



for normal requirements, 300/500V, unshielded, UL/CSA



APPLICATION

as highly flexible power and control cable for high electrical and normal mechanical requirements in drag chains and motion drive systems in machine and plant engineering.

SPECIAL FEATURES

- UL/CSA approved, conform to DESINA
- low adhesion, silicone-free
- flame-retardant acc. to IEC 60332-1-2, FT1, VW-1
- oilresistant acc. to DIN EN 60811-404 (only mineral oil)
- largely resistant to grease, coolant fluids and lubricants
- due to 600 V UL/CSA approval parallel laying with other 600 V cables is permitted

REMARKS

- RoHS compliant
- compliant with the 2014/35/EU directive ("Low Voltage Directive") CE
- NEW: with reduced outer diameters, for lighter construction, smaller bending radii and lower weight; from production date January, 2020



PRODUCT DETAILS

DESIGN

Conductor material	bare copper strand
Conductor class	acc. to DIN VDE 0295 class 6 pt. 4 resp. IEC 60228 cl. 6 pt. 4
Core insulation	PVC
Core identification	acc. to DIN VDE 0293 black wires with white numerals, 1 x GNYE
Overall stranding	cores stranded in layers
Outer sheath material	PVC
Sheath colour	grey RAL 7001

ELECTRICAL PROPERTIES

Rated voltage AC IEC	acc. to IEC: 300/500 V; acc. to UL: 600 V
Testing voltage	4 kV
Conductor resistance	at +20 °C acc. to DIN VDE 0295 cl. 6 resp. IEC 60228 cl. 6
Insulation resistance	at +20 °C $\geq 20 \text{ M}\Omega \times \text{km}$
Current carrying capacity	acc. to DIN VDE

MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	4 x d
Min. bending radius moved	7,5 x d < 10 m TL 10 x d \geq 10 m TL
Traverse length (m) - drag chain	max. 25 m
Traverse speed (m/s) - drag chain	self-supporting: max. 5 m/s, gliding: max. 2,5 m/s
Acceleration (m/s ²) - drag chain	max. 10 m/s ²

THERMAL PROPERTIES

Operat. temp. fixed min./max. [°C]	-40 °C / +90 °C
Operat. temp. moved min/max [°C]	-5 °C / +90 °C

PROPERTIES IN CASE OF FIRE
Burning behavior

flame-retardant acc. to IEC 60332-1-2, FT1, VW-1

STANDARDS & APPROVALS
Approvals

UL/CSA - cURus 600V, 90°C

ITEM OVERVIEW
KAWEFLEX 6110 SK-PVC UL/CSA

Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
1504599	2 X 0,5 (AWG 21)	5,0	9,6	40,0
1504600	3 G 0,5 (AWG 21)	5,4	14,4	50,0
1504601	4 G 0,5 (AWG 21)	5,8	19,2	62,0
1504602	5 G 0,5 (AWG 21)	6,4	24,0	74,0
1504603	7 G 0,5 (AWG 21)	7,6	33,6	106,0
1504604	12 G 0,5 (AWG 21)	9,0	57,6	144,0
1504605	18 G 0,5 (AWG 21)	10,5	86,4	224,0
1504606	25 G 0,5 (AWG 21)	12,7	120,0	308,0
1504607	30 G 0,5 (AWG 21)	13,4	144,0	336,0
1504608	36 G 0,5 (AWG 21)	14,5	172,8	394,0
1504609	2 X 0,75 (AWG 19)	5,4	14,4	49,0
1504610	3 G 0,75 (AWG 19)	5,8	21,6	61,0
1504611	4 G 0,75 (AWG 19)	6,3	28,8	77,0
1504612	5 G 0,75 (AWG 19)	7,0	36,0	92,0
1504613	7 G 0,75 (AWG 19)	8,3	50,4	132,0
1504614	12 G 0,75 (AWG 19)	9,8	86,4	188,0
1504615	18 G 0,75 (AWG 19)	11,7	129,6	293,0
1504616	25 G 0,75 (AWG 19)	14,1	180,0	399,0
1504617	36 G 0,75 (AWG 19)	16,2	259,2	540,0
1504618	42 G 0,75 (AWG 19)	17,7	302,4	635,0
1504619	2 X 1 (AWG 18)	5,7	19,2	58,0
1504620	3 G 1 (AWG 18)	6,2	28,8	74,0
1504621	4 G 1 (AWG 18)	6,6	38,4	92,0
1504622	5 G 1 (AWG 18)	7,4	48,0	116,0
1504623	7 G 1 (AWG 18)	9,0	67,2	164,0
1505374	8 G 1 (AWG 18)	9,7	80,0	184,0
1504624	12 G 1 (AWG 18)	10,5	115,2	234,0
1504625	18 G 1 (AWG 18)	12,5	172,8	363,0
1504626	25 G 1 (AWG 18)	15,3	240,0	500,0
1505175	36 G 1 (AWG 18)	17,5	346,0	620,0
1504627	2 X 1,5 (AWG 16)	6,3	28,8	72,0
1504628	3 G 1,5 (AWG 16)	6,8	43,2	93,0
1504629	4 G 1,5 (AWG 16)	7,4	57,6	117,0
1504630	5 G 1,5 (AWG 16)	8,3	72,0	148,0
1504631	7 G 1,5 (AWG 16)	10,0	100,8	210,0
1504632	12 G 1,5 (AWG 16)	11,9	172,8	304,0
1504633	18 G 1,5 (AWG 16)	14,2	259,2	479,0
1504634	25 G 1,5 (AWG 16)	17,4	360,0	666,0
1504635	36 G 1,5 (AWG 16)	19,8	518,4	867,0
1504636	42 G 1,5 (AWG 16)	22,0	604,8	1.020,0
1505599	50 G 1,5 (AWG 16)	24,3	720,0	1.051,0
1504637	3 G 2,5 (AWG 14)	8,2	72,0	146,0
1504638	4 G 2,5 (AWG 14)	9,0	96,0	191,0
1504639	5 G 2,5 (AWG 14)	10,1	120,0	239,0
1504640	7 G 2,5 (AWG 14)	12,3	168,0	339,0
1504641	12 G 2,5 (AWG 14)	14,7	288,0	499,0
1504642	3 G 4 (AWG 12)	9,7	115,2	211,0
1504643	4 G 4 (AWG 12)	10,5	153,6	276,0
1504644	5 G 4 (AWG 12)	12,1	192,0	345,0
1504645	3 G 6 (AWG 10)	11,8	172,8	302,0
1504646	4 G 6 (AWG 10)	12,8	230,4	393,0
1504647	5 G 6 (AWG 10)	14,7	288,0	498,0
1504648	4 G 10 (AWG 8)	16,7	384,0	681,0
1504649	5 G 10 (AWG 8)	19,0	480,0	848,0
1504650	4 G 16 (AWG 6)	19,8	614,4	1.001,0
1504651	5 G 16 (AWG 6)	22,8	768,0	1.254,0