

APPLICATIONS

INDUSTRITE™ C-FLEX cables are designed and manufactured for use in festoon systems functioning on gantry cranes or other material handling equipment.

C-Flex cables are typically used in applications requiring frequent flexing and mechanical stress. C-Flex is recommended for festoon systems operating at travel speeds up to 200 meters per minute. Consult Draka for speeds greater than 200 m/min based on system design.

FEATURES

1. CONDUCTORS

Extra-flexible rope stranding (Class K), soft-drawn copper per ASTM B-3, ASTM B-172, and UL-62 offers high flexibility, extended flex-life and reduced copper fatigue/conductor breakage.

2. SEPARATOR

Paper separator for easy stripping.

3. INSULATION

Thermoset (EPDM) insulation per UL-62 and ICEA S-68-516 with excellent physical and electrical properties and stability during extreme flexing/twisting.

4. CABLING

Conductors are cabled with non-hygroscopic fillers, without a separator which allows pressure-extruded jacket to fill interstices and prohibits conductor displacement during flexing operations. Control cables use a binder tape.

5. JACKET

Black, oil and flame resistant two layer thermoset jacket per UL-62 and ICEA S-68-516, suitable for use indoors and outdoors in continuous flexing applications where exposure to moisture, temperature, sunlight and mechanical abuse are considerations.

RATINGS

Rated for continuous operation at 90° C to -40° C in dry locations.
UL Listed for reeling and festoon systems

CONSTRUCTION OPTIONS

Consult factory for INDUSTRITE™ C-FLEX cables designed and manufactured in a variety of alternative constructions for specific applications.

Options include:

- overall shields
- composite conductors
- fiber optic components





INDUSTRITE™ C-FLEX

90° C to -40° C / 600 volts

power & control cables for shipyard crane and festoon systems

Part Number	Conductor Number	Conductor Size AWG (mm ²)	Stranding	Nominal Insulation Thickness in (mm)	Nominal Jacket Thickness in (mm)	Nominal Cable O.D. in (mm)	Ampacity ¹	Minimum Bend Diameter in (mm)	Approximate Cable Weight Lbs/Mft (Kg/Km)
C-FLEX CONTROL CABLES									
030856	6TSP	16 (1.5)	26/30	0.030 (0.76)	0.155 (3.94)	1.170 (29.7)	13	14.0 (356.6)	662 (986)
030857	9TSP	16 (1.5)	26/30	0.030 (0.76)	0.170 (4.32)	1.450 (36.8)	13	17.4 (442.0)	1076 (1602)
030858	12	16 (1.5)	26/30	0.030 (0.76)	0.095 (2.41)	0.735 (18.7)	13	8.8 (224.0)	307 (457)
030869	4	14 (2.5)	41/30	0.030 (0.76)	0.080 (2.03)	0.510 (13.0)	20	6.1 (155.4)	150 (223)
030870	5	14 (2.5)	41/30	0.030 (0.76)	0.080 (2.03)	0.550 (14.0)	20	6.6 (167.6)	177 (264)
030859	12	14 (2.5)	41/30	0.030 (0.76)	0.110 (2.79)	0.820 (20.8)	18	9.8 (249.9)	415 (618)
030860	18	14 (2.5)	41/30	0.030 (0.76)	0.125 (3.18)	0.965 (24.5)	18	11.6 (294.1)	594 (884)
030861	24	14 (2.5)	41/30	0.030 (0.76)	0.140 (3.56)	1.135 (28.8)	18	13.6 (345.9)	808 (1203)
030862	30	14 (2.5)	41/30	0.030 (0.76)	0.155 (3.94)	1.240 (31.5)	15	14.9 (378.0)	1035 (1541)
030863	36	14 (2.5)	41/30	0.030 (0.76)	0.170 (4.32)	1.480 (37.6)	15	17.8 (451.1)	1312 (1954)
030864	12	12 (3.5 & 4.0)	65/30	0.030 (0.76)	0.125 (3.18)	0.925 (23.5)	21	11.1 (281.9)	545 (812)
030865	18	12 (3.5 & 4.0)	65/30	0.030 (0.76)	0.140 (3.56)	1.100 (27.9)	21	13.2 (335.3)	825 (1228)
030866	24	12 (3.5 & 4.0)	65/30	0.030 (0.76)	0.155 (3.94)	1.260 (32.0)	21	15.1 (384.0)	1100 (1638)
030867	30	12 (3.5 & 4.0)	65/30	0.030 (0.76)	0.170 (4.32)	1.440 (36.6)	18	17.3 (438.9)	1400 (2085)
030868	36	12 (3.5 & 4.0)	65/30	0.030 (0.76)	0.170 (4.32)	1.600 (40.6)	18	19.2 (487.7)	1718 (2558)
030871	4	10 (6.0)	105/30	0.030 (0.76)	0.095 (2.41)	0.680 (17.3)	32	8.2 (207.3)	300 (447)
030872	5	10 (6.0)	105/30	0.030 (0.76)	0.095 (2.41)	0.740 (18.8)	32	8.9 (225.6)	356 (530)

C-FLEX POWER CABLES									
030873	4	8 (10.0)	168/30	0.045 (1.14)	0.125 (3.18)	0.895 (22.7)	44	10.7 (272.8)	545 (812)
030874	5	8 (10.0)	168/30	0.045 (1.14)	0.125 (3.18)	0.975 (24.8)	44	11.7 (297.2)	650 (968)
030875	4	6 (16.0)	266/30	0.045 (1.14)	0.125 (3.18)	0.990 (25.1)	60	11.9 (301.8)	742 (1105)
030876	5	6 (16.0)	266/30	0.045 (1.14)	0.140 (3.56)	1.150 (29.2)	60	13.8 (350.5)	875 (1303)
030507	4	4 (25.0)	420/30	0.045 (1.14)	0.140 (3.56)	1.050 (26.7)	76	12.6 (320.0)	956 (1423)
030877	5	4 (25.0)	420/30	0.045 (1.14)	0.155 (3.94)	1.120 (28.4)	76	13.4 (341.4)	981 (1461)
030555	4	2 (35.0)	665/30	0.045 (1.14)	0.155 (3.94)	1.420 (36.1)	104	17.0 (432.8)	1488 (2216)
030878	4	1/0 (50.0)	1045/30	0.055 (1.40)	0.190 (4.83)	1.610 (40.9)	136	19.3 (490.7)	2168 (3228)

C-FLEX POWER CABLES WITH GROUNDS									
030879	3 + 3 ground	2 (35.0)	665/30	0.045 (1.14)	0.155 (3.94)	1.300 (33.0)	130	15.6 (396.2)	1305 (1943)
030880	3 + 3 ground	1/0 (50.0)	1045/30	0.055 (1.40)	0.170 (4.32)	1.470 (37.3)	170	17.6 (448.1)	1890 (2814)
030881	3 + 3 ground	2/0 (70.0)	1330/30	0.055 (1.40)	0.170 (4.32)	1.600 (40.6)	195	19.2 (487.7)	2732 (4068)

C-FLEX POWER CABLES (SINGLE CONDUCTOR)									
030882	1	2 (35.0)	665/30	0.045 (1.14)	0.030 (0.76)	0.480 (12.2)	130	5.8 (146.3)	310 (462)
030883	1	1/0 (50.0)	1045/30	0.055 (1.40)	0.045 (1.14)	0.615 (15.6)	170	7.4 (187.5)	425 (633)
030884	1	2/0 (70.0)	1330/30	0.055 (1.40)	0.045 (1.14)	0.689 (17.5)	195	8.3 (210.0)	542 (807)
030885	1	4/0 (95.0)	2107/30	0.055 (1.40)	0.065 (1.65)	0.830 (21.1)	260	10.0 (253.0)	836 (1245)
030886	1	250 (120.0)	2499/30	0.065 (1.65)	0.065 (1.65)	0.955 (24.3)	290	11.5 (291.1)	985 (1467)
030887	1	300 (150.0)	2989/30	0.065 (1.65)	0.065 (1.65)	1.020 (25.9)	320	12.2 (310.9)	1158 (1724)
030888	1	400 (185.0)	3990/30	0.065 (1.65)	0.065 (1.65)	1.150 (29.2)	380	13.8 (350.5)	1537 (2289)

¹Ampacity based on single cable in free air 30° C ambient, 90° C conductor temperature.

The data herein is approximate and subject to normal manufacturing tolerances. These specifications are subject to change without notice.