AnHui Feichun
Special Cable Co., Ltd
Professional Manufacturer

RONDOFLEX

(CHAIN)

Low Voltage Energy Chain Cable

Technical Specification
Complete Product Range



RONDOFLEX(CHAIN) - Premium Energy Chain Cable System

PRODUCT OVERVIEW

RONDOFLEX(CHAIN) is a professional-grade low voltage cable specifically designed for energy chain systems. It delivers exceptional performance in container cranes, stacking cranes, indoor cranes, and material handling equipment with high travel speeds and extreme reliability requirements.

KEY APPLICATIONS

- Container cranes
- Stacking cranes
- Indoor cranes
- Material handling
- High-speed systems
- Outdoor installations

QUALITY CERTIFICATIONS

GOST-R | VDE CERTIFIED | DIN VDE 0250-814

All standards met

ELECTRICAL & TECHNICAL PARAMETERS

Parameter	Specification
Brand/Type	RONDOFLEX(CHAIN)
Type Designations	(N)GRDGCGOEU-J / (N)GRDGOEU-J/-O
Rated Voltage	0.6/1 kV (600/1000V)
Max. Operating Voltage AC	0.7/1.2 kV
Max. Operating Voltage DC	0.9/1.8 kV
AC Test Voltage	3.5 kV (5 min)
Primary Standard	DIN VDE 0250-814
Certifications	GOST-R, VDE

Max. Tensile Load	15 N/mm²
Travel Speed (Chain)	Up to 240 m/min
Torsional Stress	Not Allowed

THERMAL & MECHANICAL PROPERTIES

TEMPERATURE RATINGS

Conductor Max	90°C
Short Circuit	250°C
Fixed Install	-50°C to +80°C
Flex Operation	-35°C to +80°C

ENVIRONMENTAL RESISTANCE

Oil Resistance	Excellent
Weather Resist	Unrestricted
Ozone Resistant	Superior
Abrasion Resist	Excellent

DESIGN FEATURES & MATERIALS

Component	Specification
Conductor	Bare electrolytic copper, finely stranded, class 5. Earth conductor: bare copper, extremely finely stranded, class FS
Insulation	PROTOLON MS - High-grade EPR compound (at least 3GI3). Alternative for control: ETFE
Core Identification	Up to 10 mm²: light colored with black numbers; Earth: yellow-green
Core Arrangement	Up to 10 mm²: 4-core design; From 16 mm²: 3-energy cores + 3-part split earth conductor
Screen	Braid screen of tinned copper wires; >80% coverage; Transfer impedance <100 mOhm/m at ≤30 MHz
Inner Sheath	Special EPR-based compound (at least GM1b); Black color
Outer Sheath	High-grade EVA compound with excellent abrasion and aging resistance; Black color

COMPLETE PRODUCT RANGE - SINGLE CORE CONFIGURATIONS

(N)GRDGOEU Power Cables - Single-core Design: Available from 1×16 mm² to 1×240 mm² with standard and screened options

(N)GRDGOEU Single-Core Power Cables - Standard

Cores × mm²	Part No.	Ø Cond. (mm)	Ø min (mm)	Ø max (mm)	Bend R (mm)	Weight (kg/km)	Tensile (N)	R@20°C (Ω/km)	Current (A)	I²t (kA)
1×16	20003427	5.7	7.6	9.7	39	210	240	1.21	99	2.29
1×25	20003428	7.1	10.2	12.2	61	330	370	0.78	131	3.58
1×35	20168373	8.3	12.1	14.1	71	445	520	0.55	162	5.01
1×50	20003429	9.8	13.9	15.9	80	620	750	0.39	202	7.15
1×70	20003430	11.6	15.8	17.9	90	830	1050	0.27	250	10.01
1×95	20003431	13.8	19.1	21.1	106	1120	1420	0.21	301	13.59
1×120	20167027	14.9	20.8	22.8	114	1390	1800	0.16	352	17.16
1×150	20003432	17.2	23.0	26.0	130	1740	2250	0.13	404	21.45
1×185	20047699	18.0	25.2	28.2	141	2090	2770	0.11	461	26.46
1×240	20086404	22.5	29.9	32.9	165	2830	3600	0.08	540	34.32

(N)GRDGCGOEU Single-Core Screened Power Cables

Cores × mm²	Part No.	Ø Cond. (mm)	Ø min (mm)	Ø max (mm)	Bend R (mm)	Weight (kg/km)	Tensile (N)	R@20°C (Ω/km)	Current (A)	I²t (kA)
1×16C	5DG4211	5.7	10.1	12.1	61	320	240	1.21	99	2.29
1×25C	5DG4212	7.1	12.8	14.8	74	450	370	0.78	131	3.58
1×35C	20003445	8.3	13.7	15.7	79	540	520	0.55	162	5.01
1×50C	20003446	9.8	15.7	17.7	89	740	750	0.39	202	7.15
1×70C	20003447	11.6	18.7	20.7	104	1020	1050	0.27	250	10.01
1×95C	20003448	13.8	20.8	22.8	114	1260	1420	0.21	301	13.59
1×120C	20008791	14.9	22.8	24.8	124	1580	1800	0.16	352	17.16
1×150C	5DG4218	17.2	25.6	28.6	143	2000	2250	0.13	404	21.45
1×185C	20003449	18.0	27.7	30.7	154	2370	2770	0.11	461	26.46
1×240C	5DG4220	22.5	31.9	34.9	175	3130	3600	0.08	540	34.32

(N)GRDGOEU-J Multicore Power Cables

Cores × mm²	Part No.	Ø Cond. (mm)	Ø min (mm)	Ø max (mm)	Bend R (mm)	Weight (kg/km)	Tensile (N)	R@20°C (Ω/km)	Current (A)	I²t (kA)
4×2.5	20025432	2.0	9.9	11.5	46	200	150	7.98	30	0.36
4×4	20003433	2.9	12.7	14.7	74	320	240	4.95	41	0.57
4×6	20003434	3.6	14.2	16.2	81	430	360	3.3	53	0.86
4×10	20003435	4.6	16.7	18.7	94	670	600	1.91	74	1.43
4×16	20003436	5.9	21.2	23.2	116	1020	960	1.21	99	2.29
4×25	20003437	7.2	26.5	29.5	148	1600	1500	0.78	131	3.58
3×35+3×16/3	20024514	8.1	26.4	29.4	147	1770	1570	0.55	162	5.01
3×50+3×25/3	20026619	10.0	31.5	34.5	173	2560	2250	0.39	202	7.15
3×70+3×35/3	20042007	11.9	37.6	40.6	203	3550	3150	0.27	250	10.01
5×6	20003438	3.6	15.8	17.8	89	530	450	3.3	53	0.86
5×10	20003439	4.6	19.7	21.7	109	850	750	1.91	74	1.43
5×16	20003440	5.9	23.4	25.4	127	1300	1200	1.21	99	2.29

(N)GRDGCGOEU-J Multicore Screened Power Cables

Cores × mm²	Part No.	Ø Cond. (mm)	Ø min (mm)	Ø max (mm)	Bend R (mm)	Weight (kg/km)	Tensile (N)	R@20°C (Ω/km)	Current (A)	I²t (kA)
4×2.5C	20003450	1.9	11.2	13.2	66	310	150	7.98	30	0.36
4×4C	20003451	2.9	15.2	17.2	86	490	240	4.95	41	0.57
4×6C	5DG4242	3.6	17.0	19.0	95	650	360	3.3	53	0.86
4×10C	20003452	4.6	19.2	21.2	106	870	600	1.91	74	1.43
3×16+3×2.5C	20003453	5.9	20.3	22.3	112	1050	720	1.21	99	2.29
3×25+3×4C	20003454	7.2	25.7	28.7	144	1610	1120	0.78	131	3.58

Notes: All current ratings based on ambient temperature 30°C in chain system. C = Screened configuration. Complete range available from single core 1×16 to multicore configurations. Custom specifications available upon request.

KEY ADVANTAGES & FEATURES

- ✓ **Extended Cable Life:** Optimized for extreme abrasion resistance and durability
- ✓ **High-Speed Capability:** Rated for up to 240 m/min in chain systems
- ✓ **EMC Optimized:** Braid screen design with >80% coverage for EMI protection
- ✓ **Oil & Chemical Resistant:** EVA sheath provides superior resistance to oils and environmental factors
- ✓ **Outdoor Ready:** Unrestricted outdoor/indoor use; resistant to ozone, UV, and moisture
- ✓ **Split Earth Design:** Advanced conductor arrangement for enhanced safety and performance
- ✓ **Proven Reliability:** Extensive testing including abrasion and practical long-distance performance
- ✓ **Wide Temperature Range:** Operating from -35°C to +80°C in flexible operation

ENVIRONMENTAL & PERFORMANCE STANDARDS

RONDOFLEX(CHAIN) cables are engineered for the most demanding industrial crane and material handling applications. Specifically optimized for long travel distances and high travel speeds with exceptional **abrasion resistance and environmental durability**.

- ✓ Oil resistance per DIN EN 60811-404 and DIN VDE 0473-811-404
- ✓ Weather resistance: unrestricted outdoor/indoor use
- ✓ Ozone and UV resistant - long-term outdoor durability
- ✓ Moisture and aging resistant outer sheath

- ✓ Abrasion resistance testing per DIN VDE 0298
- ✓ Bending and flexing performance validated on owned testing facility

CONTACT & TECHNICAL SUPPORT

Company: AnHui Feichun Special Cable Co., Ltd

WhatsApp: +86 13855123218

Website: feichuncables.com

Website: reelingcable.com

Service: 24/7 Technical Support Available

Product Availability:

All RONDOFLEX(CHAIN) configurations from single-core 1×16 mm² to multicore 3×70+3×35/3 mm² available for immediate delivery. Standard and screened versions (with "C" designation) in stock. Large volume orders receive special pricing. Custom configurations and technical modifications available upon request. Complete technical consultation for specific crane applications.

Quality Assurance: All RONDOFLEX(CHAIN) cables manufactured under strict ISO 9001 certification with comprehensive testing including bending, abrasion, and practical performance validation. Each cable meets international safety and reliability standards for crane and material handling systems.

Disclaimer: This technical specification contains general information about RONDOFLEX(CHAIN) low voltage energy chain cables. For specific applications, environmental conditions, or detailed technical requirements, consult our technical team. Performance claims are based on standard test conditions. All technical data is subject to change without notice. Document prepared by AnHui Feichun Special Cable Co., Ltd. Information based on DIN VDE 0250-814 standard and GOST-R certification.

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