Y-CY-JB flexible, CU-screened, transparent, EMC-preferred type, meter marking

Technical data

- Special PVC control cables, adapted to E DIN VDE 0245, 0281 part 13
- **Conductor resistance** to DIN VDE 0295
- **Temperature range** flexing -5°C to +80°C fixed installation -40°C to +80°C
- **Nominal voltage** U_0/U 300/500 V to 1,5 mm² U_0/U 450/750 V at 2,5 mm²
- **Test voltage** 4000 V
- **Breakdown voltage** min. 8000 V
- **Insulation resistance** min. 20 MOhm x km
- **Mutual capacitance** according to different cross-sections 0,5 mm² to 2,5 mm²: core/core approx. 150 nF/km core/screen approx. 270 nF/km
- **Coupling resistance** max. 250 Ohm/km
- **Minimum bending radius** flexing 10x cable Ø fixed installation 5x cable Ø
- **Radiation resistance** up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable structure

- Bare copper, fine wire conductors, bunch stranded to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Core insulation of special PVC Z 7225
- Core colour coded to JB/OB colour code
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Special PVC inner sheath
- Tinned copper, braided screen, approx. 85% coverage
- Transparent special PVC outer sheath
- with meter marking, change-over in 2009

Properties

- Extensively oil resistant. Chemical Resistance - see table Technical Informations
- 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)
- 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 (OB).
- by 5 cores with VDE-Reg. No.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type: **JB-500**, see page A 22 **JB-750**, see page A 23

Application

For use as a data and control cable in machinery, computer systems etc. as well as a signal cable for electronics. The high level of screening ensures a high degree of interference protection. The screening density assures disturbance-free transmission of all signals and impulses. The PVC-inner sheaths of those cables raise the mechanical stress. The applied clear transparent PVC outer sheath accentuates the optical view of the tinned copper braid. 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.
EMC = Electromagnetic compatibillity
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. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16121	2 x 0,5	6,9	41,0	67,0	20
16122	3 G 0,5	7,2	45,0	83,0	20
16123	4 G 0,5	7,8	54,0	94,0	20
16124	5 G 0,5	8,3	66,0	108,0	20
16125	2 x 0,75	7,6	46,0	87,0	18
16126	3 G 0,75	7,8	57,0	98,0	18
16127	4 G 0,75	8,3	63,0	113,0	18
16128	5 G 0,75	9,1	76,0	130,0	18
16129	2 x 1	7,9	54,0	97,0	17
16130	3 G 1	8,2	64,0	103,0	17
16131	4 G 1	8,9	76,0	146,0	17
16132	5 G 1	9,5	89,0	169,0	17
16133	2 x 1,5	8,4	64,0	130,0	16
16134	3 G 1,5	9,0	82,0	152,0	16
16135	4 G 1,5	9,6	99,0	168,0	16
16136	5 G 1,5	10,5	123,0	202,0	16

Part No.	No.cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16137	2 x 2,5	11,0	110,0	180,0	14
16138	3 G 2,5	11,6	148,0	216,0	14
16139	4 G 2,5	12,6	169,0	267,0	14
16140	5 G 2,5	13,8	220,0	347,0	14
16141	2 x 4	12,6	124,0	302,0	12
16142	3 G 4	13,3	178,0	340,0	12
16143	4 G 4	14,5	234,0	410,0	12
16144	5 G 4	15,9	284,0	502,0	12
16145	2 x 6	14,3	176,0	350,0	10
16146	3 G 6	15,1	245,0	450,0	10
16147	4 G 6	16,4	316,0	559,0	10
16148	5 G 6	18,1	442,0	702,0	10
16149	2 x 10	17,5	260,0	500,0	8
16150	3 G 10	18,6	367,0	750,0	8
16151	4 G 10	20,6	549,0	1020,0	8
16152	5 G 10	22,7	604,0	1115,0	8

Dimensions and specifications may be changed without prior notice. (RA01)

Continuation ►

Y-CY-JB flexible, CU-screened, transparent, EMC-preferred type, meter marking

Part No.	No.cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16153	4 G 16	24,5	807,0	1380,0	6
16154	5 G 16	27,2	940,0	1553,0	6
16469	4 G 25	30,6	1169,0	1890,0	4
16155	5 G 25	33,7	1420,0	2270,0	4
16470	4 G 35	33,8	1680,0	2390,0	2
16156	5 G 35	37,8	2020,0	2885,0	2
16471	4 G 50	39,8	2370,0	3315,0	1
16119	5 G 50	44,8	2880,0	4150,0	1

Part No.	No.cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
16472	4 G 70	48,1	3257,0	4600,0	2/0
16473	4 G 95	52,7	4060,0	6060,0	3/0
16474	4 G 120	58,6	5231,0	7315,0	4/0
16247	4 G 150	65,7	7760,0	9340,0	300 kcmil
16319	4 G 185	73,0	7760,0	11120,0	350 kcmil

Dimensions and specifications may be changed without prior notice. (RA01)