

FLEX-CH Shielded Halogen-Free



FLEX-CH is a low smoke, zero halogen, flexible, oil-resistant, overall shielded, multi-conductor power and control cable designed for use in all electrical equipment in dry, damp and wet conditions. For use in flexible or stationary applications under medium mechanical stress with free movement without any tensile stress, loads or forced movements. Common applications include connections to machinery, data processing, production lines, conveyor belts, ventilation and air-conditioning systems. Found in public facilities, airports, railway stations, plant construction, steel mills, offices and in areas exposed to high risk of flame or fires. The flame retardant, halogen-free jacket gives off no corrosive gases and low smoke when exposed to fire, making **FLEX-CH** suitable in areas of high risk or potential for fire. The overall tinned copper braid is recommended where there is electrical interference, distorted signals or EMI emissions. Outdoor installation is not permitted.



Construction:

- Fine bare copper strands
- Strands to VDE-0295 Class-5, IEC 60228 CI-5
- Special Halogen-Free core insulation
- Color code VDE-0293 - black & numbered
- Special Halogen-Free inner jacket
- 85% Tinned Copper Braid
- Halogen-Free outer jacket - gray (RAL 7001)
- "OZ" denotes no ground wire
- **Extremely oil & chemical resistant**

Technical:

- Working voltage: 300/500 volts
- Test voltage: 3000 volts
- Flexing bending radius: 20 x Ø
- Static bending radius: 6 x Ø
- Flexing temp: -30° C to +70° C
- Static temp: -40° C to +70° C
- Flame retardant: **IEC 60332.3**
- Insulation resistance: 20 MΩ x km

Approvals:

- VDE-0245, 0250, 0281, 0282
- CE Low Voltage Directive 73/23/EEC and 93/68/EEC
- ROHS compliant

PART NUMBER	CORES	NOMINAL OD	CU LBS/MFT	WT LBS/MFT
20 AWG (16/32) 0,50mm²				
1852002 OZ	2	0.276" / 7.0mm	23	54
1812003 **	3	0.287" / 7.3mm	30	71
1812004 **	4	0.303" / 7.7mm	37	83
1812005 **	5	0.327" / 8.3mm	44	90
1812007	7	0.390" / 9.9mm	54	107
1812012	12	0.441" / 11.2mm	93	159
1812018	18	0.524" / 13.3mm	125	225
1812025	25	0.606" / 15.4mm	168	270
18 AWG (24/32) 0,75mm²				
1851802 OZ	2	0.295" / 7.5mm	30	77
1811803 **	3	0.307" / 7.8mm	39	84
1811804 **	4	0.354" / 9.0mm	43	95
1811805 **	5	0.378" / 9.6mm	52	109
1811807 **	7	0.425" / 10.8mm	68	125
1811812	12	0.504" / 12.8mm	119	210
1811818	18	0.587" / 14.9mm	163	306
1811825	25	0.736" / 18.7mm	207	386
17 AWG (32/32) 1,00mm²				
1851702 OZ	2	0.303" / 7.7mm	34	85
1811703 **	3	0.315" / 8.0mm	44	94
1811704 **	4	0.362" / 9.2mm	52	107
1811705	5	0.386" / 9.8mm	60	122
1811707	7	0.441" / 11.2mm	76	144
1811712	12	0.520" / 13.2mm	126	236
1811718	18	0.606" / 15.4mm	192	345
1811725	25	0.760" / 19.3mm	260	454
1811734	34	0.807" / 20.5mm	298	580
1811741	41	0.898" / 22.8mm	388	677
16 AWG (30/30) 1,50mm²				
1851602 OZ	2	0.327" / 8.3mm	52	115
1811603 **	3	0.366" / 9.3mm	56	125

Sizes continued on next page.

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FLEX-CH Sizes Continued. (17 AWG and Larger)

PART NUMBER	CORES	NOMINAL OD	CU LBS/MFT	WT LBS/MFT
16 AWG (30/30) 1,50mm² Cont.				
1811604	4	0.390" / 9.9mm	67	135
1811605	5	0.417" / 10.6mm	84	155
1811607	7	0.504" / 12.8mm	131	208
1811612	12	0.574" / 14.5mm	188	339
1811618	18	0.681" / 17.3mm	261	419
1811625	25	0.791" / 20.1mm	355	596
14 AWG (50/30) 2,50mm²				
1811403	3	0.425" / 10.8mm	98	142
1811404	4	0.457" / 11.6mm	112	239
1811405	5	0.531" / 13.2mm	134	259
1811407	7	0.610" / 15.5mm	193	334
1811412	12	0.748" / 19.0mm	320	524
12 AWG (56/28) 4,00mm²				
1811203	3	0.504" / 12.8mm	133	208
1811204	4	0.528" / 13.4mm	159	307
1811205	5	0.579" / 14.7mm	188	357
1811207	7	0.685" / 17.4mm	260	514
10 AWG (84/28) 6,00mm²				
1811003	3	0.654" / 16.6mm	162	276
1811004	4	0.689" / 17.5mm	213	410
1811005	5	0.728" / 18.5mm	304	516
1811007	7	0.823" / 20.9mm	352	694
8 AWG (80/26) 10,0mm²				
1810803	3	0.677" / 17.2mm	279	497
1810804	4	0.803" / 20.4mm	383	663
1810805	5	0.870" / 22.1mm	463	806
6 AWG (128/26) 16,0mm²				
1810604	4	1.016" / 25.8mm	539	1115
1810605	5	1.142" / 29.0mm	605	1356
4 AWG (200/26) 25,0mm²				
1810404	4	1.189" / 30.2mm	865	1738
1810405	5	1.339" / 34.0mm	942	2144
2 AWG (280/26) 35,0mm²				
1810204	4	1.260" / 32.0mm	1267	2198
1810205	5	1.457" / 37.0mm	1698	3038
1 AWG (400/26) 50,0mm²				
1810104	4	1.669" / 42.4mm	1571	2509
2/0 AWG (356/24) 70,0mm²				
1812104	4	1.874" / 47.6mm	1994	3390
3/0 AWG (485/24) 95,0mm²				
1813104	4	2.035" / 51.7mm	2720	4311
4/0 AWG (614/24) 120,0mm²				
1814104	4	2.205" / 56.0mm	3852	5670

* Additional sizes may be available.

** Sizes available as FLEX-CH-OZ (185) - no ground wire construction.