



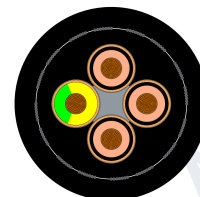
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

MGM 111 TYPE 320 / TYPE 321 MINING CABLE

EPR insulated, screened and steel-armoured cable



APPLICATION

Power supply for excavating and crushing machines and equipment. For deep mines where explosive gases and dust can accumulate, and surface use.

KEY FEATURES

Parameter	Value
Rated voltage	1900/3300 V
Test voltage	7.5 kV
Conductor	Stranded, tinned copper wire, IEC 60228 Class 5
Insulation	EPR; Type 320 earth core is not insulated
Screen	Tinned copper / nylon braid over insulated cores
Armour	Galvanized steel pliable armour

CABLE DESIGN

Parameter	Value
Separator	Semiconducting layers around insulation
Lay-up	All cores laid up in contact
Bedding	Rubber-based bedding compound
Outer sheath	Heavy-duty chloroprene compound
Optional separator	Galvanized steel tape or water-blocking tape
Related standard	MGM 111/1985

TECHNICAL DATA

MGM 111 - TYPE 320							
Cable type	3x16+16	3x25+16	3x35+16	3x50+25	3x70+35	3x95+50	3x120+70
Phase cores / cross-section mm ²	3x16	3x25	3x35	3x50	3x70	3x95	3x120
Phase stranding mm	126/0.40	196/0.40	276/0.40	396/0.40	360/0.50	475/0.50	608/0.50
Insulation thickness mm	3.0						
Earth core / cross-section mm ²	1x16	1x16	1x16	1x25	1x35	1x50	1x70
Earth stranding mm	126/0.40	126/0.40	126/0.40	196/0.40	276/0.40	396/0.40	360/0.50
Radial inner sheath mm	2.5	2.5	3.5	3.8	3.8	5.0	5.0
Size of armour mm	7/0.7	7/0.7	7/0.9	7/0.9	7/0.9	7/1.25	7/1.25
Radial outer sheath mm	4.0	5.0	5.3	5.8	6.7	6.8	7.2
Min. overall diameter mm	51.5	56.7	60.7	68.6	74.7	85.3	88.5
Max. overall diameter mm	55.8	60.1	64.1	72.3	78.4	89.2	93.7
Min. bending radius mm	503	541	577	651	706	803	844
Approx. cable weight kg/km	4700	6150	7300	9100	11000	11800	16700
Copper weight kg/km	990	1300	1650	2250	3150	4200	5050
Current rating at 25 C A	85	110	135	170	205	250	295
Phase conductor ohm/km	1.24	0.795	0.565	0.393	0.277	0.21	0.164
3 screens + earth ohm/km	0.70	0.60	0.50	0.50	0.34	0.28	0.18
Armour ohm/km	1.40	0.96	0.90	0.79	0.73	0.47	0.44

TECHNICAL DATA

MGM 111 - TYPE 321								
Cable type	4x16	4x25	4x35	4x50	4x70	4x95	4x120	4x150
Cores / cross-section mm ²	4x16	4x25	4x35	4x50	4x70	4x95	4x120	4x150
Stranding mm	126/0.40	196/0.40	276/0.40	396/0.40	360/0.50	475/0.50	608/0.50	756/0.50
Insulation thickness mm	3.0							
Radial inner sheath mm	2.5	2.5	3.5	3.8	3.8	5.0	5.0	5.0
Size of armour mm	7/0.7	7/0.7	7/0.9	7/0.9	7/0.9	7/1.25	7/1.25	7/1.25
Radial outer sheath mm	4.0	5.0	5.3	5.8	6.7	6.8	7.2	7.6
Min. overall diameter mm	51.5	56.7	60.7	68.6	74.7	85.3	88.5	95.4
Max. overall diameter mm	55.8	60.1	64.1	72.3	78.4	89.2	93.7	99.3
Min. bending radius mm	503	541	577	651	706	803	844	894
Approx. cable weight kg/km	4850	6400	7650	9500	11550	12500	17450	19000
Copper weight kg/km	1100	1500	2000	2650	3700	4900	5800	6850
Current rating at 25 C A	85	110	135	170	205	250	295	345
Conductor ohm/km	1.24	0.795	0.565	0.393	0.277	0.21	0.164	0.124
Armour ohm/km	1.40	0.96	0.90	0.79	0.73	0.47	0.44	0.38

CERTIFICATIONS



TEBAOFLEX CABLE