



Medium-voltage rubber reeling cables (DIN VDE 0250-813)

WXG / WXG-D R-(N)TSCGEWOEU

WXG / WXG-D Extra-Heavy-Duty MV Reeling Cable (6/10–12/20 kV)

Bright-red 3-layer sandwich PCP MV reeling cable up to 240 m/min with optional 6/12/18 FO



6/10–12/20 kV

(N)TSKCGEWOEU-FO

240 m/min · 20 N/mm²

Application

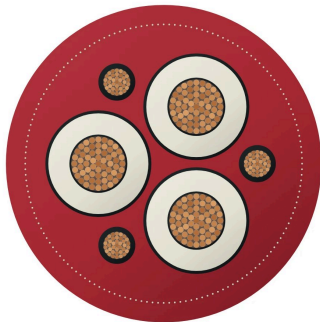
Extra-heavy-duty MV reeling cable (6/10–12/20 kV) per DIN VDE 0250-813 (R-(N)TSCGEWOEU / (N)TSKCGEWOEU-FO) with 7×D short-lay tinned copper cores, cold-strip EPR/NBR field control, 5GM3 inner sheath, anti-torsion braid, and red 5GM5 PCP sheath up to 240 m/min.

Typical uses: High-Speed STS & RMG Container Cranes, Ship Unloaders & Automated Port Terminals, Stacker / Reclaimers & Bulk Handling, Heavy Open-Pit Mining Excavators

Construction



WXG / WXG-D TEBAOFLEX.COM



Cross-section, not to scale

- 1 Extra-flexible tinned copper conductor
- 2 Semiconductive EPR inner & cold-strip NBR outer screens (CGE)
- 3 High-voltage 3GI3 EPR core insulation
- 4 Central rubber cross (K), split earth & optical unit (WXG-D)
- 5 Submersible red 5GM3 EPR inner sheath
- 6 Vulcanized polyester anti-torsion braid
- 7 Middle & outer sheaths (5GM5 Bright Red PCP)

Technical data

Typical values

Rated voltage U0/U	6.0/10.0 kV, 8.7/15.0 kV, and 12.0/20.0 kV	Max. operating voltage AC	7.0/12.0 kV (6/10 kV) · 10.2/18.0 kV (8.7/15 kV) · 14.0/24.0 kV (12/20 kV)
Max. operating voltage DC	9.0/18.0 kV (6/10 kV) · 13.0/26.0 kV (8.7/15 kV) · 18.0/36.0 kV (12/20 kV)	AC test voltage (DIN VDE 0250-813)	17 kV (6/10 kV) · 24 kV (8.7/15 kV) · 29 kV (12/20 kV) per DIN VDE 0250-813
Current rating (DIN VDE 0298-4)	According to DIN VDE 0298-4 at 30 °C ambient (apply reel layer derating factors: 0.80 for 1 layer, 0.61 for 2 layers, 0.49 for 3 layers)	Temperature, flexing	–35 °C to +80 °C (–25 °C to +80 °C in standard table; down to –35 °C per overview specification)
Temperature, fixed installation	–50 °C to +80 °C (–40 °C to +80 °C in standard table)	Max. conductor temperature	+90 °C
Short-circuit temperature	+250 °C per DIN VDE 0250-813 (200 °C conservative catalog rating)	Max. travel speed	Up to 240 m/min (> 240 m/min on request) through multiple diversion roller assemblies
Max. tensile load (dynamic)	20 N/mm ² of phase conductor cross-section during dynamic reeling (1,500–9,000 N across 25–150 mm ²)	Min. bending radius, moving	12 × D on the reel · 15 × D at deflection pulley · 20 × D minimum distance at S-type directional changes
Permissible torsional stress	±25 °/m permissible operational torsion	Fibre count & types (WXG-D)	WXG-D: 6 optical fibres in standard tables (12, 18 or more fibres on request) in E9/125 SM, 50/125 MM, or 62.5/125 MM per DIN VDE 0888 / IEC 9314-3
Optical attenuation (850 / 1300 / 1550 nm)	E9/125 SM: 0.4 dB/km (1300 nm), 0.3 dB/km (1550 nm) · 50/125 MM: 2.8 dB/km (850 nm), 0.8 dB/km (1300 nm) · 62.5/125 MM: 3.3 dB/km (850 nm), 0.9 dB/km (1300 nm)	Oil, UV, ozone & water resistance	Unlimited resistance to atmospheric corrosion; oil, ozone, UV, and humidity resistant; suitable for limited use in water (5GM3/5GM5); CFC-free, LBS-free / silicone-free
Flame retardance	Flame-retardant and self-extinguishing per IEC 60332-1-2 / DIN VDE 0482-265-2-1	Standards	R-(N)TSCGEWOEU / (N)TSKCGEWOEU-FO adapted to DIN VDE 0250-813 (VDE Reg.-No. 9809)

Sizes

42 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 12×D
WXG Power · 6/10 kV (7 sizes) 7 sizes							
☐ WXG 6/10 kV · 3 × 25 + 3 G 25/3	3 × 25 + 3 G 25/3	38.4	41.4	1,008	2,380	1,500	497
☐ WXG 6/10 kV · 3 × 35 + 3 G 25/3	3 × 35 + 3 G 25/3	40.9	43.9	1,411	2,880	2,100	527
☐ WXG 6/10 kV · 3 × 50 + 3 G 25/3	3 × 50 + 3 G 25/3	44.4	47.4	1,764	3,480	3,000	569
☐ WXG 6/10 kV · 3 × 70 + 3 G 35/3	3 × 70 + 3 G 35/3	49.4	53.4	2,621	4,590	4,200	641
☐ WXG 6/10 kV · 3 × 95 + 3 G 50/3	3 × 95 + 3 G 50/3	53.7	57.7	3,377	5,660	5,700	692
☐ WXG 6/10 kV · 3 × 120 + 3 G 70/3	3 × 120 + 3 G 70/3	57.2	61.2	4,334	6,830	7,200	734
☐ WXG 6/10 kV · 3 × 150 + 3 G 70/3	3 × 150 + 3 G 70/3	62.5	66.5	5,242	8,180	9,000	798
WXG Power · 8.7/15 kV (7 sizes) 7 sizes							
☐ WXG 8.7/15 kV · 3 × 25 + 3 G 25/3	3 × 25 + 3 G 25/3	41.8	44.8	1,008	2,670	1,500	538
☐ WXG 8.7/15 kV · 3 × 35 + 3 G 25/3	3 × 35 + 3 G 25/3	44.4	47.4	1,411	3,130	2,100	569
☐ WXG 8.7/15 kV · 3 × 50 + 3 G 25/3	3 × 50 + 3 G 25/3	47.9	50.9	1,764	3,810	3,000	611
☐ WXG 8.7/15 kV · 3 × 70 + 3 G 35/3	3 × 70 + 3 G 35/3	52.9	56.9	2,621	4,960	4,200	683
☐ WXG 8.7/15 kV · 3 × 95 + 3 G 50/3	3 × 95 + 3 G 50/3	57.2	61.2	3,377	6,070	5,700	734
☐ WXG 8.7/15 kV · 3 × 120 + 3 G 70/3	3 × 120 + 3 G 70/3	62.1	66.1	4,334	7,480	7,200	793
☐ WXG 8.7/15 kV · 3 × 150 + 3 G 70/3	3 × 150 + 3 G 70/3	65.9	69.9	5,242	8,630	9,000	839

Designation	Configuration	Outer Ø min	Outer Ø max	Cu number	Weight ≈	Permitted pull	Reel R min 12×D
WXG Power · 12/20 kV (7 sizes) 7 sizes							
☐ WXG 12/20 kV · 3 × 25 + 3 G 25/3	3 × 25 + 3 G 25/3	44.8	47.8	1,008	2,940	1,500	574
☐ WXG 12/20 kV · 3 × 35 + 3 G 25/3	3 × 35 + 3 G 25/3	47.4	50.4	1,411	3,420	2,100	605
☐ WXG 12/20 kV · 3 × 50 + 3 G 25/3	3 × 50 + 3 G 25/3	51.8	55.8	1,764	4,300	3,000	670
☐ WXG 12/20 kV · 3 × 70 + 3 G 35/3	3 × 70 + 3 G 35/3	55.9	59.9	2,621	5,300	4,200	719
☐ WXG 12/20 kV · 3 × 95 + 3 G 50/3	3 × 95 + 3 G 50/3	61.9	65.6	3,377	6,660	5,700	787
☐ WXG 12/20 kV · 3 × 120 + 3 G 70/3	3 × 120 + 3 G 70/3	65.1	69.1	4,334	7,800	7,200	829
☐ WXG 12/20 kV · 3 × 150 + 3 G 70/3	3 × 150 + 3 G 70/3	69	73	5,242	9,060	9,000	876
WXG-D Power + 6 FO · 6/10 kV (7 sizes) 7 sizes							
☐ WXG-D 6/10 kV · 3 × 25 + 2 × 25/2 + 6 FO	3 × 25 + 2 × 25/2 + 6 FO	40.7	43.7	1,008	2,610	1,500	524
☐ WXG-D 6/10 kV · 3 × 35 + 2 × 25/2 + 6 FO	3 × 35 + 2 × 25/2 + 6 FO	42.7	45.7	1,411	3,010	2,100	548
☐ WXG-D 6/10 kV · 3 × 50 + 2 × 25/2 + 6 FO	3 × 50 + 2 × 25/2 + 6 FO	46.1	49.1	1,764	3,680	3,000	589
☐ WXG-D 6/10 kV · 3 × 70 + 2 × 35/2 + 6 FO	3 × 70 + 2 × 35/2 + 6 FO	51.1	55.1	2,621	4,810	4,200	661
☐ WXG-D 6/10 kV · 3 × 95 + 2 × 50/2 + 6 FO	3 × 95 + 2 × 50/2 + 6 FO	56.1	60.1	3,377	6,000	5,700	721
☐ WXG-D 6/10 kV · 3 × 120 + 2 × 70/2 + 6 FO	3 × 120 + 2 × 70/2 + 6 FO	60.9	64.9	4,334	7,410	7,200	779
☐ WXG-D 6/10 kV · 3 × 150 + 2 × 70/2 + 6 FO	3 × 150 + 2 × 70/2 + 6 FO	64.8	68.8	5,242	8,750	9,000	826
WXG-D Power + 6 FO · 8.7/15 kV (7 sizes) 7 sizes							
☐ WXG-D 8.7/15 kV · 3 × 25 + 2 × 25/2 + 6 FO	3 × 25 + 2 × 25/2 + 6 FO	43.5	46.5	1,008	2,860	1,500	558
☐ WXG-D 8.7/15 kV · 3 × 35 + 2 × 25/2 + 6 FO	3 × 35 + 2 × 25/2 + 6 FO	46.1	49.1	1,411	3,330	2,100	589
☐ WXG-D 8.7/15 kV · 3 × 50 + 2 × 25/2 + 6 FO	3 × 50 + 2 × 25/2 + 6 FO	50.5	54.5	1,764	4,210	3,000	654
☐ WXG-D 8.7/15 kV · 3 × 70 + 2 × 35/2 + 6 FO	3 × 70 + 2 × 35/2 + 6 FO	55.2	59.2	2,621	5,270	4,200	710
☐ WXG-D 8.7/15 kV · 3 × 95 + 2 × 50/2 + 6 FO	3 × 95 + 2 × 50/2 + 6 FO	60.9	64.9	3,377	6,640	5,700	779
☐ WXG-D 8.7/15 kV · 3 × 120 + 2 × 70/2 + 6 FO	3 × 120 + 2 × 70/2 + 6 FO	64.4	68.4	4,334	7,870	7,200	821
☐ WXG-D 8.7/15 kV · 3 × 150 + 2 × 70/2 + 6 FO	3 × 150 + 2 × 70/2 + 6 FO	68.8	72.8	5,242	9,130	9,000	874
WXG-D Power + 6 FO · 12/20 kV (7 sizes) 7 sizes							
☐ WXG-D 12/20 kV · 3 × 25 + 2 × 25/2 + 6 FO	3 × 25 + 2 × 25/2 + 6 FO	46.6	49.6	1,008	3,150	1,500	595
☐ WXG-D 12/20 kV · 3 × 35 + 2 × 25/2 + 6 FO	3 × 35 + 2 × 25/2 + 6 FO	50.1	54.1	1,411	3,810	2,100	649
☐ WXG-D 12/20 kV · 3 × 50 + 2 × 25/2 + 6 FO	3 × 50 + 2 × 25/2 + 6 FO	54.1	58.1	1,764	4,610	3,000	697
☐ WXG-D 12/20 kV · 3 × 70 + 2 × 35/2 + 6 FO	3 × 70 + 2 × 35/2 + 6 FO	58.2	62.2	2,621	5,640	4,200	746
☐ WXG-D 12/20 kV · 3 × 95 + 2 × 50/2 + 6 FO	3 × 95 + 2 × 50/2 + 6 FO	64	68	3,377	7,050	5,700	816
☐ WXG-D 12/20 kV · 3 × 120 + 2 × 70/2 + 6 FO	3 × 120 + 2 × 70/2 + 6 FO	68	72	4,334	8,360	7,200	864
☐ WXG-D 12/20 kV · 3 × 150 + 2 × 70/2 + 6 FO	3 × 150 + 2 × 70/2 + 6 FO	73.3	77.3	5,242	9,840	9,000	928

- Permitted dynamic tensile load equals 20 N/mm² of total phase conductor cross-section (1,500 N for 3 × 25 mm² up to 9,000 N for 3 × 150 mm²).
- On WXG 8.7/15 kV 3 × 70 + 3 G 35/3 and WXG 12/20 kV 3 × 70 + 3 G 35/3, the legacy catalog table prints '4.220 N' and '5.250 N'; both are normalized to the true 20 N/mm² rating of 4,200 N (matching WXG 6/10 kV and all three WXG-D 3 × 70 rows).
- WXG-D standard tables integrate 6 optical fibres; 12, 18, or more fibres in E9/125, 50/125, or 62.5/125 µm are available on request.

Electrical reference data

42 sizes

Designation	Rated U0/U	Max. DC R 20 °C	Ref. Ampacity 30 °C	AC Test Voltage
WXG Power · 6/10 kV (7 sizes) 7 sizes				
WXG 6/10 kV · 3 × 25 + 3 G 25/3	6/10 kV	0.795	131	17 kV AC (DIN VDE 0250-813)
WXG 6/10 kV · 3 × 35 + 3 G 25/3	6/10 kV	0.565	162	17 kV AC (DIN VDE 0250-813)
WXG 6/10 kV · 3 × 50 + 3 G 25/3	6/10 kV	0.393	202	17 kV AC (DIN VDE 0250-813)
WXG 6/10 kV · 3 × 70 + 3 G 35/3	6/10 kV	0.277	250	17 kV AC (DIN VDE 0250-813)
WXG 6/10 kV · 3 × 95 + 3 G 50/3	6/10 kV	0.210	301	17 kV AC (DIN VDE 0250-813)
WXG 6/10 kV · 3 × 120 + 3 G 70/3	6/10 kV	0.164	352	17 kV AC (DIN VDE 0250-813)

Designation	Rated U0/U	Max. DC R 20 °C	Ref. Ampacity 30 °C	AC Test Voltage
WXG 6/10 kV · 3 × 150 + 3 G 70/3	6/10 kV	0.132	404	17 kV AC (DIN VDE 0250-813)
WXG Power · 8.7/15 kV (7 sizes) 7 sizes				
WXG 8.7/15 kV · 3 × 25 + 3 G 25/3	8.7/15 kV	0.795	131	24 kV AC (DIN VDE 0250-813)
WXG 8.7/15 kV · 3 × 35 + 3 G 25/3	8.7/15 kV	0.565	162	24 kV AC (DIN VDE 0250-813)
WXG 8.7/15 kV · 3 × 50 + 3 G 25/3	8.7/15 kV	0.393	202	24 kV AC (DIN VDE 0250-813)
WXG 8.7/15 kV · 3 × 70 + 3 G 35/3	8.7/15 kV	0.277	250	24 kV AC (DIN VDE 0250-813)
WXG 8.7/15 kV · 3 × 95 + 3 G 50/3	8.7/15 kV	0.210	301	24 kV AC (DIN VDE 0250-813)
WXG 8.7/15 kV · 3 × 120 + 3 G 70/3	8.7/15 kV	0.164	352	24 kV AC (DIN VDE 0250-813)
WXG 8.7/15 kV · 3 × 150 + 3 G 70/3	8.7/15 kV	0.132	404	24 kV AC (DIN VDE 0250-813)
WXG Power · 12/20 kV (7 sizes) 7 sizes				
WXG 12/20 kV · 3 × 25 + 3 G 25/3	12/20 kV	0.795	131	29 kV AC (DIN VDE 0250-813)
WXG 12/20 kV · 3 × 35 + 3 G 25/3	12/20 kV	0.565	162	29 kV AC (DIN VDE 0250-813)
WXG 12/20 kV · 3 × 50 + 3 G 25/3	12/20 kV	0.393	202	29 kV AC (DIN VDE 0250-813)
WXG 12/20 kV · 3 × 70 + 3 G 35/3	12/20 kV	0.277	250	29 kV AC (DIN VDE 0250-813)
WXG 12/20 kV · 3 × 95 + 3 G 50/3	12/20 kV	0.210	301	29 kV AC (DIN VDE 0250-813)
WXG 12/20 kV · 3 × 120 + 3 G 70/3	12/20 kV	0.164	352	29 kV AC (DIN VDE 0250-813)
WXG 12/20 kV · 3 × 150 + 3 G 70/3	12/20 kV	0.132	404	29 kV AC (DIN VDE 0250-813)
WXG-D Power + 6 FO · 6/10 kV (7 sizes) 7 sizes				
WXG-D 6/10 kV · 3 × 25 + 2 × 25/2 + 6 FO	6/10 kV	0.795	131	17 kV AC (DIN VDE 0250-813)
WXG-D 6/10 kV · 3 × 35 + 2 × 25/2 + 6 FO	6/10 kV	0.565	162	17 kV AC (DIN VDE 0250-813)
WXG-D 6/10 kV · 3 × 50 + 2 × 25/2 + 6 FO	6/10 kV	0.393	202	17 kV AC (DIN VDE 0250-813)
WXG-D 6/10 kV · 3 × 70 + 2 × 35/2 + 6 FO	6/10 kV	0.277	250	17 kV AC (DIN VDE 0250-813)
WXG-D 6/10 kV · 3 × 95 + 2 × 50/2 + 6 FO	6/10 kV	0.210	301	17 kV AC (DIN VDE 0250-813)
WXG-D 6/10 kV · 3 × 120 + 2 × 70/2 + 6 FO	6/10 kV	0.164	352	17 kV AC (DIN VDE 0250-813)
WXG-D 6/10 kV · 3 × 150 + 2 × 70/2 + 6 FO	6/10 kV	0.132	404	17 kV AC (DIN VDE 0250-813)
WXG-D Power + 6 FO · 8.7/15 kV (7 sizes) 7 sizes				
WXG-D 8.7/15 kV · 3 × 25 + 2 × 25/2 + 6 FO	8.7/15 kV	0.795	131	24 kV AC (DIN VDE 0250-813)
WXG-D 8.7/15 kV · 3 × 35 + 2 × 25/2 + 6 FO	8.7/15 kV	0.565	162	24 kV AC (DIN VDE 0250-813)
WXG-D 8.7/15 kV · 3 × 50 + 2 × 25/2 + 6 FO	8.7/15 kV	0.393	202	24 kV AC (DIN VDE 0250-813)
WXG-D 8.7/15 kV · 3 × 70 + 2 × 35/2 + 6 FO	8.7/15 kV	0.277	250	24 kV AC (DIN VDE 0250-813)
WXG-D 8.7/15 kV · 3 × 95 + 2 × 50/2 + 6 FO	8.7/15 kV	0.210	301	24 kV AC (DIN VDE 0250-813)
WXG-D 8.7/15 kV · 3 × 120 + 2 × 70/2 + 6 FO	8.7/15 kV	0.164	352	24 kV AC (DIN VDE 0250-813)
WXG-D 8.7/15 kV · 3 × 150 + 2 × 70/2 + 6 FO	8.7/15 kV	0.132	404	24 kV AC (DIN VDE 0250-813)
WXG-D Power + 6 FO · 12/20 kV (7 sizes) 7 sizes				
WXG-D 12/20 kV · 3 × 25 + 2 × 25/2 + 6 FO	12/20 kV	0.795	131	29 kV AC (DIN VDE 0250-813)
WXG-D 12/20 kV · 3 × 35 + 2 × 25/2 + 6 FO	12/20 kV	0.565	162	29 kV AC (DIN VDE 0250-813)
WXG-D 12/20 kV · 3 × 50 + 2 × 25/2 + 6 FO	12/20 kV	0.393	202	29 kV AC (DIN VDE 0250-813)
WXG-D 12/20 kV · 3 × 70 + 2 × 35/2 + 6 FO	12/20 kV	0.277	250	29 kV AC (DIN VDE 0250-813)
WXG-D 12/20 kV · 3 × 95 + 2 × 50/2 + 6 FO	12/20 kV	0.210	301	29 kV AC (DIN VDE 0250-813)
WXG-D 12/20 kV · 3 × 120 + 2 × 70/2 + 6 FO	12/20 kV	0.164	352	29 kV AC (DIN VDE 0250-813)
WXG-D 12/20 kV · 3 × 150 + 2 × 70/2 + 6 FO	12/20 kV	0.132	404	29 kV AC (DIN VDE 0250-813)

- Maximum DC conductor resistance at 20 °C per IEC 60228 Table 3 for Class 5 tinned copper conductors.
- Free-air reference ampacity at 30 °C ambient per DIN VDE 0298-4; apply reel layer derating factors (0.80 for 1 layer, 0.61 for 2 layers, 0.49 for 3 layers).

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.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/wxg-wxg-d-mv-pcp-reeling-cable



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.