



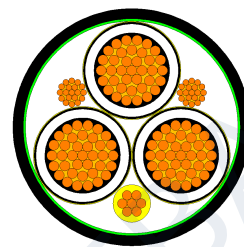
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrialcable

TYPE MP-GC

2 kV to 15 kV three-conductor mine power feeder cable



APPLICATION

Heavy-duty three-conductor mine feeder cable for connections between units of underground and surface mine power distribution systems, including mine tunnels, shafts, load centres, open pits and stationary horizontal high-voltage circuits. Suitable for installation in duct, conduit, trough, tray or open air, and for direct burial in wet or dry locations where an internal ground-check conductor is required. The 2 kV EPR version supports rugged feeder service, while the 5 kV to 15 kV XLPE version is intended for non-flexing high-voltage distribution applications.

CONSTRUCTION

Component	Description
Power conductors	Three annealed bare copper conductors; compact or concentric-lay stranding according to applicable ASTM requirements
Conductor shield	Extruded thermosetting semi-conducting stress-control layer over each power conductor
2 kV insulation	Ethylene-propylene rubber (EPR) with a semi-conducting insulation shield and copper-tape screen
5 kV to 15 kV insulation	Cross-linked polyethylene (XLPE) with free-stripping extruded semi-conducting insulation shield
Phase identification and screen	Black, white and red marker strips beneath overlapped annealed copper-tape insulation screens
Grounding conductors	Two bare annealed copper grounding conductors, Class B strand
Ground-check conductor	Annealed copper Class B strand with yellow polypropylene or equivalent yellow insulation
Outer jacket and options	Heavy-duty black CPE; optional CSP, PCP, NBR or PVC, including a two-layer fibre-reinforced jacket design

CHARACTERISTICS

- Three-conductor mine power feeder cable with integrated grounding and ground-check conductors.
- Suitable for stationary or non-flexing underground and surface mine distribution circuits.
- High dielectric strength, low dielectric loss and stable electrical performance under stress.
- Resistant to moisture, oil, chemicals, corona, tearing, puncture and abrasion.
- Minimum bending radius: 12 x cable overall diameter.
- Operating range for the high-voltage application: -20 to +90 deg C.

TECHNICAL INFORMATION

Parameter	Unit	Value
Rated voltage range	kV	2 to 15
Insulation systems		EPR at 2 kV; XLPE at 5 kV to 15 kV
Maximum conductor temperature	°C	+90
Minimum bending radius		12 x overall diameter
Primary cable standard		ICEA S-75-381 / NEMA WC 58
Conductor standards		ASTM B3; ASTM B8; ASTM B496
Canadian standard		CAN/CSA-C22.2 No. 96

TECHNICAL DATA

DIMENSIONS, WEIGHT AND AMPACITY

Nominal construction dimensions, cable weight and current-carrying capacity from the supplied Word tables.

Construction cores x AWG/kcmil	Strands	Grounding AWG/kcmil	Ground-check AWG/kcmil	Insulation in / mm	Jacket in / mm	Overall diameter in / mm	Weight lb/ft / kg/km	Ampacity A
TYPE MP-GC 3C - 2 kV EPR/CPE								
3 x 6	7	10	8	0.090 / 2.3	0.110 / 2.8	1.30 / 33.0	1060 / 1577	93
3 x 4	7	8	8	0.090 / 2.3	0.110 / 2.8	1.41 / 35.8	1441 / 2144	122
3 x 2	7	6	8	0.090 / 2.3	0.110 / 2.8	1.47 / 37.3	1827 / 2718	159
3 x 1	19	5	8	0.090 / 2.3	0.110 / 2.8	1.54 / 39.1	2168 / 3226	184
3 x 1/0	19	4	8	0.090 / 2.3	0.110 / 2.8	1.63 / 41.4	2602 / 3871	211
3 x 2/0	19	3	8	0.090 / 2.3	0.110 / 2.8	1.72 / 43.7	3010 / 4478	243
3 x 3/0	19	2	8	0.090 / 2.3	0.140 / 3.6	1.89 / 48.0	3265 / 4859	279
3 x 4/0	19	1	8	0.090 / 2.3	0.140 / 3.6	2.01 / 51.0	4190 / 6234	321
3 x 250	37	1/0	8	0.090 / 2.3	0.140 / 3.6	2.10 / 53.3	4825 / 7179	355
3 x 350	37	2/0	8	0.090 / 2.3	0.140 / 3.6	2.31 / 58.7	6062 / 9019	435
3 x 500	37	4/0	8	0.090 / 2.3	0.140 / 3.6	2.59 / 65.8	8427 / 12538	536

NOTES

- All imperial and metric values are reproduced from the corresponding Word specification table.
 - Ampacity values apply to the listed 2 kV EPR/CPE construction and conductor size.
- The Word document provides construction data, but no dimensional table, for the 5 kV to 15 kV XLPE version.
 - Final selection must consider voltage, installation method, ambient conditions and applicable regulations.

CERTIFICATIONS

