

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



HELUKABEL JZ-500-FC-PUR 4G 2,5 QMM / 23475 300/500V 001051019



Technical data

- Special-PUR control cable adapted to DIN VDE 0285-525-1 / DIN EN 50525-1
- **Temperature range**
flexing -10°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage** 3000 V
- **Breakdown voltage** min. 6000 V
- **Coupling resistance**
max. 250 Ohm/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, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of special PVC compound type T12 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification to DIN VDE 0293 black cores with continuous white numbering
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-length
- Separating foil
- Tinned copper braided screen, approx. 85% coverage
- Core wrapping of fleece guarantees easy cable stripping
- Outer sheath from special **full polyurethane** compound type TMPU to DIN EN 50363-10-2
- Sheath colour grey (RAL 7001) also available in other colours on request
- with meter marking

Properties

- **Resistant to**
UV-radiation, Oxygen, Ozone, Hydrolyse and Microbes
- Low adhesion, matt surface
- 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 conductor
x = without green-yellow conductor (OZ)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type:
JZ-500-PUR, confer page 67

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 optimize 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/EC.

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No. cores x cross-sec. mm ²	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	23429	2 x 0,75	6,1	40,0	60,0	19
23415	3 G 0,5	5,9	42,0	57,0	20	23430	3 G 0,75	6,3	52,0	67,0	19
23416	3 x 0,5	5,9	42,0	57,0	20	23431	3 x 0,75	6,3	52,0	67,0	19
23417	4 G 0,5	6,4	47,0	60,0	20	23432	4 G 0,75	6,8	60,0	76,0	19
23418	4 x 0,5	6,4	47,0	60,0	20	23433	4 x 0,75	6,8	60,0	76,0	19
23419	5 G 0,5	6,9	56,0	75,0	20	23435	5 x 0,75	7,4	71,0	92,0	19
23420	5 x 0,5	6,9	56,0	75,0	20	23434	5 G 0,75	7,4	71,0	92,0	19
23421	7 G 0,5	7,6	69,0	97,0	20	23437	7 x 0,75	8,2	91,0	131,0	19
23422	7 x 0,5	7,6	69,0	97,0	20	23436	7 G 0,75	8,2	91,0	131,0	19
23423	10 G 0,5	9,6	94,0	133,0	20	23438	10 G 0,75	10,3	137,0	180,0	19
23424	12 G 0,5	9,7	108,0	158,0	20	23439	12 G 0,75	10,5	142,0	204,0	19
23425	18 G 0,5	11,5	145,0	218,0	20	23440	18 G 0,75	12,7	212,0	290,0	19
23426	25 G 0,5	13,7	240,0	315,0	20	23441	25 G 0,75	15,0	281,0	413,0	19
23427	34 G 0,5	15,5	312,0	420,0	20	23442	34 G 0,75	17,2	345,0	492,0	19
23428	42 G 0,5	16,9	355,0	487,0	20	23443	42 G 0,75	18,8	407,0	624,0	19

Continuation ▶

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EAC

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Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
23444	2 x 1	6,4	50,0	66,0	18
23445	3 G 1	6,7	60,0	82,0	18
23446	3 x 1	6,7	60,0	82,0	18
23447	4 G 1	7,2	71,0	100,0	18
23448	4 x 1	7,2	71,0	100,0	18
23449	5 G 1	8,0	88,0	128,0	18
23450	5 x 1	8,0	88,0	128,0	18
23451	7 G 1	8,7	111,0	157,0	18
23452	7 x 1	8,7	111,0	157,0	18
23453	10 G 1	11,2	150,0	230,0	18
23454	12 G 1	11,4	184,0	262,0	18
23455	18 G 1	13,6	260,0	381,0	18
23456	25 G 1	16,2	349,0	535,0	18
23457	34 G 1	18,5	486,0	740,0	18
23458	42 G 1	20,2	545,0	867,0	18
23459	50 G 1	22,0	625,0	1027,0	18
23460	2 x 1,5	7,0	63,0	87,0	16
23461	3 G 1,5	7,4	80,0	102,0	16
23462	3 x 1,5	7,4	80,0	102,0	16
23463	4 G 1,5	8,1	97,0	127,0	16
23464	4 x 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
23467	7 G 1,5	9,8	147,0	207,0	16
23468	7 x 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	15,6	374,0	480,0	16
23471	25 G 1,5	18,4	526,0	704,0	16
23472	30 G 1,5	19,6	555,0	817,0	16

Part no.	No. cores x cross-sec. mm ²	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	15,4	439,0	510,0	10
23484	7 G 6	17,0	505,0	673,0	10
23485	4 G 10	17,2	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	20,3	740,0	1196,0	6

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



Suitable accessories can be found in Chapter X.

- Cable Gland - HELUTOP® HT-PA
- Cable Gland - HELUTOP® HT-MS
- Cable Gland - HELUTOP® HT-E