

# FLEX-JZ

PVC, Black Cores, Non-Shielded, 300/500V



**FLEX-JZ** is our most standard PVC, flexible, oil-resistant, multi-conductor power and control cable designed for use in electrical equipment in dry, damp or wet conditions. For use in flexible or stationary applications under medium mechanical stress with free movement without any tensile stress, loads or forced movements. Common applications include connections and control to CNC machines, machine tools, control systems, assembly lines, control panel to machine connections, grinding machines and bottling equipment. **FLEX-JZ** is found in plant engineering, paint shops, power stations and refrigeration plants. Outdoor installation is not permitted.

## Construction:

- Fine bare copper strands
- Strands to VDE-0295 Class-5, IEC 60228 CI-5
- Special PVC core insulation
- Color code VDE-0293 - black & numbered
- Ground wire in outer layer
- PVC outer jacket - gray (RAL 7001)
- "OZ" denotes no ground wire
- *Extremely oil & chemical resistant*

## Technical:

- Working voltage: 300/500 volts
- Test voltage: 4000 volts
- Flexing bending radius: 15 x Ø
- Static bending radius: 4 x Ø
- Flexing temp: -5° C to +70° C
- Static temp: -30° C to +80° C
- Flame retardant: IEC 60332.1
- Insulation resistance: 20 MΩ x km

## Approvals:

- VDE-0245, 0281, 0293 & 0295
- CE Low Voltage Directive 2014/35/EU
- EN 50525-2-11
- ROHS compliant

PART NUMBER	CORES	NOMINAL OD (in)	NOMINAL OD (mm)	CU LBS/ MFT	WT LBS/ MFT
<b>20 AWG (16/32) 0,50mm<sup>2</sup></b>					
1022002	2	0.185"	4.7mm	7	22
1032000	100	1.142"	29.0mm	322	657
1032003	3	0.201"	5.1mm	10	32
1032004	4	0.217"	5.5mm	13	39
1032005	5	0.244"	6.2mm	16	50
1032007	7	0.268"	6.8mm	23	62
1032012	12	0.370"	9.4mm	39	101
1032014	14	0.402"	10.2mm	45	115
1032018	18	0.453"	11.5mm	58	145
1032021	21	0.504"	12.8mm	68	167
1032025	25	0.524"	13.3mm	80	172
1032030	30	0.567"	14.4mm	97	209
1032034	34	0.620"	15.75mm	109	267
1032040	40	0.673"	17.1mm	129	302
1032050	50	0.740"	18.8mm	161	359
1032061	61	0.776"	19.7mm	196	403
1032065	65	0.823"	20.9mm	209	448
1032080	80	0.917"	23.3mm	257	556
<b>18 AWG (24/32) 0,75mm<sup>2</sup></b>					
1021802	2	0.205"	5.2mm	10	29
1031800	100	1.236"	31.4mm	483	885
1031803	3	0.228"	5.8mm	15	44
1031804	4	0.250"	6.35mm	19	52
1031805	5	0.272"	6.9mm	24	61
1031807	7	0.295"	7.5mm	34	83
1031808	8	0.354"	9.0mm	39	96
1031809	9	0.370"	9.4mm	44	109
1031810	10	0.384"	9.75mm	48	124
1031812	12	0.398"	10.1mm	58	128
1031815	15	0.441"	11.2mm	72	154
1031818	18	0.472"	12.0mm	87	190
1031821	21	0.524"	13.3mm	101	196
1031825	25	0.551"	14.0mm	121	260



Sizes continued on next page

**FLEX-JZ**

PVC, Black Cores, Non-Shielded, 450/750V

**FLEX-JZ Sizes Continued. ( 18 , 17 & 16 AWG )**

PART NUMBER	CORES	NOMINAL OD (in)	NOMINAL OD (mm)	CU LBS/ MFT	WT LBS/ MFT
1031830	30	0.602"	15.3mm	148	290
1031834	34	0.638"	16.2mm	164	300
1031841	41	0.705"	17.9mm	198	357
1031850	50	0.772"	19.6mm	241	439
1031865	65	0.870"	22.1mm	314	561
1031880	80	1.043"	26.5mm	386	758
<b>17 AWG (32/32) 1,00mm<sup>2</sup></b>					
1021702	2	0.217"	5.5mm	13	34
1031700	100	1.256"	31.9mm	644	1102
1031703	3	0.244"	6.2mm	19	46
1031704	4	0.264"	6.7mm	25	57
1031705	5	0.287"	7.3mm	32	74
1031706	6	0.319"	8.1mm	39	91
1031707	7	0.343"	8.7mm	45	98
1031708	8	0.382"	9.7mm	52	99
1031709	9	0.409"	10.4mm	58	122
1031710	10	0.413"	10.5mm	64	141
1031712	12	0.417"	10.6mm	77	156
1031714	14	0.453"	11.5mm	90	182
1031716	16	0.472"	12.0mm	103	201
1031718	18	0.512"	13.0mm	116	220
1031721	21	0.567"	14.4mm	135	242
1031725	25	0.587"	14.9mm	161	269
1031727	27	0.622"	15.8mm	207	358
1031734	34	0.689"	17.5mm	219	368
1031740	40	0.744"	18.9mm	270	506
1031742	42	0.752"	19.1mm	270	445
1031750	50	0.827"	21.0mm	322	532
1031756	56	0.913"	23.2mm	361	645
1031765	65	0.925"	23.5mm	418	675
1031780	80	1.110"	28.2mm	515	908
<b>16 AWG (30/30) 1,50mm<sup>2</sup></b>					
1021602	2	0.248"	6.3mm	19	45
1031600	100	1.504"	38.2mm	966	1576
1031603	3	0.268"	6.8mm	29	64
1031604	4	0.291"	7.4mm	39	78
1031605	5	0.318"	8.1mm	48	102
1031607	7	0.350"	8.9mm	68	129
1031608	8	0.429"	10.9mm	77	137

**FLEX-JZ**

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**FLEX-JZ Sizes Continued. ( 16, 14 & 12 AWG )**

PART NUMBER	CORES	NOMINAL OD (in)	NOMINAL OD (mm)	CU LBS/ MFT	WT LBS/ MFT
1031609	9	0.449"	11.4mm	87	162
1031610	10	0.465"	11.8mm	97	169
1031612	12	0.437"	11.1mm	116	209
1031614	14	0.508"	12.9mm	135	234
1031616	16	0.539"	13.7mm	154	270
1031618	18	0.577"	14.6mm	174	306
1031621	21	0.646"	16.4mm	203	384
1031625	25	0.677"	17.2mm	241	428
1031632	32	0.736"	18.7mm	309	472
1031634	34	0.776"	19.7mm	329	488
1031641	41	0.831"	21.1mm	386	451
1031642	42	0.846"	21.5mm	406	595
1031650	50	0.929"	23.6mm	483	705
1031661	61	1.004"	25.5mm	589	844
1031665	65	1.024"	26.0mm	628	853
1031680	80	1.299"	33.0mm	772	1267
<b>14 AWG (50/30) 2,50mm<sup>2</sup></b>					
1021402	2	0.299"	7.6mm	32	68
1031403	3	0.327"	8.3mm	48	99
1031404	4	0.358"	9.1mm	64	158
1031405	5	0.402"	10.2mm	80	176
1031407	7	0.443"	11.2mm	113	200
1031408	8	0.520"	13.2mm	129	227
1031412	12	0.591"	15.0mm	193	350
1031414	14	0.634"	16.1mm	225	394
1031418	18	0.713"	18.1mm	290	502
1031421	21	0.862"	21.9mm	338	622
1031425	25	0.831"	21.1mm	402	687
1031434	34	0.972"	24.7mm	547	771
1031442	42	1.15"	29.2mm	676	1023
1031450	50	1.264"	32.1mm	805	1222
<b>12 AWG (56/28) 4,00mm<sup>2</sup></b>					
1021202	2	0.390"	9.9mm	52	124
1031203	3	0.398"	10.1mm	77	158
1031204	4	0.433"	11.0mm	103	200
1031205	5	0.472"	12.0mm	129	243
1031207	7	0.535"	13.6mm	180	327
1031212	12	0.772"	19.6mm	309	530

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PVC, Black Cores, Non-Shielded, 450/750V

**FLEX-JZ Sizes Continued. ( 10 AWG and Larger)**

PART NUMBER	CORES	NOMINAL OD (in)	NOMINAL OD (mm)	CU LBS/ MFT	WT LBS/ MFT
<b>10 AWG (84/28) 6,00mm<sup>2</sup></b>					
1031003	3	0.461"	11.7mm	116	278
1031004	4	0.504"	12.8mm	154	322
1031005	5	0.567"	14.4mm	193	391
1031007	7	0.630"	16.0mm	270	524
<b>8 AWG (80/26) 10,0mm<sup>2</sup></b>					
1030803	3	0.579"	14.7mm	193	457
1030804	4	0.642"	16.3mm	257	494
1030805	5	0.717"	18.2mm	322	613
1030807	7	0.791"	20.1mm	451	799
<b>6 AWG (128/26) 16,0mm<sup>2</sup></b>					
1030603	3	0.787"	20.0mm	309	555
1030604	4	0.811"	20.6mm	412	729
1030605	5	0.882"	22.4mm	515	919
1030607	7	1.008"	25.6mm	721	1193
<b>4 AWG (200/26) 25,0mm<sup>2</sup></b>					
1030403	3	0.886"	22.5mm	483	795
1030404	4	1.012"	25.7mm	644	1061
1030405	5	1.130"	28.7mm	805	1340
1030407	7	1.339"	34.0mm	1127	1661
<b>2 AWG (280/26) 35,0mm<sup>2</sup></b>					
1030203	3	1.020"	25.9mm	676	1063
1030204	4	1.071"	27.2mm	901	1412
1030205	5	1.366"	34.7mm	1127	1666

\*\* for sizes larger than #2 AWG (35,0mm<sup>2</sup>) see product FLEX-JB (101)