



















Power Cables



Power Cable Selection

Chainflex® cable	Jacket	Shield	Class	Bending radius moving (factor x d)	Temperature moving from/to °F (°C)	Oil-resistant	Torsion resistant	V max. ft/s (m/s) unsupported	V max. ft/s (m/s) gliding	a max. ft/s² (m/s²)	Approvals and standards
Power cables											
CF30	PVC		5.3.2	7.5	+23/+158°F (-5/+70°C)	✓	✓	32.81 ft/s (10 m/s)	16.41 ft/s (5 m/s)	262.4 ft/s² (80 m/s²)	CE   
CF31	PVC	✓	5.3.2	7.5	+23/+158°F (-5/+70°C)	✓		32.81 ft/s (10 m/s)	16.41 ft/s (5 m/s)	262.4 ft/s² (80 m/s²)	CE  
CF34	TPE		6.4.4	7.5	-31/+194°F (-35/+90°C)	✓	✓	32.81 ft/s (10 m/s)	19.69 ft/s (6 m/s)	262.4 ft/s² (80 m/s²)	CE   
CF35	TPE	✓	6.4.4	7.5	-31/+194°F (-35/+90°C)	✓		32.81 ft/s (10 m/s)	19.69 ft/s (6 m/s)	262.4 ft/s² (80 m/s²)	CE  
CF300	TPE	✓	6.4.4	7.5	-31/+194°F (-35/+90°C)	✓		32.81 ft/s (10 m/s)	19.69 ft/s (6 m/s)	328.1 ft/s² (100 m/s²)	CE   
CFPE	TPE		6.4.4	7.5	-31/+194°F (-35/+90°C)	✓		32.81 ft/s (10 m/s)	19.69 ft/s (6 m/s)	328.1 ft/s² (100 m/s²)	CE  
CF310	TPE	✓	6.4.4	7.5	-31/+194°F (-35/+90°C)	✓		32.81 ft/s (10 m/s)	19.69 ft/s (6 m/s)	328.1 ft/s² (100 m/s²)	CE  
CFCRANE	igupren		6.4.3	7.5	-31/+194°F (-35/+90°C)	✓		32.81 ft/s (10 m/s)	19.69 ft/s (6 m/s)	164.0 ft/s² (50 m/s²)	CE
Pneumatic Hose											
CF AIR	PU			10	-13/+176°F (-25/+80°C)	✓		9.84 ft/s (3 m/s)	9.84 ft/s (3 m/s)	65.62 ft/s² (20 m/s²)	
CF CleanAIR	PU			10	-13/+176°F (-25/+80°C)	✓		9.84 ft/s (3 m/s)	9.84 ft/s (3 m/s)	65.62 ft/s² (20 m/s²)	

CF30

PVC Power Cable

Chainflex® CF30

PVC Standard Energy Chain® cable, oil-resistant, flame-retardant

CLASS
5.3.2

Price Index



Conductor
Highly flexible special conductor

Core
Conductors stranded around high-tensile center core

Outer jacket
gusset filled, pressure extruded, oil-proof PVC blend

Construction

Conductor: Finely stranded bare copper wires, according to EN 60228

Conductor insulation: Mechanically high quality TPE blend

Conductor twisting: Conductors cabled with short pitch over a high-tensile-strength center core.

Conductor colors: Black with white numbers, one conductor green-yellow.

1. U / L1 / C / L+
2. V / L2
3. W / L3 / D / L-
4. 4 / N
5. green / yellow

Outer jacket: PVC-based, low-adhesion blend, adapted to the requirements of the Energy Chain®. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** black (RAL 9005).

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: +23°F to +158°F (-5°C to +70°C)

Permissible temperature, fixed: -4°F to +158°F (-20°C to +70°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: Medium

UV resistance: Medium

Regulations: cRUus: UL AWM style for USA & Canada: 2570 80°C 1000V **Flame Resistance:** FT1, **CE:** CEI 20-20, **DESINA, RoHS: 2002/95/EC;** Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 2, material/cable tested by IPA according to standard 14644-1. Test cable CF5-10-07

Typical Applications

- for high mechanical load requirements
- preferably indoor applications, outdoor is acceptable for temperatures greater than +41°F (+5°C)
- for unsupported and gliding travel up to 328 ft (100m)
- torsion +/-90° with 3 ft cable length
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, indoor cranes

Part No.	AWG	No. of Conductors and Rated Cross-Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF30-15-04	16	4 x 1.5	.34	(8.5)	37	(55)	69	(102)
CF30-25-04	14	4 x 2.5	.41	(10.5)	65	(95)	112	(164)
CF30-40-04	12	4 x 4	.47	(12.0)	103	(152)	160	(235)
CF30-40-05	12	5 x 4	.51	(13.0)	130	(191)	195	(286)
CF30-60-04	10	4 x 6	.55	(14.0)	159.9	(235)	234	(344)
CF30-60-05	10	5 x 6	.59	(15.0)	199.3	(293)	283.7	(417)
CF30-100-04	8	4 x 10	.69	(17.5)	266	(391)	378	(555)
CF30-100-05	8	5 x 10	.77	(19.5)	332.7	(489)	474.8	(698)
CF30-160-04	6	4 x 16	.81	(20.5)	415	(610)	567.4	(834)
CF30-160-05	6	5 x 16	.93	(23.5)	519	(763)	722.5	(1062)
CF30-250-04	4	4 x 25	1.00	(25.5)	642.2	(944)	915	(1345)
CF30-350-04	2	4 x 35	1.12	(28.5)	910.9	(1339)	1177.6	(1731)
CF30-500-04	1	4 x 50	1.34	(34.0)	1291.2	(1898)	1766	(2596)

NOTE: The mentioned external diameters are maximum values.

No Minimum Order • No Cut Charges on up to 10 cuts of the same part number



10.144

PVC Power Cable

Chainflex® CF31

PVC Standard Energy Chain® cable, shielded, oil-resistant, flame-retardant



CF31

Price Index



CLASS
5.3.2

Construction

Conductor: Finely stranded bare copper wires, according to EN 60228

Conductor insulation: Mechanically high quality TPE blend

Conductor twisting: Conductors cabled with short pitch over a high-tensile-strength center core.

Conductor colors: Black with white numbers, one conductor green-yellow.

1. U / L1 / C / L+
2. V / L2
3. W / L3 / D / L-
4. 4 / N
5. green / yellow

Intermediate jacket: PVC-based blend, adapted to the requirements of the Energy Chain®.

Total shielding: Tinned copper braid, 90% optical coverage

Outer jacket: PVC-based, low-adhesion blend, adapted to the requirements of the Energy Chain®. Silicone-free in compliance with PV 3.10.7 - status 1992. **Color:** black (RAL 9005).

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: +23°F to +158°F (-5°C to +70°C)

Permissible temperature, fixed: -4°F to +158°F (-20°C to +70°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: Medium

UV resistance: Medium

Regulations: cRUUs: UL AWM style for USA & Canada: 2570 80°C 1000V **Flame Resistance:** FT1, **CE:** CEI 20-20, **RoHS: 2002/95/EC;** Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 2, material/cable tested by IPA according to standard 14644-1.

Test cable CF5-10-07

Typical Applications

- for high mechanical load requirements
- preferably indoor applications, outdoor is acceptable for temperatures greater than +41°F (+5°C)
- for unsupported and gliding travel up to 328 ft (100m)
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, indoor cranes
- designed for AC motors with variable frequency drive (VFD)

Part No.	AWG	No. of Conductors and Rated Cross-Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF31-15-04	16	4 x 1.5	.43	(11.0)	56	(82)	115	(169)
CF31-25-04	14	4 x 2.5	.49	(12.5)	87	(128)	161	(237)
CF31-25-05	14	5 x 2.5	.53	(13.5)	106	(156)	189	(278)
CF31-40-04	12	4 x 4	.55	(14.0)	131	(192)	217	(319)
CF31-40-05	12	5 x 4	.59	(15.0)	167	(246)	264	(388)
CF31-60-04	10	4 x 6	.63	(16.0)	202.0	(297)	320.0	(470)
CF31-60-05	10	5 x 6	.73	(18.5)	243.5	(358)	384.4	(565)
CF31-100-04	8	4 x 10	.81	(20.5)	329.3	(484)	513.0	(754)
CF31-100-05	8	5 x 10	.87	(22.0)	406.8	(598)	614.3	(903)
CF31-160-04	6	4 x 16	.91	(23.0)	501.4	(737)	711.6	(1046)
CF31-250-04	4	4 x 25	1.12	(28.5)	735.4	(1081)	1092	(1605)
CF31-350-04	2	4 x 35	1.25	(32.0)	1015.7	(1493)	1420.4	(2088)
CF31-500-04	1	4 x 50	1.48	(37.5)	1415.7	(2081)	2048.3	(3011)
CF31-700-04	2/0	4 x 70	1.85	(47.0)	2014	(2961)	3163	(4650)

NOTE: The mentioned external diameters are maximum values.

No Minimum Order • No Cut Charges on up to 10 cuts of the same part number



10.145

CF34

TPE Power Cable

CLASS
6.4.4

Price Index



Chainflex® CF34

TPE Energy Chain® cable, oil-resistant, bio-oil-resistant,
UV-resistant, flame-retardant

Conductor
Highly flexible
special
conductor

Core
Conductors
stranded around
high tensile
center core

Outer jacket
gusset filled,
pressure
extruded,
TPE blend



Construction

Conductors: Finely stranded bare copper wires, according to EN 60228.

Conductor insulation: Mechanically high quality TPE blend

Conductor twisting: Conductors cabled with short pitch over a high-tensile-strength center core.

Conductor colors: Black with white numbers, one conductor green-yellow.

1. U / L1 / C / L+
2. V / L2
3. W / L3 / D / L-
4. 4 / N
5. green / yellow

Outer jacket: TPE particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** black

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: -31°F to +194°F (-35°C to +90°C)

Permissible temperature, fixed: -40°F to +194°F (-40°C to +90°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: High

UV resistance: High

Regulations: cRUUs: UL AWM style for USA & Canada: 21184 80°C 1000V **Flame Resistance:** FT1, CE, DESINA, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to standard 14644-1.

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- for unsupported and gliding travel up to 1312 ft (400m)
- torsion +/-90° with 3 ft cable length
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, ship-to-shore, outdoor cranes, low temperature applications

Part No.	AWG	No. of Conductors and Rated Cross- Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF34-15-04	16	4 x 1.5	.34	(8.5)	37	(55)	71	(105)
CF34-25-04	14	4 x 2.5	.39	(10.0)	62	(91)	106	(156)
CF34-40-04	12	4 x 4	.47	(12.0)	103	(152)	159	(234)
CF34-60-04	10	4 x 6	.55	(14.0)	160	(235)	232	(341)
CF34-60-05	10	5 x 6	.59	(15.0)	193	(283)	282	(414)
CF34-100-04	8	4 x 10	.67	(17.0)	266	(391)	361	(531)
CF34-100-05	8	5 x 10	.73	(18.5)	333	(489)	446	(655)
CF34-160-04	6	4 x 16	.77	(19.5)	415	(610)	536	(788)
CF34-160-05	6	5 x 16	.93	(23.5)	519	(763)	729	(1072)
CF34-250-04	4	4 x 25	.96	(24.5)	642	(944)	847	(1245)
CF34-100-04-O-PE ^{††}	8	4 x 10	.67	(17.0)	266	(391)	361	(531)
CF34-500-03-O-PE ^{††}	1	3 x 50	1.18	(30.0)	968	(1423)	1323	(1947)

NOTE: The mentioned external diameters are maximum values.

^{††}O-PE = no ground (green/yellow wire)



10.146

No Minimum Order • No Cut Charges on up to 10 cuts of the same part number

TPE Power Cable



CF35

Chainflex® CF35

TPE Energy Chain® Cable, shielded, oil-resistant, bio-oil-resistant, UV-resistant, flame-retardant

CLASS
6.4.4

Price Index



Construction

Conductors: Finely stranded bare copper wires, according to EN 60228

Conductor insulation: Mechanically high quality TPE blend

Conductor twisting: Conductors cabled with short pitch over a high-tensile-strength center core.

Conductor colors: Black with white numbers, one conductor green-yellow.

1. U / L1 / C / L+
2. V / L2
3. W / L3 / D / L-
4. green / yellow

Inner Jacket: TPE

Shielding: Tinned copper braid, 90% optical coverage

Outer jacket: TPE particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant, Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** black (RAL 9005)

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: -31°F to +194°F (-35°C to +90°C)

Permissible temperature, fixed: -40°F to +194°F (-40°C to +90°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: High

UV resistance: High

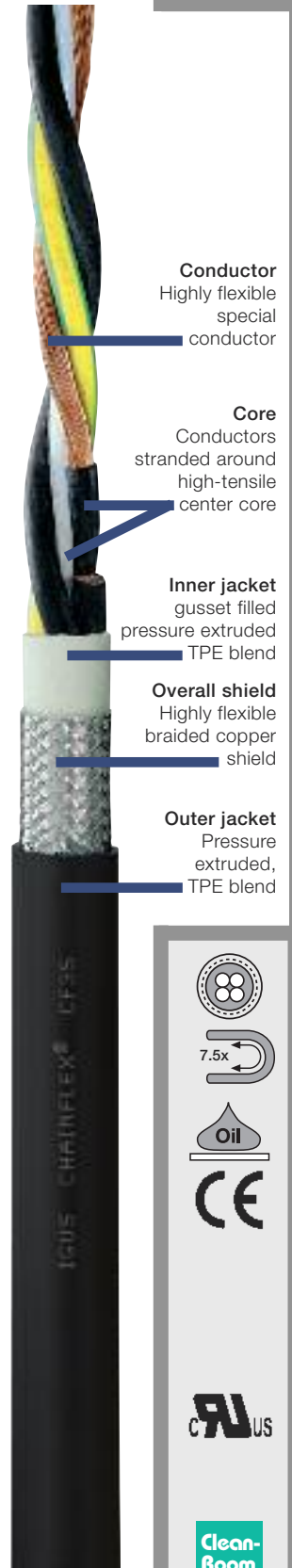
Regulations: cRUUs: UL AWM style for USA & Canada: 21184 80°C 1000V **Flame Resistance:** FT1, CE, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to standard 14644-1.

Test cable CF34-25-04

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- designed for AC motors with variable frequency drive (VFD)
- for unsupported and gliding travel up to 1312 ft (400m)
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, ship-to-shore, outdoor cranes, low temperature applications



Part No.	AWG	No. of Conductors and Rated Cross-Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF35-05-04	20	4 x 0.5	.32	(8.0)	26.5	(39)	55.1	(81)
CF35-07-04	18	4 x 0.75	.34	(8.5)	35.3	(52)	67.3	(99)
CF35-15-04	16	4 x 1.5	.37	(9.5)	56	(82)	99.0	(146)
CF35-25-04	14	4 x 2.5	.43	(11.0)	84	(123)	139.5	(205)
CF35-40-04	12	4 x 4	.55	(14.0)	137	(201)	218.0	(321)
CF35-60-04	10	4 x 6	.61	(15.5)	198	(291)	291.0	(428)
CF35-100-04	8	4 x 10	.77	(19.5)	305	(449)	457.0	(672)
CF35-160-04	6	4 x 16	.87	(22.0)	473.5	(696)	657.0	(965)
CF35-250-04	4	4 x 25	1.06	(27.0)	736	(1082)	1013.0	(1489)

NOTE: The mentioned external diameters are maximum values.

No Minimum Order • No Cut Charges on up to 10 cuts of the same part number



10.147

CF300

TPE Power Cable

CLASS
6.4.4

Price Index



Chainflex® CF300

TPE Energy Chain® cable, oil-resistant, bio-oil-resistant,
UV-resistant, flame-retardant

Conductor
Highly flexible
special
conductor

Conductor insulation
Pressure
extruded
TPE blend

Outer jacket
Pressure
extruded, TPE
blend



Construction

Conductors: Finely stranded bare copper wires, according to EN60882

Conductor insulation: Mechanically high quality TPE blend.

Outer jacket: TPE - Particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant and UV-resistant. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** black.

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: -31°F to +194°F (-35°C to +90°C)

Permissible temperature, fixed: -40°F to +194°F (-40°C to +90°C)

Nominal voltage: 1000 V

Testing voltage: 4000V

Oil resistance: High

UV resistance: High

Regulations: cRUus: UL AWM style for USA & Canada: 21184 80°C 1000V **Flame Resistance:** FT1, CE, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to standard 14644-1.

Test cable CF34-25-04

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- for unsupported and gliding travel up to 1312 ft (400m) or more
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, ship-to-shore, outdoor cranes, low temperature applications

Part No.	AWG	No. of Conductors and Rated Cross- Section in mm ²	Outer Diameter		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF300-40-01	12	1 x 4.0	.26	(6.5)	25.5	(38)	41.0	(61)
CF300-60-01	10	1 x 6.0	.28	(7)	39.4	(58)	57.8	(85)
CF300-100-01	8	1 x 10.0	.31	(8)	65.3	(96)	88.4	(130)
CF300-160-01	6	1 x 16.0	.37	(9.5)	104.7	(154)	129.2	(190)
CF300-250-01	4	1 x 25.0	.45	(11.5)	163.2	(240)	190.4	(280)
CF300-350-01	2	1 x 35.0	.49	(12.5)	228.5	(336)	272.0	(400)
CF300-500-01	1	1 x 50.0	.57	(14.5)	326.4	(480)	353.6	(520)
CF300-700-01	2/0	1 x 70.0	.63	(16)	424.0	(623)	460.0	(676)
CF300-950-01	3/0	1 x 95.0	.75	(19.0)	577.0	(848)	631.0	(927)
CF300-1200-01	4/0	1 x 120.0	.85	(21.5)	720.0	(1059)	779.0	(1145)
CF300-1500-01	300 MCM	1 x 150.0	.91	(23)	897.0	(1318)	960.0	(1411)
CF300-1850-01	350 MCM	1 x 185.0	1.06	(27.0)	1285.7	(1890)	1370.1	(2014)



Chainflex® Shrink Sleeve

Technical Data (Heat-shrink sleeving only)

Material: Polyolefin particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant **Color:** green/yellow

Permissible temperature range for continuous flexing: -40°F to +275°F (-40°C to +135°C)

Shrink temperature: +248°F (+120 °C) min.

Part No.	Maximum Diameter Before Shrinking		Minimum Diameter After Shrinking	
	in.	(mm)	in.	(mm)
CGPT 9-5/4-8	.37	(9.5)	.19	(4.8)
CGPT 12-7/6-4	.50	(12.7)	.25	(6.4)
CGPT 19-0/9-5	.75	(19.0)	.37	(9.5)
CGPT 25-4/12-7	1.00	(25.4)	.50	(12.7)
CGPT 38-0/19-0	1.50	(38.0)	.75	(19.0)

NOTE: The mentioned external diameters are maximum values.



10.148

TPE Power Cable

Chainflex® CFPE

TPE Energy Chain® cable, oil-resistant, bio-oil-resistant, UV-resistant, flame retardant



CFPE

CLASS
6.4.4

Price Index



Construction

Conductors: Finely stranded bare copper wires, according to EN60882

Conductor insulation: Mechanically high quality TPE blend **Color:** green/yellow

Overall jacket: TPE Especially abrasion resistant, highly flexible mixture, oil resistant coolant resistant and UV resistant Silicone-free in compliance with PV 3.10.7 - status 1992. Color: Black

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: -31°F to +194°F (-35°C to +90°C)

Permissible temperature, fixed: -40°F to +194°F (-40°C to +90°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: High

UV resistance: High

Regulations: cRUus: UL AWM style for USA & Canada: 21184 80°C 1000V **Flame Resistance:** FT1, CE, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to standard 14644-1. Test cable

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- for unsupported and gliding travel up to 1312 ft (400m) or more
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, ship-to-shore, outdoor cranes, low temperature applications



Conductor
Highly flexible special conductor

Conductor insulation
Pressure extruded TPE blend

Outer jacket
Pressure extruded, flame-retardant TPE blend

Part No.	AWG	No. of Conductors and Rated Cross-Section in mm ²	Outer Diameter		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CFPE-15-01	16	1 x 1.5	.20	(5.0)	10.2	(15)	24.0	(35)
CFPE-25-01	14	1 x 2.5	.22	(5.5)	17.0	(25)	31.0	(46)
CFPE-40-01	12	1 x 4.0	.24	(6.0)	25.5	(38)	41.0	(61)
CFPE-60-01	10	1 x 6.0	.30	(7.5)	37.6	(56)	54.4	(81)
CFPE-100-01	8	1 x 10.0	.32	(8.0)	64.5	(96)	83.0	(123)
CFPE-160-01	6	1 x 16.0	.37	(9.5)	101.5	(151)	128.3	(191)
CFPE-250-01	4	1 x 25.0	.45	(11.5)	161.0	(239)	195.5	(291)
CFPE-350-01	2	1 x 35.0	.51	(13.0)	227	(333)	263	(387)



No Minimum Order • No Cut Charges on up to 10 cuts of the same part number

10.149

CF310

TPE Power Cable

CLASS
6.4.4

Price Index



Chainflex® CF310

TPE Energy Chain® cable, shielded, oil-resistant, bio-oil-resistant, UV-resistant, flame-retardant

Conductor
Highly flexible
special
conductor

**Conductor
insulation**
Pressure
extruded
TPE blend

Overall Shield
Highly flexible
braided copper
shield

Outer jacket
Pressure
extruded,
TPE blend



Construction

Conductors: Finely stranded bare copper wires, according to EN60882

Conductor insulation: Mechanically high quality TPE blend.

Total shielding: Tinned copper braid, 90% optical coverage

Outer jacket: TPE: particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant and UV-resistant. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** black.

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: -31°F to +194°F (-35°C to +90°C)

Permissible temperature, fixed: -40°F to +194°F (-40°C to +90°C)

Voltage: 1000 V

Testing voltage: 4000V

Oil resistance: High

UV resistance: High

Regulations: cRUus: UL AWM style for USA & Canada: 21184 80°C 1000V **Flame Resistance:** FT1, CE, RoHS:

2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to standard 14644-1.

Test cable CF34-25-04

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- for unsupported and gliding travel up to 1312 ft (400m) or more
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, ship-to-shore, outdoor cranes, low temperature applications

Part No.	AWG	No. of Conductors and Rated Cross- Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF310-25-01	14	1 x 2.5	.26	(6.5)	26.2	(39)	41	(61)
CF310-40-01	12	1 x 4.0	.26	(6.5)	37	(55)	50	(74)
CF310-60-01	10	1 x 6.0	.30	(7.5)	51	(75)	66	(97)
CF310-100-01	8	1 x 10.0	.34	(8.5)	82	(120)	98	(144)
CF310-160-01	6	1 x 16.0	.39	(10.0)	121	(178)	143	(210)
CF310-250-01	4	1 x 25.0	.45	(11.5)	185	(272)	214	(314)
CF310-350-01	2	1 x 35.0	.53	(13.5)	259	(380)	288	(423)
CF310-500-01	1	1 x 50.0	.59	(15)	357	(524)	386	(568)
CF310-700-01	2/0	1 x 70.0	.69	(17.5)	469	(689)	509	(748)
CF310-950-01	3/0	1 x 95.0	.81	(20.5)	626	(920)	678	(997)
CF310-1200-01	4/0	1 x 120.0	.87	(22)	776	(1140)	839	(1233)
CF310-1500-01	300 MCM	1 x 150.0	.94	(24)	977	(1436)	1054	(1549)
CF310-1850-01	350 MCM	1 x 185.0	1.04	(26.5)	1244	(1829)	1297	(1906)

NOTE: The mentioned external diameters are maximum values.



10.150

No Minimum Order • No Cut Charges on up to 10 cuts of the same part number

igupren Power Cable

Chainflex® CFCRANE

For maximum voltages and output, oil-resistant, UV-resistant, flame-retardant

Construction

Conductors: Highly flexible cable consisting of tinned copper wires

Conductor insulation: Inner secondary layer made of conductive rubber. Insulating sheath made of high-quality, heat-resistant and ozone-proof (free) ethylene propylene rubber (EPR). External semi-conducting layer made of conductive rubber

Outer jacket: Flame-retardant, oil-resistant rubber jacket made of iguprene for maximum mechanical stress.

Technical Data

Minimum bending radius, moving: 10 x outer cable diameter

Minimum bending radius, fixed: 7.5 x outer cable diameter

Permissible temperature, moving: -4°F to +176°F (-20°C to +80°C)

Permissible temperature, fixed: -22°F to +176°F (-30°C to +80°C)

Nominal voltage: 6/10KV (other voltage upon inquiry)

Oil resistance: High

UV resistance: High

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- for freely suspended and gliding travel up to 1640 ft (500m) or more

Part No.	Center AWG/ Serve AWG	No. of Conductors and Rated Cross Section in mm ²
CFCRANE 1x25/16	4 / 6	1 x 25/16
CFCRANE 1x35/16	2 / 6	1 x 35/16
CFCRANE 1x50/16	1 / 6	1 x 50/16
CFCRANE 1x70/16	2/0 / 6	1 x 70/16
CFCRANE 1x95/16	3/0 / 6	1 x 95/16

Part No.	Outer Diameter (approx)		Copper Index		Weight	
	in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CFCRANE 1x25/16	1.06	(27)	318.2	(468)	639.2	(940)
CFCRANE 1x35/16	1.14	(29)	391.7	(576)	754.8	(1110)
CFCRANE 1x50/16	1.18	(30)	484.2	(712)	918.0	(1350)
CFCRANE 1x70/16	1.26	(32)	620.2	(912)	1054.0	(1550)
CFCRANE 1x95/16	1.34	(34)	778.6	(1145)	1237.6	(1820)

igus®

CFCRANE

Price Index



CLASS
6.4.3



Conductor
Highly flexible
special
conductor

Core insulation
Extruded EPR
insulation over
conductive
rubber

Overall shield
Highly flexible
copper shield

Outer jacket
Extruded, highly
abrasion-resistant
iguprene blend



No Minimum Order • No Cut Charges on up to 10 cuts of the same part number

10.151

Price Index



Pneumatic Hose

Chainflex® CF AIR

PUR Energy Chain® air hose, oil-resistant, coolant-resistant, abrasion-resistant, outside toleranced*

Description

igus® Chainflex® Air pneumatic hoses have been tested successfully in cable carriers through more than 10 million bending cycles, at bend radii below the recommended minimum. They are optimized for excellent flexibility and wear resistance in continuous-flex cable carrier applications. They are also very resistant to oils and coolants.

Technical Data

Material: Polyurethane, optimized for the requirements of continuous flexing inside a cable carrier

Color: blue

Operating pressure at +68°F (+20°C): 150 psi (10 bar)

Vacuum: at +68°F (20°C) 28" Hg

Minimum bending radius for flexible use: 10 x outer hose diameter

Temperature range, moving: -13°F to +158°F (-25°C to +70°C)

Temperature range, fixed: -40°F to +158°F (-40°C to +70°C)

Chainflex® Air - Metric Sizes

Part No.	Inner Diameter (approx)		Wall Thickness		Outer Diameter (approx)		Weight	
	in.	(mm)	in.	(mm)	in.	(mm)	lbs.mft	(kg/km)
CAPU-A-06-0	.16	(4)	.04	(1.0)	.24	(6)	12.9	(19)
CAPU-A-08-0	.22	(5.7)	.04	(1.0)	.31	(8)	20.4	(30)
CAPU-A-10-0	.28	(7)	.06	(1.4)	.39	(10)	32.6	(48)
CAPU-A-12-0	.31	(8)	.08	(1.9)	.47	(12)	51.7	(76)
CAPU-A-16-0	.43	(11)	.10	(2.4)	.63	(16)	86.4	(127)

Chainflex® Air - Inch Sizes

Part No.	Inner Diameter (approx)		Wall Thickness		Outer Diameter (approx)		Weight	
	in.		in.		in.		lbs	
CAPU-I-02	.16		.05		.25		15	
CAPU-I-03	.19		.06		.31		26	
CAPU-I-04	.25		.06		.38		32	
CAPU-I-06	.31		.09		.50		45	
CAPU-I-08	.41		.11		.63		58	

Note: Overall diameter tolerances
 1/8" - 1/2" OD = ± .005
 9/16" - 3/4" OD = ± .006

Pneumatic Hose



CF
CleanAIR
PE

Chainflex® CF CleanAIR

PE Energy Chain® air hose, oil-resistant, coolant-resistant, highly abrasion-resistant, outside tolerated*, PVC-free, halogen-free

Technical Data

Material: highly abrasion resistant polyethylene adapted the requirements of Energy Chains®

Color: white

Operating pressure at +68°F (+20°C): 150 psi (10 bar)

Vacuum: at +68°F (20°C) -14 psi (-0.95 bar)

Minimum bending radius for flexible use: 10 x outer hose diameter

Minimum bending radius for static use: 8x outer hose diameter

Temperature range, moving: -13°F to +158°F (-25°C to +70°C)

Temperature range, fixed: -40°F to +158°F (-40°C to +70°C)

Cleanroom: According to ISO Class 1, tube material tested by IPA according to ISO standard 14644-1

Typical Applications

- Especially for high abrasion resistance
- Cleanroom, semi-conductor industry, material handling systems

Chainflex® Air - Metric Sizes

Part No.	Inner Diameter (approx)		Wall Thickness		Outer Diameter (approx)		Weight	
	in.	(mm)	in.	(mm)	in.	(mm)	lbs.mft	(kg/km)
CAPE-A-04-0	.11	2.7	.03	0.7	.16	4.0	4	6
CAPE-A-06-0	.16	4.0	.04	1.0	.24	6.0	10	15
CAPE-A-08-0	.22	5.7	.05	1.2	.32	8.0	14	21
CAPE-A-10-0	.28	7.0	.06	1.5	.39	10.0	26	38
CAPE-A-12-0	.32	8.0	.08	2.0	.47	12.0	36	54
CAPE-A-16-0	.43	11.0	.10	2.5	.63	16.0	60	90

Price Index



No Minimum Order • No Cut Charges on up to 10 cuts of the same part number