



CABLE STRUCTURE

Conductor	Electrolytic, stranded, tinned copper wire DIN VDE 0295 Class 5
Insulation	3GI3 Type EPR Compound
Electrical Field Control	Inner and Outer Semiconductive layer of semiconductive rubber
Protective-Earth Conductor	Tinned Copper conductor with semiconductive layer
Lay Up	Three main conductors laid-up with three control cores in the outer interstice
Inner Sheath	GM1b Type EPR Compound
Reinforcement	Embedded braid made of anti torsion synthetic threads
Outer Sheath	SGM5 Type elastomer compound, Red

PRODUCTION AND TEST STANDARDS

Construction	DIN VDE 0250-813
General Requirements	DIN VDE 0250-1
Guide to Use	DIN VDE 0298-3
Electrical Tests	DIN VDE 0472-501, 503, 508
Non-Electrical Tests	DIN VDE 0472-401, 402, 602, 303, 615
Under Fire Conditions Tests	DIN VDE 0472-803, 804
Flame Retardant	VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1
Oil Resistant	HD/EN/IEC 60811-2-1, DIN VDE 0473-811-2-1

OPERATING CHARACTERISTICS

Rated Voltage	3,6/6 kV	6/10 kV	8,7/15 kV	12/20 kV	18/30 kV
AC Test Voltage	11 kV	17 kV	24 kV	29 kV	43 kV
Max. Permissible Operating Voltage AC	4,2/7,2 kV 6,9/12 kV 10,4/18 kV 13,9/24 kV 20,8/36 kV Acc. to DIN VDE 0298 part 3				
Min Bending Radius	According to DIN VDE 0298, Part 4				
Current Carrying Capacity					
Working Temperature					
Fixed	-40°C .. +80°C				
Mobile	-25°C .. +80°C				
Max. Tensile Load of cable	15 N/mm ²				
Max. Torsion	25°/m				
Travel Speed for tunnelling app.	max. 30 m/min.				
Minimum distance for change of direction	20 X D				

Application

For the connection of electrical equipment, large material handling machines such as excavators, cranes, dumpers in mining and tunnelling applications. The flexible cable design allows for movement of the equipment during operation.



3,6/6 kV

Cross Section (mm ²)	Overall Diameter Min - Max (mm)	Approximate weight (kg / km)
3 x 25 + 3 x 25/3	41.8 - 45.0	2530
3 x 35 + 3 x 25/3	44.2 - 48.9	2900
3 x 50 + 3 x 25/3	48.5 - 51.4	3600
3 x 70 + 3 x 35/3	52.6 - 55.6	4400
3 x 95 + 3 x 50/3	55.7 - 58.8	5630
3 x 120 + 3 x 70/3	59.6 - 65.9	6200

6/10 kV

Cross Section (mm ²)	Overall Diameter Min - Max (mm)	Approximate weight (kg / km)
3 x 25 + 3 x 25/3	43.6 - 48.1	2600
3 x 35 + 3 x 25/3	45.6 - 50.4	2980
3 x 50 + 3 x 25/3	48.3 - 51.4	3720
3 x 70 + 3 x 35/3	53.4 - 59.1	4510
3 x 95 + 3 x 50/3	57.1 - 63.2	5720
3 x 120 + 3 x 70/3	63.0 - 69.7	6300

8,7/15 kV

Cross Section (mm ²)	Overall Diameter Min - Max (mm)	Approximate weight (kg / km)
3 x 25 + 3 x 25/3	48.1 - 53.2	3675
3 x 35 + 3 x 25/3	51.8 - 57.3	4415
3 x 50 + 3 x 25/3	55.5 - 61.4	5135
3 x 70 + 3 x 35/3	58.0 - 64.1	6005
3 x 95 + 3 x 50/3	63.4 - 70.1	7200
3 x 120 + 3 x 70/3	67.5 - 74.6	8700

12/20 kV

Cross Section (mm ²)	Overall Diameter Min - Max (mm)	Approximate weight (kg / km)
3 x 25 + 3 x 25/3	51.1 - 55.3	4460
3 x 35 + 3 x 25/3	54.0 - 58.2	4990
3 x 50 + 3 x 25/3	59.4 - 63.6	5740
3 x 70 + 3 x 35/3	64.2 - 68.4	6950
3 x 95 + 3 x 50/3	69.6 - 73.8	7870
3 x 120 + 3 x 70/3	73.60 - 77.8	9425

18/30 kV

Cross Section (mm ²)	Overall Diameter Min - Max (mm)	Approximate weight (kg / km)
3 x 25 + 3 x 25/3	66.0 - 72.8	6360
3 x 35 + 3 x 25/3	68.0 - 75.0	6925
3 x 50 + 3 x 25/3	71.6 - 79.1	7800
3 x 70 + 3 x 35/3	75.8 - 83.7	9140
3 x 95 + 3 x 50/3	79.4 - 87.7	10100
3 x 120 + 3 x 70/3	85.3 - 94.2	12260

20/35 kV

Cross Section (mm ²)	Overall Diameter Min - Max (mm)	Approximate weight (kg / km)
3 x 35 + 3 x 25/3	75.7 - 83.6	8400
3 x 50 + 3 x 25/3	79.5 - 87.8	9360
3 x 70 + 3 x 35/3	82.0 - 90.6	10400
3 x 95 + 3 x 50/3	87.3 - 96.4	11770
3 x 120 + 3 x 70/3	91.4 - 101.1	13680

