHBU: 11.0 kV AC	Conductor stranding	IEC 60228 / NF C 32-013 Class 5 flexible copper
Metallic braid conductance	Composite Cu/Fe braid ('B') meets French mine earth-fault impedance limits	Max. conductor temperature	+90 °C continuous operation
Short-circuit temperature	+250 °C max. (up to 5 s)	Temperature, flexing	−25 °C to +80 °C
Temperature, fixed	−40 °C to +80 °C	Min. bending radius, fixed	6 × overall diameter
Min. bending radius, moving	10 × overall diameter	Crush & impact resistance	High-coverage copper/steel wire braid ('B') + inner rubber bedding
Max. tensile load	15 N/mm ² on copper conductors	Flame retardance	NF C 32-070 Cat. C2 & IEC 60332-1-2 self-extinguishing
Oil & chemical resistance	EN 60811-404 mineral oil, hydraulic emulsion & grease resistant	Abrasion & tear	Heavy-duty Type U elastomer outer jacket resists rock drag
Water & humidity	Subterranean mine water and mud resistant	Standards	NF M 82-376 (1-CHBU) & NF M 82-377 (3-CHBU / 6-CHBU)
Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends		

Sizes

15 standard constructions

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

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
1-CHBU (0.6/1 kV · NF M 82-376) Low-Voltage Armoured Mining Cables 5 sizes							
☐ 1-CHBU 4G4 (0.6/1 kV)	4G4	12	17.3	18.8	154	540	113
☐ 1-CHBU 4G10 (0.6/1 kV)	4G10	8	22.8	24.8	384	1,020	149
☐ 1-CHBU 3×25+1×16 (0.6/1 kV)	3×25+1×16	4	29.3	31.8	874	1,820	191
☐ 1-CHBU 3×50+1×25 (0.6/1 kV)	3×50+1×25	1	37.0	40.2	1,680	3,120	241
☐ 1-CHBU 3×95+1×50 (0.6/1 kV)	3×95+1×50	3/0	46.7	50.8	3,216	5,480	305
3-CHBU (1.8/3 kV · NF M 82-377) 3 kV Medium-Voltage Armoured Mining Cables 5 sizes							
☐ 3-CHBU 3×25+1×16 (1.8/3 kV)	3×25+1×16	4	32.8	35.6	874	2,190	214
☐ 3-CHBU 3×35+1×16 (1.8/3 kV)	3×35+1×16	2	35.7	38.8	1,162	2,680	233
☐ 3-CHBU 3×50+1×25 (1.8/3 kV)	3×50+1×25	1	40.3	43.8	1,680	3,510	263
☐ 3-CHBU 3×70+1×35 (1.8/3 kV)	3×70+1×35	2/0	44.7	48.6	2,352	4,620	292
☐ 3-CHBU 3×95+1×50 (1.8/3 kV)	3×95+1×50	3/0	49.9	54.2	3,216	5,940	325
6-CHBU (3.6/6 kV · NF M 82-377) 6 kV Medium-Voltage Armoured Mining Cables 5 sizes							
☐ 6-CHBU 3×25+1×16 (3.6/6 kV)	3×25+1×16	4	37.2	40.4	874	2,690	242
☐ 6-CHBU 3×35+1×16 (3.6/6 kV)	3×35+1×16	2	40.1	43.6	1,162	3,210	262
☐ 6-CHBU 3×50+1×25 (3.6/6 kV)	3×50+1×25	1	44.5	48.4	1,680	4,080	290
☐ 6-CHBU 3×70+1×35 (3.6/6 kV)	3×70+1×35	2/0	48.9	53.2	2,352	5,240	319
☐ 6-CHBU 3×95+1×50 (3.6/6 kV)	3×95+1×50	3/0	54.1	58.8	3,216	6,610	353

– Dimensions and weights are typical values per NF M 82-376 / NF M 82-377. Minimum fixed bending radius shown is 6 × OD.

Electrical & current ratings

7 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	1-core in air 30 °C, A	3–4 core in air 30 °C, A
4	12	5.09	41	34
10	8	1.95	74	61
25	4	0.795	131	108
35	2	0.565	162	135
50	1	0.393	202	168
70	2/0	0.277	250	207
95	3/0	0.21	301	250

– Current ratings at 30 °C ambient in free air per DIN VDE 0298-4 / EN 50565-1. Apply derating factors for elevated ambient temperature or reeling layer grouping.

Standards and approvals

✓ NF M 82-376 / NF M 82-377

✓ 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/chbu-mining-equipment-interconnection-cable



Typical values for this cable type, based on NF M 82-376 / NF M 82-377. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.