



SANS 1520 / BS 6708 coal-cutter trailing cables

SCGMS 19050 Type 2A / 3A / 2B / 3B

Screened Underground Mining

NF M 82-375 / SCGMS 19050 1000 V (Type 2A/2B) & 5500 V (Type 3A/3B) underground mining



NF M 82-375 / SCGMS 19050

1000 V (2A/2B) · 5500 V (3A/3B)

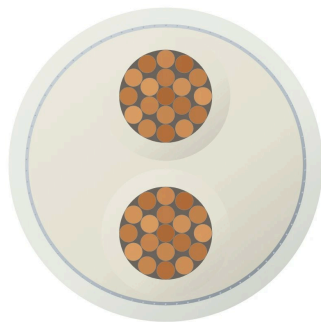
Phase-Screened + PCP

Application

SCGMS 19050 Type 2A / 3A / 2B / 3B is the French standard NF M 82-375 phase-screened flexible rubber trailing cable for underground coal, potash, and bauxite mines, covering 0.6/1 kV (1000 V Type 2A/2B) and 3.2/5.5 kV (5500 V Type 3A/3B) coal shearers

Typical uses: Underground coal, potash & uranium mines, NF M 82-375 Francophone mining operations, 1000 V & 5500 V longwall shearers, Underground LHD & jumbo feeders

Construction



Cross-section, not to scale

1	Phase & pilot conductors	NF EN 60228 Class 5
2	Central elastomeric cradle	NF M 82-375
3	Stress-control layers (Type 3A/3B)	NF M 82-375
4	EPR core insulation	NF M 82-375
5	Individual phase earth screens	NF M 82-375 / SCGMS 19050
6	Reinforced polychloroprene sheath	NF M 82-375

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV (Type 2A/2B) · 3.2/5.5 kV (Type 2B / 3B)	AC routine test voltage	3.5 kV rms (Type 2A/2B) · 11 kV rms (Type 2B / 3B)
Protective earth path	Combined conductance of the 3 tinned Cu	Pilot core rating	1 to 3 insulated/screened pilot cores for
Max. conductor operating temp.	+90 °C continuous	Max. short-circuit temperature	+250 °C (5 s)
Ambient temperature range	-25 °C to +60 °C	Min. bending radius (fixed)	6 × D fixed · 10 × D trailing
Sheath reinforcement (Type 2B / 3B)	Embedded synthetic textile braid between	Max. tensile load on copper	15–20 N/mm ²
Flame retardancy	NF C 32-070 C2 / IEC 60332-1-2 underground	Oil & hydraulic fluid	NF EN 60811-404 resistant
Impact & crush resistance	NF M 82-375 coal-face impact test	Standards	NF M 82-375 / Charbonnages de France SCGMS

Sizes

10 standard constructions

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

Order designation	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard SCGMS 19050 Type 2A / 3A / 2B / 3B configurations 10 sizes						
☐ SCGMS 19050 Type 2A 3×25+3E+1×6P (1000 V)	3×25 + 3E + 1×6P (1000 V Type 2A)	25	35.8	1,020	1,920	215
☐ SCGMS 19050 Type 2A 3×35+3E+1×6P (1000 V)	3×35 + 3E + 1×6P (1000 V Type 2A)	35	39.2	1,350	2,380	235
☐ SCGMS 19050 Type 2B 3×50+3E+1×10P (1000 V)	3×50 + 3E + 1×10P (1000 V Type 2B)	50	44.5	1,860	3,120	267
☐ SCGMS 19050 Type 2B 3×70+3E+1×10P (1000 V)	3×70 + 3E + 1×10P (1000 V Type 2B)	70	49.5	2,540	4,010	297
☐ SCGMS 19050 Type 2B 3×95+3E+1×10P (1000 V)	3×95 + 3E + 1×10P (1000 V Type 2B)	95	54.8	3,420	5,120	329
☐ SCGMS 19050 Type 3A 3×25+3E+1×10P (5.5 kV)	3×25 + 3E + 1×10P (3.2/5.5 kV Type 3A)	25	42.5	1,090	2,540	255
☐ SCGMS 19050 Type 3A 3×35+3E+1×10P (5.5 kV)	3×35 + 3E + 1×10P (3.2/5.5 kV Type 3A)	35	45.8	1,410	3,020	275
☐ SCGMS 19050 Type 3B 3×50+3E+1×10P (5.5 kV)	3×50 + 3E + 1×10P (3.2/5.5 kV Type 3B)	50	50.5	1,910	3,810	303
☐ SCGMS 19050 Type 3B 3×70+3E+1×10P (5.5 kV)	3×70 + 3E + 1×10P (3.2/5.5 kV Type 3B)	70	55.6	2,610	4,780	334
☐ SCGMS 19050 Type 3B 3×95+3E+1×10P (5.5 kV)	3×95 + 3E + 1×10P (3.2/5.5 kV Type 3B)	95	61.0	3,510	5,980	366

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per NF M 82-375 / SCGMS 19050.

Electrical & ampacity data

10 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
3×25 + 3E + 1×6P (1000 V Type 2A)	0.799	122	104	151	3,500
3×35 + 3E + 1×6P (1000 V Type 2A)	0.568	150	128	168	3,500
3×50 + 3E + 1×10P (1000 V Type 2B)	0.396	187	159	192	3,500
3×70 + 3E + 1×10P (1000 V Type 2B)	0.279	229	195	226	3,500
3×95 + 3E + 1×10P (1000 V Type 2B)	0.211	276	235	267	3,500
3×25 + 3E + 1×10P (3.2/5.5 kV Type 3A)	0.799	122	104	151	11,000
3×35 + 3E + 1×10P (3.2/5.5 kV Type 3A)	0.568	150	128	168	11,000
3×50 + 3E + 1×10P (3.2/5.5 kV Type 3B)	0.396	187	159	192	11,000
3×70 + 3E + 1×10P (3.2/5.5 kV Type 3B)	0.279	229	195	226	11,000
3×95 + 3E + 1×10P (3.2/5.5 kV Type 3B)	0.211	276	235	267	11,000

– Current ratings apply at +30 °C ambient in free air; apply standard derating factors for elevated ambient or drum layers.

Standards and approvals

✓ NF M 82-375

✓ SCGMS 19050

✓ EN 10204 3.1

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/scgms-19050-type-2a-3a-2b-3b-screened-underground-mining-trailing-cable



Typical values for this cable type, based on NF M 82-375 / SCGMS 19050. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.