

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

TC-ER (exposed run), NFPA 79, +90°C



HELUKABEL® JZ-604 4G1 QMM: (UL) TC-ER 600V 90°C DRY 75°C WET SUN RES OIL RES I OIL RES II DIR BUR FT4 / WTTC 1000V 90°C / MTW 600V 90°C / AWM STYLE 2587 600C 90°C / CSA LL113926 AWM I/II A/B 90°C 600V C E

TECHNICAL DATA

PVC control and connection cable acc. to UL-Std. 1277 (TC), UL-Std. 1063 (MTW), UL-Std. 2277 (WTTC), 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 UL (TC) AC 600 V UL (WTTC) AC 1000 V UL (MTW) AC 600 V
Test voltage core/core	3000 V
Breakdown voltage	6000 V
Minimum bending radius	flexible 7.5x 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
- 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
- Part numbers with protective conductor (GN-YE): for Class 1 Div. 2 explosive environments acc. to NEC Art. 501

APPLICATION

NFPA 79 compliant, flexible control and connection cable 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. Only cables with 3 or more cores are rated for exposed run (ER).

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 factor per km	Weight kg/km, approx.
69661	2 x 1	18	7.9	19.2	91.0
69662	3 G 1	18	8.3	29.0	105.0
69663	4 G 1	18	9.0	39.0	126.0
69664	5 G 1	18	9.9	48.0	149.0
69665	7 G 1	18	11.5	67.0	198.0
69666	9 G 1	18	14.0	84.0	245.0
69667	10 G 1	18	14.3	96.0	255.0
69668	12 G 1	18	14.7	115.0	309.0
69669	18 G 1	18	17.1	173.0	433.0
69670	25 G 1	18	20.3	240.0	576.0
69671	34 G 1	18	23.7	326.0	794.0
69672	50 G 1	18	27.6	480.0	1081.0
69673	2 x 1.5	16	8.3	29.0	106.0
69674	3 G 1.5	16	8.8	43.0	123.0
69675	4 G 1.5	16	9.5	58.0	148.0
69676	5 G 1.5	16	10.4	72.0	178.0
69677	7 G 1.5	16	12.2	101.0	236.0
69678	8 G 1.5	16	13.9	115.0	248.0
69679	9 G 1.5	16	14.8	130.0	300.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
69680	10 G 1.5	16	15.1	144.0	313.0
69681	12 G 1.5	16	15.5	173.0	377.0
69682	16 G 1.5	16	17.2	230.0	478.0
69683	18 G 1.5	16	18.1	259.0	534.0
69684	25 G 1.5	16	22.6	360.0	772.0
69685	34 G 1.5	16	25.1	489.0	988.0
69686	41 G 1.5	16	27.0	590.0	1158.0
69687	50 G 1.5	16	29.3	720.0	1352.0
69688	61 G 1.5	16	32.0	878.0	1728.0
69689	2 x 2.5	14	9.3	48.0	140.0
69690	3 G 2.5	14	9.8	72.0	165.0
69691	4 G 2.5	14	10.7	96.0	203.0
69692	5 G 2.5	14	11.8	120.0	241.0
69693	7 G 2.5	14	14.6	168.0	350.0
69694	8 G 2.5	14	15.7	192.0	421.0
69695	9 G 2.5	14	16.8	216.0	455.0
69696	10 G 2.5	14	17.1	240.0	451.0
69697	12 G 2.5	14	17.6	288.0	531.0
69698	18 G 2.5	14	21.6	432.0	751.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
69699	25 G 2.5	14	25.9	600.0	1076.0
69700	3 G 4	12	10.9	115.0	220.0
69701	4 G 4	12	11.9	154.0	272.0
69702	5 G 4	12	13.9	192.0	328.0
69703	7 G 4	12	16.3	269.0	495.0
69704	9 G 4	12	18.8	346.0	636.0
69705	12 G 4	12	19.8	461.0	726.0
69706	18 G 4	12	24.1	691.0	1086.0
69707	3 G 6	10	12.4	173.0	290.0
69708	4 G 6	10	14.3	230.0	382.0
69709	5 G 6	10	15.8	288.0	470.0
69710	7 G 6	10	18.6	403.0	609.0
69711	3 G 10	8	16.8	288.0	544.0
69712	4 G 10	8	18.4	384.0	678.0
69713	5 G 10	8	20.3	480.0	817.0
69714	7 G 10	8	25.2	672.0	1110.0
69715	3 G 16	6	20.7	461.0	823.0
69716	4 G 16	6	23.8	614.0	1041.0
69717	5 G 16	6	26.2	768.0	1317.0
69718	7 G 16	6	31.2	1075.0	1676.0
69719	3 G 25	4	25.0	720.0	1192.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
69720	4 G 25	4	27.4	960.0	1499.0
69721	5 G 25	4	30.3	1200.0	1846.0
69722	7 G 25	4	36.1	1680.0	2580.0
69723	3 G 35	2	27.1	1008.0	1536.0
69724	4 G 35	2	29.8	1344.0	1932.0
69725	5 G 35	2	33.0	1680.0	2386.0
69726	3 G 50	1	33.1	1440.0	2238.0
69727	4 G 50	1	36.5	1920.0	2844.0
69728	5 G 50	1	41.5	2400.0	3579.0
69729	3 G 70	2/0	37.6	2016.0	2969.0
69730	4 G 70	2/0	41.8	2688.0	3837.0
69731	5 G 70	2/0	47.7	3360.0	4882.0
69732	3 G 95	3/0	41.8	2736.0	3811.0
69733	4 G 95	3/0	46.6	3648.0	4921.0
69734	5 G 95	3/0	52.2	4560.0	6140.0
69735	3 G 120	4/0	45.8	3456.0	4821.0
69736	4 G 120	4/0	50.9	4608.0	6243.0
69737	5 G 120	4/0	56.5	5760.0	7599.0
59378	4 G 150	250 kcmil	57.7	5760.0	8050.0
59379	4 G 185	350 kcmil	62.3	7104.0	9250.0

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