

# RHEYCORD® (RTS) (N)SHTOEU-J

Extra Heavy Duty Reeling Cables



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## Extra Heavy Duty Reeling Cables

**0.6/1 kV**

### Approval/Certificates

In line with VDE

### Applications

Extra heavy duty rubber reeling cable for control and power supplies. For applications with high mechanical stresses, especially for simultaneous tensile and torsion stresses. Suitable for motor-driven reels, spring-operated reels, drum-spreader, festoon- and hoisting systems.

### Design

#### 1. Conductor

Copper extra-fine stranded, class „RTS“. Better than IEC 60228, DIN VDE 0295 class 5

#### 2. Insulation

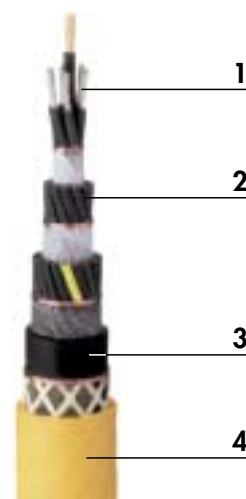
New special insulation compound „RHEYCLEAN“ based on EPDM, according to DIN VDE 0207 part 20

#### 3. Inner sheath

Special synthetic rubber (better than GM1b)

#### 4. Outer sheath

New special sandwich construction with incorporated anti-torsion braid for a optimum of flexibility and heavy duty. PCP (polychloroprene), type 5GM5, abrasion and notch-resistant. Colour: yellow



### Marking

RHEYCORD (RTS) (N)SHTOEU-J  
90/-40 1kV

### Core identification

( DIN VDE 0293 part 308/HD 308 S2)

Colour code:

4 cores: green/ yellow-brown-  
black-grey

5 cores: green/ yellow-blue-  
brown-black-grey

≥ 5 cores: black with printed  
numbers

### Standards

In line with DIN VDE 0250  
part 814

### Options

- Further numbers of cores and cross-section upon request
- Spreader cables for basket operation upon request

## RHEYCORD® (RTS) (N)SHTOEU-J

### Cable characteristics

Mechanical properties		
Minimum bending radii:	<b>outer diameter d</b>	
	<b>15 - 20 mm</b>	<b>&gt; 20 mm</b>
Flexible operation	5 d	5 d
With strain relief	5 d	5 d
Forced guidance e.g.:		
Reeling applications	5 d	6 d
Festoon systems	5 d	5 d
E-chain cable carrier systems	5 d	5 d
Static	4 d	4 d
Deflection pulleys	7.5 d	7.5 d
Minimum distance between two bends (S-shape deflection)	10 d	10 d
Travelling speed		
drum and drum-spreader	up to 200 m/min	
festoon-system	up to 240 m/min	

Chemical properties
Oil resistant For indoor and outdoor applications. Moisture, UV and ozone resistant.

Electrical and Thermal properties	
Nominal voltage	$U_o/U = 0.6/1$ kV
Maximum operating voltage in AC systems	$U_o/U = 0.72/1.2$ kV
Test voltage 50 Hz, 5 min	energy core 2,500 V control core 2,000 V
Current rating (A)	according to DIN VDE 0298 part 4
Max. temperature at the conductor	
in service	+ 90 °C
in short circuit	+ 250 °C
Max. surface temperature	
fixed installation	- 50 °C to +90 °C
flexible operation	- 40 °C to +90 °C
Max. static tensile stress of the conductor	15 N/mm <sup>2</sup>
Tensile stress of the carrier unit (spreader cable)	3,000 N

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### Technical data

Number of cores and nominal cross-section mm <sup>2</sup>	Permissible current rating (A)**	$\Delta U$ (cos $\varphi$ 0.8) Voltage drop (V/A x km)	Approx. outer diameter mm	Approx. weight kg/km
5x1.5	23	21.1	13	270
7x1.5	17	21.1	15	370
12x1.5	12	21.1	21	700
18x1.5	11	21.1	22	750
24x1.5	10	21.1	24	980
30x1.5	9	21.1	26	1,180
4x2.5	32	13.3	13	300
5x2.5	32	13.3	14	340
7x2.5	22	13.3	16	500
12x2.5	17	13.3	23	900
18x2.5	14	13.3	24	1,000
24x2.5 spreader	13	13.3	26	1,300
30x2.5 spreader	11	13.3	29	1,600
36x2.5 *spreader	10	13.3	31	1,700
44x2.5 *spreader	8	13.3	34	2,200
56x2.5 spreader	5	13.3	41	2,900
4x4	43	8.3	16	450
4x6	56	5.5	17	560
4x10	78	3.3	22	900
4x16	104	2.1	24	1,200
4x25	138	1.3	29	1,800
3x35+3x25/3	171	0.97	29	2,100
3x50+3x25/3	213	0.74	35	2,800
3x70+3x35/3	263	0.55	40	3,900
3x95+3x50/3	317	0.42	44	5,000
3x120+3x70/3	370	0.32	51	6,600
19x2.5 + 5x1.5C	10	13.3	27	1,300
25x2.5 + 5x1.5C	9	13.3	30	1,600

\* stock types

\*\* ambient temperature 30 °C, conductor temperature 90 °C