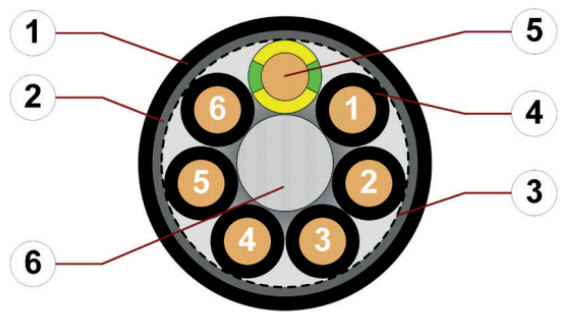
PRODUCT TECHNICAL SPECIFICATION

CF881 Shielded Control Cable

PVC-sheathed, shielded and flame-retardant control cable for flexing applications and e-chain installations.



Shielded control for moving systems

CF881 combines bare copper stranded conductors, TPE core insulation, an overall tinned-copper braid and a low-adhesion PVC outer jacket for demanding flexing applications.

- 300/500 V nominal voltage
- Overall shield
- Flame-retardant
- Up to 10 m unsupported travel

−15 to +70 °C
Fixed-installation temperature range

60% coverage
Approximate optical shield coverage

35 models
Complete technical schedule

01 / Cable Design & Operating Data

CF881 is a shielded control cable for flexing applications, especially unsupported travel. It is intended for indoor applications without oil influence and without torsion.

CABLE STRUCTURE

Conductor	**Stranded bare copper wires according to DIN EN 60228**
Core insulation	**Mechanically high-quality TPE mixture**
Core structure	**Cores wound with optimized pitch length**
Core identification	**Black cores with white numbers; one green-yellow core**
Overall shield	**Braided tinned copper wires; approx. 60% optical coverage**
Outer jacket	**Low-adhesion PVC; jet black, similar to RAL 9005; white printing**

DYNAMIC INFORMATION

Bend radius, linear / flexible / fixed	**Minimum 12.5 × d / 10 × d / 7 × d**
Temperature, linear	**+5 to +70 °C**
Temperature, flexible / fixed	**−5 to +70 °C / −15 to +70 °C**
Maximum speed / acceleration	**3 m/s / 20 m/s²**
Unsupported travel	**Up to 10 m, Class 1**

ELECTRICAL INFORMATION

Nominal voltage	**300/500 V; 300 V according to UL**
Testing voltage	**2,000 V according to DIN EN 50395**

SERVICE-LIFE REFERENCE

Double-stroke options	**1, 3 or 5 million double strokes**
Recommended installation	**Middle temperature range**

Operating note: Dynamic values are based on specific applications or tests and do not represent the limit of what is technically feasible.

02 / Properties, Approvals & Applications

PROPERTIES AND APPROVALS

Flame-retardant	**IEC 60332-1-2; VW-1, FT1, FT2 / Horizontal Flame**
Silicone-free	**Yes**
PTFE-free	**Yes**
UL/CSA AWM	**UL style core insulation 10493; outer jacket 2464**
NFPA	**NFPA 79-2018, Chapter 12.9**
REACH / lead-free / CE	**EC 1907/2006 / 2011/65/EC / 2014/35/EU**

UL / CSA AWM DETAILS

0.5 mm²	**3–25 cores; 300 V; 80 °C**
0.75 mm²	**2–25 cores; 300 V; 80 °C**
1.0 mm²	**2–25 cores; 300 V; 80 °C**
1.5 mm²	**2–25 cores; 300 V; 80 °C**
2.5 mm²	**4–12 cores; 300 V; 80 °C**

TYPICAL LAB TEST SETUP

Test bend radius / travel	**Approx. 75–225 mm / 1–15 m**
Duration	**Minimum 2–4 million double strokes**
Speed / acceleration	**Approx. 0.5–2 m/s / 0.5–1.5 m/s²**

TYPICAL APPLICATIONS

Application class	**Flexing, Class 3; unsupported travel, Class 1**
Environment	**Preferably indoor; without oil influence; no torsion**
Industries	**Wood/stone processing, packaging, feeding, handling and adjusting devices**

03 / Technical Schedule

Part number	Cores & nominal cross section [mm²]	Outer diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF881.05.03	(3G0.5)C	6.0	28	47
CF881.05.04	(4G0.5)C	6.5	35	54
CF881.05.05	(5G0.5)C	7.0	41	65
CF881.05.07	(7G0.5)C	8.0	59	75
CF881.05.12	(12G0.5)C	9.0	91	125
CF881.05.18	(18G0.5)C	11.0	136	177
CF881.05.25	(25G0.5)C	13.0	210	243
CF881.07.02	(2×0.75)C	6.5	30	50
CF881.07.03	(3G0.75)C	7.0	37	66
CF881.07.04	(4G0.75)C	7.5	46	72
CF881.07.05	(5G0.75)C	8.0	61	87
CF881.07.07	(7G0.75)C	9.0	83	112
CF881.07.12	(12G0.75)C	10.5	124	170
CF881.07.18	(18G0.75)C	12.0	183	238
CF881.07.25	(25G0.75)C	14.5	222	309
CF881.10.02	(2×1.0)C	6.5	30	52
CF881.10.03	(3G1.0)C	7.0	46	73
CF881.10.04	(4G1.0)C	7.5	63	102

Operating note: Dynamic values are based on specific applications or tests and do not represent the limit of what is technically feasible.

03 / Technical Schedule · Continued

Part number	Cores & nominal cross section [mm²]	Outer diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF881.10.05	(5G1.0)C	8.0	76	110
CF881.10.07	(7G1.0)C	9.5	100	130
CF881.10.12	(12G1.0)C	11.5	167	229
CF881.10.18	(18G1.0)C	13.0	213	281
CF881.10.25	(25G1.0)C	16.0	291	390
CF881.15.02	(2×1.5)C	7.5	60	71
CF881.15.03	(3G1.5)C	7.5	63	87
CF881.15.04	(4G1.5)C	8.5	90	111
CF881.15.05	(5G1.5)C	9.0	94	131
CF881.15.07	(7G1.5)C	11.0	153	183
CF881.15.12	(12G1.5)C	13.0	212	282
CF881.15.18	(18G1.5)C	15.0	399	458
CF881.15.25	(25G1.5)C	18.5	425	573
CF881.25.04	(4G2.5)C	10.0	141	163
CF881.25.05	(5G2.5)C	11.0	149	195
CF881.25.07	(7G2.5)C	13.0	204	262
CF881.25.12	(12G2.5)C	16.0	342	428

Operating note: Dynamic values are based on specific applications or tests and do not represent the limit of what is technically feasible.

04 / Selection & Contact

CF881 is intended for shielded signal and control transmission in moving industrial equipment. Confirm part number, installation geometry, temperature range and dynamic conditions before ordering.

HIGHLIGHTED PARTS

CF881.07.03	**Amber · (3G0.75)C · 7.0 mm · 37 kg/km copper · 66 kg/km**
CF881.05.04	**Violet · (4G0.5)C · 6.5 mm · 35 kg/km copper · 54 kg/km**
CF881.15.03	**Green · (3G1.5)C · 7.5 mm · 63 kg/km copper · 87 kg/km**
CF881.25.04	**Blue · (4G2.5)C · 10.0 mm · 141 kg/km copper · 163 kg/km**

NOTATION & SCHEDULE NOTES

G	**With green-yellow earth core**
×	**Without earth core**
Outer diameter	**Maximum value; may tend toward lower tolerance limits**
Phase-out note	**CF881.07.25 and CF881.25.12 are marked as phase-out models in the source schedule**

Sales contact

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Websites

https://cranecable.com.au/
https://flexcable.ae/

This technical datasheet is prepared for product communication and preliminary selection. Values are reference data from the supplied specification. Final manufacturing requirements and installation conditions should be confirmed before production. The source brand name and source brand logo have not been included.