

HELUKABEL® ROBOFLEX 2001 Robot cables

HELUKABEL® ROBOFLEX 2001-C screened, EMC* preferred type



Technical data

- Special TPE-E/PUR based on DIN VDE 0245, 0250, 0282
- **Temperature range** flexing –30°C to +80°C fixed installation –40°C to +80°C
- **Nominal voltage** up to 0,34 mm² 350 V (Operating peak voltage) from 0,5 mm² U₀/U 300/500 V
- **Test voltage** up to 0,34 mm² 1,5 kV, 5 mins. from 0,5 mm² 3,0 kV, 5 mins.
- **Mutual capacitance** Core/core approx. 100 nF/km Core/screen approx. 120 nF/km
- **Inductance** approx. 0,69 mH/km
- **Minimum bending radius** 7,5x cable Ø

Features

- High flexibility at low temperatures
- abrasion-proof, notch ductile
- Loadable under torsional stress ± 360 degrees/metre

Cable structure

- Bare copper, fine and/or ultra fine wire conductor to DIN VDE 0295 cl. 5 and/or 6, BS 6360 cl. 5 and/or 6, IEC 60228 cl. 5 and/or 6, to 0,34 mm² cl. 5, from 0,5 mm² cl. 6
- Special core insulation, TPE
- Core identification
 - up to 0,34 mm² to DIN 47100
 - from 0,5 mm², black core with sequential numbering imprinted in white, according to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Core stranded with optimal lay-length
- Special separating film, overlapped
- on C-Type, screened from Cu-winding, coverage approx. 85–95%
- Outer sheath from special polyurethane, colour black (RAL 9005), PUR sheath flame resistance to DIN VDE 0482 part 265-2-1/EN 50265-2-1/IEC 60332-1 (equivalent to DIN VDE 0472 part 804 test type B)

Application

These cables are specially designed for combined torsional and bending stresses and are used with robot and/or handling systems as control and signal lines.

Resistant to

- microbes and corrosion
- Oxygen and ozone
- Vibrations
- UV-radiation
- Solvents
- Acids and alkalis
- Hydraulic fluids

Largely resistant to

- Oils and fats

* EMC = Electromagnetic compatibility

Note: 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 73/23/EEC and 93/68/EEC.

ROBOFLEX 2001

Part No.	No. of cores x cross section mm ²	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
25459	7 x 0,25	5,8	16,8	48	24
25439	12 x 0,25	7,6	28,8	71	24
25460	25 x 0,25	10,4	60,0	143	24
25461	2 x 0,34	4,0	6,6	28	22
25462	3 x 0,34	4,0	9,8	34	22
25440	7 x 0,34	5,7	22,8	51	22
25449	12 x 0,34	8,3	39,2	69	22
25463	12 G 0,5	10,4	57,8	90	20
25519	16 G 0,5	11,67	76,8	277	20
25464	18 G 0,5	12,7	86,4	121	20
25465	25 G 0,5	14,2	120,0	256	20
25466	4 G 0,75	6,0	28,8	63	18
25450	7 G 0,75	7,9	50,4	96	18
25467	12 G 0,75	11,5	84,4	171	18
25468	14 G 0,75	12,8	100,8	200	18
25469	2 x 1	6,0	19,2	48	17
25470	3 G 1	6,0	29,0	60	17
25471	4 G 1	6,3	38,4	78	17
25472	7 G 1	8,5	67,2	131	17
25473	12 G 1	12,5	115,2	216	17
25474	18 G 1	15,4	172,8	306	17
25475	25 G 1	17,4	240,0	432	17
25476	34 G 1	21,3	326,4	569	17
25477	41 G 1	25,2	393,6	694	17
25520	3 G 1,5	6,9	43,2	94	16
25529	4 G 1,5	7,9	57,6	107	16
25509	8 G 1,5	11,1	115,2	292	16
25478	12 G 1,5	15,5	172,8	356	16
25479	18 G 1,5	19,3	259,2	445	16
25480	25 G 1,5	21,8	360,0	636	16
25481	3 G 2,5	8,4	72,0	136	14
25482	4 G 2,5	9,1	96,0	170	14
25483	3 G 4	10,3	116,0	227	12
25530	4 G 4	11,2	153,6	261	12
25510	4 G 6	14,1	230,4	341	10
25484	3 G 10	15,6	288,0	518	8
25485	3 G 16	18,2	460,8	722	6
25486	3 G 25	22,9	720,0	1180	4
25487	3 G 35	26,5	1008,0	1600	2

ROBOFLEX 2001-C

Part No.	No. of cores x cross section mm ²	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
25539	10 x 0,14	8,1	34,2	62	26
25488	12 x 0,14	7,8	42,1	95	26
25489	18 x 0,14	9,7	54,5	120	26
25490	25 x 0,14	10,9	69,0	158	26
25491	12 x 0,25	8,3	59,5	126	24
25492	18 x 0,25	10,1	80,0	164	24
25493	25 x 0,25	11,1	103,0	215	24
25494	12 x 0,34	8,8	78,0	160	22
25495	18 x 0,34	10,8	101,0	210	22
25496	25 x 0,34	12,1	158,0	305	22
25497	12 G 0,5	11,2	117,0	175	20
25498	18 G 0,5	13,6	160,0	231	20
25499	25 G 0,5	14,8	255,0	347	20
25500	12 G 0,75	11,8	155,0	220	18
25501	18 G 0,75	15,0	210,0	305	18
25502	25 G 0,75	16,6	275,0	415	18
25503	12 G 1	13,0	190,0	265	17
25504	18 G 1	16,1	245,0	390	17
25505	25 G 1	18,0	345,0	540	17
25506	12 G 1,5	16,2	260,0	345	16
25507	18 G 1,5	20,3	370,0	485	16
25508	25 G 1,5	22,5	498,0	710	16

G = with green-yellow earth core
X = without green-yellow earth core