

BI-FLEX High Flexible DC Cable

BI-FLEX TPE 105°C • 600/1000 V • Flame Retardant, Oil Resistance, good impact strength and weatherproof

CONSTRUCTION :

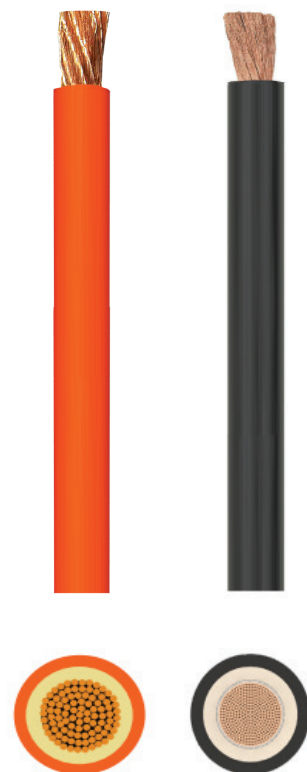
Type of Conductor : Fine wire according to IEC 60228 Class 5
 Type of Insulation : PVC Special grades according to IEC 60227-4
 Type of Sheath : TPE (Thermoplastic Elastomer) according to IEC 60227-4
 Colour of Insulation : Yellow or Available on request
 Colour of Sheath : Black, Orange or Available on request

TECHNICAL DATA :

Norm references : IEC.60502
 Rated Voltage (Uo/U) : 600/1000 Volts
 Max. Operating temperature : 105°C
 Min. Operating temperature : -25°C
 Testing Voltage : 2.5 KV., 50Hz.
 Insulation Resistance : 20 MΩxkm
 Flame retardant : According to IEC 60332-1-2

APPLICATION RANGE :

- Used as welding generator for shipbuilding , automobile industry, transport and welding generator.
- Resist to heat, flame, oil, petrol, influence of ozone, gases and oxygen
- High flexibility
- Suitable for all fixed wiring, switchboard cable and control cable



CABLE PARAMETER







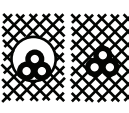






Conductor		Overall Diameter		Maximum Conductor	Current		
Nominal area	Nominal No. & Nominal diameter of wire	Lower limit	Upper limit	Resistance per 1000m at 20°C	Rating for 30% duty cycle	Rating for 60% duty cycle	Rating for 100% duty cycle
sq.mm.	mm.	mm.	mm.	ohm/km.	Amp.	Amp.	Amp.
10	318/0.20	9.50	10.50	1.843	160	110	87
16	511/0.20	10.00	11.00	0.912	240	150	100
25	798/0.20	11.00	12.50	0.780	330	230	118
35	1121/0.20	12.50	14.00	0.552	410	290	225
50	1591/0.20	14.50	16.00	0.390	520	370	285
70	990/0.30	16.00	18.50	0.276	650	460	355
95	1344/0.30	19.00	21.50	0.204	790	560	430
120	1697/0.30	21.00	23.50	0.156	910	650	500
150	2122/0.30	24.00	27.00	0.123	1040	740	580
185	2617/0.30	26.00	29.00	0.097	1200	850	660
240	3394/0.30	28.00	31.00	0.076	1296	916	710
300	4242/0.30	30.00	36.00	0.06	1400	990	770

CURRENT RATING FOR SINGLE CYCLE OPERATION OVER A MAXIMUM PERIOD OF 5 MINUTES

DE-RATING FACTORS

AMBIENT TEMPERATURE	25°C	30°C	35°C	40°C	45°C
DE-RATING FACTOR	1.0	0.96	0.91	0.87	0.82

CURRENT-CARRYING CAPACITIES OF THREE SINGLE-CORE 0.6/1KV 90°C (TPE V105°C/PVC 90°C Insulation)

Nominal conductor area mm ²	Unenclosed				Enclosed	Thermal Insulation		Buried Direct	Underground Wiring Enclosure			Three Phase Voltage Drop (@ 50Hz & 90°C) mV/A.m	
	Spaced	Spaced from Surface	Touching	Exposed to Sun	Wiring Enclosure in Air	Partially Surrounded by Thermal Insulation	Completely Surrounded by Thermal Insulation						
													
10	80	69	64	48	55	45	32	67	66	79	4.22	4.22	
16	106	91	85	63	73	58	43	117	85	101	2.68	2.68	
25	142	121	114	83	94	77	58	151	109	132	1.73	1.74	
35	177	151	141	103	118	96	72	180	134	158	1.24	1.24	
50	223	191	178	128	144	114	-	214	163	190	0.869	0.875	
70	283	241	225	161	183	146	-	262	203	232	0.622	0.630	
95	341	290	271	192	214	176	-	313	237	276	0.483	0.492	
120	406	346	322	226	256	209	-	356	279	320	0.388	0.399	
150	470	400	372	260	291	236	-	400	316	358	0.325	0.338	
185	540	459	427	296	334	268	-	452	357	413	0.280	0.295	
240	651	553	514	352	410	320	-	523	416	477	0.233	0.251	
300	752	637	591	402	458	375	-	589	479	552	0.207	0.227	
400	909	764	709	477	533	427	-	668	554	626	0.183	0.204	
500	1062	884	821	546	630	506	-	752	642	707	0.169	0.192	
630	1256	1030	956	630	719	571	-	843	729	820	0.157	0.181	