

# Reelkab MS (N)TSCGEW0EU



## CABLE STRUCTURE

<b>Conductor</b>	Phase and earth conductor made of tinned annealed stranded copper wires Class 5 in accordance with VDE 0295 and IEC 60228
<b>Conductor Screen</b>	Extruded inner semiconductive rubber compound and semiconductive tape
<b>Insulation</b>	High grade special compound based on EPR quality at least 3GI3, in accordance with VDE 0207 - Part 20
<b>Insulation Screen</b>	Extruded outer semiconductive rubber compound easily stripped and semiconductive tape. (Except 1,8/3 kV)
<b>Core Arrangement</b>	A three core design, where the earth conductor is divided into three parts and placed in the spaces between the cores. Left hand stranded.
<b>Inner Sheath</b>	Special rubber compound, quality at least 5GM3, in accordance with VDE 0207 - Part 21
<b>Reinforcement</b>	A braid of polyester threads, reinforced and bonded with vulcanization between the sheaths, delivers high durability to the sheath system
<b>Outer Sheath</b>	Special rubber compound quality at least 5GM5, in accordance with VDE 0207 - Part 21

## STANDARDS & MAIN CHARACTERISTICS

<b>Standard</b>	Based on VDE 0250-813	<b>Flame Retardant</b>	IEC 60332-1-2
<b>General Requirements</b>	VDE 0250-1	<b>Oil Resistant</b>	IEC 6081-404
<b>Guide to Use</b>	VDE 0298-3, VDE 0298-4	<b>UV Resistance</b>	BS EN 50289-4-17 / Method B
<b>Electrical Tests</b>	VDE 0472-501, 512, 508, 502, 503	<b>Water Resistance</b>	AD8
<b>Non-electrical Tests</b>	VDE 0472-401, 402, 602,615, 613		
<b>Conductor Resistance</b>	VDE 0295, IEC 60228		

## OPERATING CHARACTERISTICS

<b>Rated Voltage</b>	3,6/6 kV / 6/10 kV / 8,7/15 kV / 12/20 kV	<b>Min. Bending Radius</b>	VDE 0298-3
<b>Test Voltage</b>	11 kV / 17 kV / 24 kV / 29 kV	<b>Max. Tensile Load on the Conductor</b>	20 N/mm <sup>2</sup>
<b>Max. Conductor Temperature</b>	90°C	<b>Max. Tensile Load on the Conductor</b>	Up to 30 N/mm <sup>2</sup> (during acceleration)
<b>Short Circuit Temperature</b>	250°C (Max. 5 s)	<b>Torsional Stress</b>	± 25 °/m
<b>Min. Ambient Temperature</b>	-50°C	<b>Min. Distance with S-Type Directional Changes</b>	20 x D
<b>Max. Current Carrying Capacity</b>	VDE 0298-4	<b>Travel speed</b>	max. 240 m/min

## VISUAL AND MARKING

<b>Sheath Color</b>	Red	<b>Marking</b>	ÜNTEL Reelkab MS (N)TSCGEW0EU (NxS mm <sup>2</sup> ) (rated voltage) (Based on VDE 0250-813) [LOT NUMBER] [XXXX MT]
<b>Cores</b>	Color-coded phase identification ropes		

## APPLICATION

This cable is specially designed for mobile equipment operating under high to extreme mechanical stresses. It is engineered to withstand high travel speeds, dynamic tensile loads, multi-directional changes in movement across different planes, churning effects when running over rollers, and continuous torsional stresses. It is particularly suitable for fast-moving container cranes, portal cranes, stacker-reclaimers, and large-scale mobile industrial machinery.

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# Reelkab MS (N)TSCGEWOEU

## 1,8/3 kV

CAN*	Cross-section (mm <sup>2</sup> )	Conductor Diameter Max. (mm)	Earth Conductor Diameter Max. (mm)	Outer Sheath Diameter			Approx. Cable Weight (kg/km)	Min. Bending Radius Free moving (mm)	Permissible tensile force max. (N)	Dynamic tensile force max. (N)	Current Carrying Capacity (**) (A)	Short-circuit current (conductor) (kA)	Max. Electrical Resistance at 20°C (ohm/km)
				Min. (mm)	Nom. (mm)	Max. (mm)							
4711.1	3x25+3x25/3	7,30	4,50	34,3	36,3	37,3	2.258	373	1500	2250	131	3,58	0,795
4711.2	3x35+3x25/3	8,80	4,50	43,0	44,5	46,0	3.193	460	2100	3150	162	5,01	0,565
4711.3	3x50+3x25/3	10,50	4,50	46,4	47,8	49,4	3.863	494	3000	4500	202	7,15	0,393
4711.4	3x70+3x35/3	12,60	5,40	45,9	47,7	48,9	4.471	489	4200	6300	250	10,01	0,277
4711.5	3x95+3x50/3	14,50	6,40	50,3	53,2	54,3	5.748	543	5700	8550	301	13,59	0,21
4711.6	3x120+3x70/3	16,40	7,70	63,8	66,6	67,8	8.279	678	7200	10800	352	17,16	0,164
4711.7	3x150+3x70/3	18,10	7,70	67,7	69,9	71,7	9.361	717	9000	13500	404	21,45	0,132
4711.8	3x185+3x95/3	20,20	9,00	71,6	74,1	75,6	11.073	756	11100	16650	461	26,46	0,108
4711.9	3x240+3x120/3	23,40	10,10	79,4	82,1	83,4	14.058	834	14400	21600	540	34,32	0,0817
4711.10	3x300+3x150/3	26,10	11,40	84,7	88,3	89,7	16.964	897	18000	27000	620	42,90	0,0654

## 3,6/6 kV

CAN*	Cross-section (mm <sup>2</sup> )	Conductor Diameter Max. (mm)	Earth Conductor Diameter Max. (mm)	Outer Sheath Diameter			Approx. Cable Weight (kg/km)	Min. Bending Radius Free moving (mm)	Permissible tensile force max. (N)	Dynamic tensile force max. (N)	Current Carrying Capacity (**) (A)	Short-circuit current (conductor) (kA)	Max. Electrical Resistance at 20°C (ohm/km)
				Min. (mm)	Nom. (mm)	Max. (mm)							
4712.1	3x25+3x25/3	7,30	4,50	35,5	38,6	39,6	2.461	396	1500	2250	131	3,58	0,795
4712.2	3x35+3x25/3	8,80	4,50	39,0	41,5	42,6	2.964	426	2100	3150	162	5,01	0,565
4712.3	3x50+3x25/3	10,50	4,50	42,4	44,8	45,9	3.617	459	3000	4500	202	7,15	0,393
4712.4	3x70+3x35/3	12,60	5,40	46,4	48,8	49,9	4.617	499	4200	6300	250	10,01	0,277
4712.5	3x95+3x50/3	14,50	6,40	51,4	54,5	55,5	5.945	555	5700	8550	301	13,59	0,21
4712.6	3x120+3x70/3	16,40	7,70	55,0	57,8	59,0	7.184	590	7200	10800	352	17,16	0,164
4712.7	3x150+3x70/3	18,10	7,70	58,8	61,8	62,8	8.284	628	9000	13500	404	21,45	0,132
4712.8	3x185+3x95/3	20,20	9,00	64,0	67,0	68,0	10.063	680	11100	16650	461	26,46	0,108
4712.9	3x240+3x120/3	23,40	10,10	72,5	75,4	76,5	12.990	765	14400	21600	540	34,32	0,0817
4712.10	3x300+3x150/3	26,10	11,40	78,2	81,1	82,2	15.704	822	18000	27000	620	42,90	0,0654

\*\* Conductor temperature at 90 °C, Ambient air temperature at 30 °C

\* CAN : Cable Article Number

# Reelkab MS (N)TSCGEWUEU

## 6/10 kV

CAN*	Cross-section (mm <sup>2</sup> )	Conductor Diameter Max. (mm)	Earth Conductor Diameter Max. (mm)	Outer Sheath Diameter			Approx. Cable Weight (kg/km)	Min. Bending Radius Free moving (mm)	Permissible tensile force max. (N)	Dynamic tensile force max. (N)	Current Carrying Capacity (**) (A)	Short-circuit current (conductor) (kA)	Max. Electrical Resistance at 20 °C (ohm/km)
				Min. (mm)	Nom. (mm)	Max. (mm)							
4713.1	3x25+3x25/3	7,30	4,50	37,8	39,8	40,8	2.558	408	1500	2250	131	3,58	0,795
4713.2	3x35+3x25/3	8,80	4,50	40,2	42,1	43,2	3.016	432	2100	3150	162	5,01	0,565
4713.3	3x35+3x35/3	8,80	5,40	40,2	42,1	43,2	3.126	432	2100	3150	162	5,01	0,565
4713.4	3x35+3x50/3	8,80	6,40	42,7	44,6	45,7	3.525	457	2100	3150	162	5,01	0,565
4713.5	3x50+3x25/3	10,50	4,50	43,7	45,6	46,7	3.690	467	3000	4500	202	7,15	0,393
4713.6	3x70+3x35/3	12,60	5,40	47,7	49,6	50,7	4.698	507	4200	6300	250	10,01	0,277
4713.7	3x95+3x50/3	14,50	6,40	52,8	55,7	56,8	6.080	568	5700	8550	301	13,59	0,21
4713.8	3x120+3x70/3	16,40	7,70	56,2	59,0	60,2	7.328	602	7200	10800	352	17,16	0,164
4713.9	3x150+3x70/3	18,10	7,70	61,5	64,4	65,5	8.618	655	9000	13500	404	21,45	0,132
4713.10	3x185+3x95/3	20,20	9,00	65,3	68,2	69,3	10.239	693	11100	16650	461	26,46	0,108
4713.11	3x240+3x120/3	23,40	10,10	73,8	76,6	77,8	13.193	778	14400	21600	540	34,32	0,0817
4713.12	3x300+3x150/3	26,10	11,40	79,5	82,4	83,5	15.956	835	18000	27000	620	42,9	0,0654

## 8,7/15 kV

CAN*	Cross-section (mm <sup>2</sup> )	Conductor Diameter Max. (mm)	Earth Conductor Diameter Max. (mm)	Outer Sheath Diameter			Approx. Cable Weight (kg/km)	Min. Bending Radius Free moving (mm)	Permissible tensile force max. (N)	Dynamic tensile force max. (N)	Current Carrying Capacity (**) (A)	Short-circuit current (conductor) (kA)	Max. Electrical Resistance at 20 °C (ohm/km)
				Min. (mm)	Nom. (mm)	Max. (mm)							
4714.1	3x25+3x25/3	7,30	4,50	41,1	42,9	44,1	2.857	441	1500	2250	139	3,58	0,795
4714.2	3x35+3x25/3	8,80	4,50	43,7	45,7	46,7	3.373	467	2100	3150	172	5,01	0,565
4714.3	3x50+3x25/3	10,50	4,50	47,1	49,0	50,1	4.055	501	3000	4500	216	7,15	0,393
4714.4	3x70+3x35/3	12,60	5,40	52,0	54,8	56,0	5.291	560	4200	6300	265	10,01	0,277
4714.5	3x95+3x50/3	14,50	6,40	57,2	59,7	61,2	6.599	612	5700	8550	319	13,59	0,21
4714.6	3x120+3x70/3	16,40	7,70	62,1	65,0	66,1	8.138	661	7200	10800	371	17,16	0,164
4714.7	3x150+3x70/3	18,10	7,70	65,9	68,8	69,9	9.274	699	9000	13500	428	21,45	0,132
4714.8	3x185+3x95/3	20,20	9,00	69,8	72,6	73,8	10.920	738	11100	16650	488	26,46	0,108
4714.9	3x240+3x120/3	23,40	10,10	77,3	80,2	81,3	13.821	813	14400	21600	574	34,32	0,0817
4714.10	3x300+3x150/3	26,10	11,40	84,2	88,0	89,2	17.003	892	18000	27000	660	42,9	0,0654

\*\* Conductor temperature at 90 °C, Ambient air temperature at 30 °C

\* CAN : Cable Article Number

# Reelkab MS (N)TSCGEWOEU

12/20 kV

CAN*	Cross-section (mm <sup>2</sup> )	Conductor Diameter Max. (mm)	Earth Conductor Diameter Max. (mm)	Outer Sheath Diameter			Approx. Cable Weight (kg/km)	Min. Bending Radius Free moving (mm)	Permissible tensile force max. (N)	Dynamic tensile force max. (N)	Current Carrying Capacity (**) (A)	Short-circuit current (conductor) (kA)	Max. Electrical Resistance at 20 °C (ohm/km)
				Min. (mm)	Nom. (mm)	Max. (mm)							
4715.1	3x25+3x25/3	7,30	4,50	44,1	46,1	47,1	3.173	471	1500	2250	139	3,58	0,795
4715.2	3x35+3x25/3	8,80	4,50	46,6	48,6	49,6	3.686	496	2100	3150	172	5,01	0,565
4715.3	3x50+3x25/3	10,50	4,50	51,8	54,4	55,8	4.656	558	3000	4500	216	7,15	0,393
4715.4	3x70+3x35/3	12,60	5,40	55,0	58,0	59,0	5.702	590	4200	6300	265	10,01	0,277
4715.5	3x95+3x50/3	14,50	6,40	61,6	64,2	65,6	7.212	656	5700	8550	319	13,59	0,21
4715.6	3x120+3x70/3	16,40	7,70	65,1	68,0	69,1	8.582	691	7200	10800	371	17,16	0,164
4715.7	3x150+3x70/3	18,10	7,70	69,0	71,3	73,0	9.678	730	9000	13500	428	21,45	0,132
4715.8	3x185+3x95/3	20,20	9,00	74,3	77,2	78,3	11.664	783	11100	16650	488	26,46	0,108
4715.9	3x240+3x120/3	23,40	10,10	80,3	83,1	84,3	14.414	843	14400	21600	574	34,32	0,0817
4715.10	3x300+3x150/3	26,10	11,40	87,2	90,5	92,2	17.518	922	18000	27000	660	42,9	0,0654

\*\* Conductor temperature at 90 °C, Ambient air temperature at 30 °C

\* CAN : Cable Article Number