

HELUCHAIN®-PAAR-TRONIC-320-C-PVC

oil-resistant, colour code DIN 47100, EMC-preferred type



HELUCHAIN®-PAAR-TRONIC-320-C-PVC 8x2x0,5 QMM E 170315
AWM STYLE 2464 20 AWG 16C VW-1 AWM I/II A/B 80°C 300V FT1 CE

TECHNICAL DATA

PVC drag chain cable acc. to UL-Std. 758 (AWM) Style 2464, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range	flexible -5°C to +80°C fixed -40°C to +80°C
Nominal voltage	UL (AWM) AC 300 V
Test voltage core/core	1500 V
Test voltage core/screen	1000 V
Mutual capacitance core/core	at 800 Hz, approx. 60 pF/m
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 0.14 - 0.25 mm ² : 7.5 x Outer-Ø 0.34 - 1 mm ² : 10 x Outer-Ø fixed 0.14 - 0.25 mm ² : 4 x Outer-Ø 0.34 - 1 mm ² : 5 x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, extra finely stranded, 0.5 - 1 mm²: acc. to DIN VDE 0295 Class 6 / IEC 60228 Class 6
- Wire structure:
0.14 mm²: approx. 18 x 0.10 mm
0.25 mm²: approx. 32 x 0.10 mm
0.34 mm²: approx. 42 x 0.10 mm
- Core insulation: PP
- Core identification acc. to DIN 47100 (paired stranding), colour coded
- x = without protective conductor
- Cores stranded in pairs with optimally matched lay lengths, Pairs stranded in layers with optimally matched lay lengths
- Fleece wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Fleece wrapping
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM5), UL-Std. 1581 Tab. 50.182

- Sheath colour: grey (RAL 7001)
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, weathering effects
- for outdoor use
- suitable for use in drag chains
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, UL VW-1, CSA FT1
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2

APPLICATION

Highly flexible PVC drag chain cable, suitable for frequent and fast lifting and bending stresses; for applications in machine and tool construction, robotics and permanently moving machine parts. Reliable function ensures long service life and economic efficiency. The copper shield effectively protects against interferences inwards and outwards. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- for use in energy supply systems:
 - 1) the assembly instructions must be observed
 - 2) for further application parameters, please refer to the selection tables
 - 3) for special applications, we recommend contacting us and using our data entry form for energy supply systems

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11020964	1 x 2 x 0.14	26	4.3	13.0	25.0
11020965	2 x 2 x 0.14	26	5.5	19.0	40.0
11020966	3 x 2 x 0.14	26	5.8	23.0	50.0
11020967	4 x 2 x 0.14	26	6.2	27.0	60.0
11020968	5 x 2 x 0.14	26	6.7	38.0	70.0
11020969	6 x 2 x 0.14	26	7.2	49.0	90.0
11020970	8 x 2 x 0.14	26	8.4	55.0	115.0
11020971	10 x 2 x 0.14	26	9.1	60.0	125.0
11020972	14 x 2 x 0.14	26	9.8	70.0	150.0
11020973	1 x 2 x 0.25	24	4.9	14.0	28.0
11020974	2 x 2 x 0.25	24	6.6	33.0	60.0
11020975	3 x 2 x 0.25	24	6.9	39.0	73.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11020976	4 x 2 x 0.25	24	7.5	43.0	90.0
11020977	5 x 2 x 0.25	24	8.1	52.0	105.0
11020978	6 x 2 x 0.25	24	8.8	72.0	135.0
11020979	8 x 2 x 0.25	24	10.4	75.0	160.0
11020980	10 x 2 x 0.25	24	11.3	90.0	190.0
11020981	14 x 2 x 0.25	24	12.4	111.0	225.0
11020982	1 x 2 x 0.34	22	5.1	20.0	58.0
11020983	2 x 2 x 0.34	22	6.9	41.0	65.0
11020984	3 x 2 x 0.34	22	7.3	52.0	78.0
11020985	4 x 2 x 0.34	22	7.9	59.0	90.0
11020986	5 x 2 x 0.34	22	8.6	67.0	110.0
11020987	6 x 2 x 0.34	22	9.5	86.4	125.0

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11020988	8 x 2 x 0.34	22	11.2	108.0	140.0
11020989	10 x 2 x 0.34	22	12.1	131.0	150.0
11020990	14 x 2 x 0.34	22	13.5	150.0	200.0
11020991	1 x 2 x 0.5	20	5.7	23.0	47.0
11020992	2 x 2 x 0.5	20	7.9	53.0	100.0
11020993	3 x 2 x 0.5	20	8.4	73.0	130.0
11020994	4 x 2 x 0.5	20	9.3	76.0	150.0
11020995	5 x 2 x 0.5	20	10.1	86.0	169.0
11020996	6 x 2 x 0.5	20	11.2	103.0	196.0
11020997	8 x 2 x 0.5	20	13.6	184.0	290.0
11020998	10 x 2 x 0.5	20	14.7	180.0	350.0
11020999	14 x 2 x 0.5	20	16.3	218.0	390.0
11021000	1 x 2 x 0.75	19	6.4	35.0	65.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11021001	2 x 2 x 0.75	19	9.1	61.0	115.0
11021002	3 x 2 x 0.75	19	9.8	87.0	160.0
11021003	4 x 2 x 0.75	19	10.9	92.0	175.0
11021004	5 x 2 x 0.75	19	12.1	115.0	210.0
11021005	6 x 2 x 0.75	19	13.5	137.0	235.0
11021006	8 x 2 x 0.75	19	16.1	184.0	345.0
11021007	10 x 2 x 0.75	19	17.4	260.0	475.0
11021008	14 x 2 x 0.75	19	19.2	314.0	545.0
11021009	1 x 2 x 1	18	6.9	42.0	71.0
11021010	2 x 2 x 1	18	10.1	73.0	130.0
11021011	3 x 2 x 1	18	10.9	94.0	170.0
11021012	4 x 2 x 1	18	12.1	118.0	210.0
11021013	5 x 2 x 1	18	13.6	139.0	250.0