



CABLE STRUCTURE

Conductor	Electrolytic annealed, class 5 stranded tinned copper wires
Insulation	3GI3 type cross-linked elastomeric compound (VDE 0207 - Part 20)
Electrical Field Control Screens	Inner and outer layer of semiconductive rubber compound, easily strippable
Protective-Earth Cores	Tinned copper conductors with semiconductive layer make up earth cores that split into the interstices
Inner Sheath	GM1b type cross-linked elastomeric compound (VDE 0207 - Part 21)
Reinforcement	Antitorsion textile braided embedded sheath
Outer Sheath	5GM5 type cross-linked elastomeric compound (VDE 0207 - Part 21)
Color	Red

MAIN CHARACTERISTICS

Construction	Based on VDE 0250-813
General Requirements	VDE 0250-1
Guide to Use	VDE 0298-3, VDE 0298-4
Electrical Tests	VDE 0472-501, 512, 508, 502, 503
Non-electrical Tests	VDE 0472-401, 402, 602, 303, 615, 613
Conductor Resistance	VDE 0295, IEC 60228
Flame Retardant	IEC 60332-1-2, VDE 0482-332-1-2
Oil Resistant	VDE 0473-811-404, EN 60811-404

OPERATING CHARACTERISTICS

Rated Voltage	3,6/6 kV 6/10 kV 8,7/15 kV 12/20 kV 18/30 kV 20/35 kV
AC Test voltage	11 kV 17 kV 24 kV 29 kV 43 kV 50 kV
Operating Temperature	
<i>In Flexing Use</i>	-25°C to +80°C
<i>In Fixed Use</i>	-40°C to +90°C
Max. Conductor Operating Temp.	90°C
Conductor Short-Circuit Temp.	250°C (Max. 5 sec.)
Min. Installation Temp.	-15°C
Max. Permissible Tensile Force	15 N / mm ²
Min. Bending Radius	VDE 0298-3 Tab.3
Current Carrying Capacities	VDE 0298-4 Tab. 15
Max. Travel Speed	
<i>For Tunnelling and Mining applications</i>	30 m/min
<i>For Crane or similar application</i>	200 m/min - horizontal

APPLICATIONS

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



Cross Section (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (free movement) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
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3,6/6 kV

3x25+3x25/3	38,9 - 43,1	2.600	410	0,795
3x35+3x25/3	40,6 - 45,0	2.940	428	0,565
3x50+3x25/3	43,7 - 48,5	3.575	460	0,393
3x70+3x35/3	47,6 - 52,8	4.535	502	0,277
3x95+3x50/3	53,3 - 59,1	5.820	562	0,210
3x120+3x70/3	55,7 - 61,7	6.745	587	0,164
3x150+3x70/3	60,4 - 66,7	7.760	636	0,132
3x185+3x95/3	64,4 - 71,1	9.150	678	0,108

6/10 kV

3x25+3x25/3	39,9 - 44,1	2.710	420	0,795
3x35+3x25/3	41,7 - 46,0	3.050	438	0,565
3x50+3x25/3	44,8 - 49,5	3.690	472	0,393
3x70+3x35/3	48,6 - 53,8	4.660	512	0,277
3x95+3x50/3	54,3 - 60,1	5.960	572	0,210
3x120+3x70/3	56,7 - 62,7	6.890	597	0,164
3x150+3x70/3	61,4 - 67,7	7.875	646	0,132
3x185+3x95/3	65,4 - 72,1	9.300	688	0,108

8,7/15 kV

3x25+3x25/3	42,0 - 46,6	2.850	443	0,795
3x35+3x25/3	44,1 - 48,8	3.330	464	0,565
3x50+3x25/3	47,9 - 53,1	4.040	505	0,393
3x70+3x35/3	52,3 - 57,8	5.045	550	0,277
3x95+3x50/3	55,6 - 61,6	6.150	586	0,210
3x120+3x70/3	59,1 - 65,4	7.350	622	0,164
3x150+3x70/3	63,7 - 70,4	8.130	670	0,132
3x185+3x95/3	67,5 - 74,6	9.540	710	0,108

12/20 kV

3x25+3x25/3	44,6 - 49,3	3.115	470	0,795
3x35+3x25/3	46,9 - 51,9	3.560	494	0,565
3x50+3x25/3	51,6 - 57,2	4.430	544	0,393
3x70+3x35/3	54,8 - 60,6	5.400	577	0,277
3x95+3x50/3	58,0 - 64,2	6.450	611	0,210
3x120+3x70/3	63,2 - 70,0	8.025	666	0,164
3x150+3x70/3	66,0 - 72,8	8.460	694	0,132
3x185+3x95/3	71,5 - 79,0	10.150	753	0,108

Cross Section (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (free movement) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
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14/25 kV

3x25+3x25/3	49,4 - 54,6	3.650	520	0,795
3x35+3x25/3	51,4 - 56,8	3.925	541	0,565
3x50+3x25/3	54,6 - 60,3	4.600	575	0,393
3x70+3x35/3	58,6 - 64,7	5.870	617	0,277
3x95+3x50/3	63,4 - 70,1	7.000	668	0,210
3x120+3x70/3	67,0 - 74,0	8.000	705	0,164
3x150+3x70/3	71,4 - 79,0	9.400	752	0,132
3x185+3x95/3	75,3 - 83,2	11.000	793	0,108

18/30 kV

3x25+3x25/3	52,7 - 58,3	4.200	555	0,795
3x35+3x25/3	55,2 - 61,1	4.580	582	0,565
3x50+3x25/3	58,7 - 64,9	5.590	618	0,393
3x70+3x35/3	63,4 - 70,2	6.835	668	0,277
3x95+3x50/3	66,7 - 73,9	7.910	703	0,210
3x120+3x70/3	71,6 - 79,2	9.490	754	0,164
3x150+3x70/3	74,7 - 82,6	10.100	786	0,132
3x185+3x95/3	65,4 - 72,1	9.300	688	0,108

20/35 kV

3x25+3x25/3	42,0 - 46,6	2.850	443	0,795
3x35+3x25/3	44,1 - 48,8	3.330	464	0,565
3x50+3x25/3	47,9 - 53,1	4.040	505	0,393
3x70+3x35/3	52,3 - 57,8	5.045	550	0,277
3x95+3x50/3	55,6 - 61,6	6.150	586	0,210
3x120+3x70/3	59,1 - 65,4	7.350	622	0,164
3x150+3x70/3	63,7 - 70,4	8.130	670	0,132
3x185+3x95/3	67,5 - 74,6	9.540	710	0,108

12/20 kV

3x35+3x25/3	58,9 - 65,1	5.230	620	0,565
3x50+3x25/3	64,1 - 70,9	6.480	675	0,393
3x70+3x35/3	67,1 - 74,3	7.445	707	0,277
3x95+3x50/3	70,4 - 78,0	8.555	742	0,210
3x120+3x70/3	75,7 - 83,7	10.170	797	0,164