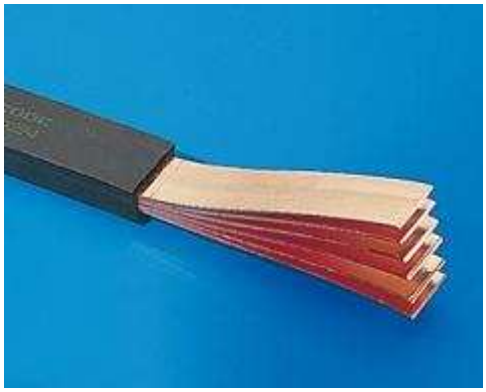
ERIFLEX® FLEXIBAR
PLAIN COPPER

- **ERIFLEX® FLEXIBAR:**
- ERIFLEX® FLEXIBAR is a very flexible busbar / conductor.

IEC 439.1



ERICO's exclusive manufacturing process offers the best flexibility:

- **Copper laminates are free to slide within the insulation**
- **High insulation quality**

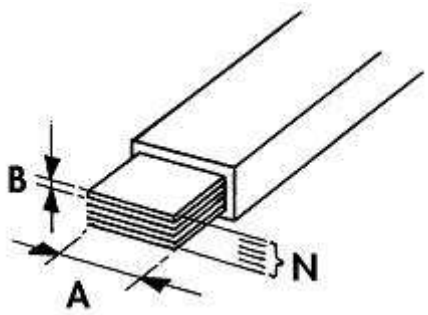
ERIFLEX® FLEXIBAR is formed with multiple layers of thin electrolytic copper, available in plain or tinplated
The insulation is a high resistance, self extinguishing PVC compound

ERIFLEX® FLEXIBAR connections are made by punching directly through the laminates. No lugs to purchase, installation are simpler and faster and faulty connection problems are eliminated.

Easily formed, ERIFLEX FLEXIBAR improves assembly flexibility and aesthetics of panels.

ERIFLEX® FLEXIBAR is :

- UL® recognised
- CSA® certified
- VERITAS certified for Ship Application



Part No	Description	Section (mm²)	N (mm)	A (mm)	B (mm)	Length (mm)		
552400	ERIFLEX FLEXIBAR 2M 8x6x0,5	24	8	6	0,5	2	10	0,35 kg
552410	ERIFLEX FLEXIBAR 2M 3x9x0,8	21,6	3	9	0,8	2	10	0,43 kg
552420	ERIFLEX FLEXIBAR 2M 6x9x0,8	43,2	6	9	0,8	2	10	0,81 kg
552430	ERIFLEX FLEXIBAR 2M 9x9x0,8	64,8	9	9	0,8	2	10	1,19 kg
552440	ERIFLEX FLEXIBAR 2M 3x13x0,5	19,5	3	13	0,5	2	10	0,45 kg
552450	ERIFLEX FLEXIBAR 2M 6x13x0,5	39	6	13	0,5	2	10	0,79 kg
552390	ERIFLEX FLEXIBAR 2M 2x15,5x0,8	24,8	2	15,5	0,8	2	10	0,51 kg
552460	ERIFLEX FLEXIBAR 2M 4x15,5x0,8	49,6	4	15,5	0,8	2	10	1,02 kg
552470	ERIFLEX FLEXIBAR 2M 6x15,5x0,8	74,4	6	15,5	0,8	2	10	1,5 kg
552480	ERIFLEX FLEXIBAR 2M 10x15,5x0,8	124	10	15,5	0,8	2	10	2,2 kg
552490	ERIFLEX FLEXIBAR 2M 2x20x1	40	2	20	1	2	5	1,05 kg
552500	ERIFLEX FLEXIBAR 2M 3x20x1	60	3	20	1	2	5	1,42 kg
552510	ERIFLEX FLEXIBAR 2M 4x20x1	80	4	20	1	2	5	1,78 kg
552520	ERIFLEX FLEXIBAR 2M 5x20x1	100	5	20	1	2	5	2,15 kg
552530	ERIFLEX FLEXIBAR 2M 6x20x1	120	6	20	1	2	5	2,52 kg
552540	ERIFLEX FLEXIBAR 2M 10x20x1	200	10	20	1	2	5	3 kg
552550	ERIFLEX FLEXIBAR 2M 2x24x1	48	2	24	1	2	5	1,24 kg
552560	ERIFLEX FLEXIBAR 2M 3x24x1	72	3	24	1	2	5	1,68 kg
552570	ERIFLEX FLEXIBAR 2M 4x24x1	96	4	24	1	2	5	2,12 kg
552580	ERIFLEX FLEXIBAR 2M 5x24x1	120	5	24	1	2	5	2,55 kg
552590	ERIFLEX FLEXIBAR 2M 6x24x1	144	6	24	1	2	5	2,99 kg
552600	ERIFLEX FLEXIBAR 2M 8x24x1	192	8	24	1	2	5	3,87 kg
552610	ERIFLEX FLEXIBAR 2M 10x24x1	240	10	24	1	2	5	4,75 kg
552620	ERIFLEX FLEXIBAR 2M 2x32x1	64	2	32	1	2	5	1,62 kg
552630	ERIFLEX FLEXIBAR 2M 3x32x1	96	3	32	1	2	5	2,2 kg
552640	ERIFLEX FLEXIBAR 2M 4x32x1	128	4	32	1	2	5	2,78 kg
552650	ERIFLEX FLEXIBAR 2M 5x32x1	160	5	32	1	2	5	3,36 kg
552660	ERIFLEX FLEXIBAR 2M 6x32x1	192	6	32	1	2	5	3,94 kg
552670	ERIFLEX FLEXIBAR 2M 8x32x1	256	8	32	1	2	5	5,1 kg
552680	ERIFLEX FLEXIBAR 2M 10x32x1	320	10	32	1	2	5	6,27 kg
552690	ERIFLEX FLEXIBAR 2M 2x40x1	80	2	40	1	2	5	1,99 kg
552700	ERIFLEX FLEXIBAR 2M 3x40x1	120	3	40	1	2	5	2,72 kg
552710	ERIFLEX FLEXIBAR 2M 4x40x1	160	4	40	1	2	5	3,44 kg
552720	ERIFLEX FLEXIBAR 2M 5x40x1	200	5	40	1	2	5	4,16 kg
552730	ERIFLEX FLEXIBAR 2M 6x40x1	240	6	40	1	2	5	4,89 kg
552740	ERIFLEX FLEXIBAR 2M 8x40x1	320	8	40	1	2	5	6,33 kg
552750	ERIFLEX FLEXIBAR 2M 10x40x1	400	10	40	1	2	5	7,78 kg
552760	ERIFLEX FLEXIBAR 2M 3x50x1	150	3	50	1	2	5	3,37 kg
552770	ERIFLEX FLEXIBAR 2M 4x50x1	200	4	50	1	2	5	4,27 kg
552780	ERIFLEX FLEXIBAR 2M 5x50x1	250	5	50	1	2	5	5,17 kg
Part No	**Description**	**Section (mm²)**	**N (mm)**	**A (mm)**	**B (mm)**	**Length (mm)**		

552790	ERIFLEX FLEXIBAR 2M 6x50x1	300	6	50	1	2	2	6,07 kg
552800	ERIFLEX FLEXIBAR 2M 8x50x1	400	8	50	1	2	2	7,87 kg
552810	ERIFLEX FLEXIBAR 2M 10x50x1	500	10	50	1	2	2	9,68 kg
552820	ERIFLEX FLEXIBAR 2M 3x63x1	189	3	63	1	2	2	4,21 kg
552830	ERIFLEX FLEXIBAR 2M 4x63x1	252	4	63	1	2	2	5,34 kg
552840	ERIFLEX FLEXIBAR 2M 5x63x1	315	5	63	1	2	2	6,48 kg
552850	ERIFLEX FLEXIBAR 2M 6x63x1	378	6	63	1	2	2	7,61 kg
552860	ERIFLEX FLEXIBAR 2M 8x63x1	504	8	63	1	2	2	9,88 kg
552870	ERIFLEX FLEXIBAR 2M 10x63x1	630	10	63	1	2	2	12,14 kg
552880	ERIFLEX FLEXIBAR 2M 3x80x1	240	3	80	1	2	2	5,32 kg
552890	ERIFLEX FLEXIBAR 2M 4x80x1	320	4	80	1	2	2	6,75 kg
552900	ERIFLEX FLEXIBAR 2M 5x80x1	400	5	80	1	2	2	8,19 kg
552910	ERIFLEX FLEXIBAR 2M 6x80x1	480	6	80	1	2	2	9,62 kg
552920	ERIFLEX FLEXIBAR 2M 8x80x1	640	8	80	1	2	2	12,49 kg
552930	ERIFLEX FLEXIBAR 2M 10x80x1	800	10	80	1	2	2	15,37 kg
552940	ERIFLEX FLEXIBAR 2M 4x100x1	400	4	100	1	2	2	8,41 kg
552950	ERIFLEX FLEXIBAR 2M 5x100x1	500	5	100	1	2	2	10,2 kg
552960	ERIFLEX FLEXIBAR 2M 6x100x1	600	6	100	1	2	2	11,99 kg
552970	ERIFLEX FLEXIBAR 2M 8x100x1	800	8	100	1	2	2	15,57 kg
552980	ERIFLEX FLEXIBAR 2M 10x100x1	1000	10	100	1	2	2	19,16 kg
552990	ERIFLEX FLEXIBAR 2M 12x100x1	1200	12	100	1	2	2	22,74 kg
538650	ERIFLEX FLEXIBAR 2M 10x120x1	1200	10	120	1	2	1	23,5 kg
541020	ERIFLEX FLEXIBAR 3M 6x9x0,8	43,2	6	9	0,8	3	5	1,2 kg
541060	ERIFLEX FLEXIBAR 3M 4x15,5x0,8	49,6	4	15,5	0,8	3	5	1,3 kg
541070	ERIFLEX FLEXIBAR 3M 6x15,5x0,8	74,4	6	15,5	0,8	3	5	1,3 kg
541090	ERIFLEX FLEXIBAR 3M 2x20x1	40	2	20	1	3	5	1,58 kg
541100	ERIFLEX FLEXIBAR 3M 3x20x1	60	3	20	1	3	5	2,13 kg
541110	ERIFLEX FLEXIBAR 3M 4x20x1	80	4	20	1	3	5	2,67 kg
541150	ERIFLEX FLEXIBAR 3M 2x24x1	48	2	24	1	3	5	1,3 kg
541160	ERIFLEX FLEXIBAR 3M 3x24x1	72	3	24	1	3	5	2,52 kg
541170	ERIFLEX FLEXIBAR 3M 4x24x1	96	4	24	1	3	5	3,18 kg
541180	ERIFLEX FLEXIBAR 3M 5x24x1	120	5	24	1	3	5	3,2 kg
541230	ERIFLEX FLEXIBAR 3M 3x32x1	96	3	32	1	3	2	3,3 kg
541240	ERIFLEX FLEXIBAR 3M 4x32x1	128	4	32	1	3	2	4,17 kg
541250	ERIFLEX FLEXIBAR 3M 5x32x1	160	5	32	1	3	2	5,04 kg
541260	ERIFLEX FLEXIBAR 3M 6x32x1	192	6	32	1	3	2	5,91 kg
541270	ERIFLEX FLEXIBAR 3M 8x32x1	256	8	32	1	3	2	6,84 kg
541300	ERIFLEX FLEXIBAR 3M 3x40x1	120	3	40	1	3	2	4,08 kg
541320	ERIFLEX FLEXIBAR 3M 5x40x1	200	5	40	1	3	2	6,24 kg
541380	ERIFLEX FLEXIBAR 3M 5x50x1	250	5	50	1	3	2	7,76 kg

Part N°	ΔT (K)																Current coefficient		
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80			
552400	52	74	91	105	117	129	139	148	157	166	174	182	189	196	203	210	1,72	2,25	2,7
552410	42	60	73	85	95	104	112	120	127	134	141	147	153	159	164	169	1,72	2,25	2,7
552420	77	110	134	155	173	190	205	219	232	245	257	268	279	290	300	310	1,72	2,25	2,7
552430	84	119	145	168	187	205	222	237	251	265	278	290	302	314	325	335	1,72	2,25	2,7
552440	53	75	91	106	118	129	140	149	158	167	175	183	190	198	205	211	1,72	2,25	2,7
552450	80	113	139	160	179	196	212	226	240	253	265	277	288	299	310	320	1,72	2,25	2,7
552390	67	95	116	134	150	164	177	190	201	212	222	232	242	251	260	268	1,72	2,25	2,7
552460	101	143	175	202	226	248	268	286	304	320	336	351	365	379	392	405	1,72	2,25	2,7
552470	127	180	220	254	284	311	336	360	381	402	422	440	458	476	492	508	1,72	2,25	2,7
552480	144	203	249	288	322	352	381	407	432	455	477	498	519	538	557	576	1,72	2,25	2,7
552490	87	123	151	174	194	213	230	246	261	275	288	301	314	325	337	348	1,72	2,25	2,7
552500	114	161	197	228	255	279	301	322	342	360	378	394	410	426	441	455	1,72	2,25	2,7
552510	127	180	220	254	284	311	336	360	381	402	422	440	458	476	492	508	1,72	2,25	2,7
552520	133	188	230	266	297	325	351	376	398	420	440	460	479	497	514	531	1,72	2,25	2,7
552530	146	207	253	292	327	358	387	413	438	462	485	506	527	547	566	584	1,72	2,25	2,7
552540	204	288	353	408	456	500	540	577	612	645	676	707	735	763	790	816	1,72	2,25	2,7
552550	120	170	208	240	269	294	318	340	360	380	399	416	433	450	465	481	1,72	2,25	2,7
552560	131	185	226	261	292	320	346	369	392	413	433	452	471	489	506	522	1,72	2,25	2,7
552570	147	208	255	294	329	360	389	416	441	465	488	509	530	550	570	588	1,72	2,25	2,7
552580	163	230	282	325	363	398	430	460	488	514	539	563	586	608	630	650	1,72	2,25	2,7
552590	179	253	310	358	400	438	474	506	537	566	594	620	645	670	693	716	1,72	2,25	2,7
552600	214	303	371	429	479	525	567	606	643	678	711	743	773	802	830	858	1,72	2,25	2,7
552610	253	358	438	506	566	620	669	716	759	800	839	876	912	947	980	1012	1,72	2,25	2,7
552620	128	182	222	257	287	314	340	363	385	406	426	445	463	480	497	514	1,72	2,25	2,7
552630	152	215	263	304	339	372	402	429	455	480	503	526	547	568	588	607	1,72	2,25	2,7
552640	173	245	300	347	387	424	458	490	520	548	575	600	625	648	671	693	1,72	2,25	2,7
552650	202	286	351	405	453	496	535	572	607	640	671	701	730	757	784	810	1,72	2,25	2,7
552660	226	320	392	452	506	554	598	640	678	715	750	783	815	846	876	904	1,72	2,25	2,7
552670	272	385	471	544	608	666	720	769	816	860	902	942	981	1018	1053	1088	1,72	2,25	2,7
552680	329	465	570	658	735	806	870	930	987	1040	1091	1139	1186	1231	1274	1316	1,72	2,25	2,7
552690	144	203	249	288	322	352	381	407	432	455	477	498	519	538	557	576	1,72	2,25	2,7
552700	165	233	286	330	369	404	437	467	495	522	547	572	595	618	639	660	1,72	2,25	2,7
552710	194	275	337	389	435	476	515	550	583	615	645	674	701	728	753	778	1,72	2,25	2,7
552720	240	340	416	481	537	589	636	680	721	760	797	833	867	899	931	961	1,72	2,25	2,7
552730	272	385	471	544	608	666	720	769	816	860	902	942	981	1018	1053	1088	1,72	2,25	2,7
552740	329	465	570	658	735	806	870	930	987	1040	1091	1139	1186	1231	1274	1316	1,72	2,25	2,7

Part N°	ΔT (K)																Current coefficient		
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80			
552750	373	528	647	747	835	915	988	1056	1120	1181	1239	1294	1347	1397	1446	1494	1,72	2,25	2,7
552760	187	265	324	374	419	459	495	530	562	592	621	649	675	700	725	749	1,72	2,25	2,7
552770	230	325	398	460	514	563	608	650	690	727	762	796	829	860	890	920	1,72	2,25	2,7
552780	294	416	509	588	658	720	778	832	882	930	975	1019	1060	1100	1139	1176	1,72	2,25	2,7
552790	327	463	567	655	732	802	866	926	982	1035	1086	1134	1180	1225	1268	1309	1,72	2,25	2,7
552800	372	525	644	743	831	910	983	1051	1115	1175	1232	1287	1340	1390	1439	1486	1,72	2,25	2,7
552810	441	624	764	882	986	1081	1167	1248	1323	1395	1463	1528	1591	1651	1709	1765	1,72	2,25	2,7
552820	213	302	370	427	477	523	565	604	640	675	708	739	770	799	827	854	1,65	2,12	2,6
552830	270	382	468	541	605	662	715	765	811	855	897	937	975	1012	1047	1081	1,65	2,12	2,6
552840	326	461	564	651	728	798	862	921	977	1030	1080	1128	1174	1219	1261	1303	1,65	2,12	2,6
552850	384	543	665	768	859	941	1017	1087	1153	1215	1274	1331	1385	1438	1488	1537	1,65	2,12	2,6
552860	441	624	764	882	986	1081	1167	1248	1323	1395	1463	1528	1591	1651	1709	1765	1,65	2,12	2,6
552870	506	716	876	1012	1131	1239	1339	1431	1518	1600	1678	1753	1824	1893	1960	2024	1,65	2,12	2,6
552880	262	370	453	523	585	641	692	740	785	827	867	906	943	979	1013	1046	1,65	2,12	2,6
552890	321	454	556	642	718	786	849	908	963	1015	1065	1112	1157	1201	1243	1284	1,65	2,12	2,6
552900	372	525	644	743	831	910	983	1051	1115	1175	1232	1287	1340	1390	1439	1486	1,65	2,12	2,6
552910	435	615	753	870	972	1065	1150	1230	1304	1375	1442	1506	1568	1627	1684	1739	1,65	2,12	2,6
552920	506	716	876	1012	1131	1239	1339	1431	1518	1600	1678	1753	1824	1893	1960	2024	1,65	2,12	2,6
552930	561	794	972	1123	1255	1375	1485	1588	1684	1775	1862	1944	2024	2100	2174	2245	1,65	2,12	2,6
552940	387	548	671	775	866	949	1025	1096	1162	1225	1285	1342	1397	1449	1500	1550	1,6	2,02	2,4
552950	438	619	759	876	979	1073	1159	1239	1314	1385	1453	1517	1579	1639	1696	1752	1,6	2,02	2,4
552960	490	693	849	980	1096	1201	1297	1386	1470	1550	1626	1698	1767	1834	1898	1961	1,6	2,02	2,4
552970	574	812	994	1148	1283	1406	1519	1623	1722	1815	1904	1988	2069	2148	2223	2296	1,6	2,02	2,4
552980	628	888	1087	1255	1404	1538	1661	1775	1883	1985	2082	2174	2263	2349	2431	2511	1,6	2,02	2,4
552990	669	946	1158	1338	1496	1638	1770	1892	2006	2115	2218	2317	2411	2503	2590	2675	1,6	2,02	2,4
538650	737	1042	1276	1474	1648	1805	1949	2084	2210	2330	2444	2552	2657	2757	2854	2947	1,49	1,95	2,2
541020	77	110	134	155	173	190	205	219	232	245	257	268	279	290	300	310	1,72	2,25	2,7
541060	101	143	175	202	226	248	268	286	304	320	336	351	365	379	392	405	1,72	2,25	2,7
541070	127	180	220	254	284	311	336	360	381	402	422	440	458	476	492	508	1,72	2,25	2,7
541090	87	123	151	174	194	213	230	246	261	275	288	301	314	325	337	348	1,72	2,25	2,7
541100	114	161	197	228	255	279	301	322	342	360	378	394	410	426	441	455	1,72	2,25	2,7
541110	127	180	220	254	284	311	336	360	381	402	422	440	458	476	492	508	1,72	2,25	2,7
541150	120	170	208	240	269	294	318	340	360	380	399	416	433	450	465	481	1,72	2,25	2,7
541160	131	185	226	261	292	320	346	369	392	413	433	452	471	489	506	522	1,72	2,25	2,7
541170	147	208	255	294	329	360	389	416	441	465	488	509	530	550	570	588	1,72	2,25	2,7
541180	163	230	282	325	363	398	430	460	488	514	539	563	586	608	630	650	1,72	2,25	2,7

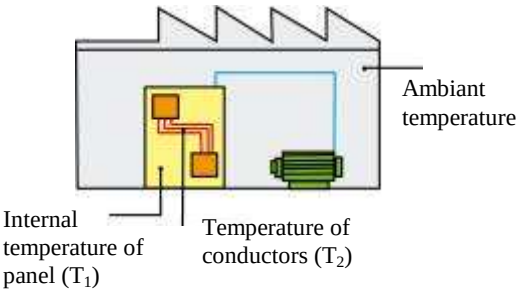
Part N°	ΔT (K)																Current coefficient		
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80			
541230	152	215	263	304	339	372	402	429	455	480	503	526	547	568	588	607	1,72	2,25	2,7
541240	173	245	300	347	387	424	458	490	520	548	575	600	625	648	671	693	1,72	2,25	2,7
541250	202	286	351	405	453	496	535	572	607	640	671	701	730	757	784	810	1,72	2,25	2,7
541260	226	320	392	452	506	554	598	640	678	715	750	783	815	846	876	904	1,72	2,25	2,7
541270	272	385	471	544	608	666	720	769	816	860	902	942	981	1018	1053	1088	1,72	2,25	2,7
541300	165	233	286	330	369	404	437	467	495	522	547	572	595	618	639	660	1,72	2,25	2,7
541320	240	340	416	481	537	589	636	680	721	760	797	833	867	899	931	961	1,72	2,25	2,7
541380	294	416	509	588	658	720	778	832	882	930	975	1019	1060	1100	1139	1176	1,72	2,25	2,7

❑ Technical data:

- Electrolytic copper Cu-ETP (Cu/Al) according to standard NF EN 13601
- Copper purity of minimum 99,9%
- Maximum resistivity of 0,017241 Ωmm^2 / m below 20°C
- Coefficient of linear expansion: 16,6 x 10^{-6} per °C within 20°C to 100°C
- Conductor in electrolytic tinned copper
- Insulation high resistance vinyl compound:
  - Elongation: 370%
  - Max. working temperature: 105°C
  - Thickness: 2 mm ± 0,2
  - Self-extinguishing: UL 94 VO
  - Dielectric strength: 20kV/mm

❑ Intensity temperature rise:

Temperature rise of conductor = T2 - T1 = ΔT (K)



Ex.: For a current of 630A, with
T1 = 40°C
T2 = 90°C
1) ΔT = 90 - 40 = 50 K
2) In the 50°C column, find the closest current value to 630A.
ERIFLEX FLEXIBAR 5 x 32 x 1 - 552650 - 160mm2 - 640A
3) Select ERIFLEX FLEXIBAR according to the terminal width of the equipment being connected.

❑ Using 2 or 3 FLEXIBARS in parallel:

When using 2 or 3 ERIFLEX FLEXIBAR in parallel, use the coefficient mentioned in the previous table:
Ex: 5 x 32 x 1 – ΔT° = 50 K: 640 A
2 bars in parallel > 640 A x 1,72 = 1100 A
3 bars in parallel > 640 A x 2,25 = 1440 A

❑ Voltage rating:

- Maximum Continuous Voltage: 1000 V AC/1500 V DC.

❑ ERIFLEX® FLEXIBAR Connection recommended

Description			Overlap H	Bolt No. N	Bolt size M
2	**20**	**1**	25	1	M6
3	**20**	**1**	25	1	M6
4	**20**	**1**	25	1	M8
5	**20**	**1**	25	1	M8
6	**20**	**1**	30	1	M10
10	**20**	**1**	50	2	M8
2	**24**	**1**	25	1	M8
3	**24**	**1**	25	1	M8
4	**24**	**1**	25	1	M8
5	**24**	**1**	25	1	M10
6	**24**	**1**	30	1	M10
8	**24**	**1**	40	1	M12
10	**24**	**1**	50	2	M10
2	**32**	**1**	25	1	M10
3	**32**	**1**	25	1	M10
4	**32**	**1**	25	1	M10
5	**32**	**1**	25	1	M10
6	**32**	**1**	30	1	M12
8	**32**	**1**	40	1	M12
10	**32**	**1**	50	2	M10
2	**40**	**1**	20	2	M8
3	**40**	**1**	25	1	M12
4	**40**	**1**	25	1	M12
5	**40**	**1**	30	1	M12
6	**40**	**1**	30	1	M12
8	**40**	**1**	40	2	M10
10	**40**	**1**	50	2	M12
3	**50**	**1**	25	2	M8
4	**50**	**1**	25	2	M8
5	**50**	**1**	25	2	M10
6	**50**	**1**	30	2	M10
8	**50**	**1**	40	2	M12
10	**50**	**1**	50	2	M12
3	**63**	**1**	25	2	M10
4	**63**	**1**	25	2	M10
5	**63**	**1**	25	2	M10
6	**63**	**1**	30	2	M12
8	**63**	**1**	40	2	M12
10	**63**	**1**	50	3	M12
3	**80**	**1**	25	3	M8
4	**80**	**1**	25	3	M8
5	**80**	**1**	25	3	M10
6	**80**	**1**	30	3	M10
8	**80**	**1**	40	3	M12
10	**80**	**1**	50	3	M12
4	**100**	**1**	25	4	M8
5	**100**	**1**	25	4	M10
6	**100**	**1**	30	4	M10
8	**100**	**1**	40	4	M12
10	**100**	**1**	50	4	M12
12	**100**	**1**	60	5	M12
10	**120**	**1**	50	4	M12

❑ Certificates:

- ERIFLEX FLEXIBAR is UL® recognized for 600 volts maximum. E125470
- CE Conformity
- ROHS 2002/95/EC Compliance
- International Electro technical Association meets all requirements of IEC® 439-1

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