



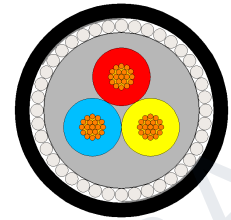
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

MGM 109 TYPE 1012,1013,1014 LOW-VOLTAGE MINING CABLE

3-core PVC power cable with single galvanized steel wire armour



APPLICATION

Fixed installation cable for supplying machines and equipment. Suitable for deep mines where explosive gases and dust may accumulate, and for surface installations.

KEY FEATURES

Parameter	Value
Rated voltage	600/1000 V
Conductor	Electrolytic, stranded copper wire, IEC 60228 Class 1 or 2
Insulation	PVC
Armour	Galvanized steel pliable armour

CABLE DESIGN

Parameter	Value
Lay-up	All cores laid up in contact with each other
Bedding	PVC-based bedding compound
Separator	Galvanized steel tape, optional
Outer sheath	Special PVC compound

ELECTRICAL AND REFERENCE DATA

Parameter	Value
Related standard	MGM 109/1983
Test voltage	3 kV
Product families	MGM 109 Type 1012, Type 1013 and Type 1014
Availability	Other sizes and designs available on request

TECHNICAL DATA

MGM 109 TYPE 1012 - DIMENSIONS AND CABLE WEIGHTS										
Cable type	Insul. mm	Inner sheath mm	Inner dia. mm	Armour mm	Outer sheath mm	Min. OD mm	Max. OD mm	Bend radius mm	Cable wt. kg/km	Cu wt. kg/km
2x1.5	0.8	0.8	7.0	1/0.9	1.3	9.7	13.7	124	320	30
2x2.5	0.8	0.8	8.2	1/0.9	1.4	11.1	15.1	136	395	50
2x4	0.8	0.8	10.2	1/0.9	1.4	13.1	17.1	154	480	80
2x6	0.8	0.8	11.3	1/0.9	1.5	14.5	18.5	167	620	120
2x10	1.0	0.8	14.0	1/1.25	1.6	18.1	22.1	199	950	220
2x16	1.0	0.8	15.8	1/1.25	1.6	19.9	23.9	216	1280	380

CONSTRUCTION AND APPLICATION NOTES	
Parameter	Value
Construction	2-core low-voltage cable with single galvanized steel wire armour
Conductor	Electrolytic stranded copper, IEC 60228 Class 1 or 2
Insulation	PVC insulation
Bedding and sheath	PVC-based bedding and special PVC outer sheath
Installation	Fixed installation for machinery, equipment, deep mines and surface use

TECHNICAL DATA

MGM 109 TYPE 1013 - DIMENSIONS AND CABLE WEIGHTS										
Cable type	Insul. mm	Inner sheath mm	Inner dia. mm	Armour mm	Outer sheath mm	Min. OD mm	Max. OD mm	Bend radius mm	Cable wt. kg/km	Cu wt. kg/km
3x1.5	0.8	0.8	7.4	1/0.9	1.4	9.7	13.7	124	350	45
3x2.5	0.8	0.8	8.8	1/0.9	1.4	11.1	15.1	136	420	75
3x4	0.8	0.8	10.9	1/0.9	1.4	13.1	17.1	154	560	120
3x6	0.8	0.8	12.0	1/1.25	1.5	14.5	18.5	167	780	190
3x10	1.0	0.8	15.0	1/1.25	1.6	18.1	22.1	199	1120	310
3x16	1.0	0.8	16.6	1/1.25	1.6	20.7	24.7	223	1400	530
3x25	1.2	1.0	20.3	1/1.60	1.7	25.3	29.3	264	2150	810
3x35	1.2	1.0	22.5	1/1.60	1.8	27.9	31.9	288	2450	1160
3x50	1.4	1.0	26.2	1/1.80	1.9	32.2	36.2	326	3400	1720
3x70	1.4	1.2	30.0	1/2.0	2.0	36.4	40.4	364	4420	2340
3x95	1.6	1.2	34.8	1/2.0	2.1	41.6	45.6	411	5800	3200

CONSTRUCTION AND APPLICATION NOTES	
Parameter	Value
Construction	3-core low-voltage cable with single galvanized steel wire armour
Conductor	Electrolytic stranded copper, IEC 60228 Class 1 or 2
Insulation	PVC insulation
Bedding and sheath	PVC-based bedding and special PVC outer sheath
Installation	Fixed installation for machinery, equipment, deep mines and surface use

TECHNICAL DATA

MGM 109 TYPE 1014 - DIMENSIONS AND CABLE WEIGHTS										
Cable type	Insul. mm	Inner sheath mm	Inner dia. mm	Armour mm	Outer sheath mm	Min. OD mm	Max. OD mm	Bend radius mm	Cable wt. kg/km	Cu wt. kg/km
4x1.5	0.8	0.8	8.1	1/0.9	1.4	11.0	15.0	135	420	60
4x2.5	0.8	0.8	9.5	1/0.9	1.4	12.5	16.5	149	500	100
4x4	0.8	0.8	11.9	1/1.25	1.5	15.8	19.8	179	750	160
4x6	0.8	0.8	13.2	1/1.25	1.5	17.2	21.2	191	820	240
4x10	1.0	0.8	16.5	1/1.25	1.6	20.8	24.8	224	1350	400
4x16	1.0	1.0	18.7	1/1.60	1.7	23.9	27.9	252	1900	660
4x25	1.2	1.0	22.6	1/1.60	1.8	28.0	32.0	288	2610	1050
4x35	1.2	1.0	25.0	1/1.60	1.9	30.6	34.6	312	3100	1460
4x50	1.4	1.2	29.6	1/2.0	2.0	36.2	40.2	362	4300	2090
4x70	1.4	1.2	33.4	1/2.0	2.1	40.2	44.2	398	5400	3010
4x95	1.6	1.2	38.7	1/2.0	2.2	45.7	49.7	448	7000	4100

CONSTRUCTION AND APPLICATION NOTES	
Parameter	Value
Construction	4-core low-voltage cable with single galvanized steel wire armour
Conductor	Electrolytic stranded copper, IEC 60228 Class 1 or 2
Insulation	PVC insulation
Bedding and sheath	PVC-based bedding and special PVC outer sheath
Installation	Fixed installation for machinery, equipment, deep mines and surface use

ELECTRICAL DATA

MGM 109 TYPE 1014 - CURRENT RATING AND RESISTANCE			
Cable type	Current at 25 deg C A	Conductors ohms/km	Armour ohms/km
4x1.5	18	12.1	20.17
4x2.5	26	7.41	12.30
4x4	34	4.61	7.68
4x6	44	3.08	5.13
4x10	61	1.83	3.05
4x16	82	1.15	1.92
4x25	108	0.727	1.21
4x35	135	0.524	0.873
4x50	168	0.387	0.645
4x70	207	0.268	0.447
4x95	250	0.193	0.322

REFERENCE INFORMATION	
Parameter	Value
Product family	MGM 109 Type 1012, 1013 and 1014
Rated voltage	600/1000 V
Test voltage	3 kV
Related standard	MGM 109/1983

CERTIFICATIONS



TEBAOFLEX CABLE