

JZ-604-FCY TC TRAY CABLE / OZ-604-FCY TC TRAY CABLE

TC-ER (exposed run), NFPA 79, +90°C, 600 V, EMC-preferred type



HELUKABEL® JZ-604 FCY TC-ER UL 1277 18AWG/1QMM 4C 600V MTW 90°C DRY 75°C WET SUN RES DIR BUR OIL RES I OIL RES II FT4 OR AWM STYLE 2587 CSA AWM III A/B 90°C FT4 600V LL113926 CE

TECHNICAL DATA

PVC control and connection cable acc. to UL-Std. 1277 (TC), UL-Std. 758 (AWM) Style 2587, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range	flexible -5°C to +90°C fixed -40°C to +90°C
Nominal voltage	UL (AWM) AC 600 V
Test voltage core/core	3000 V
Breakdown voltage	6000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PVC acc. to UL-Std. 1277 (TC) Sec. 9
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores, G = with protective conductor GN-YE, in the outer layer (JZ), x = without protective conductor (OZ)
- Cores stranded in layers with optimal lay lengths
- Fleece wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PVC acc. to UL-Std. 1581 Tab. 50.182
- Sheath colour: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation (SUN RES)
- for outdoor use
- direct burial (DIR BUR)
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to CSA FT4
- oil-resistant acc. to UL Oil Res I, UL Oil Res II
- 90°C DRY/ 75°C WET acc. to UL Std. 1277 No. 9
- Cold Bend Test acc. to UL Std. 1277 No. 17
- Impact Test (-ER) acc. to UL Std. 1277 No. 23
- Crushing Test (-ER) acc. to UL Std. 1277 No. 24
- certifications and approvals:
EAC
for Class 1 Div. 2 explosive environments acc. to NEC Art. 501

APPLICATION

NFPA 79 compliant, flexible control and connection cable (up to 600 V) for machinery in tool and plant construction; suitable for installation in dry, damp and wet environments as well as outdoors. For underground installation and for open, unprotected installation from the cable rack to machines and industrial plants. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and allround large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
69750	2 x 1	18	8.6	50.0	103.0
69751	3 G 1	18	9.0	60.0	119.0
69752	4 G 1	18	9.7	71.0	139.0
69753	5 G 1	18	10.5	88.0	165.0
69754	7 G 1	18	12.2	111.0	216.0
69755	9 G 1	18	14.2	139.0	285.0
69756	10 G 1	18	15.0	150.0	311.0
69757	12 G 1	18	15.4	184.0	349.0
69758	18 G 1	18	17.8	260.0	472.0
69759	25 G 1	18	21.9	349.0	665.0
69760	34 G 1	18	24.3	486.0	886.0
69761	50 G 1	18	28.4	625.0	1164.0
69762	2 x 1.5	16	9.0	63.0	115.0
69763	3 G 1.5	16	9.4	80.0	140.0
69764	4 G 1.5	16	10.2	97.0	164.0
69765	5 G 1.5	16	11.1	119.0	195.0
69766	7 G 1.5	16	12.9	147.0	260.0
69767	8 G 1.5	16	14.0	170.0	297.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
69768	9 G 1.5	16	15.2	182.0	351.0
69769	10 G 1.5	16	15.5	193.0	360.0
69770	12 G 1.5	16	16.2	267.0	408.0
69771	16 G 1.5	16	18.1	315.0	526.0
69772	18 G 1.5	16	18.9	374.0	571.0
69773	25 G 1.5	16	23.8	526.0	862.0
69774	34 G 1.5	16	25.9	629.0	1050.0
69775	41 G 1.5	16	27.6	801.0	1215.0
69776	50 G 1.5	16	30.2	885.0	1418.0
69777	61 G 1.5	16	34.0	1100.0	1815.0
69778	2 x 2.5	14	10.0	96.0	148.0
69779	3 G 2.5	14	10.5	144.0	180.0
69780	4 G 2.5	14	11.4	148.0	220.0
69781	5 G 2.5	14	12.4	181.0	259.0
69782	7 G 2.5	14	15.3	255.0	379.0
69783	8 G 2.5	14	16.3	285.0	432.0
69784	9 G 2.5	14	17.6	309.0	493.0
69785	10 G 2.5	14	17.9	340.0	503.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
69786	12 G 2.5	14	18.4	441.0	560.0
69787	18 G 2.5	14	22.0	570.0	839.0
69788	25 G 2.5	14	26.6	738.0	1157.0
69789	3 G 4	12	11.6	174.0	233.0
69790	4 G 4	12	12.6	230.0	290.0
69791	5 G 4	12	14.5	273.0	362.0
69792	7 G 4	12	17.1	316.0	501.0
69793	9 G 4	12	18.4	402.0	625.0
69794	12 G 4	12	20.5	507.0	753.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
69795	18 G 4	12	24.9	751.0	1161.0
69796	3 G 6	10	13.8	240.0	327.0
69797	4 G 6	10	15.1	305.0	414.0
69798	5 G 6	10	16.4	439.0	482.0
69799	7 G 6	10	19.6	505.0	684.0
69800	3 G 10	8	17.9	350.0	549.0
69801	4 G 10	8	19.6	535.0	693.0
69802	5 G 10	8	22.5	592.0	872.0
69803	7 G 10	8	24.4	810.0	1116.0