



kabeltec FLEX-CH

Voltage : 300 / 500 V

Temp. : 70 °C

### Application

**FLEX-CH** is a halogen free and flame retardant control cable that are mainly used for control and instrumentation cables in those transportation and conveyor belts, tooling machinery, production lines as well as in plant construction, air-conditioning systems and also suitable to use in iron and steel works. As for flexing or fixed installation applications, for free movement without forced motion and also without tensile stress for medium mechanical loads.

This cable is mainly use in dry, wet and damp environment for installation above on, in and beneath plaster and also include in masonry and concrete walls but not for direct embedding in compacted, vibrated or in tamped concrete. However these cables are not recommended for imbedding in solidified or compressed concrete. An interference-free transmission of pulse and signals in assured by the high degree of screening

\*EMC = Electromagnetic compatibility

**Note** To optimize the EMC feature we recommend a large round contact of the copper braiding on both ends.

### Cable Construction

- Fine strand of bare copper conductors according to DIN VDE 0295 class 5 and IEC 60228
- Core insulation of halogen free compound H12 accordance to DIN VDE 0207 part 23
- Black cores with continuous white numbering accordance to DIN VDE 0293
- Green-yellow earth core in the outer layer
- Cores twisted in layers
- Tinned copper wire braid, min. 85% coverage
- Halogen free compound outsidersheath, HM2 to DIN VDE 0207 part 24, colour grey
- Oil & chemical resistance
- Outsersheath self-extinguishing and flame retardant, test method B according to VDE 0472 part 804 and IEC 60332-3 and HD 405.3

### Technical Data

- Standard : According to DIN VDE 0282 part 9, DIN VDE 0250 part 214
- Nominal voltage : U<sub>0</sub>/U 300/500 V
- Temperature range : Flexing : – 5°C to + 70°C  
Fixed laying : – 40°C to + 70°C
- Testing voltage : 2 KV, 50 Hz
- Conductor resistance : DIN VDE 0295 part 3
- Min. bending radius : 15 x cable diameter

\* Type OZ : Without earth core (G/Y)

Item No.	No. Of Core x Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
130001	OZ 2 x 0.5	5.9	32.1	46
130002	3 x 0.5	6.2	39.2	56
130003	4 x 0.5	6.7	46.1	62
130004	5 x 0.5	7.5	52.1	75
130005	7 x 0.5	8.7	68.3	98
130006	12 x 0.5	11.0	117.0	158
130007	18 x 0.5	13.1	156.2	216
130008	25 x 0.5	15.7	205.5	315
130009	OZ 2 x 0.75	6.5	39.3	60
130010	3 x 0.75	7.1	49.4	68
130011	4 x 0.75	7.5	57.2	78
130012	5 x 0.75	8.5	69.0	95
130013	7 x 0.75	10.1	87.1	130
130014	12 x 0.75	12.5	151.2	203
130015	18 x 0.75	14.7	207.5	290
130016	25 x 0.75	18.0	275.8	413

Item No.	No. Of Core x Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
130017	OZ 2 x 1	7.0	46.3	66
130018	3 x 1	7.3	56.4	80
130019	4 x 1	8.0	69.7	100
130020	5 x 1	8.7	85.4	130
130021	7 x 1	10.6	107.3	160
130022	12 x 1	13.1	187.0	260
130023	18 x 1	16.0	253.5	382
130024	25 x 1	19.3	342.6	540
130025	OZ 2 x 1.5	7.7	63.3	88
130026	3 x 1.5	8.5	76.2	100
130027	4 x 1.5	9.5	96.2	125
130028	5 x 1.5	10.1	111.5	158
130029	7 x 1.5	12.5	148.0	210
130030	12 x 1.5	15.4	254.5	340
130031	18 x 1.5	18.5	367.7	480
130032	25 x 1.5	22.6	492.4	702

Item No.	No. Of Core x Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
130033	OZ 2 x 2.5	8.5	96.4	132
130034	3 x 2.5	9.0	148.5	168
130035	4 x 2.5	10.0	174.2	195
130036	5 x 2.5	11.3	200.8	222
130037	7 x 2.5	13.5	235.6	345
130038	12 x 2.5	17.1	441.0	572
130039	OZ 2 x 4	10.5	135.5	184
130040	3 x 4	11.3	178.1	238
130041	4 x 4	12.5	220.3	305
130042	5 x 4	13.7	328.0	388
130043	7 x 4	17.0	355.2	504
130044	OZ 2 x 6	12.5	175.3	270
130045	3 x 6	13.2	240.0	328
130046	4 x 6	15.0	305.7	416
130047	5 x 6	16.5	441.8	510
130048	7 x 6	18.2	506.0	670
130049	OZ 2 x 10	15.6	265.2	420
130050	3 x 10	16.7	370.5	495
130051	4 x 10	18.5	486.0	785
130052	5 x 10	20.6	611.2	855
130053	7 x 10	23.3	820.5	1308

Item No.	No. Of Core x Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
130054	4 x 16	21.7	810.2	882
130055	5 x 16	24.4	1050.7	1293
130056	7 x 16	27.3	1183.0	2149
130057	3 x 25	25.9	792.0	1432
130058	4 x 25	28.8	1280.0	1911
130059	5 x 25	31.7	1440.0	2414
130060	3 x 35	31.0	1110.0	1914
130061	4 x 35	34.7	1690.0	2542
130062	5 x 35	38.9	1930.0	3180
130063	3 x 50	32.6	1584.0	3080
130064	4 x 50	39.3	2315.0	3550
130065	5 x 50	43.2	2694.0	4753
130066	3 x 70	41.5	2218.0	3840
130067	4 x 70	45.4	3020.0	4939
130068	5 x 70	49.5	3696.0	6572
130069	3 x 95	47.6	3010.0	5651
130070	4 x 95	52.5	4013.0	6690
130071	5 x 95	57.4	5016.0	8370
130072	3 x 120	51.1	3802.0	6342
130073	4 x 120	56.1	5067.0	8453