



Mining trailing & reeling cables

BS 6708 Type 20 / 21 Armoured

BS 6708 Type 20 & Type 21 Pliable Wire Armoured Mining Cable

640/1,100 V 3-core & 4-core elastomeric-cradle cables with galvanized steel PWA



BS 6708

640/1,100 V · Types 20 & 21

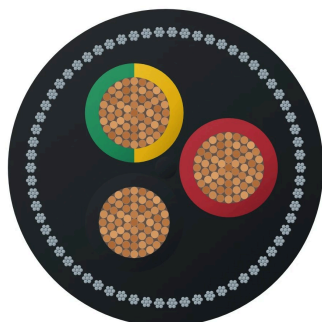
Pliable Wire Armour

Application

640/1,100 V pliable wire-armoured mining cables to BS 6708:1998 in 3-core (Type 20) and 4-core (Type 21) constructions from 2.5 to 150 mm², featuring EPR insulation, elastomeric cradle core separation, 7-strand galvanized steel armour and PCP sheath.

Typical uses: Mine roadway power distribution, Gate-end box & transformer interlinks, Quarry crushers & screening plant, Excavating & loading machines, Deep-mine gassy workings, Heavy-impact surface mining feeders

Construction



Cross-section, not to scale

1	Flexible conductors	IEC 60228 Class 5
2	Core insulation	BS 7655 / BS 6708
3	Identification tape	
4	Elastomeric cradle	
5	Inner sheath	
6	Pliable wire armour (PWA)	BS 6708 PWA
7	Outer sheath	BS 6708 / BS 7655 EM2

Technical data

Typical values

Rated voltage (U0/U)	640/1,100 V AC (U0/U)	AC test voltage	3.0 kV AC dielectric test on insulated cores
Current ratings (25 °C)	28 to 320 A continuous at 25 °C ambient across 2.5 to 150 mm ²	Armour DC resistance (20 °C)	0.45 to 4.6 Ω/km (Type 20 armour at 20 °C) · 0.41 to 4.2 Ω/km (Type 21 armour at 20 °C)
Max. conductor temperature	+90 °C maximum continuous conductor temperature (EPR insulation)	Operating temperature range	–25 °C to +85 °C ambient installation / service range (current ratings referenced at 25 °C)
Pliable wire armour (PWA)	Galvanized steel pliable wire armour (PWA) stranded in 7-wire bundles: 7/0.45 mm (2.5–4 mm ²), 7/0.71 mm (6–16 mm ²), 7/0.90 mm (25–120 mm ²), 7/1.25 mm (150 mm ²)	Minimum bending radius	243 to 786 mm (Type 20) · 258 to 858 mm (Type 21), corresponding to 9 × maximum OD
Cradle, inner & outer sheaths	Cores laid up without contact around an elastomeric cradle + rubber inner sheath (2.0 to 5.0 mm) + PWA + heavy-duty chloroprene outer sheath (2.5 to 7.3 mm)	Flame retardance	Flame retardant polychloroprene outer sheath to BS 6708 / BS EN 60332-1-2
Crush & mine environment	Pliable galvanized steel wire armour + heavy-duty PCP sheath resists rockfall impact, crushing, rodent attack, mineral oils and mine water	Standards	BS 6708 (Types 20 & 21); IEC 60228 Class 5; BS 7655

Sizes

24 standard constructions

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

Type - nominal CSA mm ²	Conductor stranding	Cond. Ø mm	Insul. mm	Inner sh. mm	Armour strand	Outer sh. mm	Max. OD mm	Min. R mm	Mass ≈ kg/km	Cu wt kg/km	Current (25 °C) A	Cond. DC res. Ω/km	Armour DC res. Ω/km
BS 6708 Type 20 · 640/1,100 V (3-Core Pliable Wire Armoured) 12 sizes													
☐ Type 20 · 3×2.5	50/0.25	2.10	1.4	2.0	7/0.45	2.5	26.9	243	990	72	28	8.210	4.60
☐ Type 20 · 3×4	56/0.30	2.70	1.4	2.0	7/0.45	2.5	28.2	254	1,150	115	37	5.090	4.20
☐ Type 20 · 3×6	84/0.30	3.30	1.5	2.5	7/0.71	3.8	36.5	329	2,000	173	46	3.390	2.20
☐ Type 20 · 3×10	80/0.40	4.40	1.5	2.5	7/0.71	3.8	38.4	346	2,350	288	63	1.950	2.00
☐ Type 20 · 3×16	126/0.40	5.50	1.5	2.5	7/0.71	3.8	40.8	368	2,750	461	85	1.240	1.90
☐ Type 20 · 3×25	196/0.40	7.10	1.6	2.5	7/0.90	4.0	47.0	423	3,350	720	110	0.795	1.30
☐ Type 20 · 3×35	276/0.40	8.40	1.6	2.5	7/0.90	4.3	50.6	456	4,300	1,008	135	0.565	1.20
☐ Type 20 · 3×50	396/0.40	10.10	1.7	2.5	7/0.90	4.7	56.7	511	5,320	1,440	170	0.393	1.10
☐ Type 20 · 3×70	360/0.50	11.90	1.8	2.5	7/0.90	5.2	62.7	565	6,750	2,016	205	0.277	0.94
☐ Type 20 · 3×95	475/0.50	13.90	2.0	3.8	7/0.90	5.8	72.1	649	8,750	2,736	250	0.210	0.80
☐ Type 20 · 3×120	629/0.50	15.80	2.2	3.8	7/0.90	6.2	77.0	693	10,650	3,456	295	0.164	0.74
☐ Type 20 · 3×150	740/0.50	17.00	2.3	5.0	7/1.25	6.6	87.3	786	12,500	4,320	320	0.132	0.45
BS 6708 Type 21 · 640/1,100 V (4-Core Pliable Wire Armoured) 12 sizes													
☐ Type 21 · 4×2.5	50/0.25	2.10	1.4	2.0	7/0.45	2.5	28.6	258	1,150	96	28	8.210	4.20
☐ Type 21 · 4×4	56/0.30	2.70	1.4	2.0	7/0.45	2.5	30.1	271	1,320	154	37	5.090	3.90
☐ Type 21 · 4×6	84/0.30	3.30	1.5	2.5	7/0.71	3.8	38.8	350	2,350	230	46	3.390	2.00
☐ Type 21 · 4×10	80/0.40	4.40	1.5	2.5	7/0.71	3.8	41.0	369	2,740	384	63	1.950	1.90
☐ Type 21 · 4×16	126/0.40	5.50	1.5	2.5	7/0.71	3.9	44.0	396	3,170	614	85	1.240	1.70
☐ Type 21 · 4×25	196/0.40	7.10	1.6	2.5	7/0.90	4.3	49.8	449	4,030	960	110	0.795	1.50
☐ Type 21 · 4×35	276/0.40	8.40	1.6	2.5	7/0.90	4.7	56.1	505	5,220	1,344	135	0.565	1.10
☐ Type 21 · 4×50	396/0.40	10.10	1.7	2.5	7/0.90	5.1	61.8	557	6,400	1,920	170	0.393	0.96
☐ Type 21 · 4×70	360/0.50	11.90	1.8	2.5	7/0.90	5.7	71.4	643	8,060	2,688	205	0.277	0.80
☐ Type 21 · 4×95	475/0.50	13.90	2.0	3.8	7/0.90	6.3	78.6	708	10,650	3,648	250	0.210	0.73
☐ Type 21 · 4×120	629/0.50	15.80	2.2	3.8	7/0.90	6.8	89.0	801	13,450	4,608	295	0.164	0.47
☐ Type 21 · 4×150	740/0.50	17.00	2.3	5.0	7/1.25	7.3	95.3	858	15,300	5,760	320	0.132	0.41

- Pliable wire armour consists of 7-wire galvanized steel strands laid helically between the rubber inner sheath and heavy-duty chloroprene outer sheath.

Standards and approvals

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.

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+86 185 9591 3361

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info@tebaoflex.com

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Typical values for this cable type, based on BS 6708. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.