

MULTIFLEX 600

Oil Res I/II, exposed run: TC-ER, PLTC-ER, ITC-ER, NFPA 79



TECHNICAL DATA

PVC control and connection cable acc. to UL-Std. 1063 (MTW), CSA-Std. C22.2 No. 210 - AWM I/II A/B, 20 AWG - 12 AWG: UL-Std. 2250 (ITC-ER), UL-Std. 13 (PLTC-ER), 18 AWG - 2 AWG: UL-Std. 1277 (TC-ER), UL-Std. 2277 (WTTC), UL-Std. 1690 (DP-1), CSA-Std. C22.2 No. 230 & 239 - c(UL) CIC-TC

Temperature range	flexible +5°C to +50°C fixed -40°C to +105°C UL (TC) to +90°C
Nominal voltage	UL (TC) AC 600 V UL (WTTC) AC 1000 V UL (MTW) AC 600 V CIC-TC AC 600 V
Test voltage core/core	6000 V
Minimum bending radius	flexible 7.5x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to ASTM B174 Class M, AWG sizes
- Core insulation: Special-PVC, with transparent nylon jacket
- Core identification: black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores, G = with protective conductor GN-YE, in the outer layer, x = without protective conductor
- Cores stranded in layers with optimally matched lay lengths
- Fleece wrapping
- Outer sheath: Special-PVC
- Sheath colour: black (RAL 9005)
- Length marking: in feet

PROPERTIES

- resistant to: oil, UV radiation (SUN RES)
- for outdoor use
- direct burial (DIR BUR)
- suitable for use in drag chains

- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- oil-resistant acc. to UL Std 1277 Tab. 12.2, Oil Res I / Oil Res II
- Impact Test (-ER) acc. to UL Std. 1277 No. 23
- Crushing Test (-ER) acc. to UL Std. 1277 No. 24
- direct burial (DIR BUR) acc. to UL Std. 1277 No. 5 (wet-locations insulation), No. 19 (crushing test)
- Vertical-Tray Flame Test (FT4) acc. to UL Std. 1277 No. 15 / UL Std. 1685
- certifications and approvals:
EAC
ECOLAB®
Part numbers with protective conductor (GN-YE): for Class 1 Div. 2 explosive environments acc. to NEC Art. 501

APPLICATION

HELUKABEL® MULTIFLEX 600 is a highly flexible, oil resistant control cable. The special combination of TC-ER, PLTC-ER and ITC-ER allows this cable to be used as a connecting cable for industrial plant and machinery in accordance with NFPA 79. Approved for open, unprotected installation in cable trays to the machine. Its outstanding oil resistance (OIL RES I & II) allows for a long service life. For industrial applications in dry, damp and wet environments. Recommended applications: Production lines, bottling plants, machine construction, switch cabinets, conveyor systems, packaging machines, automotive industry.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- for use in energy supply systems:
1) the assembly instructions must be observed
2) for special applications, we recommend contacting us and using our data entry form for energy supply systems

Part no.	No. cores x AWG-No.	Cross-sec. mm ² , approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
62502	2 x 20	0.52	6.9	9.6	56.0
62503	3 G 20	0.52	7.2	14.4	66.0
62504	4 G 20	0.52	7.7	19.3	80.0
62505	5 G 20	0.52	8.3	24.3	89.0
62506	7 G 20	0.52	9.7	34.0	122.0
62507	12 G 20	0.52	11.2	58.3	165.0
62508	18 G 20	0.52	13.0	87.7	231.0
62509	25 G 20	0.52	16.5	122.0	358.0
62510	34 G 20	0.52	17.9	167.0	440.0
62511	3 G 18	0.82	7.5	22.7	79.0
62512	4 G 18	0.82	8.1	30.4	96.0
62513	5 G 18	0.82	8.8	38.0	109.0
62514	7 G 18	0.82	10.3	53.6	150.0

Part no.	No. cores x AWG-No.	Cross-sec. mm ² , approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
62515	12 G 18	0.82	12.0	91.6	208.0
62516	15 G 18	0.82	13.2	114.8	259.0
62517	18 G 18	0.82	14.7	138.0	325.0
62518	25 G 18	0.82	17.6	193.0	458.0
62519	34 G 18	0.82	19.1	262.0	558.0
62520	36 G 18	0.82	19.1	277.0	571.0
62521	42 G 18	0.82	20.7	324.0	663.0
62522	3 G 16	1.31	8.5	36.1	103.0
62523	4 G 16	1.31	9.2	48.3	126.0
62524	5 G 16	1.31	10.0	60.5	146.0
62525	7 G 16	1.31	11.9	85.1	204.0
62526	9 G 16	1.31	14.3	109.6	292.0
62527	12 G 16	1.31	14.7	146.0	317.0

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62528	18 G 16	1.31	17.0	220.0	447.0
62529	25 G 16	1.31	20.5	306.0	636.0
62530	34 G 16	1.31	23.3	416.0	837.0
62531	41 G 16	1.31	25.2	503.0	984.0
62532	50 G 16	1.31	27.1	613.0	1146.0
62533	60 G 16	1.31	28.7	736.0	1325.0
62534	3 G 14	2.08	9.1	58.3	132.0
63136	4 G 14	2.08	9.9	77.9	164.0
62535	5 G 14	2.08	10.7	97.8	192.0
62536	7 G 14	2.08	12.8	137.0	270.0
62537	9 G 14	2.08	15.4	177.0	381.0
62538	12 G 14	2.08	15.9	235.0	424.0
62539	18 G 14	2.08	18.4	354.0	606.0
62540	25 G 14	2.08	23.2	494.0	919.0

Part no.	No. cores x AWG-No.	Cross-sec. mm ² , approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
62541	3 G 12	3.31	10.7	92.6	182.0
62542	4 G 12	3.31	11.6	124.0	230.0
62543	5 G 12	3.31	12.7	155.0	273.0
62544	7 G 12	3.31	16.1	218.0	420.0
62545	4 G 10	5.21	14.8	191.0	365.0
62546	5 G 10	5.21	16.1	239.0	433.0
62547	7 G 10	5.21	19.4	337.0	614.0
62548	4 G 8	8.37	18.5	312.0	568.0
62549	5 G 8	8.37	20.3	391.0	683.0
62550	4 G 6	13.30	20.3	500.0	788.0
62551	5 G 6	13.30	23.3	627.0	1012.0
62552	4 G 4	21.20	26.4	873.0	1356.0
62554	4 G 2	33.60	31.5	1368.0	1970.0