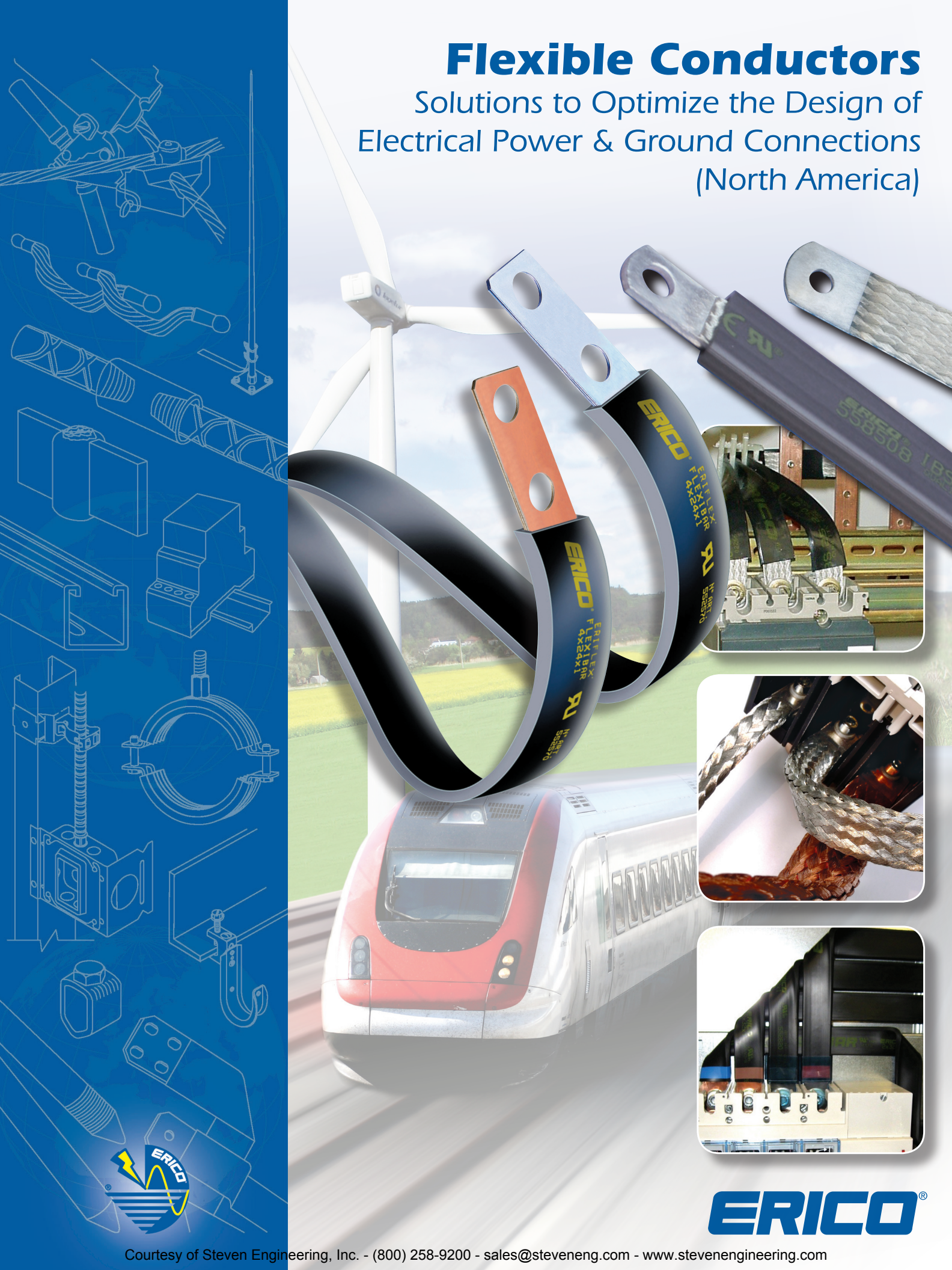


Flexible Conductors

Solutions to Optimize the Design of
Electrical Power & Ground Connections
(North America)



ERICO[®]

WARNING

ERICO products shall be installed and used only as indicated in ERICO's product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

WARRANTY

ERICO products are warranted to be free from defects in material and workmanship at the time of shipment. NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF ANY ERICO PRODUCTS. Claims for errors, shortages, defects or nonconformities ascertainable upon inspection must be made in writing within 5 days after Buyer's receipt of products. All other claims must be made in writing to ERICO within 6 months from the date of shipment or transport. Products claimed to be nonconforming or defective must, upon ERICO's prior written approval in accordance with its standard terms and procedures governing returns, promptly be returned to ERICO for inspection. Claims not made as provided above and within the applicable time period will be barred. ERICO shall in no event be responsible if the products have not been stored or used in accordance with its specifications and recommended procedures. ERICO will, at its option, either repair or replace nonconforming or defective products for which it is responsible or return the purchase price to the Buyer. THE FOREGOING STATES BUYER'S EXCLUSIVE REMEDY FOR ANY BREACH OF ERICO WARRANTY AND FOR ANY CLAIM, WHETHER SOUNDING IN CONTRACT, TORT OR NEGLIGENCE, FOR LOSS OR INJURY CAUSED BY THE SALE OR USE OF ANY PRODUCT.

LIMITATION OF LIABILITY

ERICO excludes all liability except such liability that is directly attributable to the willful or gross negligence of ERICO's employees. Should ERICO be held liable its liability shall in no event exceed the total purchase price under the contract. ERICO SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS OF BUSINESS OR PROFITS, DOWNTIME OR DELAY, LABOR, REPAIR OR MATERIAL COSTS OR ANY SIMILAR OR DISSIMILAR CONSEQUENTIAL LOSS OR DAMAGE INCURRED BY BUYER.



	Flexible conductors for multiple applications	4-5
	Certificates	6
	Product overview	7
	ERICO® FLEXIBAR®	8-17
	ERICO FLEXIBAR accessories	18-21
	Hydraulic and manual tools for busbar & ERICO FLEXIBAR	22-23
	Insulated braided conductor (IBS, IBSB & IBSBR)	24-31
	Ground copper braids (MBJ & BJ)	32-33
	Ground stainless steel braids (CPI)	34-35
	Power shunt (PBC, PBCR & PPS)	36-37
	Flat copper & stainless steel braids in coils (FTCB, FRCB, FSSB & FTCBI)	38
	Round and tubular copper braids in coils (RTCBI, RTCB, RRCB, RRCBI & TTCE)	39-40
	Make your own braided connections	41
	Made-to-order solutions	42-43
	Cross reference list	44-48

Flexible Conductors for Low-Voltage Industrial Applications

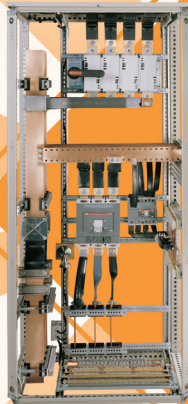
The ERICO Advantages

- A solution provider with strong expertise in a variety of markets worldwide
- A worldwide team of experts in electrical power connections
- Experienced manufacturer and global provider
- Full range of high-quality, reliable, certified products
- Innovative and compatible product designs
- Easy to use – saves time and space
- Maximize power density



Energy

- Electrical Power Generators and Distribution
 - Transformers
 - Generators
- Renewable Energies
 - Windmills
 - Solar
 - Hydropower
- Oil, Gas and Petrochemical
- Telecom
- Power Stations



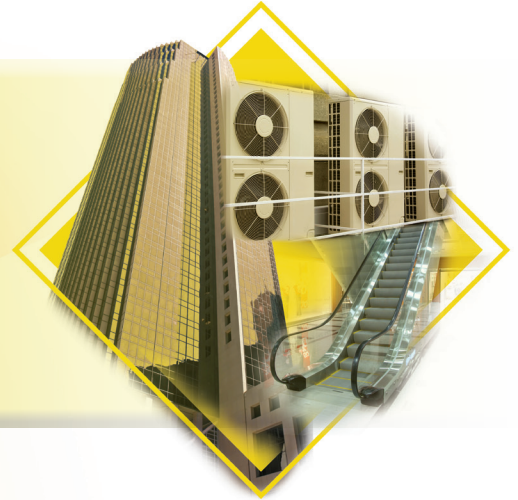
Transportation

- Marine
- Aircraft
- Ground Transportation
- Automotive



Industry & Buildings

- Buildings & Shopping Centers
- Air Conditioning
- Elevators, Escalators & Automatic Doors



Panelboard

- Power
- Control & Command Applications:
 - Power Switchboards
 - Distribution Panel
 - UPS
 - Power Factory Correction



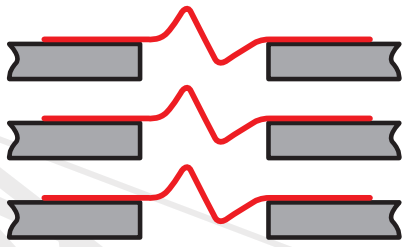
Machinery

- Tunneling
- Crushers
- Printing
- Welding
- Packaging
- Wood Working

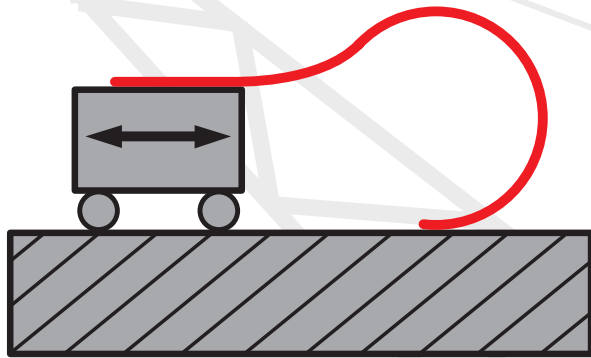


Flexible Conductors for Multiple Applications

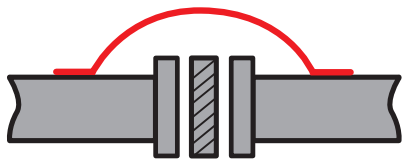
ERICO is trusted for producing high quality flexible conductors for low voltage power connections. Flexible conductors made out of braids or laminates are used in a variety of applications for current transfer or grounding connections.



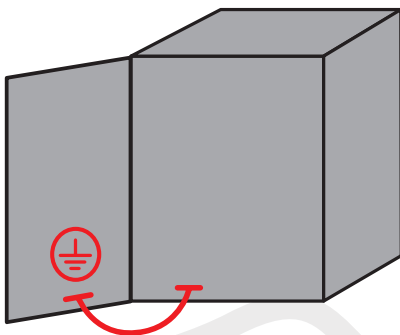
Expansion connections for busbar system



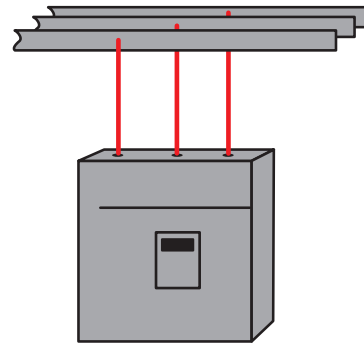
Flexible connection between fixed and moving parts



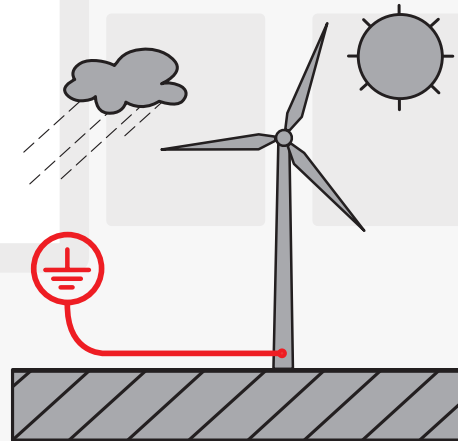
Grounding interconnection
(Example: pipeline)



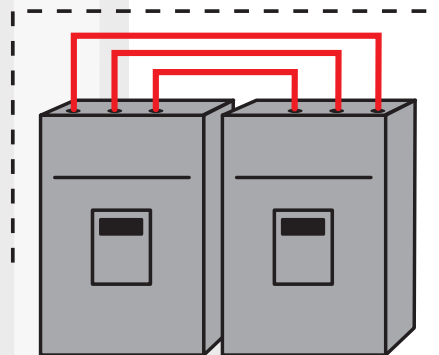
Grounding connection with excellent
electro-magnetic compatibility



Busbar and active electrical component
connection (Example: circuit breaker,
contactor) including most compact
components on the market



Outdoor/offshore application or difficult
environment (Example: abrasion,
corrosion, UV...)



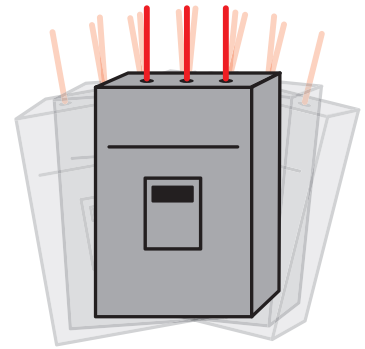
Short and compact connection between
electrical components for volume
reduction



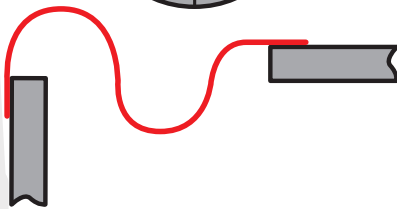
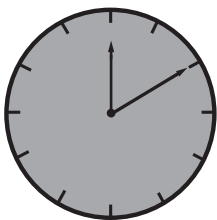
Flexible Conductors for Multiple Applications



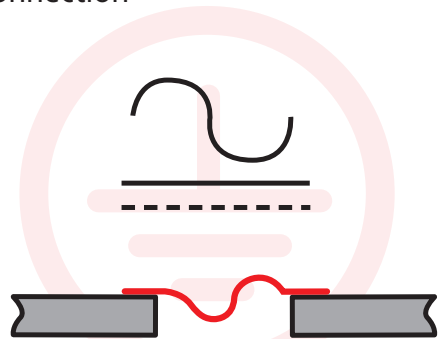
Worldwide certifications, applications and product availability



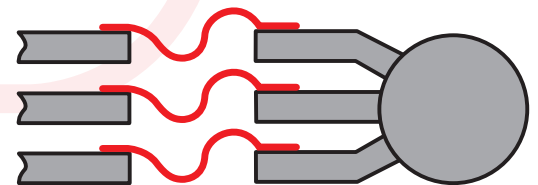
Vibration and reliability solution for connection



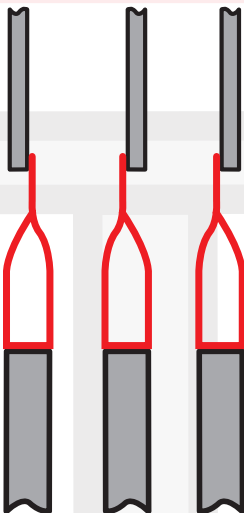
Reduce time assembly or maintenance connection



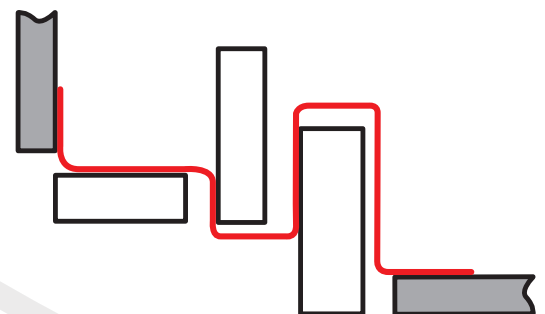
Connection for alternating current or direct current application



Motor, generator or transformer connection with busbar system



Power connection between horizontal and vertical system



Complicated and difficult connection for specific application

Certificates

Tests & Certificates

ERICO components have received conformity certificates from several agencies/standards.

Worldwide Certification

UL®

CSA®

IEC®

GOST



ABS®

VERITAS

CE

Agency/Standard Approval



International Electrotechnical Commission
IEC 60439.1 Standard
IEC 61439.1 Standard



Underwriters Laboratories
UL Recognized, File No. E125470
UL Recognized, File No. E220029
UL Recognized, File No. E316390



UL Listed, File No. E220029



Canadian Standards Association
CSA Certified, File No. LL 90005



ABS American Bureau of Shipping
Certificate No. 08-HS365878-1-PDA-DUP
Marine & Offshore Applications



European Conformity



Bureau VERITAS
Certificate No. 02859 / DO BV for
shipboard use

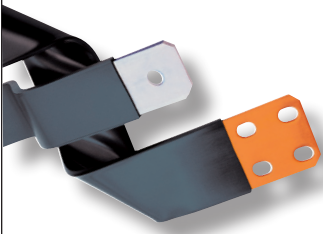
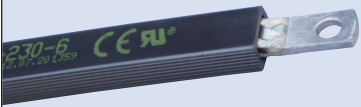
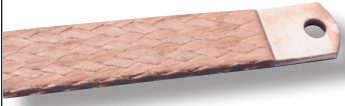
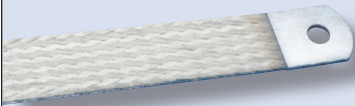
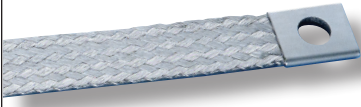
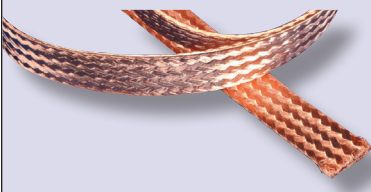
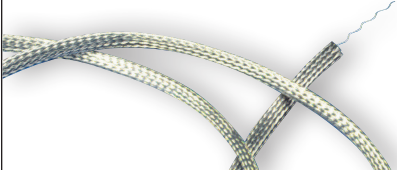


GOST
Certificate compliance for Russia



RoHS Compliant



Product Range	Typical Uses	Typical Market
Flexible wire replacement (ERICO® FLEXIBAR®) 	• Heavy-duty power interconnection • Overcome vibration/alignment problems • Circuit breaker, generator & prefabricated power network conductor • Expansion joints • Variable terminating positions • Machine connections • Movable connection from massive busbar system • Alternative to large & multiple cables • Alternative to rigid busbar	• Switchgear & control equipment • Transport • Electrical equipment manufacturers • Power generation • Machinery manufacturer
Insulated braided conductor (IBS, IBSB & IBSBR) 	• Interconnects for low voltage power distribution units • IBSB specially designed for industrial circuit breaker connection • Overcome vibration/alignment problems • Battery connections • Ground connections	• Switchgear & control equipment • Transport • Electrical equipment manufacturers • Power generation
Power shunt (PBC, PBCR & PPS) 	• Transformer or generator to busbar connection • Overcome vibration/alignment problems • Power interconnection	• Switchgear & control equipment • Power distribution • Transportation
Ground copper braids (MBJ & BJ) 	• Power, grounding and equipotential connections • Electrical bonding enclosure door • EMI effect reduction application	• Switchgear & control equipment • Rail transportation • Electrical equipment manufacturers • Power generation (wind, solar) • Data center
Ground stainless steel braids (CPI) 	• Grounding and equipotential connections • Superior abrasion, corrosion, chemical, and UV resistance for outdoor applications • Expansion joints • Connections for lightning protection systems	• Transportation • Food and beverage industry • Power generation (wind, solar) • Chemical and oil industry • Automotive • Defense & aerospace • Civil construction • Urban projects
Flat and round copper braids in coils 	• Ground connections • Power interconnection • Lightning protection • Flexible links • Overcome vibration/alignment problems	• Defense & aerospace • Rail transportation • Automotive • Electronics • General electrical sector • Civil construction
Tubular copper braids in coils 	• Screening of cables from electromagnetic, electrostatic and RF interference • Mechanical support • Protection against abrasion and corrosion • EMC & EMH applications	• Defense & aerospace • Transportation • Electronics & communication • Cable harness & assembly makers • Component distributors

ERICO® FLEXIBAR® - Flexible Wire Replacement

NEW Generation Flexible Wire Replacement

Patent pending insulation on ERICO FLEXIBAR



Superior Flexibility

ERICO's exclusive manufacturing process offers superior flexibility:

- Copper laminates are free to slide within the insulation
- High insulation quality
- Wide variety of bending, twisting & folding possibilities

NEW

Innovative patent pending insulation*

ERICO FLEXIBAR has added grooves on the inner surface of the insulation sleeve to improve sliding between the central conductor and the insulation material. The grooves help reduce the contact surface between the central conductor and the insulation material. This results in improved flexibility of the flexible busbar. Result: <20% of the inner surface is in contact with the central conductor. This ERICO patent-pending idea makes ERICO FLEXIBAR more flexible than ever, and allows users to optimize the design of their electrical power connection.

* This patent is applicable for the cross section indication by “**” on the part number. Refer to table on page 14”



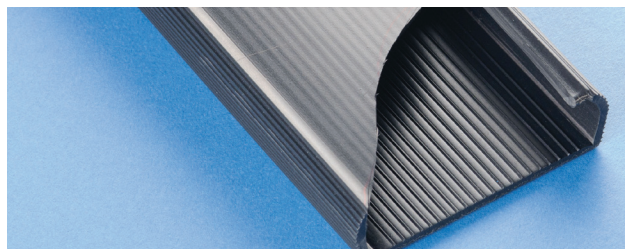
ERICO FLEXIBAR Flexible Wire Replacement - a preferred conductor

- ERICO FLEXIBAR is formed with multiple layers of thin electrolytic copper, available in plain or tin plated
- ERICO FLEXIBAR connections are made by punching and bolting directly through the laminates or by clamping or welding (using ERICO® CADWELD®). There are no lugs to purchase, helping to eliminate faulty connection problems and making installation simpler and faster
- The insulation is a high-resistance, self-extinguishing PVC or silicone compound
- Traceability code and designation Part Number on product
- Easily formed, ERICO FLEXIBAR improves assembly flexibility and aesthetics of panels
- Ideal alternative to large cable & rigid busbar
- Quality: 100% production dielectric tested
- Full range from 27 mm² up to 1200 mm²



Diverse Applications

- Working Temperature -25°C up to 105°C (-13°F up to 221°F) ERICO FLEXIBAR
- Nominal voltage = 1000 V AC/1500 V DC (IEC & UL®)
- Self-extinguishable
- High mechanical resistance
- High elongation value
- High current withstanding
- High copper quality (99.9% purity)
- High conductivity



Connection Types

- Between main power and distribution equipment (contactors, circuit-breakers...)
- Between transformer and busduct
- Between busduct and electrical cabinet

Space/Weight Savings

- Requires less installation space when compared to cable
- Reduces the length and number of conductors, reducing weight
- Insulation allows for closer spacing than traditional busbar designs.

Cost Savings

- Eliminates cost and installation of lugs
- Reduces inventory costs

Improves Reliability

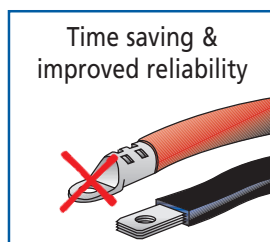
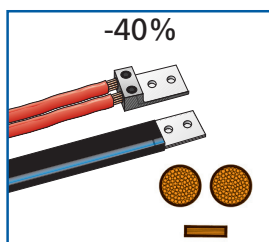
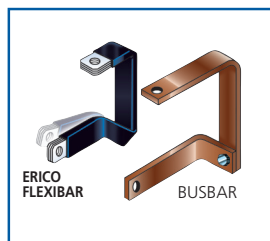
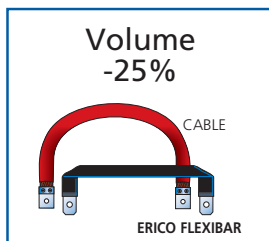
- Connection is made directly to ERICO FLEXIBAR thus eliminating the cable lug connection
- Excellent resistance to vibration
- No crimping

Aesthetics

- Improves design flexibility and panel access

Ease of Installation

- Installation is facilitated through the ease of bending and shaping even large sizes



Skin Effect on A.C. Application

COPPER CABLE



150 AMPS

1/0

53.5 sq. mm
(.373 in.)

ERICO FLEXIBAR

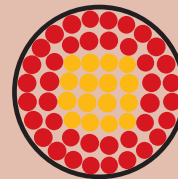


158 AMPS

3 x 9 x 0.8 mm

21.6 sq. mm
60% smaller

— OR —>



380 AMPS

500MCM

253 sq. mm
(.813 in.)

379 AMPS

3 x 24 x 1 mm

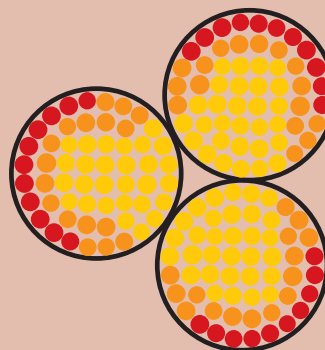
72 sq. mm
71% smaller

— OR —>

= Conductor

= Reduced Conductivity

= Insulation



1140 AMPS

(3) 500MCM

759 sq. mm
(.813 in.)

1211 AMPS

4 x 80 x 1 mm

320 sq. mm
58% smaller

— OR —>

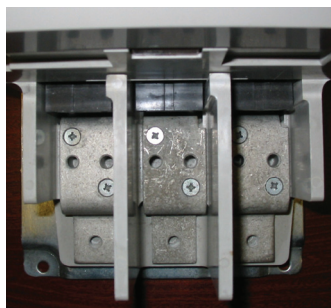
Representative to scale.

ERICO FLEXIBAR ampacity and cable ampacity are based on (NEC Table 310-16, 75° column) conductor temperature rise of 45°C.

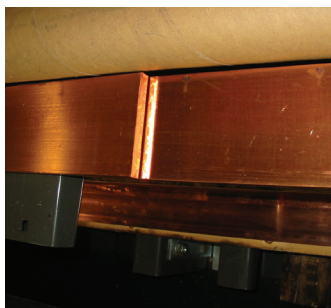
How to Achieve a Good Electrical Connection

What Size is Your Landing Point?

- ERICO® FLEXIBAR® is available from 9 mm (0.35") wide up to 100 mm (4") wide



1" Contractor Pad



4" Bus Bar

What is Maximum Ampacity the Conductor Will See?

- A single piece of ERICO FLEXIBAR can carry from 125 Amps up to 2800* Amps
- Ampacity can be increased by placing ERICO FLEXIBAR in parallel

See Coefficient page 12-13

What is Maximum Ambient Temperature?

- Maximum device operating temperature - max ambient temperature = max temp. rise of ERICO FLEXIBAR

What Are You Connecting?

Passive Element

- Bus Bar
- Transformer



Active Element

- Circuit Breaker
- Contractor



* at 60° C

Overlap (Recommended for Punched Bars)

Part Number Length 3 m	Description	Overlap in	Bolt	
			Number	Size
505501	ERICO FLEXIBAR 3MTC 2x20x1	1	1	1/4-20
505502	ERICO FLEXIBAR 3MTC 3x20x1	1	1	1/4-20
505503	ERICO FLEXIBAR 3MTC 4x20x1	1	1	5/16-16
505504	ERICO FLEXIBAR 3MTC 5x20x1	1	1	5/16-16
505505	ERICO FLEXIBAR 3MTC 6x20x1	1.2	1	7/16-14
505506	ERICO FLEXIBAR 3MTC 2x24x1	1	1	5/16-16
505507	ERICO FLEXIBAR 3MTC 3x24x1	1	1	5/16-16
505508	ERICO FLEXIBAR 3MTC 4x24x1	1	1	5/16-16
505509	ERICO FLEXIBAR 3MTC 5x24x1	1	1	7/16-14
505510	ERICO FLEXIBAR 3MTC 6x24x1	1.2	1	7/16-14
505511	ERICO FLEXIBAR 3MTC 8x24x1	1.6	1	1/2-13
505512	ERICO FLEXIBAR 3MTC 10x24x1	2	2	7/16-14
505513	ERICO FLEXIBAR 3MTC 2x32x1	1	1	7/16-14
505514	ERICO FLEXIBAR 3MTC 3x32x1	1	1	7/16-14
505515	ERICO FLEXIBAR 3MTC 4x32x1	1	1	7/16-14
505516	ERICO FLEXIBAR 3MTC 5x32x1	1	1	7/16-14
505517	ERICO FLEXIBAR 3MTC 6x32x1	1.2	1	1/2-13
505518	ERICO FLEXIBAR 3MTC 8x32x1	1.6	1	1/2-13
505519	ERICO FLEXIBAR 3MTC 10x32x1	2	2	7/16-14
505520	ERICO FLEXIBAR 3MTC 2x40x1	0.8	2	5/16-16
505521	ERICO FLEXIBAR 3MTC 3x40x1	1	1	1/2-13
505522	ERICO FLEXIBAR 3MTC 4x40x1	1	1	1/2-13
505523	ERICO FLEXIBAR 3MTC 5x40x1	1.2	1	1/2-13
505524	ERICO FLEXIBAR 3MTC 6x40x1	1.2	1	1/2-13
505525	ERICO FLEXIBAR 3MTC 8x40x1	1.6	2	7/16-14
505526	ERICO FLEXIBAR 3MTC 10x40x1	2	2	1/2-13
505551	ERICO FLEXIBAR 6x45x1	1.2	1	1/2-13
505527	ERICO FLEXIBAR 3x50x1	1	2	5/16-16
505528	ERICO FLEXIBAR 4x50x1	1	2	5/16-16
505529	ERICO FLEXIBAR 5x50x1	1	2	7/16-14
505530	ERICO FLEXIBAR 6x50x1	1.2	2	7/16-14
505531	ERICO FLEXIBAR 8x50x1	1.6	2	1/2-13
505532	ERICO FLEXIBAR 10x50x1	2	2	1/2-13
505533	ERICO FLEXIBAR 3x63x1	1	2	7/16-14
505534	ERICO FLEXIBAR 4x63x1	1	2	7/16-14
505535	ERICO FLEXIBAR 5x63x1	1	2	7/16-14
505536	ERICO FLEXIBAR 6x63x1	1.2	2	1/2-13
505537	ERICO FLEXIBAR 8x63x1	1.6	2	1/2-13
505538	ERICO FLEXIBAR 10x63x1	2	3	1/2-13
505539	ERICO FLEXIBAR 3x80x1	1	3	5/16-16
505540	ERICO FLEXIBAR 4x80x1	1	3	5/16-16
505541	ERICO FLEXIBAR 5x80x1	1	3	7/16-14
505542	ERICO FLEXIBAR 6x80x1	1.2	3	7/16-14
505543	ERICO FLEXIBAR 8x80x1	1.6	3	1/2-13
505544	ERICO FLEXIBAR 10x80x1	2	3	1/2-13
505547	ERICO FLEXIBAR 6x100x1	1.2	4	7/16-14
505548	ERICO FLEXIBAR 8x100x1	1.6	4	1/2-13
505549	ERICO FLEXIBAR 10x100x1	2	4	1/2-13
505550	ERICO FLEXIBAR 12x100x1	2.4	5	1/2-13



How to Achieve a Good Electrical Connection

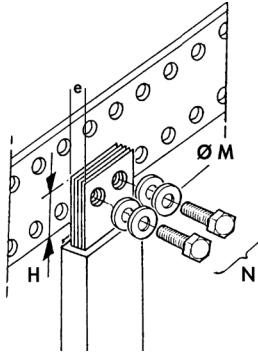
The Quality of an Electrical Contact is Determined By:

1. CONTACT SURFACE CONDITIONS

The surface has to be flat but not polished. Another important point: cleaning the surfaces before connection. They must be oxide and grease free.

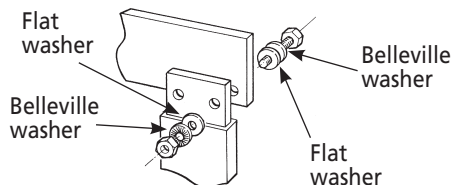
2. CONTACT SURFACE(S) - OVERLAP

The overlap (H) should be not less than 5 times the thickness (e) of the thinnest of the conductors.



3. CLAMPING TORQUE CALCULATION

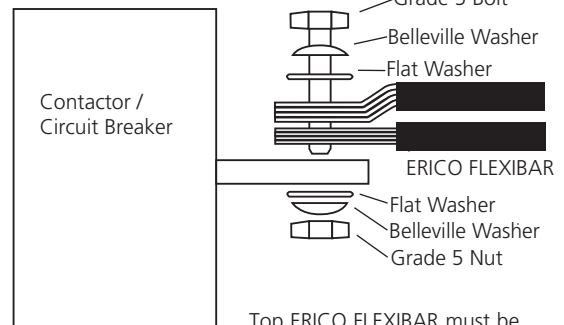
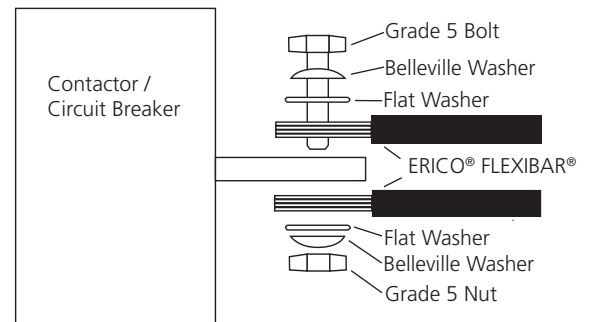
With a class coated bichromated bolt (SAE Grade 5), using "Belleville and Flat" washers tightened with a torque wrench, without lubrication.



Bolt size	1/4"-20	5/16"-18	3/8"-16	7/16"-14	1/2"-13	9/16"-12	5/8"-11
Torque (foot-pounds)	9	18	31	50	75	110	150
Alt - Metric							
Bolt size	M6	M8		M10	M12	M14	M16
Torque (newton-meters)	13	30		60	110	174	274

- SAE Grade 5 hardware can be used except where otherwise designated by the designer of the pieces installed
- Belleville and Flat washers to provide resistance to vibration
- Slotted holes are acceptable in applications where additional forming is anticipated during installation

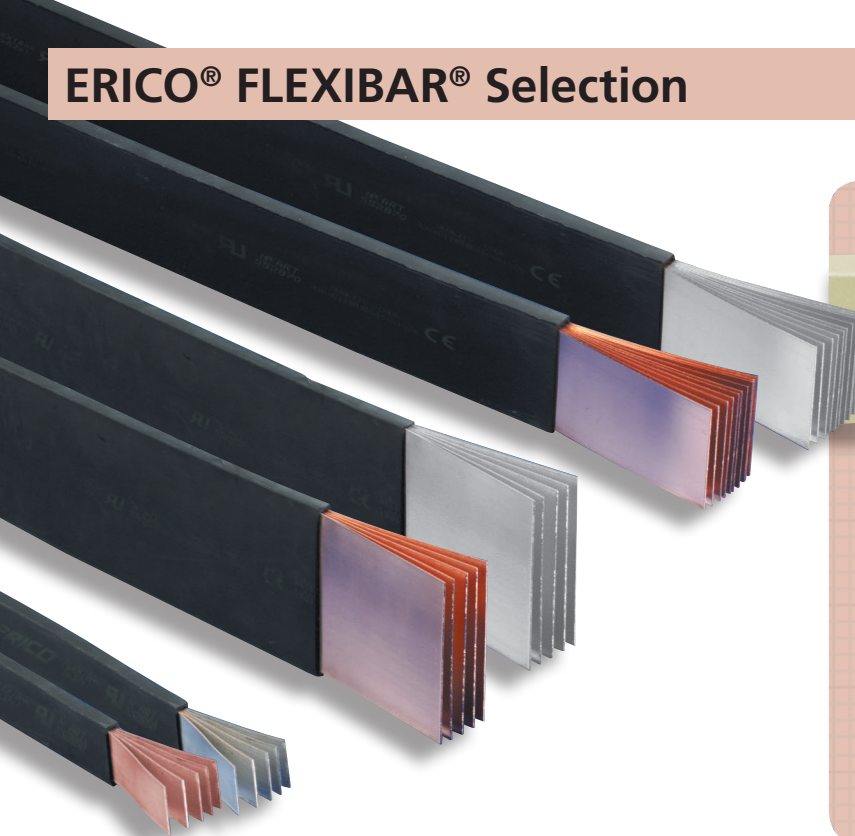
Two Ways to Connect in Parallel:



Top ERICO FLEXIBAR must be stripped and bent to insure good contact area

Install with Grade 5 or better hardware and torque

ERICO® FLEXIBAR® Selection



ERICO FLEXIBAR Flexible Wire Replacement Technical Characteristics

- Conductor is electrolytic copper (Cu-ETP)
- Insulation is high-resistance vinyl compound:
 - Elongation: 370%
 - Maximum working temperature: 105°C
 - Minimum working temperature: -25°C
 - Thickness: 2 mm ± 0,2
 - Self-extinguishing: UL® 94 VO
 - Dielectric strength: 20kV/mm

< 400 Amps @ Delta T = 45 C

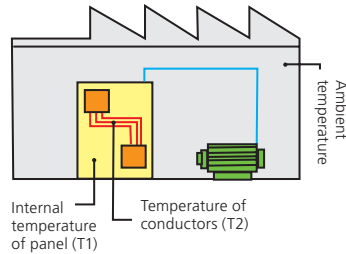
Part Number	Length	Composition			UL-rated Ampacity Temp. Rise of			Description	Current Coefficient	
		N	A mm	B mm	30° C	45°C	60°C		2 in parallel	3 in parallel
505051	2	3	9	0.8	126	158	185	ERICO FLEXIBAR 2MTC 3x9x0.8	1.72	2.25
505053	2	3	13	0.5	128	160	187	ERICO FLEXIBAR 2MTC 3x13x0.5	1.72	2.25
505059	2	2	15.5	0.8	152	190	222	ERICO FLEXIBAR 2MTC 2x15.5x0.8	1.72	2.25
505054	2	6	13	0.5	188	235	275	ERICO FLEXIBAR 2MTC 6x13x0.5	1.72	2.25
505052	2	6	9	0.8	192	241	281	ERICO FLEXIBAR 2MTC 6x9x0.8	1.72	2.25
505501	3	2	20	1	211	263	307	ERICO FLEXIBAR 2MTC 2x20x1	1.72	2.25
505055	2	4	15.5	0.8	223	279	326	ERICO FLEXIBAR 2MTC 4x15.5x0.8	1.72	2.25
505506	3	2	24	1	244	305	357	ERICO FLEXIBAR 2MTC 2x24x1	1.72	2.25
505502	3	3	20	1	263	328	383	ERICO FLEXIBAR 2MTC 3x20x1	1.72	2.25
505056	2	6	15.5	0.8	282	353	412	ERICO FLEXIBAR 2MTC 6x15.5x0.8	1.72	2.25
505507	3	3	24	1	304	379	443	ERICO FLEXIBAR 2MTC 3x24x1	1.72	2.25
505503	3	4	20	1	308	385	450	ERICO FLEXIBAR 2MTC 4x20x1	1.72	2.25
505513	3	2	32	1	311	385	454	ERICO FLEXIBAR 2MTC 2x32x1	1.72	2.25

400 < Ampacity < 800 A @ Delta T = 45 C

Part Number	Length	Composition			UL-rated Ampacity Temp. Rise of			Description	Current Coefficient	
		N	A mm	B mm	30° C	45°C	60°C		2 in parallel	3 in parallel
505504	3	5	20	1	351	438	512	ERICO FLEXIBAR 3MTC 5x20x1	1.72	2.25
505508	3	4	24	1	356	445	520	ERICO FLEXIBAR 3MTC 4x24x1	1.72	2.25
505520	3	2	40	1	376	470	549	ERICO FLEXIBAR 3MTC 2x40x1	1.72	2.25
505514	3	3	32	1	385	481	562	ERICO FLEXIBAR 3MTC 3x32x1	1.72	2.25
505505	3	6	20	1	390	487	569	ERICO FLEXIBAR 3MTC 6x20x1	1.72	2.25
505509	3	5	24	1	403	504	589	ERICO FLEXIBAR 3MTC 5x24x1	1.72	2.25
505510	3	6	24	1	448	559	653	ERICO FLEXIBAR 3MTC 6x24x1	1.72	2.25
505515	3	4	32	1	449	561	665	ERICO FLEXIBAR 3MTC 4x32x1	1.72	2.25
505521	3	3	40	1	464	580	677	ERICO FLEXIBAR 3MTC 3x40x1	1.72	2.25
505516	3	5	32	1	507	633	740	ERICO FLEXIBAR 3MTC 5x32x1	1.72	2.25
505511	3	8	24	1	531	663	775	ERICO FLEXIBAR 3MTC 8x24x1	1.72	2.25
505522	3	4	40	1	541	675	789	ERICO FLEXIBAR 3MTC 4x40x1	1.72	2.25
505517	3	6	32	1	561	701	819	ERICO FLEXIBAR 3MTC 3x32x1	1.72	2.25
505527	3	3	50	1	562	702	820	ERICO FLEXIBAR 3MTC 3x50x1	1.72	2.25
505512	3	10	24	1	606	757	885	ERICO FLEXIBAR 3MTC 10x24x1	1.72	2.25
505523	3	5	40	1	608	759	887	ERICO FLEXIBAR 3MTC 5x40x1	1.72	2.25



Selection of ERICO® FLEXIBAR® according to the internal temperature of the panel



Temperature rise of conductor = $T_2 - T_1 = \Delta T$ (C°)

Ex: For a current of 650A, with: $T_1 = 45^\circ\text{C}$ - $T_2 = 90^\circ\text{C}$

- 1) $\Delta T = 90 - 45 = 45^\circ\text{C}$
- 2) In the 45°C column, find the closest current value to 650A. ERICO FLEXIBAR 8x24x1 - 505511 - 192 mm² - 663 Amps.
- 3) Select ERICO FLEXIBAR according to the terminal width of the equipment being connected.

800 < Ampacity < 1200 A @ Delta T = 45 C

Part Number	Length	Composition			UL-rated Ampacity Temp. Rise of			Description	Current Coefficient	
		N	A mm	B mm	30° C	45° C	60° C		2 in parallel	3 in parallel
505528	3	4	50	1	651	813	950	ERICO FLEXIBAR 3MTC 4x50x1	1.72	2.25
505518	3	8	32	1	657	821	959	ERICO FLEXIBAR 3MTC 8x32x1	1.72	2.25
505524	3	6	40	1	669	835	976	ERICO FLEXIBAR 3MTC 6x40x1	1.72	2.25
505533	3	3	63	1	687	857	1002	ERICO FLEXIBAR 3MTC 3x63x1	1.65	2.12
505529	3	5	50	1	730	911	1065	ERICO FLEXIBAR 3MTC 5x50x1	1.72	2.25
505551	3	6	45	1	736	919	1074	ERICO FLEXIBAR 3MTC 6x45x1	1.72	2.25
505519	3	10	32	1	745	931	1088	ERICO FLEXIBAR 3MTC 10x32x1	1.72	2.25
505525	3	8	40	1	786	981	1146	ERICO FLEXIBAR 3MTC 8x40x1	1.72	2.25
505534	3	4	63	1	792	988	1155	ERICO FLEXIBAR 3MTC 4x63x1	1.65	2.12
505530	3	6	50	1	802	1002	1171	ERICO FLEXIBAR 3MTC 6x50x1	1.72	2.25
505539	3	3	80	1	844	1053	1231	ERICO FLEXIBAR 3MTC 3x80x1	1.65	2.12
505526	3	10	40	1	879	1097	1282	ERICO FLEXIBAR 3MTC 10x40x1	1.72	2.25
505535	3	5	63	1	883	1102	1288	ERICO FLEXIBAR 3MTC 5x63x1	1.65	2.12
505531	3	8	50	1	927	1157	1352	ERICO FLEXIBAR 3MTC 8x50x1	1.72	2.25

1200 < Ampacity < 1600 A @ Delta T = 45 C

Part Number	Length	Composition			UL-rated Ampacity Temp. Rise of			Description	Current Coefficient	
		N	A mm	B mm	30° C	45° C	60° C		2 in parallel	3 in parallel
505536	3	6	63	1	966	1205	1408	ERICO FLEXIBAR 3MTC 6x63x1	1.65	2.12
505540	3	4	80	1	970	1211	1415	ERICO FLEXIBAR 3MTC 4x80x1	1.65	2.12
505532	3	10	50	1	1040	1298	1517	ERICO FLEXIBAR 3MTC 10x50x1	1.72	2.25
505541	3	5	80	1	1077	1344	1570	ERICO FLEXIBAR 3MTC 5x80x1	1.65	2.12
505537	3	8	63	1	1108	1383	1616	ERICO FLEXIBAR 3MTC 8x63x1	1.65	2.12
505542	3	6	80	1	1172	1463	1709	ERICO FLEXIBAR 3MTC 6x80x1	1.65	2.12
505538	3	10	63	1	1232	1538	1797	ERICO FLEXIBAR 3MTC 10x63x1	1.65	2.12

1600 < Ampacity < 2000 A @ Delta T = 45 C

Part Number	Length	Composition			UL-rated Ampacity Temp. Rise of			Description	Current Coefficient	
		N	A mm	B mm	30° C	45° C	60° C		2 in parallel	3 in parallel
505546	3	5	100	1	1301	1624	1898	ERICO FLEXIBAR 3MTC 5x100x1	1.60	2.02
505543	3	8	80	1	1341	1674	1956	ERICO FLEXIBAR 3MTC 8x80x1	1.65	2.12
505547	3	6	100	1	1414	1765	2062	ERICO FLEXIBAR 3MTC 6x100x1	1.60	2.02
505544	3	10	80	1	1484	1851	2164	ERICO FLEXIBAR 3MTC 10x80x1	1.65	2.12

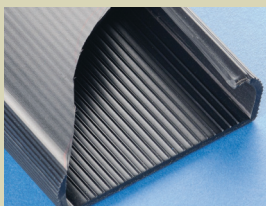
2000 < Ampacity @ Delta T = 45 C

Part Number	Length	Composition			UL-rated Ampacity Temp. Rise of			Description	Current Coefficient	
		N	A mm	B mm	30° C	45° C	60° C		2 in parallel	3 in parallel
505548	3	8	100	1	1598	1994	2330	ERICO FLEXIBAR 3MTC 8x100x1	1.60	2.02
505549	3	10	100	1	1765	2203	2574	ERICO FLEXIBAR 3MTC 10x100x1	1.60	2.02
505550	3	12	100	1	1920	2396	2800	ERICO FLEXIBAR 3MTC 12x100x1	1.60	2.02

ADMISSIBLE CURRENTS: This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

ERICO® FLEXIBAR® Certifications & Part Numbers

All ERICO FLEXIBAR cross sections can be bent, folded or twisted with a very small bending radius for shorter and more compact power connections.



ERICO FLEXIBAR Voltage Rating

- Maximum continuous voltage: 1000 VAC and 1500 VDC, UL® & IEC

ERICO FLEXIBAR Insulated Flexible Wire Replacement Certification & Approvals

- International Electrotechnical Association (IEC) - Meets all requirements of IEC 60439.1 & IEC 61439.1
- UL 67 Recognized component in the "Panelboard and Switchboard accessories - component" category (UL file E125470) for US and Canadian territory
- UL 758 Recognized component in the "Appliance wiring material - component" category style 10531 (UL file E316390) and category style 11343 (UL file E316390)
- Veritas Certified - No. 02859/DOBV. Ship application
- Canadian Standards Association - CSA® certified as appliance wiring material for a maximum of 1000 volts. File N° 090005 (CAN/CSA - C22.2)
- American Bureau of Shipping (ABS®) - Certificate No. 08-HS365878-1-PDA-DUP - Marine & Offshore Applications
- CE Conformity
- GOST Certificate Compliance - for Russia
- RoHS Compliance
- Class II Conductors (IEC 61439-1, Chapter 8.4.4 - Protection by total insulation)

2 Meters Tinned Copper

Part Number Length 2m	ERICO FLEXIBAR Description	lbs
505051	ERICO FLEXIBAR 2MTC 3x9x0.8	0.95
505052	ERICO FLEXIBAR 2MTC 6x9x0.8	1.79
505053	ERICO FLEXIBAR 2MTC 3x13x0.5	1.00
505054	ERICO FLEXIBAR 2MTC 6x13x0.5	1.74
505055	ERICO FLEXIBAR 2MTC 4x15x0.8	2.25
505056	ERICO FLEXIBAR 2MTC 6x15x0.8	3.31
505059	ERICO FLEXIBAR 2MTC 2x15x0.8	1.12

* ERICO patent pending insulation

3 Meters Tinned Copper

Part Number	ERICO FLEXIBAR Description	lbs
505501	ERICO FLEXIBAR 3MTC 2X20X	13.47
505502	ERICO FLEXIBAR 3MTC 3X20X1	4.92
505503	ERICO FLEXIBAR 3MTC 4X20X1	5.88
505504*	ERICO FLEXIBAR 3MTC 5X20X1	7.11
505505*	ERICO FLEXIBAR 3MTC 6X20X1	8.33
505506	ERICO FLEXIBAR 3MTC 2X24X1	4.1
505507	ERICO FLEXIBAR 3MTC 3X24X1	5.56
505508	ERICO FLEXIBAR 3MTC 4X24X1	6.99
505509*	ERICO FLEXIBAR 3MTC 5X24X1	8.44
505510*	ERICO FLEXIBAR 3MTC 6X24X1	9.9
505511*	ERICO FLEXIBAR 3MTC 8X24X1	12.81
505512*	ERICO FLEXIBAR 3MTC 10X24X1	15.7
505513	ERICO FLEXIBAR 3MTC 2X32X1	5.34
505514	ERICO FLEXIBAR 3MTC 3X32X1	7.28
505515	ERICO FLEXIBAR 3MTC 4X32X1	9.19
505516*	ERICO FLEXIBAR 3MTC 5X32X1	11.11
505517*	ERICO FLEXIBAR 3MTC 6X32X1	13.03
505518*	ERICO FLEXIBAR 3MTC 8X32X1	16.87
505519*	ERICO FLEXIBAR 3MTC 10X32X1	20.72
505520	ERICO FLEXIBAR 3MTC 2X40X1	6.59
505521	ERICO FLEXIBAR 3MTC 3X40X1	8.99
505522	ERICO FLEXIBAR 3MTC 4X40X1	11.38
505523*	ERICO FLEXIBAR 3MTC 5X40X1	13.78
505524*	ERICO FLEXIBAR 3MTC 6X40X1	16.16
505525*	ERICO FLEXIBAR 3MTC 8X40X1	20.94
505526*	ERICO FLEXIBAR 3MTC 10X40X1	25.73
505551*	ERICO FLEXIBAR 3MTC 6X45X1	18.15
505527	ERICO FLEXIBAR 3MTC 3X50X1	11.13
505528*	ERICO FLEXIBAR 3MTC 4X50X1	14.11
505529*	ERICO FLEXIBAR 3MTC 5X50X1	17.09
505530*	ERICO FLEXIBAR 3MTC 6X50X1	20.08
505531*	ERICO FLEXIBAR 3MTC 8X50X1	26.04
505532*	ERICO FLEXIBAR 3MTC 10X50X1	32.01
505533	ERICO FLEXIBAR 3MTC 3X63X1	15.04
505534*	ERICO FLEXIBAR 3MTC 4X63X1	17.68
505535*	ERICO FLEXIBAR 3MTC 5X63X1	21.43
505536*	ERICO FLEXIBAR 3MTC 6X63X1	25.18
505537*	ERICO FLEXIBAR 3MTC 8X63X1	32.65
505539	ERICO FLEXIBAR 3MTC 3X80X1	17.57
505540*	ERICO FLEXIBAR 3MTC 4X80X1	22.33
505541*	ERICO FLEXIBAR 3MTC 5X80X1	27.07
505542*	ERICO FLEXIBAR 3MTC 6X80X1	31.81
505543*	ERICO FLEXIBAR 3MTC 8X80X1	41.31
505546*	ERICO FLEXIBAR 3MTC 5X100X1	33.73
505547*	ERICO FLEXIBAR 3MTC 6X100X1	39.65
505548*	ERICO FLEXIBAR 3MTC 8X100X1	51.5
505549*	ERICO FLEXIBAR 3MTC 10X100X1	63.36
505550*	ERICO FLEXIBAR 3MTC 12X100X1	75.2

* ERICO patent pending insulation



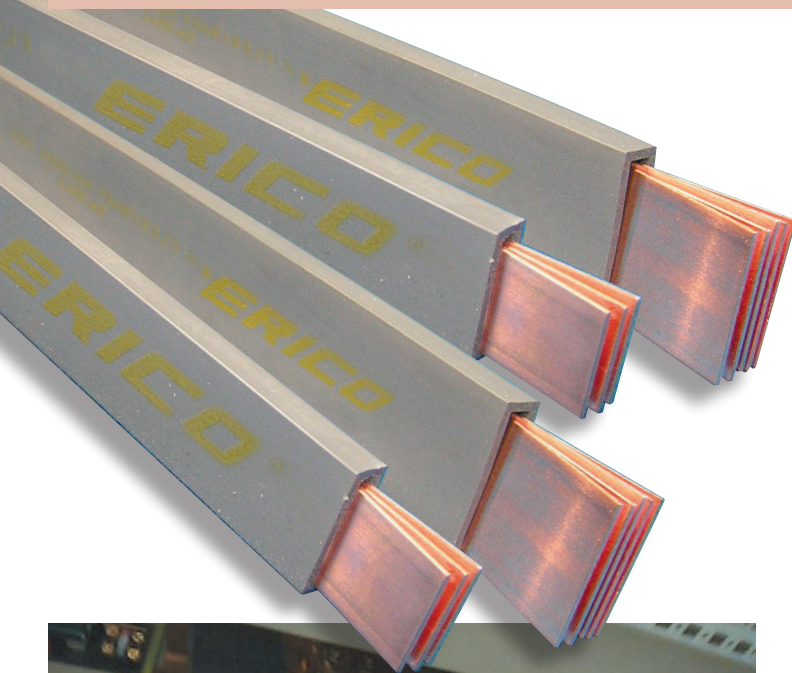
UL® Maximum Ampacity (Temperature Rise)

ERICO FLEXIBAR Composition			@ 20°C	NEC 310-16 60°C @ 30°C	@ 35°C	@ 40°C	NEC 310-16 75°C @ 45°C	@ 50°C	NEC 310-16 90°C @ 60°C	@ 65°C	@ 70°C
3	9	0.8	101	126	138	148	158	167	185	193	201
3	13	0.5	102	128	139	150	160	169	187	195	203
8	6	0.5	105	131	143	154	164	174	192	200	208
2	15.5	0.8	121	152	166	178	190	201	222	232	241
6	13	0.5	150	188	205	221	235	249	275	287	299
6	9	0.8	153	192	210	226	241	255	281	293	305
2	20	1	168	211	229	247	263	279	307	321	334
4	15.5	0.8	178	223	243	262	279	295	326	340	354
2	24	1	195	244	266	286	305	323	357	373	388
9	9	0.8	200	251	273	294	314	332	366	383	398
3	20	1	210	263	286	308	328	347	383	400	416
6	15.5	0.8	225	282	308	331	353	374	412	430	448
3	24	1	243	304	331	356	379	402	443	463	482
4	20	1	246	308	336	361	385	408	450	470	489
2	32	1	248	311	338	364	388	411	454	474	493
5	20	1	280	351	382	411	438	464	512	535	556
4	24	1	285	356	388	418	445	472	520	543	565
2	40	1	301	376	409	440	470	497	549	573	596
3	32	1	308	385	419	451	481	510	562	587	611
10	15.5	0.8	309	387	421	453	483	512	565	589	613
6	20	1	311	390	424	457	487	516	569	594	618
5	24	1	322	403	439	472	504	534	589	615	640
6	24	1	357	448	487	524	559	592	653	682	710
4	32	1	359	449	489	526	561	594	655	684	712
3	40	1	371	464	505	544	580	614	677	707	736
5	32	1	405	507	552	594	633	671	740	773	804
8	24	1	424	531	578	622	663	702	775	809	841
4	40	1	432	541	589	633	675	715	789	824	857
6	32	1	448	561	611	657	701	742	819	855	889
3	50	1	449	562	612	658	702	743	820	856	891
10	24	1	484	606	660	710	757	802	885	924	961
5	40	1	486	608	662	712	759	804	887	926	964
4	50	1	521	651	709	763	813	861	950	992	1032
8	32	1	525	657	715	770	821	869	959	1001	1042
6	40	1	535	669	728	784	835	885	976	1019	1061
3	63	1	549	687	747	804	857	907	1002	1046	1088
5	50	1	583	730	794	855	911	965	1065	1112	1157
6	45	1	588	736	801	862	919	973	1074	1121	1167
10	32	1	595	745	811	873	931	986	1088	1136	1182
8	40	1	628	786	855	920	981	1039	1146	1197	1246
4	63	1	633	792	861	927	988	1046	1155	1205	1255
6	50	1	641	802	873	940	1002	1061	1171	1222	1272
3	80	1	675	844	918	988	1053	1115	1231	1285	1337
10	40	1	702	879	956	1029	1097	1162	1282	1338	1393
5	63	1	706	883	961	1033	1102	1167	1288	1344	1399
8	50	1	741	927	1009	1085	1157	1226	1352	1412	1469
6	63	1	772	966	1051	1130	1205	1276	1408	1470	1530
4	80	1	776	970	1056	1136	1211	1282	1415	1477	1538
10	50	1	831	1040	1132	1217	1298	1375	1517	1584	1648
5	80	1	861	1077	1172	1260	1344	1423	1570	1640	1706
8	63	1	886	1108	1205	1297	1383	1464	1616	1687	1756
6	80	1	938	1172	1275	1372	1463	1549	1709	1785	1858
10	63	1	985	1232	1341	1442	1538	1628	1797	1876	1953
5	100	1	1041	1301	1416	1523	1624	1719	1898	1982	2062
8	80	1	1073	1341	1460	1570	1674	1773	1956	2043	2126
6	100	1	1132	1414	1539	1655	1765	1869	2062	2153	2241
10	80	1	1187	1484	1614	1736	1851	1960	2164	2259	2351
8	100	1	1279	1598	1739	1870	1994	2111	2330	2433	2532
10	100	1	1413	1765	1921	2066	2203	2332	2574	2688	2797
12	100	1	1537	1920	2089	2247	2396	2537	2800	2924	3043



Size	Temperature Rating of Copper Conductor from NEC® table 310-16		
AWG/ kcmil	60° C (140° F) Types: TW, UF	75° C (167° F) Types: FEPW, RH, RHW, THHW, THW, THWN, XHHW, USE, ZW	90° C (194° F) Types: TA, TBS, SA SIS, FEP, FEPB, MI RHH, RHW-2, THHN, THHW, THW-2, THWN- 2, USE-2, XHH, XHHW, XHHW-2, ZW-2
1/0	125	150	170
2/0	145	175	195
3/0	165	200	225
4/0	195	230	260
250	215	255	290
300	240	285	320
350	260	310	350
400	280	335	380
500	320	380	430
600	355	420	475
700	385	460	520
750	400	475	535
800	410	490	555
900	435	520	585
1000	455	545	615
1250	495	590	665
1500	520	625	705
1750	545	650	735
2000	560	665	750

ERICO® FLEXIBAR® SUMMUM - Halogen Free



**On request: Silvered or Tinned
ERICO FLEXIBAR SUMMUM**



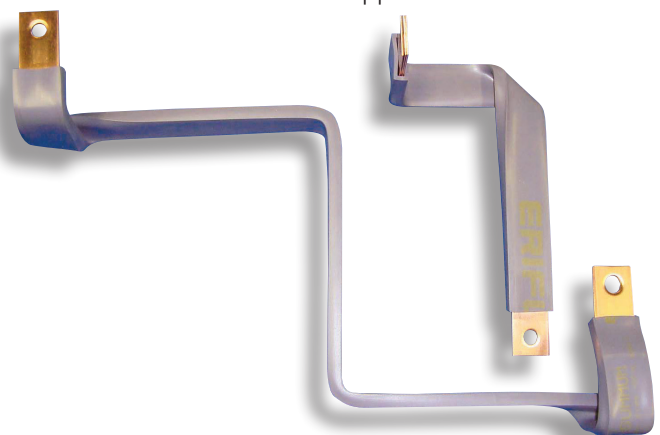
ERICO FLEXIBAR SUMMUM Characteristics

- Halogen free
- Environmental awareness
- High current density
- High ambient temperature
- High flexibility
- High insulation value

IEC 60439.1 &
IEC 61439.1

ERICO FLEXIBAR SUMMUM

- Conductor in electrolytic copper
 - Laminates thickness 1 mm
- Insulation in silicone compound
 - Working temperature: -50°C up to 280°C (315°C short time)
 - Halogen free
 - Low smoke
 - Very high UV & ozone withstanding
 - Self-extinguishing: UL® 94 VO
 - Elongation: 400% minimum
 - Tear resistance: 20 KN/m minimum
 - Thickness: 2 mm ± 0.2 mm
 - Dielectric strength: 20 KV/mm
 - Maximum continuous voltage: 1000 V AC/ 1500 V DC -
 - American Bureau of Shipping (ABS®) - Certificate No. 08-HS365878-1-PDA-DUP - Marine & Offshore Applications



Products on this page are worldwide and are not UL Recognized.



ERICO® FLEXIBAR® SUMMUM - Halogen Free



Some photographs in the ERICO FLEXIBAR SUMMUM section may actually be using ERICO FLEXIBAR

2 Meter Red Copper

Part Number	ERICO FLEXIBAR Description		 Kg	Section mm ²	IEC Ampacity ΔT (°K)					Current Coefficient	
					70	60	50	40	30		
566490	ERICO FLEXIBAR SUMMUM 2 M 2 x 20 x 1	5	1.05	40	326	300	275	246	214	1.72	2.25
566500	ERICO FLEXIBAR SUMMUM 2 M 3 x 20 x 1	5	1.42	60	428	395	360	323	280	1.72	2.25
566510	ERICO FLEXIBAR SUMMUM 2 M 4 x 20 x 1	5	1.78	80	476	440	402	360	312	1.72	2.25
566520	ERICO FLEXIBAR SUMMUM 2 M 5 x 20 x 1	5	2.15	100	498	460	420	376	326	1.72	2.25
566550	ERICO FLEXIBAR SUMMUM 2 M 2 x 24 x 1	5	1.24	48	450	416	380	340	295	1.72	2.25
566560	ERICO FLEXIBAR SUMMUM 2 M 3 x 24 x 1	5	1.68	72	490	453	413	370	320	1.72	2.25
566570	ERICO FLEXIBAR SUMMUM 2 M 4 x 24 x 1	5	2.12	96	550	540	465	416	360	1.72	2.25
566580	ERICO FLEXIBAR SUMMUM 2 M 5 x 24 x 1	5	2.55	120	608	563	514	460	398	1.72	2.25
566590	ERICO FLEXIBAR SUMMUM 2 M 6 x 24 x 1	5	2.99	144	670	620	566	506	438	1.72	2.25
566630	ERICO FLEXIBAR SUMMUM 2 M 3 x 32 x 1	5	2.2	96	570	525	480	430	372	1.72	2.25
566640	ERICO FLEXIBAR SUMMUM 2 M 4 x 32 x 1	5	2.78	128	648	600	548	490	425	1.72	2.25
566650	ERICO FLEXIBAR SUMMUM 2 M 5 x 32 x 1	5	3.36	160	758	702	640	573	496	1.72	2.25
566660	ERICO FLEXIBAR SUMMUM 2 M 6 x 32 x 1	5	3.94	192	846	783	715	640	555	1.72	2.25
566670	ERICO FLEXIBAR SUMMUM 2 M 8 x 32 x 1	5	5.1	256	1018	943	860	770	667	1.72	2.25
566720	ERICO FLEXIBAR SUMMUM 2 M 5 x 40 x 1	5	4.16	200	900	832	760	680	590	1.72	2.25
566730	ERICO FLEXIBAR SUMMUM 2 M 6 x 40 x 1	5	4.89	240	1018	943	860	770	667	1.72	2.25
566750	ERICO FLEXIBAR SUMMUM 2 M 10 x 40 x 1	5	7.78	400	1400	1295	1181	1055	915	1.72	2.25
566780	ERICO FLEXIBAR SUMMUM 2 M 5 x 50 x 1	5	5.17	250	1100	1016	930	830	718	1.72	2.25
566800	ERICO FLEXIBAR SUMMUM 2 M 8 x 50 x 1	2	7.87	400	1393	1290	1175	1050	912	1.72	2.25
566810	ERICO FLEXIBAR SUMMUM 2 M 10 x 50 x 1	2	9.68	500	1650	1525	1395	1245	1080	1.72	2.25

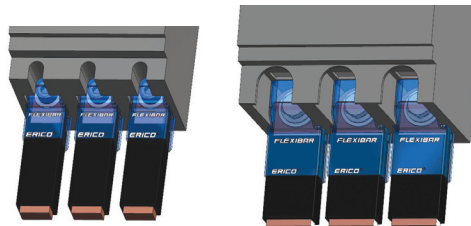
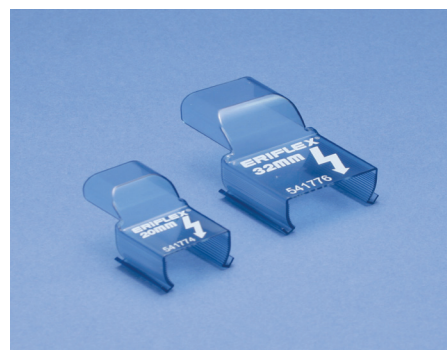
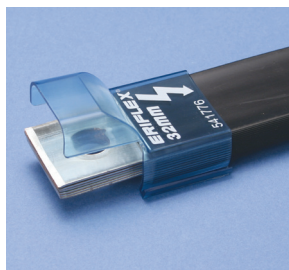
ADMISSIBLE CURRENTS: This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

ERICO® FLEXIBAR® Accessories

ERICO FLEXIBAR End Cover 20, 24 & 32

End Cover 20, 24 & 32

- End Cover 20: Accessory for ERICO FLEXIBAR 20 mm, IBS 25, IBS 50, IBSB 50 and IBSB 70.
- End Cover 24: Accessory for ERICO FLEXIBAR 24 mm and IBSB 100
- End Cover 32: Accessory for ERICO FLEXIBAR 32 mm, IBSBR 120, 185 and 240.
- Visual inspection of connection (transparent cover)
- Halogen-free
- Self-extinguishing: UL®94 V-0
- RoHS compliant
- Easy-fitting after bolting

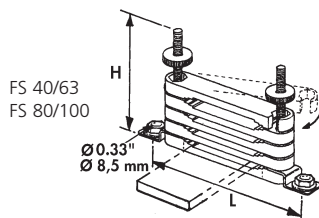
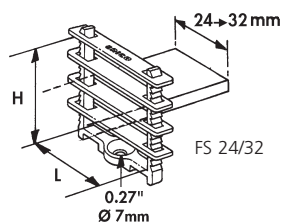


Part No.	Description		 kg/lbs
541774	End Cover 20	12	0.19/0.42
541775	End Cover 24	12	0.22/0.48
541776	End Cover 32	12	0.26/0.57

FS ERICO FLEXIBAR Spacer Clamp



- Helps ensure correct support for ERICO FLEXIBAR, IBSB & IBSBR in parallel, without damage to the insulation.
- Helps ensure correct space for optimum cooling.
- 4 ERICO FLEXIBAR in parallel maximum
- UL 67
- Recommended distance between clamps: 16 inches.

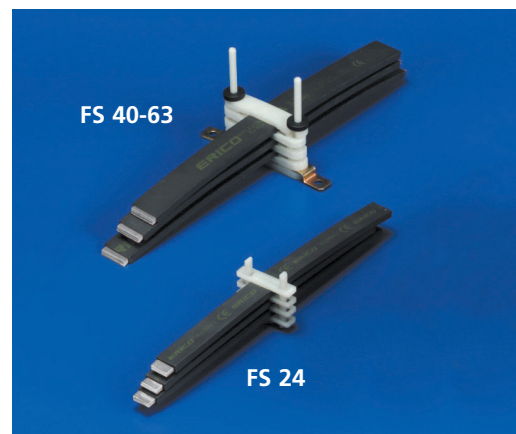


Part No.	Description	Type*	H in	L in		 lbs
553550	FS 24	=< 24 mm	2.08	1.18	25	0.03
553560	FS 32	=< 32 mm	2.08	1.49	25	0.04
553570	FS 40-63	40-50 & 63 mm	3.74	5.90	10	2.20
553580	FS 80-100	80/100 mm	5.51	7.87	10	5.51

* Type of ERICO FLEXIBAR and IBS/IBSB/IBSBR

ERICO FLEXIBAR Spacer Clamps

- Easy to install
- Provides support
- Allows for proper cooling



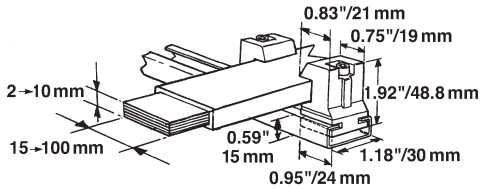


UFS Kit
ERICO FLEXIBAR
Support

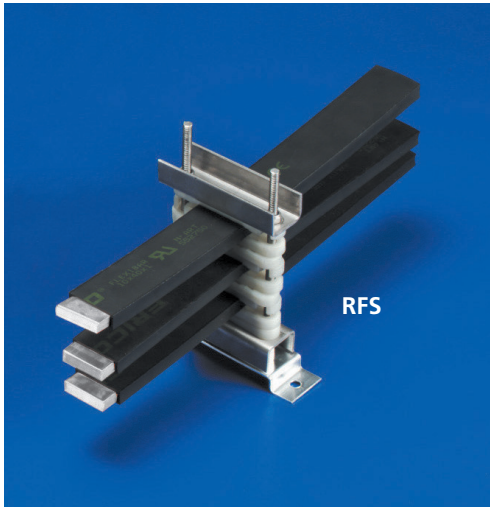


Assembly comprised of a 2 m aluminum section and 24 retaining blocks made of glass-reinforced halogen-free polyamide.

- Possible to make up 3 supports, 650 mm long each for 4 ERICO FLEXIBAR
- Recommended distance between clamps: 16 inches max.

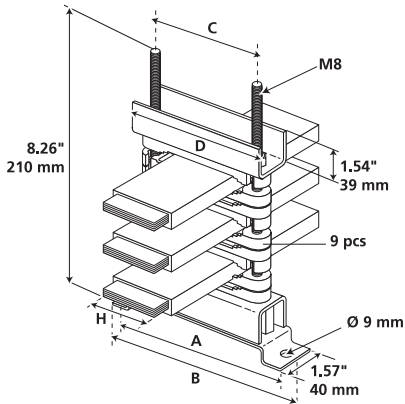


Part No.	Description		 lbs
553590	UFS Kit	1	5.07



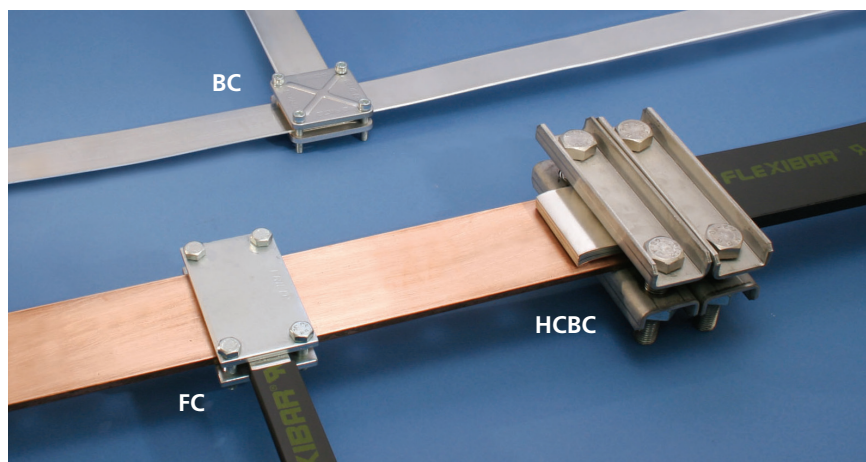
RFS
Reinforced ERICO
FLEXIBAR Support

- Allows up to 8 ERICO FLEXIBAR in parallel.
- Easy mounting in the panel. (.984 in pitch)
- Recommended distance between clamps: 16 inches.



Part No.	Description	A in	B in	C in	D in	ERICO FLEXIBAR H mm		 lbs
553370	RFS 40-63	5.90	6.89	3.54	4.72	40=>63	1	0.53
553380	RFS 80-100	7.87	8.86	5.51	6.69	80=>100	1	0.66

ERICO® FLEXIBAR® Accessories

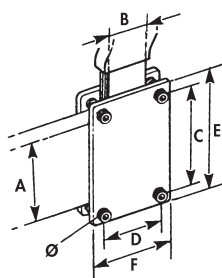


Connecting Clamps

- Allows excellent electrical contact
- Very compact: space saving
- Quick installation
- Ideal for "on site" modifications

FC ERICO FLEXIBAR Clamp

- Clamping capacity: 0.79 inches
- 2 zinc plated steel plates complete with M8 screws 8.8 class

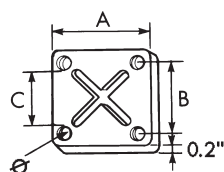


Part No.	Description	A in	B mm	C in	D in	E in	F in	Torque ft/lbs	Box	Weight lbs
553020	FC 50 x 24	2	20-24	2.32	1.42	2.95	2.05	7.37	3	0.7
553030	FC 50 x 32	2	32	2.32	1.73	2.95	2.36	7.37	3	0.8
553040	FC 50 x 40	2	40	2.32	2.05	2.95	2.68	7.37	3	0.91
553050	FC 80 x 24	3.18	20-24	3.5	1.42	4.13	2.05	7.37	3	0.95
553060	FC 80 x 32	3.18	32	3.5	1.73	4.13	2.36	7.37	3	1.08
553070	FC 80 x 50	3.18	50	3.5	2.44	4.13	3.07	7.37	3	1.41
568700	FC 100 x 32	3.97	32	4.29	1.73	4.92	2.36	7.37	3	1.47
568730	FC 120 x 32	4.4	32	5.08	1.73	4.92	2.36	7.37	3	1.67

BC Ribbed-Steel Busbar Clamp



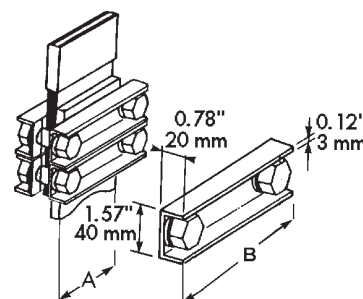
- Clamping capacity: 0.79 inches
- 2 ribbed zinc-plated hardened-steel plates complete with screws
- Maximum clamping capacity is 50 mm using longer screws SAE Grade 5
- UL® 67 recognized



Part No.	Description	A in	B in	C in	Ø mm	Torque ft/lbs	Box	Weight lbs
553200	BC 30	2.2	1.65	1.37	M6	5.16	8	0.68
553210	BC 40	2.6	2.05	1.77	M6	5.16	8	0.81
553220	BC 50	3.26	2.52	2.16	M8	14.75	8	1.30
553230	BC 63	3.66	2.91	2.55	M8	14.75	4	1.63
553250	BC 80	4.64	3.78	3.34	M10	29.50	4	2.60
553260	BC 100	5.67	4.64	4.21	M10	29.50	4	3.79

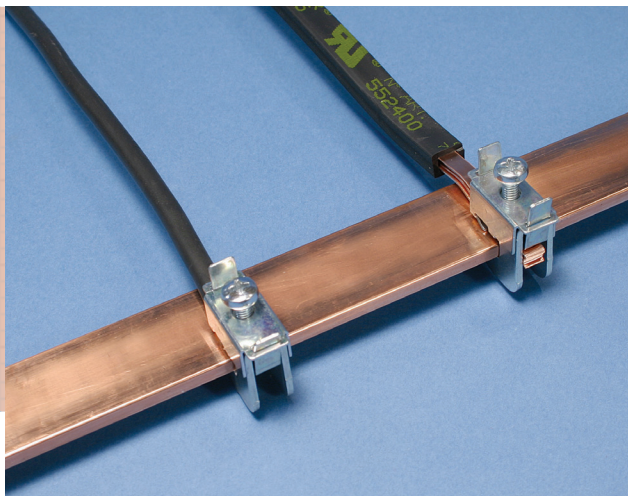
HCBC High Current Busbar Clamp

- Clamping capacity: 1.58 inches
- This modular busbar clamp is designed with non-magnetic materials for high current connections between ERICO FLEXIBAR and rigid busbars such as transformer terminals
- Its mechanical design assures rigidity and even contact pressure
- Use 2 clamps to guarantee the contact pressure



Part No.	Description	Busbar A in	Busbar A mm	Overall Width B in	Overall Bolt Length in	Torque ft/lbs	Box	Weight lbs
553100	HSBC 80	3.15	80	5.5	2.35	74	1	1.85
553110	HSBC 100	3.94	100	6.3	2.35	74	1	2.03
553120	HSBC 120	4.72	120	7.2	3.15	74	1	2.20





FBC

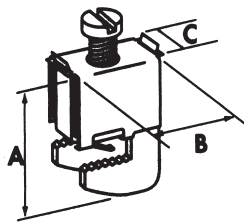
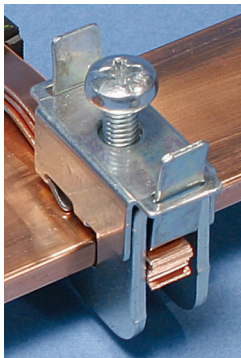
Connectors for Connecting without Drilling

- Very compact connector for connecting without drilling to a 5 mm or 10 mm thick busbar
- Cables from 1 mm² up to 185 mm² or ERICO FLEXIBAR width 6 mm to 20 mm
- Self-support of connector during mounting procedure
- IEC 60 999

ERICO FLEXIBAR Type

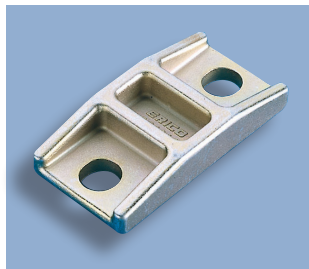
Connectors for busbar thickness 5 mm

Part No.	Description	A mm	B mm	C mm	ERICO FLEXIBAR Type mm	Torque N.m	Cable Size mm²		Kg
553405	FBC 5 x 4	23	29	11	-	2	1 - 4	15	0.016
553400	FBC 5 x 6	27	23	11.5	6	3	2.5 - 16	15	0.028
553410	FBC 5 x 9	38	40	19	9	6-8	16 - 50	15	0.068
553510	FBC 5 x 15.5	44	40	25	15.5	10-12	35 - 70	15	0.110
553520	FBC 5 x 20	49	40	31	20	12-15	70 - 185	15	0.132



Connectors for busbar thickness 10 mm

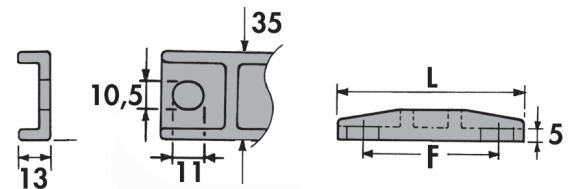
Part No.	Description	A mm	B mm	C mm	ERICO FLEXIBAR Type mm	Torque N.m	Cable Size mm²		Kg
553505	FBC 10 x 4	28	29	11	-	2	1 - 4	15	0.018
553430	FBC 10 x 6	33	23	11.5	6	3	2.5 - 16	15	0.030
553440	FBC 10 x 9	42	40	19	9	6 - 8	16 - 50	15	0.070
553530	FBC 10 x 15.5	49	40	25	15.5	10 - 12	35 - 70	15	0.112
553540	FBC 10 x 20	54	40	31	20	12 - 15	70 - 185	15	0.138



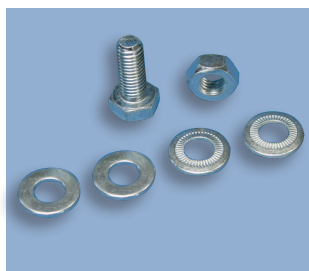
QCC

Clamps ERICO FLEXIBAR

- For ERICO FLEXIBAR thickness ≤ 5 mm = 1 clamp
- For ERICO FLEXIBAR thickness > 5 mm = 2 clamps



Part No.	Description	ERICO FLEXIBAR width min. mm	max. mm	L mm	F mm		Kg
561200	QCC 6/13	6	13	48	25	5	0.068
561210	QCC 15.5/32	15.5	32	70	50	5	0.112
561220	QCC 40/63	40	63	95	75	5	0.158



Cont Kit Metal Nuts and Bolts Contact Kit

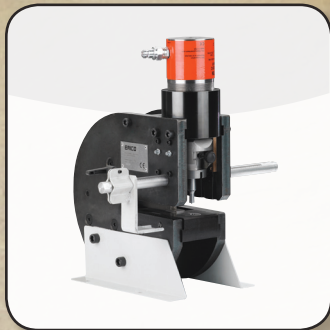
- For good electrical contact
- 100 nuts - 100 bolts - 200 flat washers
- 200 contact washers (SAE Grade 5 hardware)

Part No.	Description	Torque ft/lbs	
561400	Contact Kit 1/4 - 20 x 5/8"	9	100
561401	Contact Kit 5/16 - 18 x 1-1/4"	18	100
561402	Contact Kit 7/16 - 14 x 1-1/4"	50	100
561403	Contact Kit 7/16 - 14 x 2"	50	100
561404	Contact Kit 1/2 - 13 x 1-1/4"	75	100
561405	Contact Kit 1/2 - 13 x 1-1/2"	75	100
561406	Contact Kit 1/2 - 13 x 2"	75	100

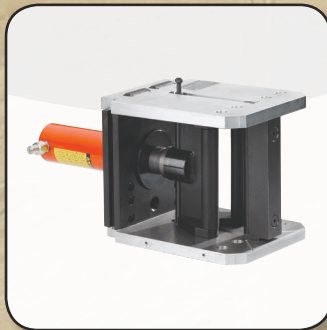
ERICO® FLEXIBAR® and Busbar Hydraulic Work Center



To discover our full range of tools, please request a copy of our specific "Hydraulic & Manual Tools" brochure, or download it from this QR code.



Hydraulic Busbar & ERICO FLEXIBAR Puncher



Hydraulic Busbar Bender



Hydraulic Busbar Cutter



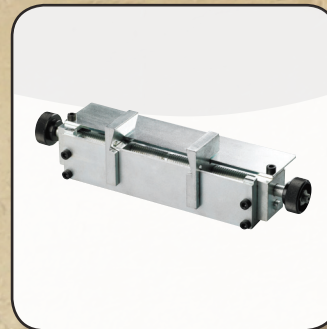
Shearing Tool Ruler



Hydraulic Pump & Foot Controller



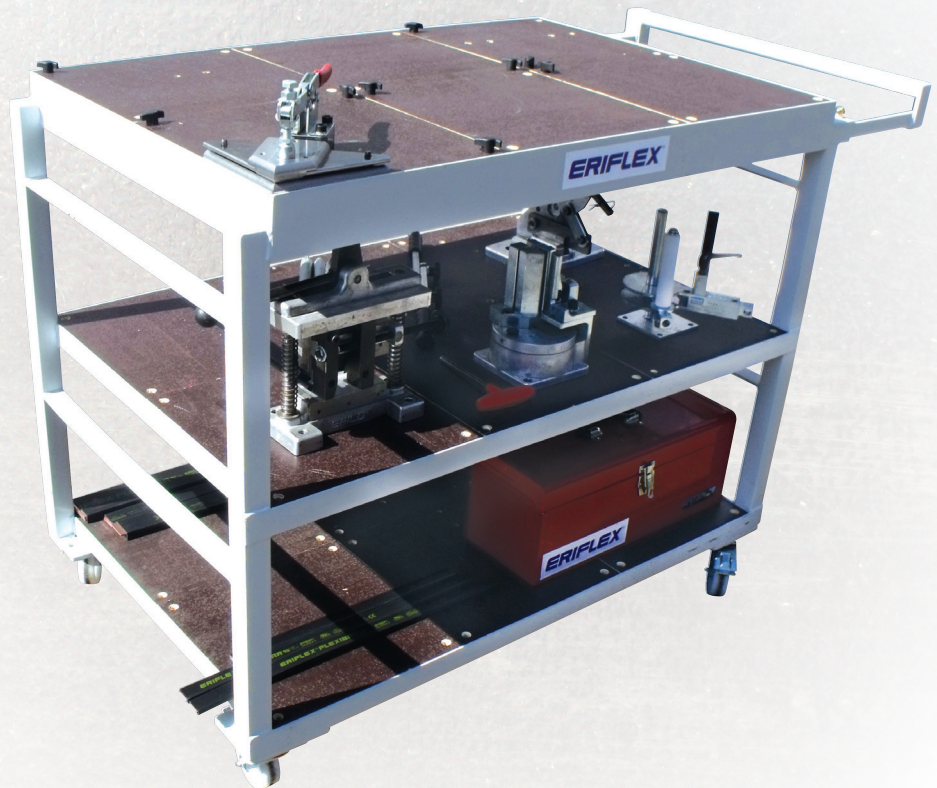
Hydraulic ERICO FLEXIBAR Shearing Tool



Shearing Tool Guide



NEW



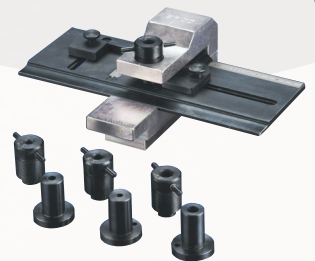
Shearing Tool



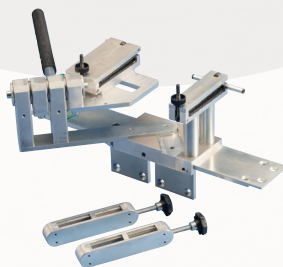
Bending Tool



Twisting Tool



ERICO® FLEXIDRILL



Folding Tool



Stripping Tool



Stripping Knife



Bending Tool

Insulated Braided Conductor (IBSB & IBSBR)



NEW



Insulated braided conductors suitable for all the main molded case circuit breakers worldwide.



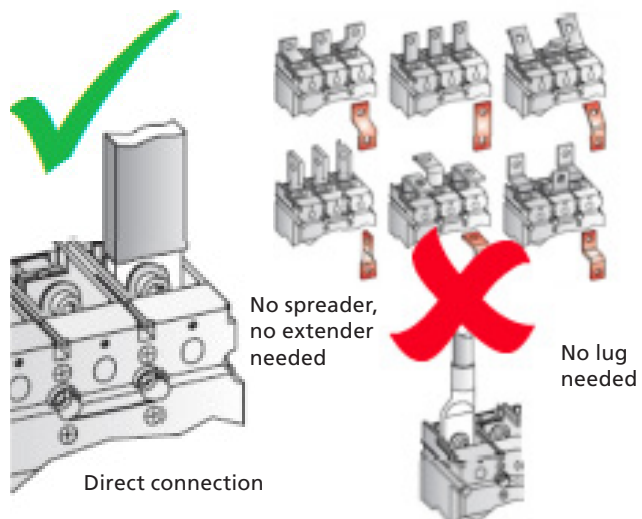
Insulated Braided Conductor Technical Characteristics

- IBSB and IBSBR are specially designed and developed to be suitable and connectable for molded case circuit breaker ranges, including most compact breakers on the market
- IBSB and IBSBR are formed with high-quality electrolytic copper wire (diameter 0,15 mm for maximum flexibility)
- Material savings: Integral palm without lugs or terminals
- Quick and easy to install: Ready to use. No cutting, stripping, crimping or punching. Less labor time for installation
- Weight savings: A flat braid weighs less than a cable (with insulation) and lugs. Offers better copper usage (Skin Effect)
- The insulation is a high-resistance self-extinguishing PVC – 105°C working temperature maximum
- Full application range: 80 A to 630 A (section 25, 50, 70, 100, 120, 185 and 240 mm²), with 230 up to 1030 mm length
- Reliability – No extra contact due to the lugs being crimped at the extremities of the cables. Integral palm without tin addition or crimped lug for an excellent electrical contact.
- Resistant to vibration - ideal alternative to cable

Ideal connection for molded case circuit breakers

The IBSB and IBSBR range can be used as an alternative to cable for all low-voltage applications. It is suitable and connectable for molded case circuit breaker ranges, including most compact breakers on the market. From 80 A up to 630 A circuit breakers, you can directly connect the IBSB/IBSBR on the front access terminals breaker without additional accessories, such as angular connectors, spreaders, ring terminal connectors or extenders. No lugs and no cutting, stripping, or crimping are necessary.

Very simple! Very quick! Ready to use!



Insulated Braided Conductor (IBSB & IBSBR)



The optimised alternative to cable - Ready to use.

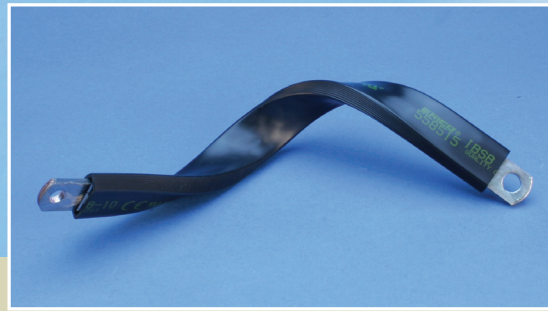
ERICO has developed a unique, state-of-the-art manufacturing line to massivate directly the palms of IBSB and IBSBR braids.

The innovative manufacturing process provides an effective electrical contact, due to the integral palms, without the addition of tin or crimped lugs. This process welds the flexible braid and brings back a solid tinned or red copper block as a palm. Unlike the traditional press-welded palms process, ERICO's process is suitable for red copper, but also for tinned plated copper. The electrical contact between each wire is optimized.

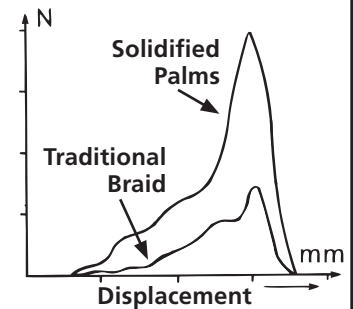
This ERICO process also helps eliminate moisture issues in the palms. By using crimped lugs in a severe environment, moisture can enter in the lug (often by capillarity) and create corrosion between each wire. After several years, the electrical contact between each wire can deteriorate and alter the electrical conductivity of the equipment. The corrosion in the palm is impossible to remove without changing the element.

This process produces RoHS products; no additional substances are added to the tinned-plated wires during the manufacturing process.

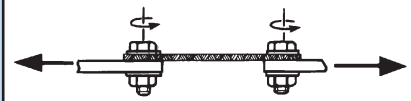
Insulated Braided Conductor (IBSB & IBSBR)



Comparison of tensile strength



Nominal clamping force



Technical data

- Excellent electrical contact with integral palm construction
- Good tensile strength

Insulation

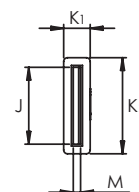
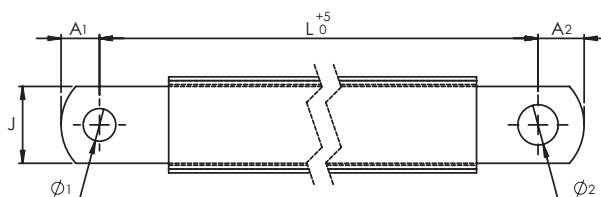
- High resistance: vinyl compound
- Maximum working temperature: 105° C
- Self-extinguishable: UL 94 V0
- Dielectric strength: 20 kV/mm
- Max. working voltage: 1000 V AC-1500 V DC-IEC & UL 758
- Max. working voltage: 600V AC/DC – UL 67
- Class II Conductors (IEC 61439-1, Chapter 8.4.4 Protection by total insulation)

Braid

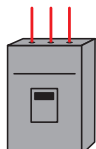
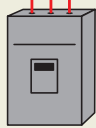
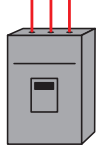
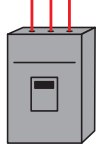
- Tinned (IBSB 25-50-70-100) or red (IBSBR 120-185-240) electrolytic copper
- Wire diameter: 0.15 mm for maximum flexibility - According to EN 13602
- Very good resistance to vibration

Certification & Approvals

- IEC 60439.1 & IEC 61439.1
- cRUus per UL67 & CAN/CSA C22.2 No. 29 (File E125470)
- RU per UL758 (File E316390)
- CE conformity
- RoHS compliance
- American Bureau of Shipping (ABS®) Certificate No. 13-HS1070074-PDA Marine & Offshore Applications



Insulated Braided Conductor (IBSB & IBSBR)

Use with circuit breaker	Part Number	Description	S mm²	L mm	Ø1 mm	Ø2 mm	A1 mm	A2 mm	J mm	M mm	K1 mm	K2 mm		 Kg	
IBSB - Tinned Copper															
IBSB 25 	125/160A	558500	IBSB 25-230-6	25	230	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.08
		558501	IBSB 25-330-6	25	330	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.11
		558502	IBSB 25-430-6	25	430	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.15
		558503	IBSB 25-530-6	25	530	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.18
		558504	IBSB 25-630-6	25	630	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.22
		558505	IBSB 25-830-6	25	830	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.28
		558506	IBSB 25-1030-6	25	1030	6.5	6.5	7.5	7.5	12	2.8	9	18	10	0.35
IBSB 50 	250A	558507	IBSB 50-230-8-10	50	230	8.5	10.5	9	11	20	3	9	27	10	0.15
		558508	IBSB 50-330-8-10	50	330	8.5	10.5	9	11	20	3	9	27	10	0.21
		558509	IBSB 50-430-8-10	50	430	8.5	10.5	9	11	20	3	9	27	10	0.27
		558510	IBSB 50-530-8-10	50	530	8.5	10.5	9	11	20	3	9	27	10	0.33
		558511	IBSB 50-630-8-10	50	630	8.5	10.5	9	11	20	3	9	27	10	0.39
		558512	IBSB 50-830-8-10	50	830	8.5	10.5	9	11	20	3	9	27	10	0.52
		558513	IBSB 50-1030-8-10	50	1030	8.5	10.5	9	11	20	3	9	27	10	0.64
IBSB 70 	300A	558514	IBSB 70-230-8-10	70	230	8.5	10.5	9	11	20	4.3	11	27	10	0.197
		558515	IBSB 70-330-8-10	70	330	8.5	10.5	9	11	20	4.3	11	27	10	0.28
		558516	IBSB 70-430-8-10	70	430	8.5	10.5	9	11	20	4.3	11	27	10	0.362
		558517	IBSB 70-530-8-10	70	530	8.5	10.5	9	11	20	4.3	11	27	10	0.444
		558518	IBSB 70-630-8-10	70	630	8.5	10.5	9	11	20	4.3	11	27	10	0.527
		558519	IBSB 70-830-8-10	70	830	8.5	10.5	9	11	20	4.3	11	27	10	0.692
		558520	IBSB 70-1030-8-10	70	1030	8.5	10.5	9	11	20	4.3	11	27	10	0.857
IBSB 100 	350A	558521	IBSB 100-230-8-10	100	230	8.5	10.5	9	11	24	5	13	31	10	0.27
		558522	IBSB 100-330-8-10	100	330	8.5	10.5	9	11	24	5	13	31	10	0.39
		558523	IBSB 100-430-8-10	100	430	8.5	10.5	9	11	24	5	13	31	10	0.50
		558524	IBSB 100-530-8-10	100	530	8.5	10.5	9	11	24	5	13	31	10	0.62
		558525	IBSB 100-630-8-10	100	630	8.5	10.5	9	11	24	5	13	31	10	0.73
		558526	IBSB 100-830-8-10	100	830	8.5	10.5	9	11	24	5	13	31	10	0.96
		558527	IBSB 100-1030-8-10	100	1030	8.5	10.5	9	11	24	5	13	31	10	1.19
IBSBR - Red Copper															
IBSBR 120 	400A	558528	IBSBR 120-230-10	120	230	10.5	10.5	11	11	32	4.4	12	39	2	0.33
		558529	IBSBR 120-330-10	120	330	10.5	10.5	11	11	32	4.4	12	39	2	0.47
		558530	IBSBR 120-430-10	120	430	10.5	10.5	11	11	32	4.4	12	39	2	0.6
		558531	IBSBR 120-530-10	120	530	10.5	10.5	11	11	32	4.4	12	39	2	0.74
		558532	IBSBR 120-630-10	120	630	10.5	10.5	11	11	32	4.4	12	39	2	0.88
		558533	IBSBR 120-830-10	120	830	10.5	10.5	11	11	32	4.4	12	39	2	1.15
		558534	IBSBR 120-1030-10	120	1030	10.5	10.5	11	11	32	4.4	12	39	2	1.43
IBSBR 185 	500A	558535	IBSBR 185-330-10-12	185	330	10.5	12.5	12	14	32	7.1	16	39	2	0.7
		558536	IBSBR 185-430-10-12	185	430	10.5	12.5	12	14	32	7.1	16	39	2	0.9
		558537	IBSBR 185-530-10-12	185	530	10.5	12.5	12	14	32	7.1	16	39	2	1.1
		558538	IBSBR 185-630-10-12	185	630	10.5	12.5	12	14	32	7.1	16	39	2	1.3
		558539	IBSBR 185-830-10-12	185	830	10.5	12.5	12	14	32	7.1	16	39	2	1.7
		558540	IBSBR 185-1030-10-12	185	1030	10.5	12.5	12	14	32	7.1	16	39	2	2.1
IBSBR 240 	630A	558541	IBSBR 240-330-10-12	240	330	10.5	12.5	12	14	32	9.2	18.5	39	2	0.89
		558542	IBSBR 240-430-10-12	240	430	10.5	12.5	12	14	32	9.2	18.5	39	2	1.14
		558543	IBSBR 240-530-10-12	240	530	10.5	12.5	12	14	32	9.2	18.5	39	2	1.4
		558544	IBSBR 240-630-10-12	240	630	10.5	12.5	12	14	32	9.2	18.5	39	2	1.65
		558545	IBSBR 240-830-10-12	240	830	10.5	12.5	12	14	32	9.2	18.5	39	2	2.16
		558546	IBSBR 240-1030-10-12	240	1030	10.5	12.5	12	14	32	9.2	18.5	39	2	2.67

Insulated Braided Conductor (IBS)



Insulated Braided Conductor Technical Characteristics

- The ideal alternative to cable
- No cutting, no stripping, no crimping
- More flexible connection
- Pre-punched: ready to use
- Quick and easy to install
- Excellent electrical contact
- Tinned electrolytic copper for better corrosion protection
- Very good resistance to vibration
- Volume reduction inside the panel board

Technical Data

- Intensity = 100A up to 1000A
- Excellent electrical contact
- Good tensile strength

Insulation

- High resistance : vinyl compound
- Max. working temperature : 105°C
- Self-extinguishable: UL® 94 VO
- Dielectric strength: 20 kV/mm
- Max. working voltage:
1000 V AC-1500 V DC-IEC & UL 758
- Max. working voltage:
600V AC/DC – UL 67

Braid

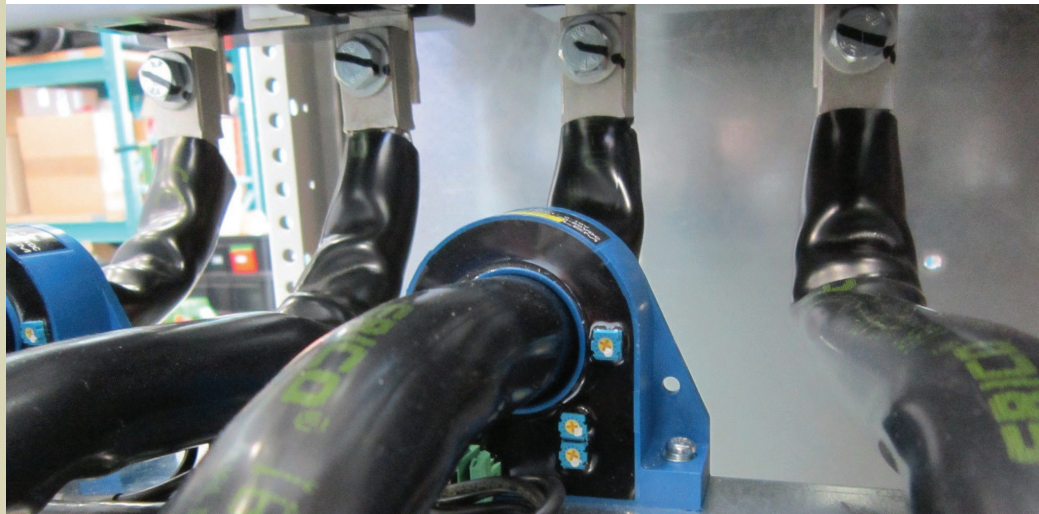
- Tinned electrolytic copper for better corrosion protection
- Wire diameter: 0.15 mm for maximum flexibility
- Very good resistance to vibration

Certification & Approval

- IEC 60439.1 & IEC 61439.1
- cRUus per UL67 & CAN/CSA C22.2 No. 29
- CE conformity
- RoHS compliance
- RU per UL758
- American Bureau of Shipping (ABS®)

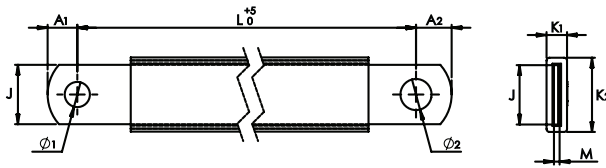
Dielectric Test

- 3500 V_{AC}, 1 minute according to the IEC 60439.1 standard (rated insulation voltage U_i 1000 V_{AC})
- 6000 V_{AC}, 1 minute with 6 mA creepage current set up



Insulated Braided Conductor (IBS)

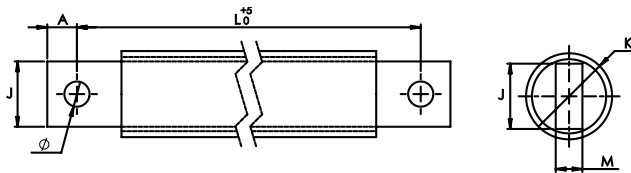
IBS 25
IBS 50



	Part No.	IBS 25	S mm ²	L mm	Ø1 mm	Ø2 mm	A1 mm	A2 mm	J mm	M mm	K1 mm	K2 mm		Kg
160 A	558240	IBS 25-230-8-10	25	230	8.5	10.5	10	12	20	1.9	6	25	10	0.095
	558241	IBS 25-330-8-10	25	330	8.5	10.5	10	12	20	1.9	6	25	10	0.14
	558242	IBS 25-430-8-10	25	430	8.5	10.5	10	12	20	1.9	6	25	10	0.17
	558243	IBS 25-530-8-10	25	530	8.5	10.5	10	12	20	1.9	6	25	10	0.21
	558244	IBS 25-630-8-10	25	630	8.5	10.5	10	12	20	1.9	6	25	10	0.25
	558249	IBS 25-830-8-10	25	830	8.5	10.5	10	12	20	1.9	6	25	10	0.33
	558250	IBS 25-1030-8-10	25	1030	8.5	10.5	10	12	20	1.9	6	25	10	0.41

	Part No.	IBS 50	S mm ²	L mm	Ø1 mm	Ø2 mm	A1 mm	A2 mm	J mm	M mm	K1 mm	K2 mm		Kg
250 A	558260	IBS 50-230-10	50	230	10.5	10.5	12	12	20	3.8	7.5	25	10	0.16
	558261	IBS 50-330-10	50	330	10.5	10.5	12	12	20	3.8	7.5	25	10	0.22
	558262	IBS 50-430-10	50	430	10.5	10.5	12	12	20	3.8	7.5	25	10	0.29
	558263	IBS 50-530-10	50	530	10.5	10.5	12	12	20	3.8	7.5	25	10	0.35
	558264	IBS 50-630-10	50	630	10.5	10.5	12	12	20	3.8	7.5	25	10	0.41
	558255	IBS 50-830-10	50	830	10.5	10.5	12	12	20	3.8	7.5	25	10	0.53
	558256	IBS 50-1030-10	50	1030	10.5	10.5	12	12	20	3.8	7.5	25	10	0.65

IBS 120
IBS 185
IBS 240

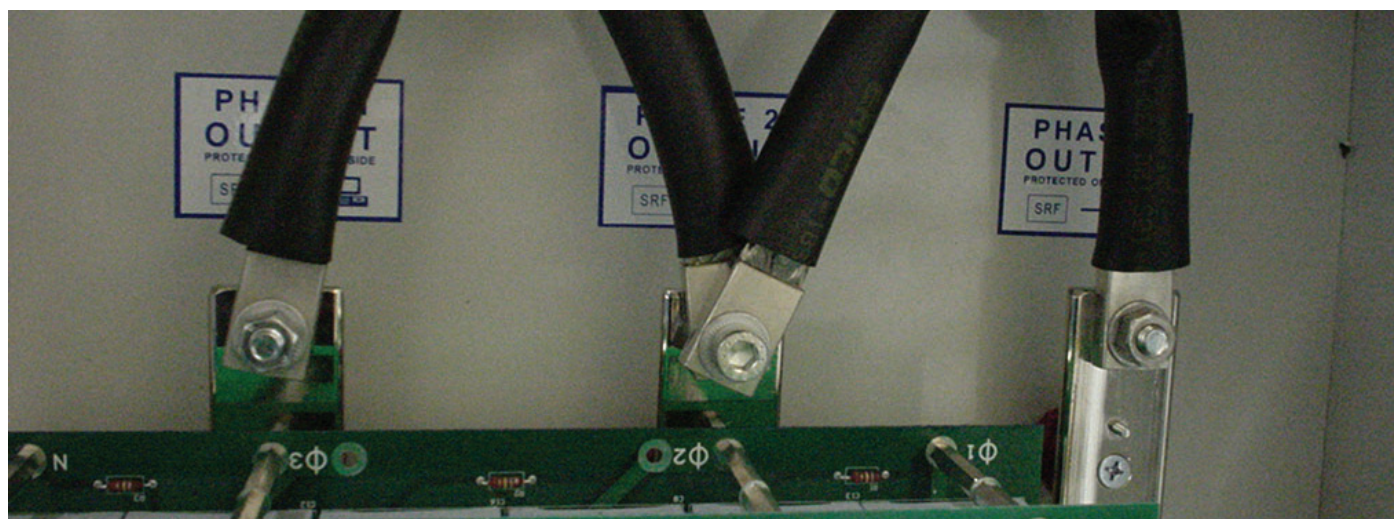


	Part No.	IBS 120	S mm ²	L mm	Ø mm	A mm	J mm	M mm	K mm		Kg
400 A	558270	IBS 120-330-10	120	330	10.5	12	24	10	27	2	0.51
	558271	IBS 120-430-10	120	430	10.5	12	24	10	27	2	0.67
	558272	IBS 120-530-10	120	530	10.5	12	24	10	27	2	0.82
	558273	IBS 120-630-10	120	630	10.5	12	24	10	27	2	0.98
	558274	IBS 120-830-10	120	830	10.5	12	24	10	27	2	1.29
	558276	IBS 120-1030-10	120	1030	10.5	12	24	10	27	2	1.6

	Part No.	IBS 185	S mm ²	L mm	Ø mm	A mm	J mm	M mm	K mm		Kg
500 A	558290	IBS 185-330-10	185	330	10.5	12	24	15	31	2	0.82
	558291	IBS 185-430-10	185	430	10.5	12	24	15	31	2	1.07
	558292	IBS 185-530-10	185	530	10.5	12	24	15	31	2	1.26
	558293	IBS 185-630-10	185	630	10.5	12	24	15	31	2	1.48
	558294	IBS 185-830-10	185	830	10.5	12	24	15	31	2	1.9
	558295	IBS 185-1030-10	185	1030	10.5	12	24	15	31	2	2.3

	Part No.	IBS 240	S mm ²	L mm	Ø mm	A mm	J mm	M mm	K mm		Kg
630 A	558280	IBS 240-330-12	240	330	12.5	13	32	15	36	2	1.03
	558281	IBS 240-430-12	240	430	12.5	13	32	15	36	2	1.34
	558282	IBS 240-530-12	240	530	12.5	13	32	15	36	2	1.65
	558283	IBS 240-630-12	240	630	12.5	13	32	15	36	2	1.96
	558284	IBS 240-830-12	240	830	12.5	13	32	15	36	2	2.58
	558285	IBS 240-1030-12	240	1030	12.5	13	32	15	36	2	3.2

Insulated Braided Conductor (IBS, IBSB & IBSBR)

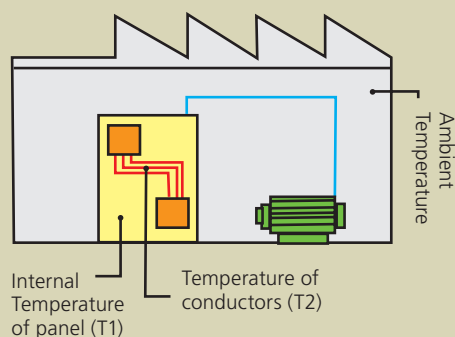


Insulated Braided conductor type	Section mm ²	ΔT (K)							Current Coefficient	
		30	40	45	50	55	60	70		
IBS 25	25	137	158	167	177	185	193	209	1.6	2
IBSB 25	25	116	134	142	150	157	164	177	1.6	2
IBS 50	50	213	246	260	274	288	301	325	1.6	2
IBSB 50	50	213	246	260	274	288	301	325	1.6	2
IBSB 70	70	226	261	277	291	306	319	345	1.6	2
IBSB 100	100	298	344	365	385	404	422	456	1.6	2
IBS 120	120	325	376	398	420	441	460	497	1.6	
IBSBR 120	120	363	419	444	468	491	513	554	1.6	2
IBS 185	185	407	470	499	526	552	576	622	1.6	
IBSBR 185	185	416	480	509	537	563	588	635	1.6	2
IBS 240	240	488	563	598	630	661	690	745	1.6	
IBSBR 240	240	556	642	681	718	753	786	849	1.6	2

ADMISSIBLE CURRENTS: This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.



Selection of insulated braided conductor IBS, IBSB & IBSBR according to the internal temperature of the panel.



Temperature rise of conductor = $T_2 - T_1 = \Delta T$ (K)

Ex.: For a current of 630A, with:

$T_1 = 40^\circ\text{C} - T_2 = 90^\circ\text{C}$

1) $\Delta T = 90 - 40 = 50\text{K}$

2) In the 50°K column, find the closest current value to 630A.

K = Kelvin degree (temperature calculated, but not measurable.)

Insulated braided conductor in parallel

When using 2 or 3 insulated braided conductors in parallel for the same phase, use the current coefficient:

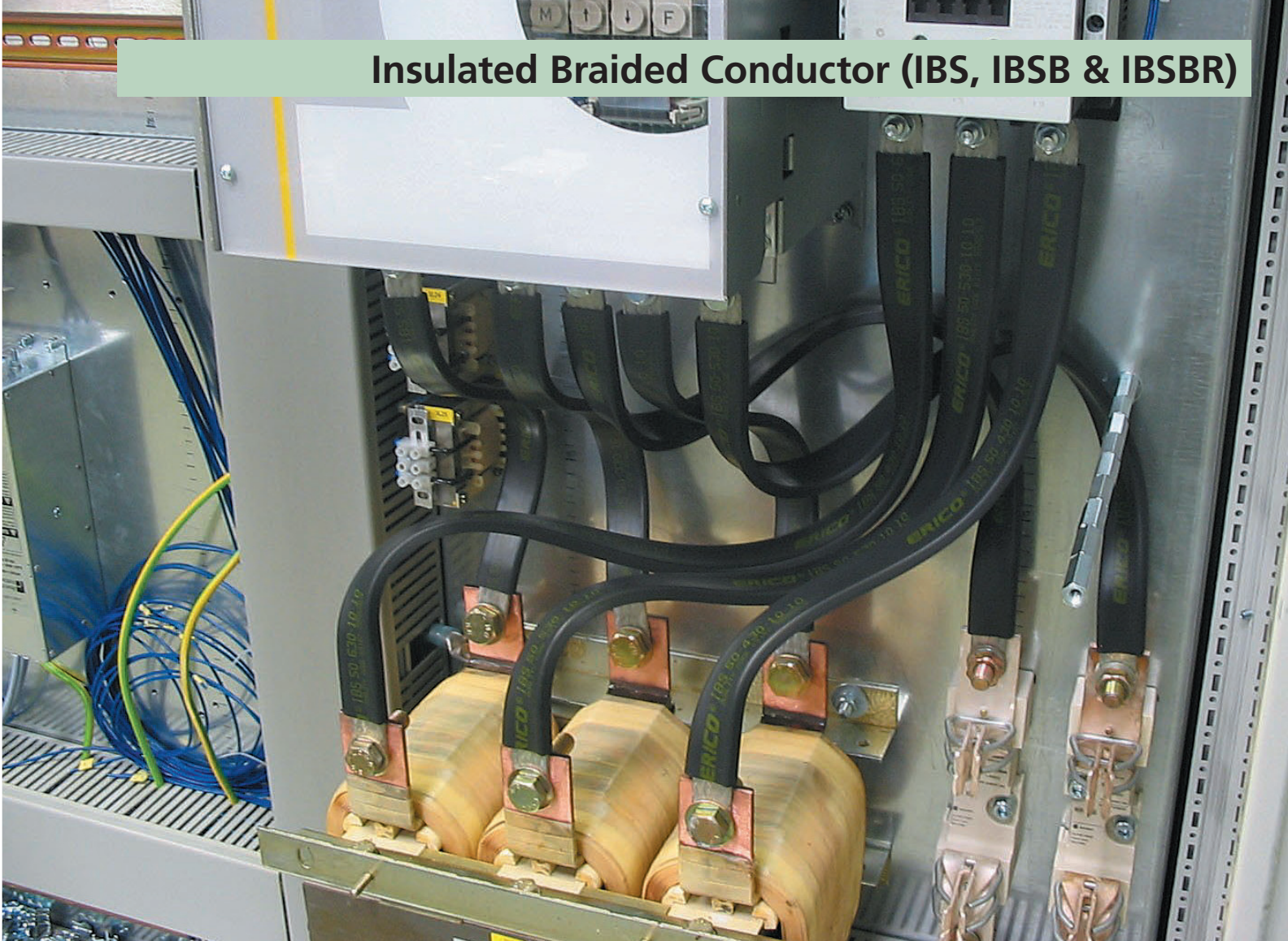
Ex.: IBSB 100 - $\Delta T^\circ = 50\text{K}$: 385 A

2 braids in parallel > $385 \text{ A} \times 1.6 = 616 \text{ A}$

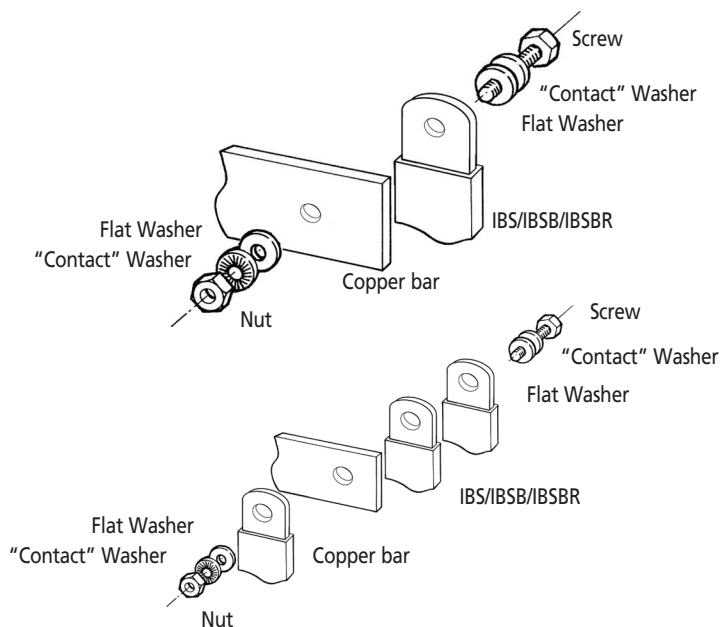
3 braids in parallel > $385 \text{ A} \times 2 = 770 \text{ A}$



Insulated Braided Conductor (IBS, IBSB & IBSBR)

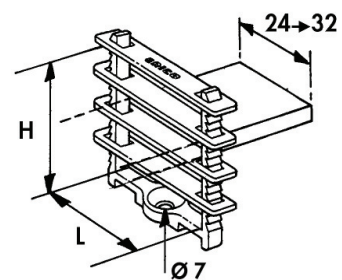


Assembly Instructions



Space between 2 or 3 insulated braided conductors in parallel, for cooling.

A minimum air gap is required. Use FS type spacer clamp.



Designation	Part No.	For insulated braided conductor type
FS 24	553550	IBS 25 / 50
		IBSB 25 / 50 / 70 / 100
FS 32	553560	IBSBR 120 / 185 / 240

Ground Copper Braids (MBJ & BJ)



Innovative, state-of-the-art manufacturing process.

ERICO manufacturing directly massivates the palms of the MBJ tinned-plated braids. This manufacturing process provides an effective electrical contact, due to the integral palms, without the addition of tin or crimped lugs.

This process welds the flexible braid and brings back a solid tinned or red copper block as a palm. Unlike the traditional press-welded palms process, ERICO's process is suitable for red copper, but also for tin plated copper. The electrical contact between each wire is optimized.

This ERICO process also helps eliminate moisture issues in the palms. By using crimped lugs in a severe environment, moisture can enter in the lug (often by capillarity) and create corrosion between each wire. After several years, the electrical contact between each wire can deteriorate and alter the electrical conductivity of the equipment. The corrosion in the palm is impossible to remove without changing the element.

This process produces RoHS products; no additional substances are added to the tinned-plated wires during the manufacturing process.

Tinned Copper Ground Braids Technical Characteristics

With integral palm

- A complete range of ground flexible connections from 6 to 100 mm² section and from 100 to 500 mm length
- Good resistance to vibration and fatigue
- Reliable: No extra contact due to the lugs crimped at the ends of the cable
- Weight savings: A flat braid weighs less than a cable (with insulation) and lugs and offers better copper usage (Skin Effect)
- Integral palm, without tin or crimped lugs for superior electrical contact and tensile strength resistance
- Quick and easy to install: Ready to use. No cutting, stripping, crimping or punching. Less labor time for installation
- Material savings: No lugs or terminals
- Recommended by the EMC/EMI directives and less impedance than cables



BJ

Round braids with crimped lugs

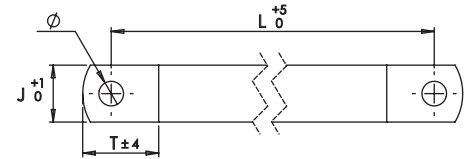
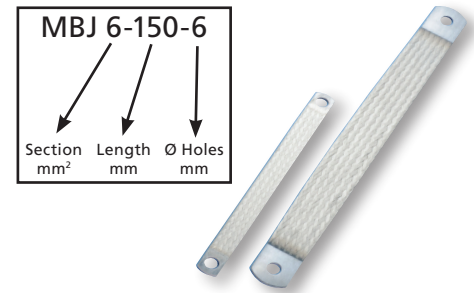


Part No.	Description	Section mm	L mm	Ø D mm	Intensity A		 Kg
556900	BJ 6-150 S	6	150	6.5	45	10	0.010
556910	BJ 6-200 S	6	200	6.5	45	10	0.015
556920	BJ 10-300 S	10	300	6.5	75	10	0.033



Ground Copper Braids (MBJ & BJ)

Part Number	Description	Intensity A	Thickness mm	Section mm ²	L mm	Ø mm	J mm	T mm	Kg
556600	MBJ 6-150-6	40	1.1	6	150	6.5	11	18	0.01
563410	MBJ 6-200-6	40	1.1	6	200	6.5	11	18	0.0167
556930	MBJ 10-200-6	75	1.1	10	200	6.5	11	18	0.022
556610	MBJ 10-300-6	75	1.1	10	300	6.5	11	18	0.033
563540	MBJ 16-100-6	120	1.5	16	100	6.5	15	20	0.018
556620	MBJ 16-100-8	120	1.5	16	100	8.5	15	20	0.018
563550	MBJ 16-150-6	120	1.5	16	150	6.5	15	20	0.035
556630	MBJ 16-150-8	120	1.5	16	150	8.5	15	20	0.035
563300	MBJ 16-200-6	120	1.5	16	200	6.5	15	20	0.033
556640	MBJ 16-200-8	120	1.5	16	200	8.5	15	20	0.033
556650	MBJ 16-250-8	120	1.5	16	250	8.5	15	20	0.04
563320	MBJ 16-300-6	120	1.5	16	300	6.5	15	20	0.05
556660	MBJ 16-300-8	120	1.5	16	300	8.5	15	20	0.05
556940	MBJ 16-500-8	120	1.5	16	500	8.5	15	20	0.082
556670	MBJ 25-100-10	150	1.5	25	100	10.5	22	28	0.027
556680	MBJ 25-150-10	150	1.5	25	150	10.5	22	28	0.039
563340	MBJ 25-200-6	150	1.5	25	200	6.5	22	28	0.052
556690	MBJ 25-200-10	150	1.5	25	200	10.5	22	28	0.052
563430	MBJ 25-200-12	150	1.5	25	200	12.5	22	28	0.052
556700	MBJ 25-250-10	150	1.5	25	250	10.5	22	28	0.064
556710	MBJ 25-300-10	150	1.5	25	300	10.5	22	28	0.077
556950	MBJ 25-500-10	150	1.5	25	500	10.5	22	28	0.13
556720	MBJ 30-100-10	180	2	30	100	10.5	22	28	0.032
556730	MBJ 30-150-10	180	2	30	150	10.5	22	28	0.047
556740	MBJ 30-200-10	180	2	30	200	10.5	22	28	0.062
556750	MBJ 30-250-10	180	2	30	250	10.5	22	28	0.075
556760	MBJ 30-300-10	180	2	30	300	10.5	22	28	0.092
556960	MBJ 30-500-10	180	2	30	500	10.5	22	28	0.155
556770	MBJ 35-100-10	197	2.1	35	100	10.5	22	28	0.037
556780	MBJ 35-150-10	197	2.1	35	150	10.5	22	28	0.054
556790	MBJ 35-200-10	197	2.1	35	200	10.5	22	28	0.072
556800	MBJ 35-250-10	197	2.1	35	250	10.5	22	28	0.089
565000	MBJ 35-250-25	197	1.5	35	250	25.5	40	45	0.089
556810	MBJ 35-300-10	197	2.1	35	300	10.5	22	28	0.11
556970	MBJ 35-500-10	197	2.1	35	500	10.5	22	28	0.18
556820	MBJ 50-100-10	250	2.5	50	100	10.5	28	33	0.052
556830	MBJ 50-150-10	250	2.5	50	150	10.5	28	33	0.077
563350	MBJ 50-200-6	250	2.5	50	200	6.5	28	33	0.12
556840	MBJ 50-200-10	250	2.5	50	200	10.5	28	33	0.12
563440	MBJ 50-200-12	250	2.5	50	200	12.5	28	33	0.12
563360	MBJ 50-200-16	250	2.5	50	200	16.5	28	33	0.11
563370	MBJ 50-200-18	250	2.5	50	200	18.5	28	33	0.11
556850	MBJ 50-250-10	250	2.5	50	250	10.5	28	33	0.127
563380	MBJ 50-300-6	250	2.5	50	300	6.5	28	33	0.15
556860	MBJ 50-300-10	250	2.5	50	300	10.5	28	33	0.153
563390	MBJ 50-300-16	250	2.5	50	300	16.5	28	33	0.15
563400	MBJ 50-300-18	250	2.5	50	300	18.5	28	33	0.14
556980	MBJ 50-500-10	250	2.5	50	500	10.5	28	33	0.255
563560	MBJ 50-500-12	250	2.5	50	500	12.5	28	33	0.255
563450	MBJ 70-300-6	290	3.4	70	300	6.5	28	33	0.21
563460	MBJ 70-300-10	290	3.4	70	300	10.5	28	33	0.21
563420	MBJ 70-300-12	290	3.4	70	300	12.5	28	33	0.21
563470	MBJ 70-300-16	290	3.4	70	300	16.5	28	33	0.2
563480	MBJ 70-300-22	290	2.8	70	300	22.5	40	45	0.2
563490	MBJ 70-500-10	290	3.4	70	500	10.5	28	33	0.34
563500	MBJ 100-250-16	349	4	100	250	16.5	50	55	0.254
563510	MBJ 100-250-30	349	4	100	250	30.5	50	55	0.254
563520	MBJ 100-500-16	349	4	100	500	16.5	50	55	0.508
563530	MBJ 100-500-30	349	4	100	500	30.5	50	55	0.508



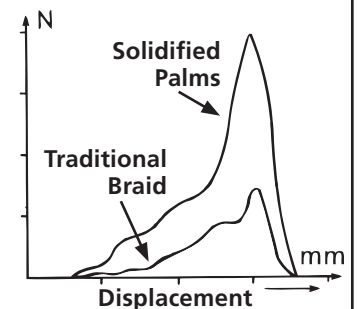
Technical Data

- Recommended by EMC/EMI directives
- Flat tinned copper braids
- Electrolytic copper Cu-ETP according to standard EN13602
- Copper purity of minimum 99.9%
- Maximum resistivity of 0,017241 mm²/m at 20°C
- Standard wire diameter; 0.15 mm
- Bends very close to the contact area
- Working temperature up to 105°C

Certification & Approvals

- UL® Listed (UL467) except BJ
- GOST certificates
- RoHS 2002/95/EC Compliant
- IEC 60439.1 & 61439.1

Comparison of tensile strength



Nominal clamping force



Ground Stainless Steel Braids (CPI)



Ready-to-use stainless steel braids for multiple applications

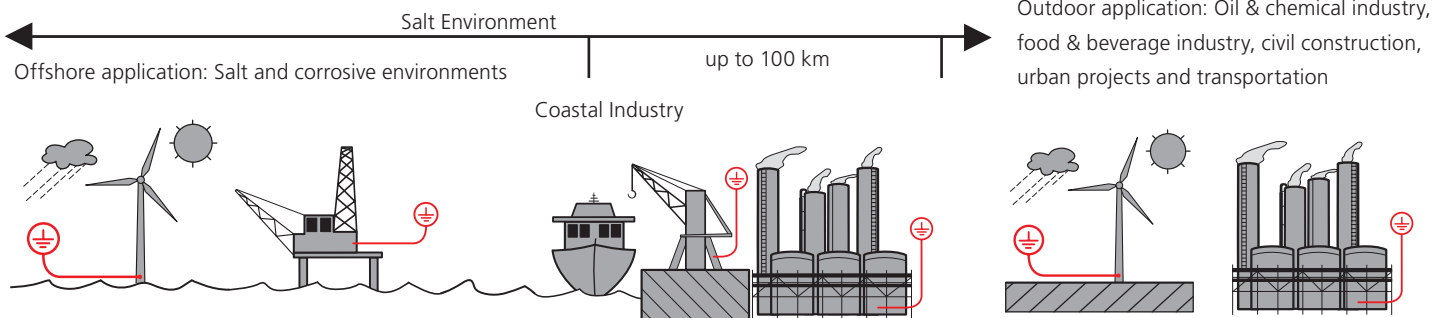
Stainless Steel Braids Technical Characteristics

- 316L stainless steel braid ready to use
- Full application range: 16 to 70 mm² section with 150 to 1100 mm length
- High-quality 316L stainless steel: superior abrasion, corrosion, chemical, and UV resistance for outdoor applications
- Good resistance to vibration and fatigue
- Time savings: Quick and easy to install. Ready to use. No additional cutting, stripping, crimping and punching needed. Less labor time for installation
- Material savings: No additional lugs or terminals needed
- Durable in outdoor, salt and corrosive environments
- Non-magnetic material
- Long maintenance cycle

ERICO developed and manufactures a range of ground stainless steel braids. These high-quality 316L stainless steel braids can be installed in extremely corrosive environments, like offshore applications or coastal applications. The CPI braid is ideal for applications using stainless steel pipe or tanks, like the food and beverage industry, building industry, transportation, oil and chemical industry.

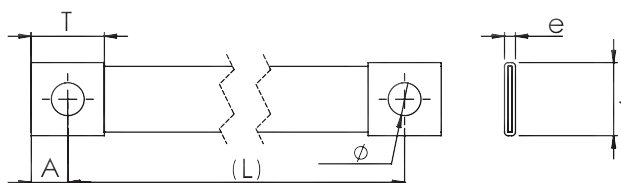
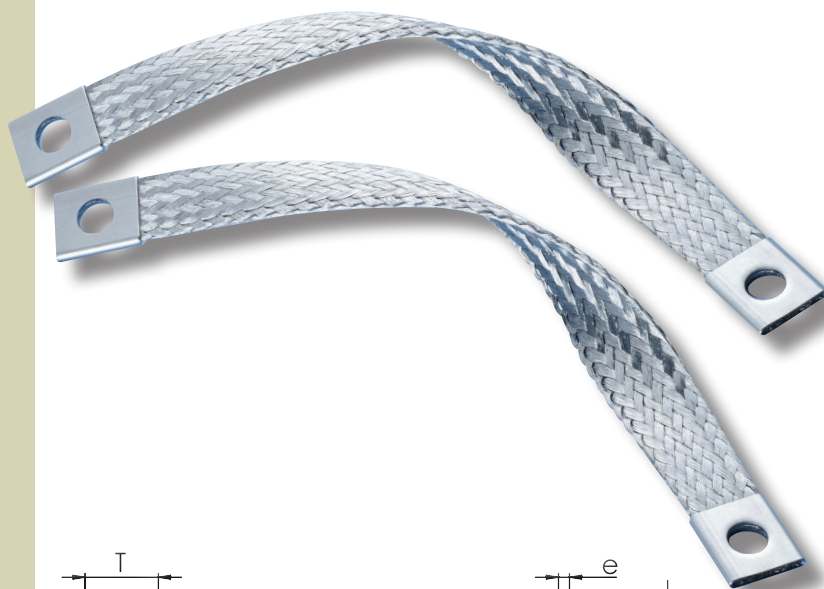
ERICO offers 316L stainless steel, one of the highest resistant stainless steel options on the market. ERICO has mastered the process of manufacturing stainless steel for braiding, crimping, cutting or punching and offers a full range of ready-to-use stainless steel braids.

Where stainless braids can be used:



Ground Stainless Steel Braids (CPI)

- Superior abrasion, corrosion, chemical and UV resistance make it ideal for outdoor applications
- Great for expansion joints where constant movement requires a flexible and indestructible covering
- Won't rust or discolor, so the appearance will never fade or change
- No additional cutting, stripping, or crimping needed
- More flexible connection
- Pre-punched: ready to use
- Quick and easy to install
- Excellent electrical contact
- Very good resistance to vibration and fatigue
- Recommended by the EMC/EMI directives
- Reduced maintenance



Part Number	Description	Section mm ²	L mm	Ø mm	J mm	A mm	T mm	e mm		Kg
554277	CPI 16-150-8	16	150	8.5	17.5	10	20	3	10	0.031
554278	CPI 16-200-8	16	200	8.5	17.5	10	20	3	10	0.037
554279	CPI 16-250-8	16	250	8.5	17.5	10	20	3	10	0.043
554280	CPI 16-300-8	16	300	8.5	17.5	10	20	3	10	0.050
554282	CPI 16-400-8	16	400	8.5	17.5	10	20	3	10	0.062
554286	CPI 16-600-8	16	600	8.5	17.5	10	20	3	10	0.087
554299	CPI 25-150-10	25	150	10.5	26.5	15	30	3.5	10	0.058
554300	CPI 25-200-10	25	200	10.5	26.5	15	30	3.5	10	0.068
554301	CPI 25-250-10	25	250	10.5	26.5	15	30	3.5	10	0.078
554302	CPI 25-300-10	25	300	10.5	26.5	15	30	3.5	10	0.088
554304	CPI 25-400-10	25	400	10.5	26.5	15	30	3.5	10	0.108
554308	CPI 25-600-10	25	600	10.5	26.5	15	30	3.5	10	0.147
554321	CPI 35-150-12	35	150	13	26.5	15	30	4	10	0.071
554322	CPI 35-200-12	35	200	13	26.5	15	30	4	10	0.085
554323	CPI 35-250-12	35	250	13	26.5	15	30	4	10	0.099
554324	CPI 35-300-12	35	300	13	26.5	15	30	4	10	0.112
554326	CPI 35-400-12	35	400	13	26.5	15	30	4	10	0.140
554330	CPI 35-600-12	35	600	13	26.5	15	30	4	10	0.195
554343	CPI 50-150-12	50	150	13	30	15	30	5	10	0.111
554344	CPI 50-200-12	50	200	13	30	15	30	5	10	0.130
554345	CPI 50-250-12	50	250	13	30	15	30	5	10	0.150
554346	CPI 50-300-12	50	300	13	30	15	30	5	10	0.170
554348	CPI 50-400-12	50	400	13	30	15	30	5	10	0.209
554352	CPI 50-600-12	50	600	13	30	15	30	5	10	0.288
554365	CPI 70-150-12	70	150	13	30	15	30	5.8	10	0.139
554366	CPI 70-200-12	70	200	13	30	15	30	5.8	10	0.167
554367	CPI 70-250-12	70	250	13	30	15	30	5.8	10	0.194
554368	CPI 70-300-12	70	300	13	30	15	30	5.8	10	0.222
554370	CPI 70-400-12	70	400	13	30	15	30	5.8	10	0.277
554374	CPI 70-600-12	70	600	13	30	15	30	5.8	10	0.388
554378	CPI 70-800-12	70	800	13	30	15	30	5.8	10	0.498
554384	CPI 70-1100-12	70	1100	13	30	15	30	5.8	10	0.664

Technical Data

- Excellent electrical contact
- Good tensile strength
- Working temperature up to 105°C

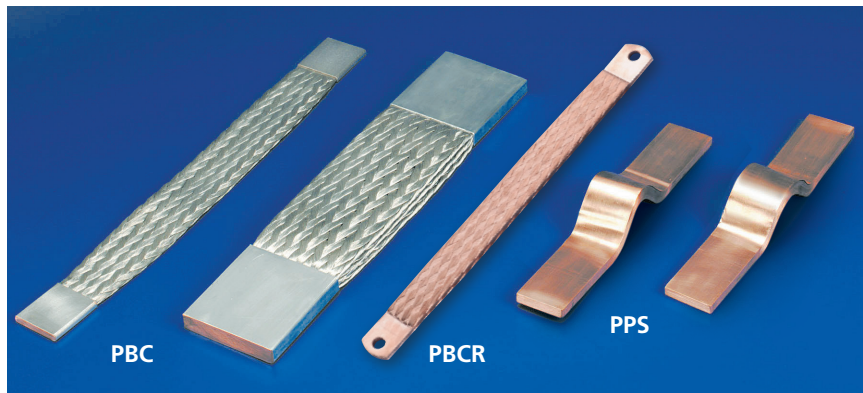
Braid

- 316L Stainless steel
- Wire diameter: 0.25 mm for maximum flexibility
- Very good resistance to vibration

Certification & Approvals

- UL® Listed UL467 - grounding and bonding equipment for US and Canada
- RoHS Compliant
- IEC 60439.1 & 61439.1
- ABS American Bureau of Shipping Certificate No. 13-HS1018106-1-PDA-DUP

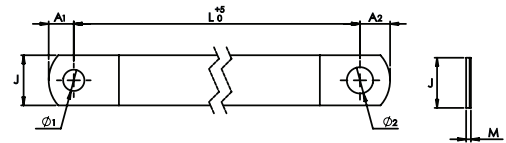
Power Shunt (PBC, PBCR & PPS)



- High flexibility
- Reduce vibrations
- Ideal for transformer-busduct link
- Intensity: Up to 4600 A

PBCR Braided Power Shunts

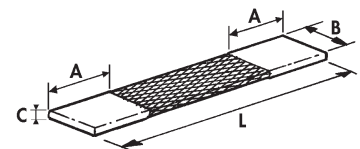
- Drilled palms (ready to use)
- Weight savings - integral palm without tin addition or crimped lug
- Red electrolytic copper strand
Ø 0.15 mm
- Extra flexible power connection and good resistance to vibration
- UL® Listed to UL 467
up to 100 mm² for
grounding and bonding
applications
- UL® Recognized to UL 67



Part No.	Description	Section mm²	Intensity (ΔT 30K)		Intensity (ΔT 50K)		L mm	Ø1 mm	Ø2 mm	A1 mm	A2 mm	J mm	M mm	Kg
564960	PBCR 70-230-8-10	70	226	362	291	466	230	8.5	10.5	9	11	20	4.3	2
564961	PBCR 70-330-8-10	70	226	362	291	466	330	8.5	10.5	9	11	20	4.3	2
564962	PBCR 70-430-8-10	70	226	362	291	466	430	8.5	10.5	9	11	20	4.3	2
564963	PBCR 100-230-8-10	100	298	477	385	616	230	8.5	10.5	9	11	24	5	2
564964	PBCR 100-330-8-10	100	298	477	385	616	330	8.5	10.5	9	11	24	5	2
564965	PBCR 100-430-8-10	100	298	477	385	616	430	8.5	10.5	9	11	24	5	2
564966	PBCR 120-230-10	120	363	581	468	749	230	10.5	10.5	11	11	32	4.4	2
564967	PBCR 120-330-10	120	363	581	468	749	330	10.5	10.5	11	11	32	4.4	2
564968	PBCR 120-430-10	120	363	581	468	749	430	10.5	10.5	11	11	32	4.4	2
564969	PBCR 185-330-10-12	185	416	666	537	859	330	10.5	12.5	12	14	32	7.1	2
564970	PBCR 185-430-10-12	185	416	666	537	859	430	10.5	12.5	12	14	32	7.1	2
564971	PBCR 240-330-10-12	240	556	890	718	1149	330	10.5	12.5	12	14	32	9.2	2
564972	PBCR 240-430-10-12	240	556	890	718	1149	430	10.5	12.5	12	14	32	9.2	2

PBC Braided Power Shunts

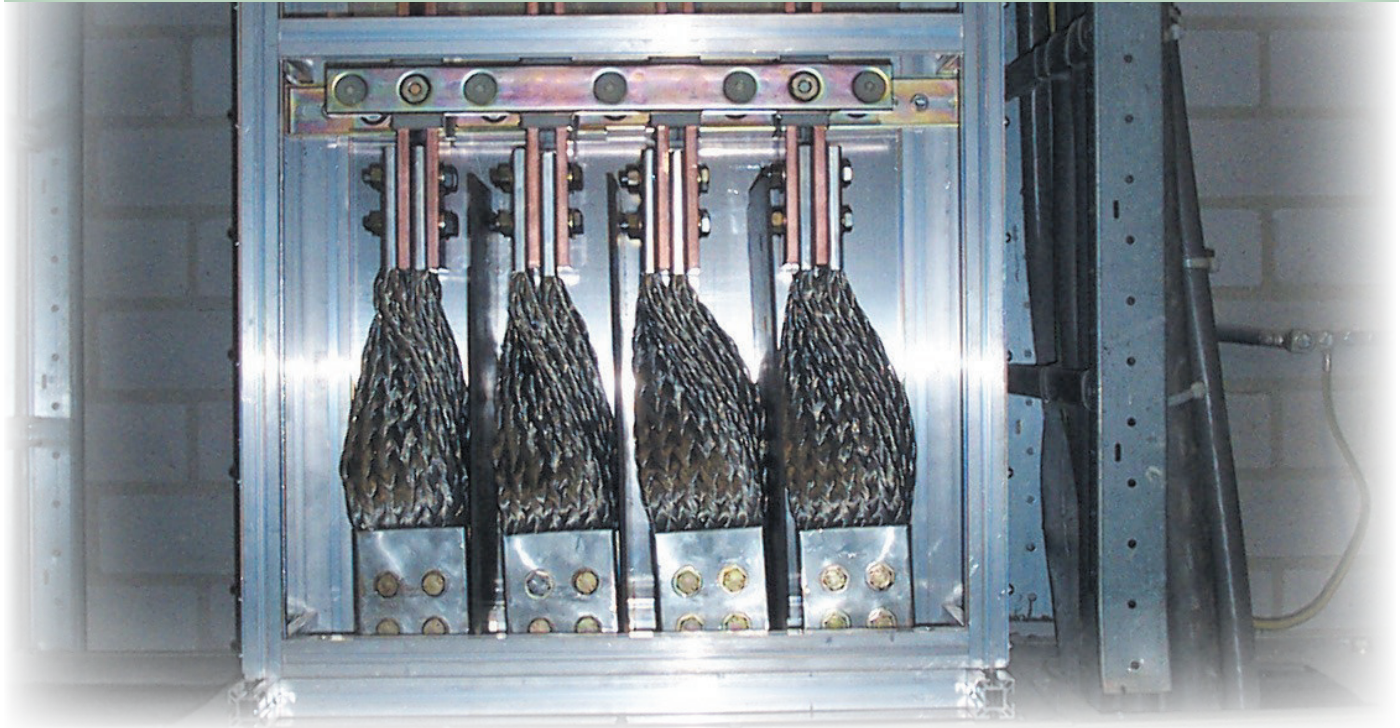
- Undrilled palms to customer's specific designs, fitted by power press
- Extra-flexible power connections (expansion rings, busbar...)
- Tinned electrolytic copper strand Ø 0.15 mm
- When used in parallel, the 2 shunts must be spaced with a minimum distance equal to the thickness of the shunt to allow air cooling



Part No.	Description	Section mm²	Intensity (ΔT 30K)		Intensity (ΔT 50K)		A mm	B mm	C mm	L mm	Kg
564000	PBC 100 x 250	100	349	600	462	795	35	40	7.0	250	0.38
564050	PBC 100 x 500	100	349	600	462	795	35	40	7.0	500	0.63
564010	PBC 120 x 250	120	385	670	511	877	35	40	7.5	250	0.42
564100	PBC 150 x 250	150	440	757	583	1003	55	50	8.0	250	0.63
564150	PBC 150 x 500	150	440	757	583	1003	55	50	8.0	500	0.90
564200	PBC 200 x 250	200	550	946	729	1253	55	50	9.0	250	0.76
564250	PBC 200 x 500	200	550	946	729	1253	55	50	9.0	500	1.20
564300	PBC 250 x 300	250	651	1120	863	1484	85	50	10.5	300	1.03
564400	PBC 300 x 400	300	716	1180	948	1565	85	60	11.0	400	1.53
564500	PBC 400 x 400	400	853	1360	1131	1808	85	80	11.0	400	2.20
564600	PBC 500 x 400	500	917	1561	1216	1944	105	100	11.0	400	2.64
564700	PBC 600 x 450	600	1101	1762	1459	2334	105	100	13.0	450	3.40
564800	PBC 800 x 450	800	1376	2202	1823	2917	105	100	14.0	450	4.26
564900	PBC 1000 x 450	1000	1651	2642	2188	3500	105	100	16.0	450	5.47
564030	PBC 1200 x 500	1200	1982	3170	2626	4208	125	120	17.5	500	7.16



Power Shunt (PBC, PBCR & PPS)



PPS Presswelded Power Shunts

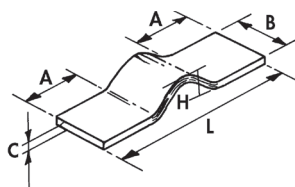
PBC Application

Part No.	Description	Section mm ²	Intensity (ΔT 30K)		Intensity (ΔT 50K)		A mm	B mm	C mm	L mm	H mm		 Kg
													
566000	PPS 40/5/50-180	200	572	984	758	1304	50	40	5	180	45	2	0.390
566020	PPS 40/10/50-220	400	849	1460	1125	1935	50	40	10	220	58	2	0.930
566030	PPS 50/10/80-280	500	1022	1758	1354	2329	80	50	10	280	58	1	1.440
566040	PPS 80/10/100-320	800	1511	2493	2002	3303	100	80	10	320	52	1	2.625
566050	PPS 100/10/100-300	1000	1825	2920	2418	3869	100	100	10	300	54	1	3.065
566060	PPS 100/10/110-360	1000	1825	2920	2418	3869	110	100	10	360	53	1	3.610
566070	PPS 100/15/110-360	1500	2178	3485	2886	4617	110	100	15	360	57	1	5.385

Press welding is welding of laminations to each other through direct current applied to pieces under pressure.

This technique results in:

- The formation of a solid palm with properties of plain bar
- Smaller cross section for same capacity
- Runs cooler than equal section
- Plain copper, thickness of laminations 0.2 mm
- When used in parallel, the 2 shunts must be spaced with a minimum distance equal to the thickness of the shunt



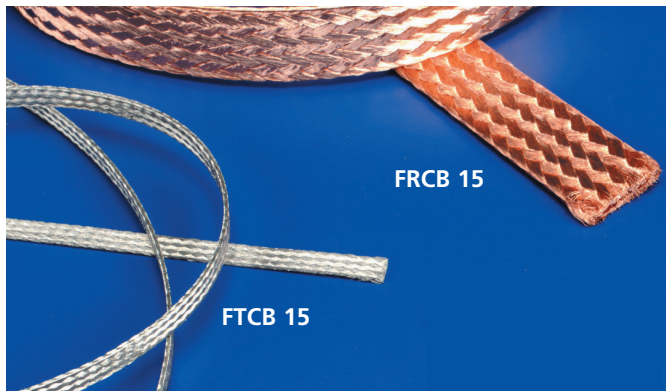
Custom Solutions

ERICO can provide made-to-order, custom configurations to your drawing specifications.

ERICO copper braids can be made to custom lengths, widths, thicknesses and hole patterns; with PVC installation; in flat or tubular shapes; using copper wire; in continuous coils; or with soldered studs or crimped lugs. Let ERICO solve your design and production scheduling challenges.



Flat Copper & Stainless Steel Braids (FTCB, FRCB, FSSB & FTCBI)



FTCB 15 Flat tinned copper braids



- Standard wire diameter: 0.15 mm
- 25 m coils

Part No.	Description	Section mm ²	mm	Number of Wire	Nominal Current A		Kg
557200	FTCB 15-3	3	5x1	168	30	25 m	0.03
557210	FTCB 15-5	5	8x1	288	45	25 m	0.05
557220	FTCB 15-8	8	8x1.5	456	65	25 m	0.08
557230	FTCB 15-10	10	10x1.5	576	75	25 m	0.10
557240	FTCB 15-16	16	15x1.5	896	120	25 m	0.16
557250	FTCB 15-20	20	20x1.5	1120	140	25 m	0.20
557260	FTCB 15-25	25	23x1.5	1404	150	25 m	0.25
557270	FTCB 15-30	30	23x2.0	1692	180	25 m	0.30
557280	FTCB 15-35	35	23x2.5	1980	200	25 m	0.35
557290	FTCB 15-40	40	25x2.5	2272	220	25 m	0.40
557300	FTCB 15-50	50	28x3	2848	250	25 m	0.50
557310	FTCB 15-60	60	30x3	3392	280	25 m	0.60
557320	FTCB 15-70	70	30x3.5	3968	290	25 m	0.70
557330	FTCB 15-75	75	30x4	4256	300	25 m	0.75
557350	FTCB 15-100	100	40x4	5664	360	25 m	1.00

FRCB 15 Flat plain copper braids

- Standard wire diameter: 0.15 mm
- 25 m coils

Part No.	Description	Section mm ²	mm	Number of Wire	Nominal Current A		Kg
557000	FRCB 15-3	3	5x1	168	30	25 m	0.03
557010	FRCB 15-5	5	8x1	288	45	25 m	0.05
557020	FRCB 15-8	8	8x1.5	456	65	25 m	0.08
557030	FRCB 15-10	10	10x1.5	576	75	25 m	0.10
557040	FRCB 15-16	16	15x1.5	896	120	25 m	0.16
557050	FRCB 15-20	20	20x1.5	1120	140	25 m	0.20
557060	FRCB 15-25	25	23x1.5	1404	150	25 m	0.25
557070	FRCB 15-30	30	23x2.0	1692	180	25 m	0.30
557080	FRCB 15-35	35	23x2.5	1980	200	25 m	0.35
557090	FRCB 15-40	40	25x2.5	2272	220	25 m	0.40
557100	FRCB 15-50	50	28x3	2848	250	25 m	0.50
557110	FRCB 15-60	60	30x3	3392	280	25 m	0.60
557120	FRCB 15-70	70	30x3.5	3968	290	25 m	0.70
557130	FRCB 15-75	75	30x4	4256	300	25 m	0.75
557150	FRCB 15-100	100	40x4	5664	360	25 m	1.00



FTCBI Insulated flat tinned copper braids

- Insulation in clear PVC, thickness 1 mm, self-extinguishing UL® 94 VO
- Standard wire diameter: 0.15 mm
- 25 m coils
- Insulation voltage: 450 V
- Working temperature: up to 70°C

Part No.	Description	Section mm ²	mm	Number of Wire	Nominal Current A		Kg
510300	FTCBI 16	16	17x3.5	896	120	25 m	0.18
510310	FTCBI 25	25	25x3.5	1404	150	25 m	0.29
510320	FTCBI 35	35	25x4.5	1980	200	25 m	0.40
510340	FTCBI 50	50	30x5	2848	250	25 m	0.60
Standard wire diameter 0.15 mm - Extra long reels							
503600	FTCBI 15-16	16	17x3.5	896	120	100 m	0.18
503610	FTCBI 15-25	25	25x3.5	1404	150	100 m	0.29
503620	FTCBI 15-35	35	25x4.5	1980	200	75 m	0.40

FTCB 20 Flat tinned copper braids



- Standard wire diameter: 0.20 mm
- Extra long reels

Part No.	Description	Section mm ²	mm	Number of Wire	Nominal Current A		Kg
503500	FTCB 20-3	3	5x1	96	30	500 m	0.03
503510	FTCB 20-5	5	8x1	168	45	500 m	0.05
503520	FTCB 20-10	10	10x1.5	312	75	150 m	0.10
503530	FTCB 20-16	16	15x2	512	120	150 m	0.16
503540	FTCB 20-25	25	25x1.5	792	150	100 m	0.25

FSSB 25 Stainless steel flat braids



- Standard wire diameter: 0.25 mm
- Stainless steel 316L

Part No.	Description	Section mm ²	mm		Kg
557160	FSSB 25-16 ²	16	15x1.5	25 m	0.14
557170	FSSB 25-25 ²	25	23x1.5	25 m	0.22
557390	FSSB 25-50 ²	50	30x3	25 m	0.44



Round & Tubular Copper Braids (RTCB, RRCB & TTCE)

- A large range of braids
- Bare or insulated

- Tubulars for shielding
- Stainless steel for corrosive environment



RTCB / RTCB HL Tinned copper round braids



- Standard wire diameter: 0.15 mm
- 25 m coils

Part No.	Description	Section mm ²	External dia in mm	Number of Wire	Nominal Current A		Kg
557600	RTCB 15-6	6	4	352	45	25 m	0.06
557610	RTCB 15-8	8	4.5	464	65	25 m	0.08
557620	RTCB 15-10	10	5	560	75	25 m	0.10
557630	RTCB 15-16	16	6	900	120	25 m	0.16
557640	RTCB 15-25	25	8	1416	150	25 m	0.25
557650	RTCB 15-30	30	9	1680	180	25 m	0.30
557660	RTCB 15-50	50	11	2820	250	25 m	0.50
557670	RTCB 15-75	75	13.5	4236	300	25 m	0.75
557680	RTCB 15-100	100	17	5652	360	25 m	1.00
Standard wire diameter 0.15 mm - Extra long reels							
503700	RTCB 15-10/HL	10	5	560	75	100 m	0.100
503710	RTCB 15-16/HL	16	6	900	120	100 m	0.160
503720	RTCB 15-25/HL	25	7.5	1416	150	100 m	0.250
503730	RTCB 15-30/HL	30	8	1680	180	75 m	0.300



RRCB Plain copper round braids

- Standard wire diameter: 0.15 mm
- 25 m coils

Part No.	Description	Section mm ²	External dia in mm	Number of Wire	Nominal Current A		Kg
557400	RRCB 15-6	6	4	352	45	25 m	0.06
557410	RRCB 15-8	8	4.5	464	65	25 m	0.08
557420	RRCB 15-10	10	5	560	75	25 m	0.10
557430	RRCB 15-16	16	6	900	120	25 m	0.16
557440	RRCB 15-25	25	8	1416	150	25 m	0.25
557450	RRCB 15-30	30	9	1680	180	25 m	0.30
557460	RRCB 15-50	50	11	2820	250	25 m	0.50
557470	RRCB 15-75	75	14	4236	300	25 m	0.75
557480	RRCB 15-100	100	18	5652	360	25 m	1.00



TTCE Tinned copper tubular braids

- For screening connecting cables between equipment used in an electromagnetically disturbed environment.
- Supplied with draw wire

Part No.	Description	Section mm ²	Diameter (mm)				Number of Wire	Ø wires mm	Nominal Current A		Kg
			Int.	Covering %	Exp.	Covering %					
510100	TTCE 3	1.7	3	100%	6	90%	96	0.15	13	50 m	0.020
510110	TTCE 5	2.5	5	99%	10	92%	144	0.15	19	50 m	0.026
510120	TTCE 8	4.45	8	99%	16	95%	252	0.15	37	50 m	0.050
510130	TTCE 10	5.7	10	100%	20	92%	320	0.15	43	50 m	0.054
510140	TTCE 15	12	15	100%	30	94%	334	0.20	90	50 m	0.120
510150	TTCE 20	20.4	20	99%	40	87%	288	0.30	122	50 m	0.190
510160	TTCE 25	27.1	25	99%	50	92%	384	0.30	163	25 m	0.270
510170	TTCE 30	33.9	30	100%	60	90%	480	0.30	185	25 m	0.320
510180	TTCE 35	40.7	35	100%	70	94%	576	0.30	244	25 m	0.380
Extra long reels											
504690	TTCE 8/HL	6.8	8	-	16	-	216	0.20	37	200 m	0.050

The primary use of tubular braid is to provide sensitive cables with an EMC/EMI screen to shield them against electromagnetic, electrostatic and radio frequency interference. Optimum screening performance is obtained using copper wire braid that can also be used for earth continuity purposes.

Round Copper Braids (RRCBI & RTCBI)



RRCBI

RRCBI Insulated plain copper round braids

- Insulation in clear PVC, thickness 1 mm, self-extinguishing UL® 94 VO
- Standard wire diameter: 0.15 mm
- Insulation voltage: 450 V
- Working temperature: up to 70°C

Part No.	Description	Section mm²	External dia in mm	Number of Wire	Nominal Current A		 Kg
510500	RRCBI 15-10	10	7	560	75	25 m	0.10
510510	RRCBI 15-16	16	8	900	120	25 m	0.16

On Request Special Manufacturing:

- Tubular braids up to 60 mm diameter maximum
- Flat or round copper braids up to 400 mm² maximum
- Insulation 105° C



RTCBI

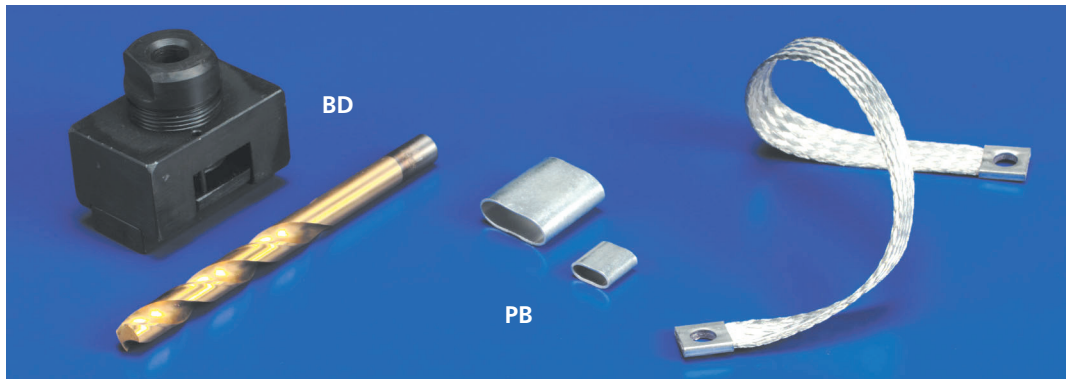
RTCBI / RTCBI HL Insulated round tinned copper braids

- Insulation in clear PVC, thickness 1 mm, self-extinguishing UL 94 VO
- Standard wire diameter: 0.15 mm
- 25 m coils
- Insulation voltage: 450 V
- Working temperature: up to 70°C

Part No.	Description	Section mm²	mm	Number of Wire	Nominal Current A		 Kg
503400	RTCBI 15-10	10	7	560	75	25 m	0.12
503410	RTCBI 15-16	16	8	900	120	25 m	0.18
503420	RTCBI 15-25	25	9.5	1416	150	25 m	0.25
503430	RTCBI 15-30	30	10	1680	180	25 m	0.35
503440	RTCBI 15-50	50	12.5	2820	250	25 m	0.58
Standard wire diameter 0.15 mm - Extra long reels							
503800	RTCBI 15-10HL	10	7	560	75	100 m	0.12
503810	RTCBI 15-16HL	16	8	900	120	100 m	0.18
503820	RTCBI 15-25HL	25	9.5	1416	150	100 m	0.28
503830	RTCBI 15-30HL	30	10	1680	180	75 m	0.35



Make Your Own Braided Connections



BD

Crimp and drill tool

- This tool has been developed by ERICO specifically for crimping and drilling of braid terminals. Guide and specially adapted drill bit included.

Part No.	Description	For Flat	Ø Drill Bit	Bolt		Kg
558610	BD 16	FTCB or FRCB 15-16	6.5	M6	1	0.653
558640	BD 16-8.5	FTCB or FRCB 15-16	8.5	M8	1	0.653
558620	BD 25	FTCB or FRCB 15-25	11	M10	1	0.678
558630	BD 50	FTCB or FRCB 15-50	12.5	M126	1	0.712

HCT 3-4

Crimping tool for hydraulic work center

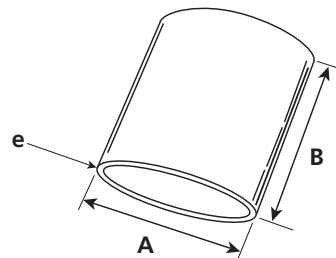
- This package allows to crimp lugs PB16, PB25 and PB50 on braids with the hydraulic ERICO Puncher.

Part No.	Description		Kg
545980	HCT 3-4	1	1.850

PB

Lugs for flat braids (FTCB or FCRB)

- In tinned annealed copper



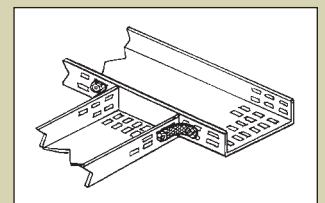
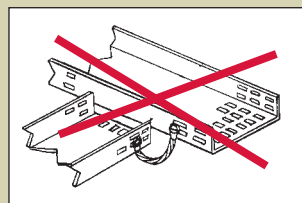
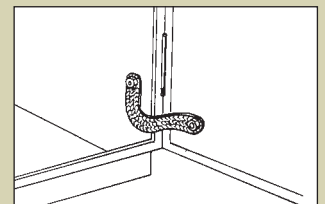
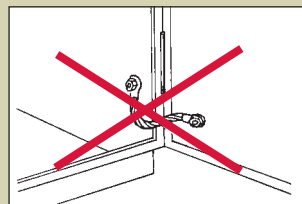
Part No.	Description	For Flat	A	B	e		Kg
557180	PB 16	FTCB or FRCB 15-16	16	15	1	100	0.004
557190	PB 25	FTCB or FRCB 15-25	22	25	1	100	0.010
557380	PB 50	FTCB or FRCB 15-50	30	30	1	100	0.017

ABOUT ELECTROMAGNETIC COMPATIBILITY...

In an environment where electromagnetic disturbances are more and more numerous, the ElectroMagnetic Compatibility (EMC) is increasingly important in the design and building of electrical panels.

In order to avoid stray currents, it is necessary that all the metallic framework, inside the panel or outside, is at the same electrical potential. Thus, it is essential to link all these metal parts with connections presenting a low impedance at High Frequency (H.F.).

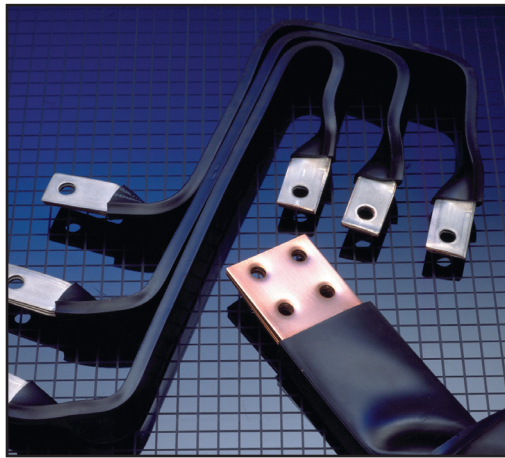
Connections with cables are not efficient. Only short and flat conductors are. Their H.F. impedances are 10 times lower than the wire impedances.



Made to Order Solutions (MTO)

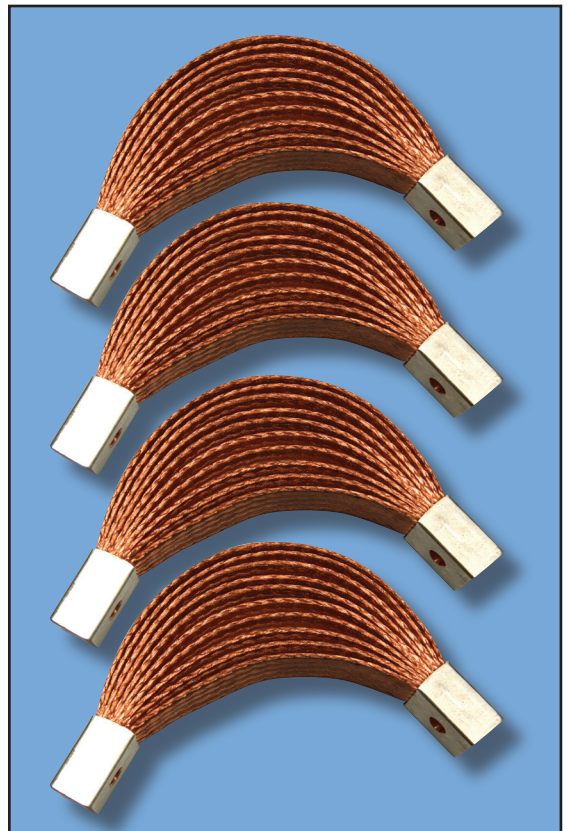
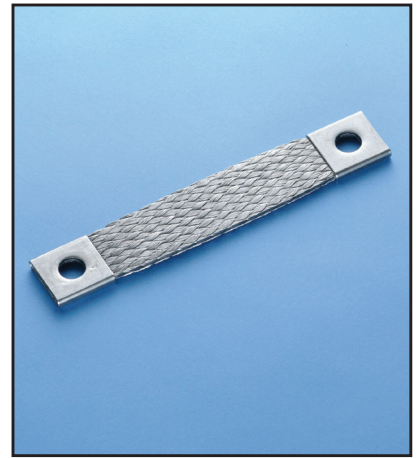
ERICO® FLEXIBAR® Custom Solutions (Made to Order)

ERICO can provide preformed ERICO FLEXIBAR configurations to your drawing specifications. ERICO FLEXIBAR can be cut, punched, twisted or bent to address your most challenging panelboard designs and production scheduling requirements. Give ERICO your low voltage connection challenges!



Braided Conductors Custom Solutions (Made to Order)

ERICO brand of copper braids can be made to custom lengths, widths, thicknesses and hole patterns; with PVC insulation; in flat or tubular shapes; using copper or stainless steel wire; in continuous coils; or with soldered studs or crimped lugs. Let ERICO solve your design and production scheduling challenges.



Custom Solutions (Made to Order) - Check List

Summary of the information we need for custom design work. Please photocopy this page and complete it by providing the information you know and sending to your local ERICO customer service representative. (Sections can be left blank)

Electrical Function:

Earthing/grounding conductor ☐
 Power conductor ☐
 Nominal current.....A
 Alternating or direct current.....
 Nominal voltage.....V
 Insulation specification (if required).....

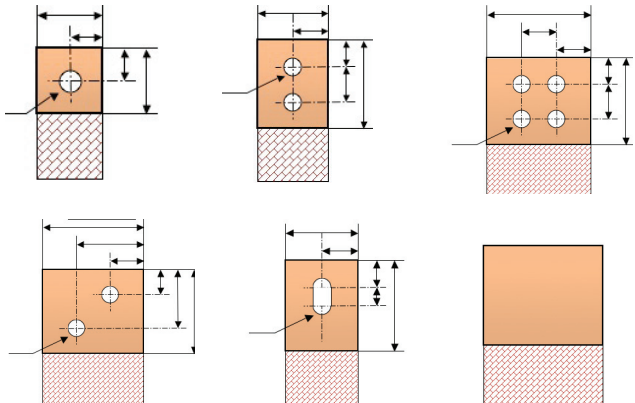
Material:

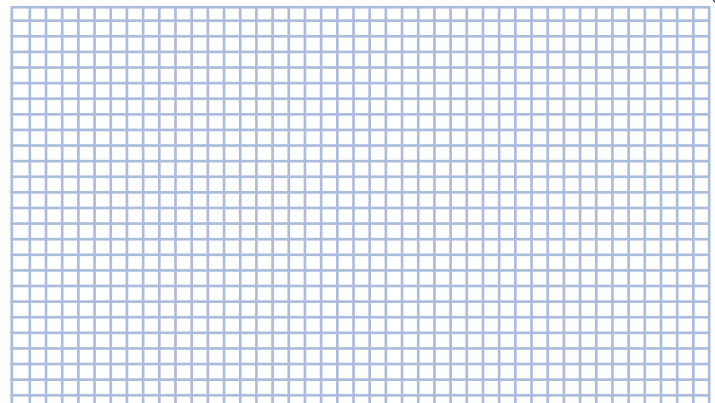
Red/plain copper..... ☐
 Tinned copper ☐
 Stainless steel ☐
 Aluminum..... ☐
 Other.....

Environment:

Ambient temperature.....C°
 Operating temperature.....C°
 Conductor maximum temperature.....C°
 Humidity (dry/average/moist).....%HR

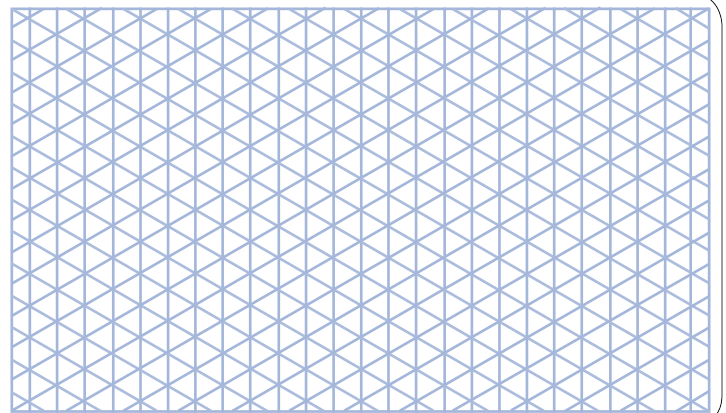
Extremity/terminal dimensions: Indicate your dimensions on the proposed terminal drawing or make a sketch showing your needs.





Conductor Dimensions:

Availability: Drawing ☐ Specification ☐ Samples ☐
 Cross Sectionmm²
 Flat or Round Section
 Width of the Conductormm
 Thickness of the Conductormm
 Length of the Conductormm
 Quantity



Contact/Requested by:

Company
 Contact Name
 Phone Number

E-mail address
 Address (City & Country)

Cross Reference List

Part Number	Page
503400	40
503410	40
503420	40
503430	40
503440	40
503500	38
503510	38
503520	38
503530	38
503540	38
503600	38
503610	38
503620	38
503700	39
503710	39
503720	39
503730	39
503800	40
503810	40
503820	40
503830	40
504690	39
505051	12, 14
505052	12, 14
505053	12, 14
505054	12, 14
505055	12, 14
505056	12, 14
505059	12, 14
505501	10, 12, 14
505502	10, 12, 14
505503	10, 12, 14

Part Number	Page
505504	10, 12, 14
505505	10, 12, 14
505506	10, 12, 14
505507	10, 12, 14
505508	10, 12, 14
505509	10, 12, 14
505510	10, 12, 14
505511	10, 12, 14
505512	10, 12, 14
505513	10, 12, 14
505514	10, 12, 14
505515	10, 12, 14
505516	10, 12, 14
505517	10, 12, 14
505518	10, 13, 14
505519	10, 13, 14
505520	10, 12, 14
505521	10, 12, 14
505522	10, 12, 14
505523	10, 12, 14
505524	10, 13, 14
505525	10, 13, 14
505526	10, 13, 14
505527	10, 12, 14
505528	10, 13, 14
505529	10, 13, 14
505530	10, 13, 14
505531	10, 13, 14
505532	10, 13, 14
505533	10, 13, 14
505534	10, 13, 14
505535	10, 13, 14

Part Number	Page
505536	10, 13, 14
505537	10, 13, 14
505538	10, 13
505539	10, 13, 14
505540	10, 13, 14
505541	10, 13, 14
505542	10, 13, 14
505543	10, 13, 14
505544	10, 13
505546	13, 14
505547	10, 13, 14
505548	10, 13, 14
505549	10, 13, 14
505550	10, 13, 14
505551	10, 14
505551	13
510100	39
510110	39
510120	39
510130	39
510140	39
510150	39
510160	39
510170	39
510180	39
510300	38
510310	38
510320	38
510340	38
510500	40
510510	40
541774	18



Cross Reference List

Part Number	Page
541775	18
541776	18
545980	41
553020	20
553030	20
553040	20
553050	20
553060	20
553070	20
553100	20
553110	20
553120	20
553200	20
553210	20
553220	20
553230	20
553250	20
553260	20
553370	19
553380	19
553400	21
553405	21
553410	21
553430	21
553440	21
553505	21
553510	21
553520	21
553530	21
553540	21
553550	18
553550	31

Part Number	Page
553560	18
553560	31
553570	18
553580	18
554277	35
554278	35
554279	35
554280	35
554282	35
554286	35
554299	35
554300	35
554301	35
554302	35
554304	35
554308	35
554321	35
554322	35
554323	35
554324	35
554326	35
554330	35
554343	35
554344	35
554345	35
554346	35
554348	35
554352	35
554365	35
554366	35
554367	35
554368	35

Part Number	Page
554370	35
554374	35
554378	35
554384	35
556600	33
556610	33
556620	33
556630	33
556640	33
556650	33
556660	33
556670	33
556680	33
556690	33
556700	33
556710	33
556720	33
556730	33
556740	33
556750	33
556760	33
556770	33
556780	33
556790	33
556800	33
556810	33
556820	33
556830	33
556840	33
556850	33
556860	33
556900	32

Cross Reference List

Part Number	Page
556910	32
556920	32
556930	33
556940	33
556950	33
556960	33
556970	33
556980	33
557000	38
557010	38
557020	38
557030	38
557040	38
557050	38
557060	38
557070	38
557080	38
557090	38
557100	38
557110	38
557120	38
557130	38
557150	38
557160	38
557170	38
557180	41
557190	41
557200	38
557210	38
557220	38
557230	38
557240	38

Part Number	Page
557250	38
557260	38
557270	38
557280	38
557290	38
557300	38
557310	38
557320	38
557330	38
557350	38
557380	41
557390	38
557400	39
557410	39
557420	39
557430	39
557440	39
557450	39
557460	39
557470	39
557480	39
557600	39
557610	39
557620	39
557630	39
557640	39
557650	39
557660	39
557670	39
557680	39
558240	29
558241	29

Part Number	Page
558242	29
558243	29
558244	29
558249	29
558250	29
558255	29
558256	29
558260	29
558261	29
558262	29
558263	29
558264	29
558270	29
558271	29
558272	29
558273	29
558274	29
558276	29
558280	29
558281	29
558282	29
558283	29
558284	29
558285	29
558290	29
558291	29
558292	29
558293	29
558294	29
558295	29
558500	27
558501	27



Cross Reference List

Part Number	Page
558502	27
558503	27
558504	27
558505	27
558506	27
558507	27
558508	27
558509	27
558510	27
558511	27
558512	27
558513	27
558514	27
558515	27
558516	27
558517	27
558518	27
558519	27
558520	27
558521	27
558522	27
558523	27
558524	27
558525	27
558526	27
558527	27
558528	27
558529	27
558530	27
558531	27
558532	27
558533	27

Part Number	Page
558534	27
558535	27
558536	27
558537	27
558538	27
558539	27
558540	27
558541	27
558542	27
558543	27
558544	27
558545	27
558546	27
558610	41
558620	41
558630	41
558640	41
561200	21
561210	21
561220	21
561400	21
561401	21
561402	21
561403	21
561404	21
561405	21
561406	21
563300	33
563320	33
563330	33
563340	33
563350	33

Part Number	Page
563360	33
563370	33
563380	33
563390	33
563400	33
563410	33
563420	33
563430	33
563450	33
563460	33
563470	33
563480	33
563490	33
563500	33
563510	33
563520	33
563530	33
563540	33
563550	33
563560	33
564000	36
564010	36
564030	36
564050	36
564100	36
564150	36
564200	36
564250	36
564300	36
564400	36
564500	36
564600	36

Cross Reference List

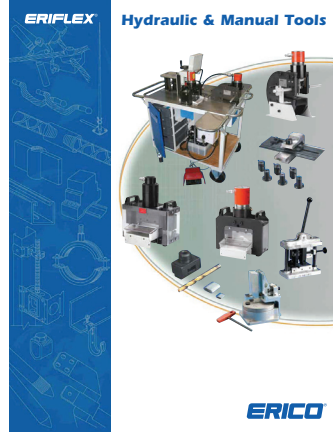
Part Number	Page
564700	36
564800	36
564900	36
564960	36
564961	36
564962	36
564963	36
564964	36
564965	36
564966	36
564967	36
564968	36
564969	36
564970	36
564971	36
564972	36
565000	33
566000	37
566020	37
566030	37
566040	37
566050	37
566060	37
566070	37
566490	17
566500	17
566510	17
566520	17
566550	17
566560	17
566570	17
566580	17

Part Number	Page
566590	17
566630	17
566640	17
566650	17
566660	17
566670	17
566720	17
566730	17
566750	17
566780	17
566800	17
566810	17
568700	20
568730	20





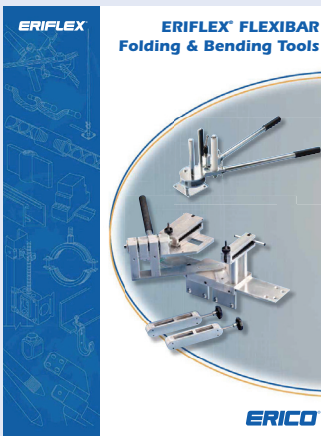
Busbar supports and copper busbar, insulators and sleeves solutions.



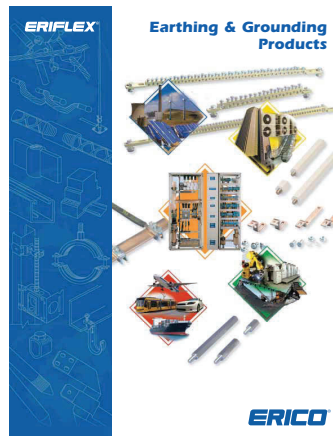
ERICO hydraulic and manual tools for ERICO® FLEXIBAR® flexible busbar and copper busbar manipulation and transformation



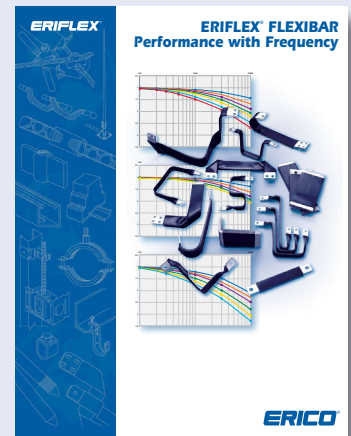
Full range of industrial connections and solutions with single and multiple pole distributions blocks, power terminals and power blocks



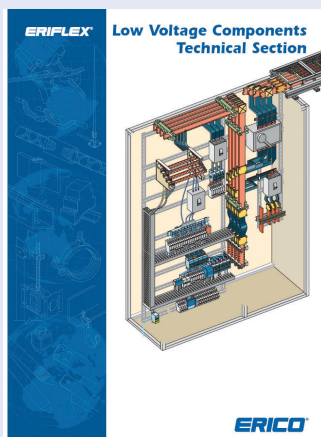
Fold and bend ERICO FLEXIBAR quickly without insulation damage, up to 10x120x1 / 12x100x1 with manual bending and folding tools.



Specific document for earthing and grounding solutions



Specific ERICO FLEXIBAR technical data for high frequency applications



Technical section document for ERICO product range, for general characteristics, main selection criteria, calculation and installation information.



Foundation grounding and construction, power connections, surge protection and lightning protection products for the wind energy industry.



Grounding, lightning protection, electrical connection and cable management solutions for the solar power industry.



www.erico.com



AUSTRALIA

Phone 1-800-263-508
Fax 1-800-423-091



CHINA

Phone +86-21-3430-4878
Fax +86-21-5831-8177



HUNGARY

Phone 06-800-16538
Fax +39-0244-386-107



NORWAY

Phone 800-100-73
Fax 800-100-66



SWITZERLAND

Phone 0800-55-86-97
Fax 0800-55-96-15



BELGIUM

Phone 0800-757-48
Fax 0800-757-60



DENMARK

Phone 808-89-372
Fax 808-89-373



INDONESIA

Phone +62-21-575-0941
Fax +62-21-575-0942



POLAND

Phone +48-71-349-04-60
Fax +48-71-349-04-61



THAILAND

Phone +66-2-267-5776
Fax +66-2-636-6988



BRAZIL

Phone +55-11-3623-4333
Fax +55-11-3621-4066



FRANCE

Phone 0-800-901-793
Fax 0-800-902-024



ITALY

Phone 800-870-938
Fax 800-873-935



SINGAPORE

Phone +65-6-268-3433
Fax +65-6-268-1389



**UNITED ARAB
EMIRATES**

Phone +971-4-881-7250
Fax +971-4-881-7270



CANADA

Phone +1-800-677-9089
Fax +1-800-677-8131



GERMANY

Phone 0-800-189-0272
Fax 0-800-189-0274



MEXICO

Phone +52-55-5260-5991
Fax +52-55-5260-3310



SPAIN

Phone 900-993-154
Fax 900-807-333



UNITED KINGDOM

Phone 0808-2344-670
Fax 0808-2344-676



CHILE

Phone +56-2-370-2908
Fax +56-2-369-5657



HONG KONG

Phone +852-2764-8808
Fax +852-2764-4486



NETHERLANDS

Phone 0800-0200-135
Fax 0800-0200-136



SWEDEN

Phone 020-790-908
Fax 020-798-964



UNITED STATES

Phone 1-800-753-9221
Fax +1-440-248-0723

ABS is a registered certification mark of American Bureau of Shipping.
CSA is a registered trademark of the Canadian Standards Association.
IEC is a registered trademark of Internationale Commission Electrotechnique.
NEC is a registered trademark of, and National Electrical Code (NEC) standard is a copyright of the National Fire Protection Association, Inc.
UL is a registered trademark of UL LLC.

Copyright ©2015, 2013, 2012 ERICO International Corporation. All rights reserved.
CADDY, CADWELD, CRITEC, ERICO, ERIFLEX, ERITECH, and LENTON are registered trademarks of ERICO International Corporation.

P1224C-NAEN P161CT15NAEN 4.5M0315

Courtesy of Steven Engineering, Inc. - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com