

# JZ 500-FC-PUR EMC-preferred type, tear and coolant resistant, screened, without inner sheath, meter marking



A



## Technical data

- Special polyurethane sheathed cable adapted to DIN VDE 0245 part 201 to 1,5 mm<sup>2</sup>, adapted to DIN VDE 0245 part 102 from 2,5 mm<sup>2</sup>
- **Temperature range**  
flexing -5 °C to +80 °C  
fixed installation -40 °C to +80 °C
- **Nominal voltage** U<sub>0</sub>/U 300/500 V
- **Test voltage** 3000 V
- **Breakdown voltage**  
min. 6000 V
- **Minimum bending radius**  
flexing 10x cable ø  
fixed installation 5x cable ø
- **Radiation resistance**  
up to 100x10<sup>6</sup> CJ/kg (up to 100 Mrad)
- **Coupling resistance**  
max. 250 Ohm/km

## Cable structure

- Bare copper conductor, fine wire to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and/or IEC 60228 cl. 5
- Core insulation of special PVC T12 to DIN VDE 0281, part 1
- Black cores with continuous white numbering according to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Separating foil
- Tinned copper braided screening, coverage approx. 85%
- Core wrapping from fleece guarantees good stripping capability
- Outer sheath from special **full polyurethane** TMPU acc. to DIN EN 50363-10-2
- Sheath colour grey (RAL 7001)
- Also available in other sheath colours
- with meter marking, change-over in 2011

## Properties

- **Resistant to**  
UV-radiation, Oxygen, Ozone, Hydrolyse and Microbes
- Low adhesion, matt surface
- 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)
- 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 (0Z).
- **unscreened analogue type:**  
**JZ-500-PUR**, see page A 43

## Application

Extremely robust cable noted for its good abrasion resistance and notch resistance. Due to its resistance to coolant emulsions, this cable is well suited for use in mechanical engineering, tool making, and systems engineering, and in steel mills and rolling mills in particularly critical areas. Good flexibility means that installation is quick and easy. Suitable for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms, and in open air (fixed installation). The dense screening assures interference-free transmission of all signals and impulses. An ideal interference-free control cable for the above applications.

**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.
23414	2 x 0,5	5,7	35,0	47,0	20
23416	3 x 0,5	5,9	42,0	57,0	20
23415	3 G 0,5	5,9	42,0	57,0	20
23418	4 x 0,5	6,4	47,0	60,0	20
23417	4 G 0,5	6,4	47,0	60,0	20
23419	5 G 0,5	6,9	56,0	75,0	20
23420	5 x 0,5	6,9	56,0	75,0	20
23422	7 x 0,5	7,6	69,0	97,0	20
23421	7 G 0,5	7,6	69,0	97,0	20
23423	10 G 0,5	9,6	94,0	133,0	20
23424	12 G 0,5	9,7	108,0	158,0	20
23425	18 G 0,5	11,5	145,0	218,0	20
23426	25 G 0,5	13,6	240,0	315,0	20
23427	34 G 0,5	15,6	312,0	420,0	20
23428	42 G 0,5	17,0	355,0	487,0	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.
23429	2 x 0,75	6,1	40,0	60,0	18
23430	3 G 0,75	6,3	52,0	67,0	18
23431	3 x 0,75	6,3	52,0	67,0	18
23432	4 G 0,75	6,8	60,0	76,0	18
23433	4 x 0,75	6,8	60,0	76,0	18
23434	5 G 0,75	7,4	71,0	92,0	18
23435	5 x 0,75	7,4	71,0	92,0	18
23436	7 G 0,75	8,2	91,0	131,0	18
23437	7 x 0,75	8,2	91,0	131,0	18
23438	10 G 0,75	10,3	137,0	180,0	18
23439	12 G 0,75	10,5	142,0	204,0	18
23440	18 G 0,75	12,7	212,0	290,0	18
23441	25 G 0,75	15,0	281,0	413,0	18
23442	34 G 0,75	17,2	345,0	492,0	18
23443	42 G 0,75	18,6	407,0	624,0	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.
23444	2 x 1	6,4	50,0	66,0	17
23446	3 x 1	6,7	60,0	82,0	17
23445	3 G 1	6,7	60,0	82,0	17
23447	4 G 1	7,2	71,0	100,0	17
23448	4 x 1	7,2	71,0	100,0	17
23449	5 G 1	8,0	88,0	128,0	17
23450	5 x 1	8,0	88,0	128,0	17
23451	7 G 1	8,7	111,0	157,0	17
23452	7 x 1	8,7	111,0	157,0	17
23453	10 G 1	11,2	150,0	230,0	17
23454	12 G 1	11,4	184,0	262,0	17
23455	18 G 1	13,5	260,0	381,0	17
23456	25 G 1	16,2	349,0	535,0	17
23457	34 G 1	18,5	486,0	740,0	17
23458	42 G 1	20,2	545,0	867,0	17
23459	50 G 1	21,8	625,0	1027,0	17
23460	2 x 1,5	7,0	63,0	87,0	16
23462	3 x 1,5	7,4	80,0	102,0	16
23461	3 G 1,5	7,4	80,0	102,0	16
23464	4 x 1,5	8,1	97,0	127,0	16
23463	4 G 1,5	8,1	97,0	127,0	16
23465	5 G 1,5	9,0	119,0	159,0	16
23466	5 x 1,5	9,0	119,0	159,0	16
23468	7 x 1,5	9,8	147,0	207,0	16
23467	7 G 1,5	9,8	147,0	207,0	16
23469	12 G 1,5	12,8	267,0	340,0	16
23470	18 G 1,5	15,5	374,0	480,0	16
23471	25 G 1,5	18,5	526,0	704,0	16
23472	30 G 1,5	19,6	555,0	817,0	16

Part no.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
23473	2 x 2,5	8,4	96,0	131,0	14
23474	3 G 2,5	8,8	144,0	168,0	14
23475	4 G 2,5	9,8	148,0	194,0	14
23476	5 G 2,5	10,8	181,0	222,0	14
23477	7 G 2,5	11,9	255,0	345,0	14
23478	12 G 2,5	15,8	441,0	570,0	14
23479	4 G 4	11,6	230,0	310,0	12
23480	5 G 4	12,9	273,0	386,0	12
23481	7 G 4	14,2	316,0	498,0	12
23482	4 G 6	13,8	305,0	414,0	10
23483	5 G 6	15,3	439,0	510,0	10
23484	7 G 6	16,9	505,0	673,0	10
23485	4 G 10	17,1	535,0	591,0	8
23486	5 G 10	19,1	592,0	768,0	8
23487	7 G 10	21,2	810,0	976,0	8
23488	4 G 16	20,0	740,0	1196,0	6

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