

NANOFLEX HC*TRONIC-C

EMC preferred type, flexible, colour code to DIN 47100, screened, meter marking



Technical data

- Special polyurethane data cables for electronic control according to DIN VDE 0245, 0812
- **Temperature range**
flexing -5 °C to +80 °C
fixed installation -40 °C to +80 °C
- **Peak operating voltage**
(not for purposes of high current and power installation)
0,14 mm² = 350 V
≥0,25 mm² = 500 V
- **Test voltage**
core/core 1200 V
core/screen 800 V
- **Breakdown voltage**
min. 2400 V
- **Insulation resistance**
min. 200 MΩm x km
- **Operating capacity**
(approx. -value) at 800 Hz
core/core at 0,14 mm² = 120 pF/m
core/core ≥0,25 mm² = 150 pF/m
core/screen at 0,14 mm² = 240 pF/m
core/screen ≥0,25 mm² = 270 pF/m
- **Inductance** approx. 0,65 mH/km
- **Impedance** approx. 78 Ωm
- **Coupling resistance** max. 250 Ωm/km
- **Minimum bending radius**
flexing 10x cable ø
fixed installation 5x cable ø
- **Radiation resistance**
up to 100x10⁶ cJ/kg (up to 100 Mrad)

Cable structure

- Bare copper conductor, fine wire stranded from 0,5 mm² according to DIN VDE 0295 cl.5 or 0245 or IEC 60228
- Wire make-up for:
0,14 mm² = 18x0,1 mm
0,25 mm² = 14x0,15 mm
0,34 mm² = 7x0,25 mm
- Special PVC core insulation T12, according to DIN VDE 0281 part 1
- Core identification according to DIN 47100, but without colour repetition
- Cores stranded in layers with optimal lay-lengths
- Foil wrapping
- Drain stranded wire, tinned copper
- Tinned copper braided screening, coverage approx. 85%
- Outer sheath from special full polyurethane TPU according to DIN EN 50363-10-2
- Sheath colour - light grey (RAL 7035)
- With meter marking

Properties

- Resistant to UV radiation, oxygen, ozone, hydrolysis, microbes
- Self-extinguishing and flame retardant in accordance to VDE 0482-332-1-2, DIN EN 60332-1/ IEC 60332-1 (conforms to DIN VDE 0472 Part 804 Test method B)
- The materials used in manufacture are free of silicone, cadmium and substances that impair paint wetting
- Good cleaning properties
- Resistant to all standard detergents

Note

- **unscreened analogue type:**
NANOFLEX®HC TRONIC, see page A 93
- *Hygienic Cable

Application

Special PUR cable for the food and beverage industry; outer sheath with antimicrobial properties increases process reliability in all applications in which food and beverages are processed unpacked and unsealed, e.g. processing of dairy products, meat, fish; production of convenience foods, brewery and beverage industry

EMC = Electromagnetic compatibility

To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
27235	1 x 0,14	2,5	6,0	16,0	26
27236	2 x 0,14	3,7	12,0	20,0	26
27237	3 x 0,14	3,9	13,0	27,0	26
27238	4 x 0,14	4,1	15,0	32,0	26
27239	5 x 0,14	4,4	16,0	37,0	26
27240	6 x 0,14	4,9	18,0	42,0	26
27241	7 x 0,14	4,9	19,0	48,0	26
27242	8 x 0,14	5,2	21,0	55,0	26
27243	10 x 0,14	6,2	29,0	65,0	26
27244	12 x 0,14	6,2	31,0	77,0	26
27245	14 x 0,14	6,6	32,0	79,0	26
27246	16 x 0,14	6,9	43,0	89,0	26
27247	18 x 0,14	7,2	51,0	103,0	26
27248	20 x 0,14	7,7	55,0	116,0	26
27249	21 x 0,14	7,9	56,0	120,0	26
27250	24 x 0,14	8,3	62,0	131,0	26
27251	25 x 0,14	8,5	61,0	136,0	26

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
27252	1 x 0,25	2,9	7,0	27,0	24
27253	2 x 0,25	4,2	16,0	31,0	24
27254	3 x 0,25	4,3	19,0	36,0	24
27255	4 x 0,25	4,7	22,0	40,0	24
27256	5 x 0,25	5,3	27,0	51,0	24
27257	6 x 0,25	5,7	32,0	58,0	24
27258	7 x 0,25	5,7	35,0	64,0	24
27259	8 x 0,25	6,6	42,0	82,0	24
27260	10 x 0,25	7,2	50,0	85,0	24
27261	12 x 0,25	7,3	58,0	90,0	24
27262	14 x 0,25	7,9	62,0	144,0	24
27263	16 x 0,25	8,3	67,0	110,0	24
27264	18 x 0,25	8,9	78,0	142,0	24
27265	19 x 0,25	9,1	79,0	146,0	24
27266	20 x 0,25	9,4	152,0	88,0	24
27267	21 x 0,25	9,4	91,0	150,0	24
27268	24 x 0,25	10,0	96,0	163,0	24

Continuation ►

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Part no.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
27269	25 x 0,25	10,1	99,0	169,0	24
27270	1 x 0,34	3,2	13,0	24,0	22
27271	2 x 0,34	4,8	18,0	30,0	22
27272	3 x 0,34	5,2	22,0	37,0	22
27273	4 x 0,34	5,5	28,0	48,0	22
27274	5 x 0,34	6,0	31,0	54,0	22
27275	6 x 0,34	6,7	45,0	61,0	22
27276	7 x 0,34	6,7	51,0	67,0	22
27277	8 x 0,34	7,8	54,0	81,0	22
27278	10 x 0,34	8,4	65,0	103,0	22
27279	12 x 0,34	8,5	70,0	110,0	22
27280	14 x 0,34	9,0	81,0	153,0	22
27281	16 x 0,34	9,4	88,0	159,0	22
27282	18 x 0,34	9,8	103,0	172,0	22
27283	19 x 0,34	10,1	106,0	181,0	22
27284	20 x 0,34	10,1	112,0	191,0	22
27285	21 x 0,34	10,7	116,0	199,0	22
27286	24 x 0,34	10,7	129,0	229,0	22
27287	25 x 0,34	12,0	120,0	241,0	22
27288	1 x 0,5	3,4	15,0	40,0	20
27289	2 x 0,5	5,3	29,0	45,0	20
27290	3 x 0,5	5,6	39,0	55,0	20
27291	4 x 0,5	6,0	46,0	61,0	20
27292	5 x 0,5	6,7	52,0	76,0	20
27293	6 x 0,5	7,3	66,0	89,0	20

Part no.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
27294	7 x 0,5	7,3	68,0	98,0	20
27295	8 x 0,5	8,5	80,0	117,0	20
27296	10 x 0,5	9,2	93,0	135,0	20
27297	12 x 0,5	9,5	117,0	157,0	20
27298	14 x 0,5	10,0	122,0	190,0	20
27299	16 x 0,5	10,6	129,0	210,0	20
27300	18 x 0,5	10,7	152,0	217,0	20
27301	19 x 0,5	11,2	156,0	246,0	20
27302	20 x 0,5	11,9	173,0	275,0	20
27303	24 x 0,5	12,6	256,0	337,0	20
27304	25 x 0,5	12,7	250,0	351,0	20
27305	1 x 0,75	3,8	19,0	41,0	18
27306	2 x 0,75	6,0	38,0	59,0	18
27307	3 x 0,75	6,2	50,0	66,0	18
27308	4 x 0,75	6,7	57,0	77,0	18
27309	5 x 0,75	7,3	70,0	93,0	18
27310	6 x 0,75	8,1	87,0	113,0	18
27311	7 x 0,75	8,2	96,0	130,0	18
27312	8 x 0,75	9,0	110,0	145,0	18
27313	10 x 0,75	10,3	140,0	180,0	18
27314	12 x 0,75	10,4	151,0	202,0	18
27315	14 x 0,75	11,2	167,0	225,0	18
27316	16 x 0,75	11,8	183,0	275,0	18
27317	18 x 0,75	12,6	207,0	292,0	18
27318	19 x 0,75	12,6	221,0	322,0	18
27319	20 x 0,75	13,1	238,0	362,0	18
27320	24 x 0,75	14,1	270,0	435,0	18
27321	25 x 0,75	14,3	278,0	415,0	18

Dimensions and specifications may be changed without prior notice. (RA02)

