

# JZ-HF-CY high flexible, screened control cable for drag chains, oil resistant, EMC-preferred type, meter marking



## Technical data

- Special PVC control cable, extreme flexibility due to special construction
- Requirements adapted to DIN VDE 0281 part 13
- **Temperature range**  
flexing -5 °C to +80 °C  
fixed installation -40 °C to +80 °C
- **Nominal voltage**  $U_0/U$  300/500 V
- **Test voltage** 4000 V
- **Breakdown voltage** min. 8000 V
- **Insulation resistance**  
min. 20 MOhm x km
- **Minimum bending radius**  
flexing 10x cable  $\varnothing$   
fixed installation 5x cable  $\varnothing$
- **Radiation resistance**  
up to  $80 \times 10^6$  cJ/kg (up to 80 Mrad)

## Cable structure

- Bare copper, extra fine wire conductors, to DIN VDE 0295 cl. 6 col. 4, BS 6360 cl. 6 and IEC 60228 cl. 6
- Core insulation of special PVC Z 7225
- Black cores with continuous white figure imprint to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal selected lay-length
- Core wrapping with fleece PVC-inner sheath
- One layer of tinned copper wire screening<sup>1)</sup>, interwoven with synthetic cross-helix to improve the bending behaviour
- Minimum coverage 80%
- Special PVC outer sheath, TM5 to DIN VDE 0281 part 1 and HD 21.1
- Colour grey (RAL 7001)
- with meter marking, change-over in 2011

## Properties

- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- oil resistant to DIN/ EN 60811-2-1
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Note

- G = with green-yellow earth core;  
x = without green-yellow earth core (OZ).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- Please note the cleanroom qualification when ordering.
- <sup>1)</sup>Change-over up to construction with Cu-screening, tinned, approx. 85% for coverage optimisation of the useful properties are in preparation.
- **unscreened analogue type:**  
**JZ-HF** see page C 5

## Application

JZ-HF cables are ideal for use in the machine tool industry, in robotics and machine production and anywhere where high flexibility is essential. These cables have shown excellent performance in combination with standard cable trays. These cables are suitable for flexible use for medium mechanical stresses with free movements. The dense screening assures disturbance-free transmission of all signals and impulses. An ideal disturbance-free control cable for the above application.

For applications which go beyond standard solutions (for example for composting appliances or high shelf conveyors with extremely high processing speeds etc.) we recommend for our especially developed enquiry sheet for energy guiding systems. Before installation in cable trays please read the instructions. Further technical details see selection table for drag chain cables, see lead text.

**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 <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
15930	2 x 0,5	7,2	30,0	90,0	20
15931	3 G 0,5	7,5	38,0	115,0	20
15932	4 G 0,5	8,1	48,0	140,0	20
15933	5 G 0,5	8,6	64,0	168,0	20
15934	7 G 0,5	9,9	70,0	217,0	20
15935	12 G 0,5	11,6	100,0	274,0	20
15876	14 G 0,5	12,2	135,0	332,0	20
15877	16 G 0,5	13,0	145,0	388,0	20
15936	18 G 0,5	13,8	154,0	445,0	20
15937	20 G 0,5	14,3	160,0	497,0	20
15878	21 G 0,5	14,8	175,0	500,0	20
15938	25 G 0,5	16,1	240,0	505,0	20
15879	30 G 0,5	16,6	280,0	515,0	20
15880	34 G 0,5	17,7	290,0	530,0	20
15881	36 G 0,5	17,7	300,0	572,0	20
15882	42 G 0,5	19,2	330,0	605,0	20
15883	50 G 0,5	21,2	393,0	742,0	20

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
15945	2 x 0,75	7,6	39,0	105,0	18
15946	3 G 0,75	8,1	49,0	128,0	18
15947	4 G 0,75	8,6	60,0	184,0	18
15948	5 G 0,75	9,4	70,0	200,0	18
15949	7 G 0,75	10,5	95,0	269,0	18
15885	10 G 0,75	12,6	110,0	327,0	18
15950	12 G 0,75	12,9	140,0	366,0	18
15886	14 G 0,75	13,4	163,0	426,0	18
15887	16 G 0,75	14,2	187,0	487,0	18
15951	18 G 0,75	14,8	211,0	547,0	18
15888	20 G 0,75	15,5	216,0	551,0	18
15889	21 G 0,75	16,2	272,0	590,0	18
15952	25 G 0,75	17,7	322,0	600,0	18
15890	30 G 0,75	18,2	414,0	650,0	18
15891	34 G 0,75	19,8	473,0	685,0	18
15892	36 G 0,75	19,8	500,0	720,0	18
15893	42 G 0,75	21,0	583,0	800,0	18
15894	50 G 0,75	23,1	695,0	954,0	18

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.
15961	2 x 1	8,1	50,0	115,0	17
15962	3 G 1	8,4	60,0	142,0	17
15963	4 G 1	9,0	73,0	196,0	17
15964	5 G 1	9,8	81,0	271,0	17
15965	7 G 1	11,2	114,0	307,0	17
15966	12 G 1	13,4	186,0	474,0	17
15967	18 G 1	15,7	254,0	622,0	17
15968	25 G 1	19,0	365,0	828,0	17
15969	34 G 1	21,0	500,0	1049,0	17
15970	41 G 1	22,7	576,0	1257,0	17
15971	50 G 1	24,5	681,0	1437,0	17
15972	65 G 1	27,7	932,0	1823,0	17
15976	2 x 1,5	8,6	64,0	170,0	16
15977	3 G 1,5	9,0	84,0	203,0	16
15978	4 G 1,5	9,8	99,0	243,0	16
15979	5 G 1,5	10,5	120,0	288,0	16
15980	7 G 1,5	12,5	148,0	403,0	16
15981	12 G 1,5	14,8	274,0	592,0	16
15982	18 G 1,5	17,3	386,0	844,0	16
15983	25 G 1,5	21,0	584,0	1155,0	16
15152	41 G 1,5	24,8	867,0	1227,0	16
15153	50 G 1,5	27,3	970,0	1445,0	16
15154	61 G 1,5	29,8	1028,0	1724,0	16

Part no.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
15925	3 G 2,5	10,8	140,0	215,0	14
15926	4 G 2,5	11,5	159,0	264,0	14
15927	5 G 2,5	12,9	194,0	344,0	14
15928	7 G 2,5	15,1	234,0	410,0	14
15929	12 G 2,5	18,4	390,0	721,0	14
15155	3 G 4	13,0	178,0	292,0	12
15156	4 G 4	14,2	222,0	372,0	12
15157	5 G 4	15,6	328,0	448,0	12
15158	4 G 6	16,0	305,0	526,0	10
15159	5 G 6	17,5	441,0	632,0	10
15160	4 G 10	21,2	485,0	858,0	8
15161	5 G 10	23,2	610,0	998,0	8
15162	4 G 16	24,1	840,0	1225,0	6
15163	5 G 16	27,0	1050,0	1560,0	6

Dimensions and specifications may be changed without prior notice. (RC01)

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