



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

WG / WG-D R-(N)TSCGEWOEU

WG / WG-D MV PCP Reeling Cable R-(N)TSCGEWOEU (3.6/6–12/20 kV)

Red 5GM5 PCP medium-voltage reeling cable (3.6/6–12/20 kV) with optional 12 FO



3.6/6–12/20 kV

R-(N)TSCGEWOEU-FO

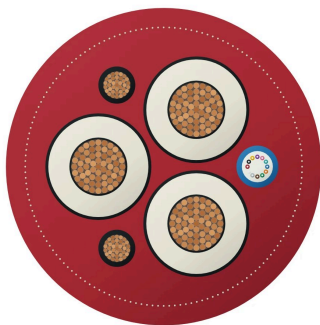
Red 5GM5 · 120 m/min

Application

Medium-voltage reeling cable (3.6/6 to 12/20 kV) adapted to DIN VDE 0250-813 (R-(N)TSCGEWOEU / -FO) with Class FS tinned copper cores, triple-extruded 3GI3 EPR field control, 5GM3 inner sheath, anti-torsion braid, and red 5GM5 PCP sheath up to 120 m/min.

Typical uses: Container Cranes (< 7 m Reel Height), Stackers & Reclaimers, Ship Unloaders & Port Bulk Handling, Heavy Open-Pit Mining Equipment

Construction



Cross-section, not to scale

- 1 Extra-flexible Class FS tinned copper conductor
- 2 Triple-extruded inner & outer semiconductive screens (CGE)
- 3 High-voltage 3GI3 EPR core insulation
- 4 Split earth & 12-fibre optical element (WG-D)
- 5 Inner sheath (5GM3 EPR)
- 6 Vulcanized anti-torsion supporting mesh
- 7 Outer sheath (5GM5 Red PCP)

Technical data

Typical values

Rated voltage U0/U	3.6/6.0 kV, 6.0/10.0 kV, 8.7/15.0 kV, and 12.0/20.0 kV (other voltages on request)	Max. operating voltage AC	4.2/7.2 kV (3.6/6 kV) · 6.9/12.0 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	5.4/10.8 kV (3.6/6 kV) · 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)	11 kV (3.6/6 kV) · 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)	Per 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 catalog summary; consult factory below –35 °C)
Temperature, fixed installation	–50 °C to +80 °C	Max. conductor temperature	+90 °C
Short-circuit temperature	+250 °C	Max. travel speed	Up to 120 m/min horizontal (maximum 1 diversion roller assembly)
Max. tensile load (dynamic)	20 N/mm ² of phase conductor cross-section during dynamic reeling (1,500–5,700 N across 25–95 mm ²)	Min. bending radius, moving	According to DIN VDE 0298-3 (min. 10 × D flexible reeling · min. 20 × D distance at S-track curves)
Fibre count & types (WG-D)	WG-D: 12 optical fibres in standard range (6, 18 and 24 FO available on request) in G9/125 SM, G50/125 MM, or G62.5/125 MM	Optical attenuation (850 / 1300 / 1550 nm)	G9/125 SM: ≤ 0.4 dB/km (1300 nm), ≤ 0.3 dB/km (1550 nm) · G50/125 MM: ≤ 2.8 dB/km (850 nm), ≤ 0.8 dB/km (1300 nm) · G62.5/125 MM: ≤ 3.3 dB/km (850 nm), ≤ 0.9 dB/km (1300 nm)
Oil, UV, ozone & chemical resistance	Oil, ozone, UV and humidity resistant (5GM5 PCP outer sheath); not resistant to sulphur or urea; not halogen-free or LBS/silicone-free	Flame retardance	Flame-retardant per IEC 60332-1-2 / DIN EN 60332-1-2 / DIN VDE 0482-265-2-1
Standards	R-(N)TSCGEWOEU / R-(N)TSCGEWOEU-FO adapted to DIN VDE 0250-813		

Sizes

32 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 10×D
WG Power · 3.6/6 kV (5 sizes) 5 sizes							
☐ WG 3.6/6 kV · 3 × 25 + 3 × 25/3	3 × 25 + 3 × 25/3	38	41	1,008	2,585	1,500	410
☐ WG 3.6/6 kV · 3 × 35 + 3 × 25/3	3 × 35 + 3 × 25/3	41	44	1,296	3,041	2,100	440
☐ WG 3.6/6 kV · 3 × 50 + 3 × 25/3	3 × 50 + 3 × 25/3	44	47	1,728	3,675	3,000	470
☐ WG 3.6/6 kV · 3 × 70 + 3 × 35/3	3 × 70 + 3 × 35/3	50	54	2,477	4,606	4,200	540
☐ WG 3.6/6 kV · 3 × 95 + 3 × 50/3	3 × 95 + 3 × 50/3	54	58	3,197	5,678	5,700	580
WG Power · 6/10 kV (5 sizes) 5 sizes							
☐ WG 6/10 kV · 3 × 25 + 3 × 25/3	3 × 25 + 3 × 25/3	39	42	1,008	2,725	1,500	420
☐ WG 6/10 kV · 3 × 35 + 3 × 25/3	3 × 35 + 3 × 25/3	42	45	1,296	3,191	2,100	450
☐ WG 6/10 kV · 3 × 50 + 3 × 25/3	3 × 50 + 3 × 25/3	45	48	1,728	3,838	3,000	480
☐ WG 6/10 kV · 3 × 70 + 3 × 35/3	3 × 70 + 3 × 35/3	51	55	2,477	4,870	4,200	550
☐ WG 6/10 kV · 3 × 95 + 3 × 50/3	3 × 95 + 3 × 50/3	55	59	3,197	5,896	5,700	590
WG Power · 8.7/15 kV (5 sizes) 5 sizes							
☐ WG 8.7/15 kV · 3 × 25 + 3 × 25/3	3 × 25 + 3 × 25/3	42	45	1,008	3,027	1,500	450
☐ WG 8.7/15 kV · 3 × 35 + 3 × 25/3	3 × 35 + 3 × 25/3	45	49	1,296	3,664	2,100	490
☐ WG 8.7/15 kV · 3 × 50 + 3 × 25/3	3 × 50 + 3 × 25/3	49	53	1,728	4,356	3,000	530
☐ WG 8.7/15 kV · 3 × 70 + 3 × 35/3	3 × 70 + 3 × 35/3	53	57	2,477	5,406	4,200	570

Designation	Configuration	Outer Ø min	Outer Ø max	Cu number	Weight ≈	Permitted pull	Reel R min 10×D
☐ WG 8.7/15 kV · 3 × 95 + 3 × 50/3	3 × 95 + 3 × 50/3	58	62	3,197	6,469	5,700	620
WG Power · 12/20 kV (2 sizes) 2 sizes							
☐ WG 12/20 kV · 3 × 25 + 3 × 25/3	3 × 25 + 3 × 25/3	44	47	1,008	3,242	1,500	470
☐ WG 12/20 kV · 3 × 35 + 3 × 25/3	3 × 35 + 3 × 25/3	47	50	1,296	3,777	2,100	500
WG-D Power+ 12 FO · 3.6/6 kV (5 sizes) 5 sizes							
☐ WG-D 3.6/6 kV · 3 × 25 + 2 × 25/2 + 12 FO	3 × 25 + 2 × 25/2 + 12 FO	41	44	1,008	2,916	1,500	440
☐ WG-D 3.6/6 kV · 3 × 35 + 2 × 25/2 + 12 FO	3 × 35 + 2 × 25/2 + 12 FO	44	47	1,296	3,301	2,100	470
☐ WG-D 3.6/6 kV · 3 × 50 + 2 × 25/2 + 12 FO	3 × 50 + 2 × 25/2 + 12 FO	44	47	1,728	3,674	3,000	470
☐ WG-D 3.6/6 kV · 3 × 70 + 2 × 35/2 + 12 FO	3 × 70 + 2 × 35/2 + 12 FO	50	54	2,477	4,622	4,200	540
☐ WG-D 3.6/6 kV · 3 × 95 + 2 × 50/2 + 12 FO	3 × 95 + 2 × 50/2 + 12 FO	54	58	3,197	5,682	5,700	580
WG-D Power+ 12 FO · 6/10 kV (5 sizes) 5 sizes							
☐ WG-D 6/10 kV · 3 × 25 + 2 × 25/2 + 12 FO	3 × 25 + 2 × 25/2 + 12 FO	41	44	1,008	2,916	1,500	440
☐ WG-D 6/10 kV · 3 × 35 + 2 × 25/2 + 12 FO	3 × 35 + 2 × 25/2 + 12 FO	44	47	1,296	3,301	2,100	470
☐ WG-D 6/10 kV · 3 × 50 + 2 × 25/2 + 12 FO	3 × 50 + 2 × 25/2 + 12 FO	45	48	1,728	3,836	3,000	480
☐ WG-D 6/10 kV · 3 × 70 + 2 × 35/2 + 12 FO	3 × 70 + 2 × 35/2 + 12 FO	51	55	2,477	4,871	4,200	550
☐ WG-D 6/10 kV · 3 × 95 + 2 × 50/2 + 12 FO	3 × 95 + 2 × 50/2 + 12 FO	55	59	3,197	5,898	5,700	590
WG-D Power+ 12 FO · 8.7/15 kV (5 sizes) 5 sizes							
☐ WG-D 8.7/15 kV · 3 × 25 + 2 × 25/2 + 12 FO	3 × 25 + 2 × 25/2 + 12 FO	44	47	1,008	3,025	1,500	470
☐ WG-D 8.7/15 kV · 3 × 35 + 2 × 25/2 + 12 FO	3 × 35 + 2 × 25/2 + 12 FO	47	51	1,296	3,650	2,100	510
☐ WG-D 8.7/15 kV · 3 × 50 + 2 × 25/2 + 12 FO	3 × 50 + 2 × 25/2 + 12 FO	49	53	1,728	4,353	3,000	530
☐ WG-D 8.7/15 kV · 3 × 70 + 2 × 35/2 + 12 FO	3 × 70 + 2 × 35/2 + 12 FO	53	57	2,477	5,407	4,200	570
☐ WG-D 8.7/15 kV · 3 × 95 + 2 × 50/2 + 12 FO	3 × 95 + 2 × 50/2 + 12 FO	58	62	3,197	6,471	5,700	620

- Permitted dynamic tensile load equals 20 N/mm² of total phase conductor cross-section (1,500 N for 3 × 25 mm² up to 5,700 N for 3 × 95 mm²).
- In WG-D 8.7/15 kV 95 mm², the legacy catalog table prints '3x95+2x35/2+12FO' in the conductor column, whereas its 3,197 kg/km copper weight and DIN VDE 0250-813 confirm a 50 mm² split earth (3 × 95 + 2 × 50/2 + 12 FO).
- WG-D standard range integrates 12 optical fibres; 6, 18, and 24 FO builds in G9/125, G50/125, or G62.5/125 are available on request.

Electrical reference data

32 sizes

Designation	Rated U0/U	Max. DC R 20 °C	Ref. Ampacity 30 °C	AC Test Voltage
WG Power · 3.6/6 kV (5 sizes) 5 sizes				
WG 3.6/6 kV · 3 × 25 + 3 × 25/3	3.6/6 kV	0.795	131	11 kV AC (DIN VDE 0250-813)
WG 3.6/6 kV · 3 × 35 + 3 × 25/3	3.6/6 kV	0.565	162	11 kV AC (DIN VDE 0250-813)
WG 3.6/6 kV · 3 × 50 + 3 × 25/3	3.6/6 kV	0.393	202	11 kV AC (DIN VDE 0250-813)
WG 3.6/6 kV · 3 × 70 + 3 × 35/3	3.6/6 kV	0.277	250	11 kV AC (DIN VDE 0250-813)
WG 3.6/6 kV · 3 × 95 + 3 × 50/3	3.6/6 kV	0.210	301	11 kV AC (DIN VDE 0250-813)
WG Power · 6/10 kV (5 sizes) 5 sizes				
WG 6/10 kV · 3 × 25 + 3 × 25/3	6/10 kV	0.795	131	17 kV AC (DIN VDE 0250-813)
WG 6/10 kV · 3 × 35 + 3 × 25/3	6/10 kV	0.565	162	17 kV AC (DIN VDE 0250-813)
WG 6/10 kV · 3 × 50 + 3 × 25/3	6/10 kV	0.393	202	17 kV AC (DIN VDE 0250-813)
WG 6/10 kV · 3 × 70 + 3 × 35/3	6/10 kV	0.277	250	17 kV AC (DIN VDE 0250-813)
WG 6/10 kV · 3 × 95 + 3 × 50/3	6/10 kV	0.210	301	17 kV AC (DIN VDE 0250-813)
WG Power · 8.7/15 kV (5 sizes) 5 sizes				
WG 8.7/15 kV · 3 × 25 + 3 × 25/3	8.7/15 kV	0.795	131	24 kV AC (DIN VDE 0250-813)
WG 8.7/15 kV · 3 × 35 + 3 × 25/3	8.7/15 kV	0.565	162	24 kV AC (DIN VDE 0250-813)
WG 8.7/15 kV · 3 × 50 + 3 × 25/3	8.7/15 kV	0.393	202	24 kV AC (DIN VDE 0250-813)
WG 8.7/15 kV · 3 × 70 + 3 × 35/3	8.7/15 kV	0.277	250	24 kV AC (DIN VDE 0250-813)

Designation	Rated U0/U	Max. DC R 20 °C	Ref. Ampacity 30 °C	AC Test Voltage
WG 8.7/15 kV · 3 × 95 + 3 × 50/3	8.7/15 kV	0.210	301	24 kV AC (DIN VDE 0250-813)
WG Power · 12/20 kV (2 sizes) 2 sizes				
WG 12/20 kV · 3 × 25 + 3 × 25/3	12/20 kV	0.795	131	29 kV AC (DIN VDE 0250-813)
WG 12/20 kV · 3 × 35 + 3 × 25/3	12/20 kV	0.565	162	29 kV AC (DIN VDE 0250-813)
WG-D Power+ 12 FO · 3.6/6 kV (5 sizes) 5 sizes				
WG-D 3.6/6 kV · 3 × 25 + 2 × 25/2 + 12 FO	3.6/6 kV	0.795	131	11 kV AC (DIN VDE 0250-813)
WG-D 3.6/6 kV · 3 × 35 + 2 × 25/2 + 12 FO	3.6/6 kV	0.565	162	11 kV AC (DIN VDE 0250-813)
WG-D 3.6/6 kV · 3 × 50 + 2 × 25/2 + 12 FO	3.6/6 kV	0.393	202	11 kV AC (DIN VDE 0250-813)
WG-D 3.6/6 kV · 3 × 70 + 2 × 35/2 + 12 FO	3.6/6 kV	0.277	250	11 kV AC (DIN VDE 0250-813)
WG-D 3.6/6 kV · 3 × 95 + 2 × 50/2 + 12 FO	3.6/6 kV	0.210	301	11 kV AC (DIN VDE 0250-813)
WG-D Power+ 12 FO · 6/10 kV (5 sizes) 5 sizes				
WG-D 6/10 kV · 3 × 25 + 2 × 25/2 + 12 FO	6/10 kV	0.795	131	17 kV AC (DIN VDE 0250-813)
WG-D 6/10 kV · 3 × 35 + 2 × 25/2 + 12 FO	6/10 kV	0.565	162	17 kV AC (DIN VDE 0250-813)
WG-D 6/10 kV · 3 × 50 + 2 × 25/2 + 12 FO	6/10 kV	0.393	202	17 kV AC (DIN VDE 0250-813)
WG-D 6/10 kV · 3 × 70 + 2 × 35/2 + 12 FO	6/10 kV	0.277	250	17 kV AC (DIN VDE 0250-813)
WG-D 6/10 kV · 3 × 95 + 2 × 50/2 + 12 FO	6/10 kV	0.210	301	17 kV AC (DIN VDE 0250-813)
WG-D Power+ 12 FO · 8.7/15 kV (5 sizes) 5 sizes				
WG-D 8.7/15 kV · 3 × 25 + 2 × 25/2 + 12 FO	8.7/15 kV	0.795	131	24 kV AC (DIN VDE 0250-813)
WG-D 8.7/15 kV · 3 × 35 + 2 × 25/2 + 12 FO	8.7/15 kV	0.565	162	24 kV AC (DIN VDE 0250-813)
WG-D 8.7/15 kV · 3 × 50 + 2 × 25/2 + 12 FO	8.7/15 kV	0.393	202	24 kV AC (DIN VDE 0250-813)
WG-D 8.7/15 kV · 3 × 70 + 2 × 35/2 + 12 FO	8.7/15 kV	0.277	250	24 kV AC (DIN VDE 0250-813)
WG-D 8.7/15 kV · 3 × 95 + 2 × 50/2 + 12 FO	8.7/15 kV	0.210	301	24 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 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.

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