



Low-voltage rubber reeling cables (DIN VDE 0250-814)

RXG / RXG-D (N)SHTOEU-J

RXG / RXG-D Heavy-Duty PCP Reeling Cable (N)SHTOEU-J (0.6/1 kV)

Heavy-duty 30 N/mm² PCP reeling cable for horizontal (240 m/min) & vertical reels



0.6/1 kV

(N)SHTOEU-J

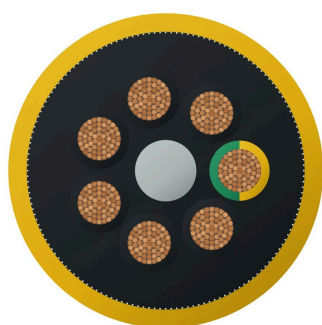
240 m/min · 30 N/mm²

Application

Extra-heavy-duty 0.6/1 kV (N)SHTOEU-J reeling cable with Class 5/FS copper cores, central strain-relief core, and yellow or black PCP sandwich sheath with anti-torsion braid across 70 power, control, -50 °C low-temp, screened data, and FO sizes.

Typical uses: Container Ports & STS/RTG Cranes, Bulk Material Handling, Floating Grab Dredgers, Arctic & Cold-Climate Mining

Construction



Cross-section, not to scale

- 1 Flexible copper conductor / optical fibres
- 2 Core insulation & coding
- 3 Screened data & optical elements (RXG-D)
- 4 Central plastic reinforcement
- 5 Inner sheath
- 6 Anti-torsion support braid
- 7 Outer sheath

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV (RXG-D all-optical variants are dielectric)	Max. operating voltage AC	0.7/1.2 kV
Max. operating voltage DC	0.9/1.8 kV	AC test voltage	2.5 kV AC
Current rating (DIN VDE 0298-4)	Per DIN VDE 0298-4 at 30 °C ambient (apply reel layer and multi-core grouping conversion factors)	Temperature, flexing	-35 °C to +80 °C (Low-Temp power series down to -50 °C)
Temperature, fixed installation	-50 °C to +80 °C	Max. conductor temperature	+90 °C
Short-circuit temperature	+250 °C	Max. travel speed	Up to 240 m/min horizontal reeling · up to 120 m/min vertical reeling (> 180 m/min on request)
Max. tensile load (dynamic)	30 N/mm ² standard (20 N/mm ² on Low-Temp & Power+FO series; 225–21,600 N across 70 sizes)	Min. bending radius, moving	6 × D (reeling) · 7.5 × D (diversion rollers) · 20 × D (S-shaped track curves)
S-bend distance	≥ 20 × D minimum distance between two changes of bending direction	Oil resistance	Oil-resistant outer sheath per DIN VDE 0472-803 / EN 60811-404
Flame retardance	Flame-retardant per IEC 60332-1-2 / DIN VDE 0472-804	Water, UV & ozone resistance	Temporary water submersion up to 50 m depth; ozone, UV and humidity resistant; LBS-free / silicone-free
Standards	(N)SHTOEU-J adapted to DIN VDE 0250-814		

Sizes

70 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation	Configuration	Outer Ø min	Outer Ø max	Cu number	Weight ≈	Permitted pull	Reel R min 6×D
RXG Control (1.5 – 2.5 mm ²) 19 sizes							
☐ RXG 5 × 1.5	5 × 1.5	13	14.6	75	280	225	88
☐ RXG 7 × 1.5	7 × 1.5	15.2	17.2	106	385	315	103
☐ RXG 12 × 1.5	12 × 1.5	21.4	23.4	182	710	540	140
☐ RXG 18 × 1.5	18 × 1.5	21.3	23.3	272	760	810	140
☐ RXG 24 × 1.5	24 × 1.5	23.8	26.8	363	990	1,080	161
☐ RXG 30 × 1.5	30 × 1.5	26.6	29.6	454	1,220	1,350	178
☐ RXG 36 × 1.5	36 × 1.5	26.5	29.5	543	1,260	1,620	177
☐ RXG 44 × 1.5	44 × 1.5	29.5	32.5	664	1,530	1,980	195
☐ RXG 56 × 1.5	56 × 1.5	34.9	37.9	845	2,050	2,520	227
☐ RXG 4 × 2.5	4 × 2.5	13.2	14.8	101	305	300	89
☐ RXG 5 × 2.5	5 × 2.5	14.2	15.8	126	355	375	95
☐ RXG 7 × 2.5	7 × 2.5	16.6	18.6	176	510	525	112
☐ RXG 12 × 2.5	12 × 2.5	23.4	25.4	302	920	900	152
☐ RXG 18 × 2.5	18 × 2.5	23.3	25.3	454	1,005	1,350	152
☐ RXG 24 × 2.5	24 × 2.5	26.2	29.2	605	1,320	1,800	175
☐ RXG 30 × 2.5	30 × 2.5	29.4	32.4	756	1,660	2,250	194
☐ RXG 36 × 2.5	36 × 2.5	30.3	33.3	907	1,720	2,700	200
☐ RXG 44 × 2.5	44 × 2.5	34.1	37.1	1,109	2,230	3,300	223
☐ RXG 56 × 2.5	56 × 2.5	40.1	43.1	1,408	2,940	4,200	259

Designation	Configuration	Outer Ø min	Outer Ø max	Cu number	Weight ≈	Permitted pull	Reel R min 6-D
RXG Power (4 – 240 mm ²) 17 sizes							
☐ RXG 4 × 4.0	4 × 4.0	16	18	161	455	480	108
☐ RXG 4 × 6.0	4 × 6.0	17.4	19.4	242	575	720	116
☐ RXG 4 × 10.0	4 × 10.0	21.6	23.6	424	905	1,200	142
☐ RXG 4 × 16.0	4 × 16.0	23.7	26.7	645	1,240	1,920	160
☐ RXG 4 × 25.0	4 × 25.0	28.5	31.5	1,020	1,850	3,000	189
☐ RXG 5 × 4	5 × 4	17.4	19.4	201	430	600	116
☐ RXG 5 × 6	5 × 6	19	21	302	690	900	126
☐ RXG 5 × 10	5 × 10	23.4	25.4	503	1,080	1,500	152
☐ RXG 5 × 16	5 × 16	26.1	29.1	805	1,500	2,400	175
☐ RXG 3 × 35 + 3 × 16/3	3 × 35 + 3 × 16/3	28.5	31.5	1,220	2,160	3,150	189
☐ RXG 3 × 50 + 3 × 25/3	3 × 50 + 3 × 25/3	34.4	37.4	1,764	2,850	4,500	224
☐ RXG 3 × 70 + 3 × 35/3	3 × 70 + 3 × 35/3	39.7	42.7	2,470	3,920	6,300	256
☐ RXG 3 × 95 + 3 × 50/3	3 × 95 + 3 × 50/3	44.3	47.3	3,377	5,020	8,550	284
☐ RXG 3 × 120 + 3 × 70/3	3 × 120 + 3 × 70/3	51	55	4,334	6,630	10,800	330
☐ RXG 3 × 150 + 3 × 70/3	3 × 150 + 3 × 70/3	53.9	57.9	5,242	7,690	13,500	347
☐ RXG 3 × 185 + 3 × 95/3	3 × 185 + 3 × 95/3	58.9	62.9	6,552	9,310	16,650	377
☐ RXG 3 × 240 + 3 × 120/3	3 × 240 + 3 × 120/3	67.4	71.4	8,870	12,200	21,600	428
RXG Power Low-Temp (–50 °C) 7 sizes							
☐ RXG-LT 3 × 50 + 3 × 25/3 (–50 °C)	3 × 50 + 3 × 25/3	32.9	36	1,680	2,520	3,000	216
☐ RXG-LT 3 × 70 + 3 × 35/3 (–50 °C)	3 × 70 + 3 × 35/3	38.9	42	2,352	3,490	4,200	252
☐ RXG-LT 3 × 95 + 3 × 50/3 (–50 °C)	3 × 95 + 3 × 50/3	42.4	46.5	3,216	4,460	5,700	279
☐ RXG-LT 3 × 120 + 3 × 70/3 (–50 °C)	3 × 120 + 3 × 70/3	47.9	52	4,128	5,640	7,200	312
☐ RXG-LT 3 × 150 + 3 × 70/3 (–50 °C)	3 × 150 + 3 × 70/3	51.7	55.8	4,992	6,710	9,000	335
☐ RXG-LT 3 × 185 + 3 × 95/3 (–50 °C)	3 × 185 + 3 × 95/3	56.2	60.3	6,240	7,860	11,100	362
☐ RXG-LT 3 × 240 + 3 × 120/3 (–50 °C)	3 × 240 + 3 × 120/3	64.2	68.3	8,064	10,800	14,400	410
RXG-D Data & Optical Fibre 7 sizes							
☐ RXG-D 6 × (2 × 1) C	6 × (2 × 1) C	28.9	31.9	460	1,330	360	191
☐ RXG-D 9 × (2 × 1) C	9 × (2 × 1) C	31	33	350	1,200	450	198
☐ RXG-D 12 G 62.5/125	12 G 62.5/125	14	16	0	240	2,000	96
☐ RXG-D 24 G 62.5/125	24 G 62.5/125	14	16	0	240	2,000	96
☐ RXG-D 12 G 50/125	12 G 50/125	14	16	0	240	2,000	96
☐ RXG-D 24 G 50/125	24 G 50/125	14	16	0	240	2,000	96
☐ RXG-D 12 E 9/125	12 E 9/125	14	16	0	240	2,000	96
RXG-D Control + Data / FO 10 sizes							
☐ RXG-D 12 × 2.5 + 12 × 1 CE	12 × 2.5 + 12 × 1 CE	26.2	29.2	545	1,230	900	175
☐ RXG-D 19 × 2.5 + 5 × 1 CE	19 × 2.5 + 5 × 1 CE	26.2	29.2	585	1,290	1,575	175
☐ RXG-D 25 × 2.5 + 5 × 1 CE	25 × 2.5 + 5 × 1 CE	29.4	32.4	736	1,620	975	194
☐ RXG-D 24 × 2.5 + 6 × (2 × 1) C	24 × 2.5 + 6 × (2 × 1) C	37	40	825	2,000	1,800	240
☐ RXG-D 30 × 1.5 + 7 × (2 × 1) C	30 × 1.5 + 7 × (2 × 1) C	42.5	45.5	612	2,800	1,350	273
☐ RXG-D 4 × 2.5 + 12 FO	4 × 2.5 + 12 FO	21	24	96	620	300	144
☐ RXG-D 12 × 2.5 + 12 FO	12 × 2.5 + 12 FO	23	25	288	830	900	150
☐ RXG-D 22 × 2.5 + 18 FO	22 × 2.5 + 18 FO	27	29	528	1,120	1,650	174
☐ RXG-D 34 × 2.5 + 12 FO + 12 FO	34 × 2.5 + 12 FO + 12 FO	34	37	816	1,900	2,550	222
☐ RXG-D 45 × 2.5 + 12 FO + 12 FO	45 × 2.5 + 12 FO + 12 FO	36	39	1,080	2,100	3,375	234

Designation	Configuration	Outer Ø min	Outer Ø max	Cu number	Weight ≈	Permitted pull	Reel R min 6×D
RXG-D Power + FO / Control 10 sizes							
☐ RXG-D 3 × 25 + 2 × 16/2 + 12 FO	3 × 25 + 2 × 16/2 + 12 FO	31.5	34.5	894	1,340	1,500	207
☐ RXG-D 3 × 35 + 2 × 16/2 + 12 FO	3 × 35 + 2 × 16/2 + 12 FO	31.5	34.5	1,181	1,794	2,100	207
☐ RXG-D 3 × 50 + 2 × 25/2 + 12 FO	3 × 50 + 2 × 25/2 + 12 FO	37.5	40.5	1,680	2,516	3,000	243
☐ RXG-D 3 × 70 + 2 × 35/2 + 12 FO	3 × 70 + 2 × 35/2 + 12 FO	39	42	2,352	3,494	4,200	252
☐ RXG-D 3 × 95 + 2 × 50/2 + 12 FO	3 × 95 + 2 × 50/2 + 12 FO	43	46	3,216	4,466	5,700	276
☐ RXG-D 3 × 120 + 2 × 70/2 + 12 FO	3 × 120 + 2 × 70/2 + 12 FO	48	52	4,128	5,640	7,200	312
☐ RXG-D 3 × 150 + 2 × 70/2 + 12 FO	3 × 150 + 2 × 70/2 + 12 FO	52	56	4,992	6,713	9,000	336
☐ RXG-D 3 × 185 + 2 × 95/2 + 12 FO	3 × 185 + 2 × 95/2 + 12 FO	56	61	6,240	7,865	11,100	366
☐ RXG-D 3 × 240 + 2 × 120/2 + 12 FO	3 × 240 + 2 × 120/2 + 12 FO	64	70	8,064	10,800	14,400	420
☐ RXG-D 5 × 25 + 12 × 1.5 (Power + Control)	5 × 25 + 12 × 1.5	41.4	42.2	1,517	2,950	3,750	253

- All 70 configurations verified against the reference reeling cable catalog, including the RXG-D 5 × 25 + 12 × 1.5 Power+Control build omitted from the summary PDF.
- Permitted dynamic tensile load is 30 N/mm² on standard RXG Control/Power and RXG-D Control+FO series, and 20 N/mm² on the -50 °C Low-Temperature Power and RXG-D Power+12 FO series.
- Row 22 × 2.5 + 18 FO tensile load corrected from the source typographical print '16.050' (16,050 N) to 1,650 N (22 × 2.5 mm² × 30 N/mm² = 1,650 N).

Electrical reference data

70 sizes

Designation	Rated U0/U	Max. DC R 20 °C	Ref. Ampacity 30 °C	AC Test Voltage
RXG Control (1.5 – 2.5 mm ²) 19 sizes				
RXG 5 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 7 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 12 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 18 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 24 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 30 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 36 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 44 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 56 × 1.5	0.6/1 kV	19.5	18	2.5 kV AC
RXG 4 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 5 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 7 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 12 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 18 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 24 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 30 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 36 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 44 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG 56 × 2.5	0.6/1 kV	7.98	26	2.5 kV AC
RXG Power (4 – 240 mm ²) 17 sizes				
RXG 4 × 4.0	0.6/1 kV	4.95	34	2.5 kV AC
RXG 4 × 6.0	0.6/1 kV	3.30	44	2.5 kV AC
RXG 4 × 10.0	0.6/1 kV	1.91	61	2.5 kV AC
RXG 4 × 16.0	0.6/1 kV	1.21	82	2.5 kV AC
RXG 4 × 25.0	0.6/1 kV	0.780	108	2.5 kV AC
RXG 5 × 4	0.6/1 kV	4.95	34	2.5 kV AC
RXG 5 × 6	0.6/1 kV	3.30	44	2.5 kV AC
RXG 5 × 10	0.6/1 kV	1.91	61	2.5 kV AC

Designation	Rated U0/U	Max. DC R 20 °C	Ref. Ampacity 30 °C	AC Test Voltage
RXG 5 × 16	0.6/1 kV	1.21	82	2.5 kV AC
RXG 3 × 35 + 3 × 16/3	0.6/1 kV	0.554	135	2.5 kV AC
RXG 3 × 50 + 3 × 25/3	0.6/1 kV	0.386	168	2.5 kV AC
RXG 3 × 70 + 3 × 35/3	0.6/1 kV	0.272	207	2.5 kV AC
RXG 3 × 95 + 3 × 50/3	0.6/1 kV	0.206	250	2.5 kV AC
RXG 3 × 120 + 3 × 70/3	0.6/1 kV	0.161	292	2.5 kV AC
RXG 3 × 150 + 3 × 70/3	0.6/1 kV	0.129	335	2.5 kV AC
RXG 3 × 185 + 3 × 95/3	0.6/1 kV	0.106	382	2.5 kV AC
RXG 3 × 240 + 3 × 120/3	0.6/1 kV	0.0801	453	2.5 kV AC
RXG Power Low-Temp (–50 °C) 7 sizes				
RXG-LT 3 × 50 + 3 × 25/3 (–50 °C)	0.6/1 kV	0.386	168	2.5 kV AC
RXG-LT 3 × 70 + 3 × 35/3 (–50 °C)	0.6/1 kV	0.272	207	2.5 kV AC
RXG-LT 3 × 95 + 3 × 50/3 (–50 °C)	0.6/1 kV	0.206	250	2.5 kV AC
RXG-LT 3 × 120 + 3 × 70/3 (–50 °C)	0.6/1 kV	0.161	292	2.5 kV AC
RXG-LT 3 × 150 + 3 × 70/3 (–50 °C)	0.6/1 kV	0.129	335	2.5 kV AC
RXG-LT 3 × 185 + 3 × 95/3 (–50 °C)	0.6/1 kV	0.106	382	2.5 kV AC
RXG-LT 3 × 240 + 3 × 120/3 (–50 °C)	0.6/1 kV	0.0801	453	2.5 kV AC
RXG-D Data & Optical Fibre 7 sizes				
RXG-D 6 × (2 × 1) C	0.6/1 kV	19.5	15	2.5 kV AC
RXG-D 9 × (2 × 1) C	0.6/1 kV	19.5	15	2.5 kV AC
RXG-D 12 G 62.5/125	Dielectric FO	—	—	—
RXG-D 24 G 62.5/125	Dielectric FO	—	—	—
RXG-D 12 G 50/125	Dielectric FO	—	—	—
RXG-D 24 G 50/125	Dielectric FO	—	—	—
RXG-D 12 E 9/125	Dielectric FO	—	—	—
RXG-D Control + Data / FO 10 sizes				
RXG-D 12 × 2.5 + 12 × 1 CE	0.6/1 kV	7.98 / 19.5	26 / 15	2.5 kV AC
RXG-D 19 × 2.5 + 5 × 1 CE	0.6/1 kV	7.98 / 19.5	26 / 15	2.5 kV AC
RXG-D 25 × 2.5 + 5 × 1 CE	0.6/1 kV	7.98 / 19.5	26 / 15	2.5 kV AC
RXG-D 24 × 2.5 + 6 × (2 × 1) C	0.6/1 kV	7.98 / 19.5	26 / 15	2.5 kV AC
RXG-D 30 × 1.5 + 7 × (2 × 1) C	0.6/1 kV	19.5	18 / 15	2.5 kV AC
RXG-D 4 × 2.5 + 12 FO	0.6/1 kV	7.98	26	2.5 kV AC
RXG-D 12 × 2.5 + 12 FO	0.6/1 kV	7.98	26	2.5 kV AC
RXG-D 22 × 2.5 + 18 FO	0.6/1 kV	7.98	26	2.5 kV AC
RXG-D 34 × 2.5 + 12 FO + 12 FO	0.6/1 kV	7.98	26	2.5 kV AC
RXG-D 45 × 2.5 + 12 FO + 12 FO	0.6/1 kV	7.98	26	2.5 kV AC
RXG-D Power + FO / Control 10 sizes				
RXG-D 3 × 25 + 2 × 16/2 + 12 FO	0.6/1 kV	0.780	108	2.5 kV AC
RXG-D 3 × 35 + 2 × 16/2 + 12 FO	0.6/1 kV	0.554	135	2.5 kV AC
RXG-D 3 × 50 + 2 × 25/2 + 12 FO	0.6/1 kV	0.386	168	2.5 kV AC
RXG-D 3 × 70 + 2 × 35/2 + 12 FO	0.6/1 kV	0.272	207	2.5 kV AC
RXG-D 3 × 95 + 2 × 50/2 + 12 FO	0.6/1 kV	0.206	250	2.5 kV AC
RXG-D 3 × 120 + 2 × 70/2 + 12 FO	0.6/1 kV	0.161	292	2.5 kV AC
RXG-D 3 × 150 + 2 × 70/2 + 12 FO	0.6/1 kV	0.129	335	2.5 kV AC
RXG-D 3 × 185 + 2 × 95/2 + 12 FO	0.6/1 kV	0.106	382	2.5 kV AC
RXG-D 3 × 240 + 2 × 120/2 + 12 FO	0.6/1 kV	0.0801	453	2.5 kV AC
RXG-D 5 × 25 + 12 × 1.5 (Power + Control)	0.6/1 kV	0.780 / 19.5	108 / 18	2.5 kV AC

– Maximum DC conductor resistance at 20 °C per IEC 60228 Table 3 for Class 5 bare copper conductors.

- Free-air reference ampacity at 30 °C ambient per DIN VDE 0298-4; apply reel layer factor (0.80 for 1 layer, 0.61 for 2 layers, 0.49 for 3 layers) and ambient temperature factor.

Standards and approvals

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

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Typical values for this cable type. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.