



CONNECT AND PROTECT

Flexible Conductors

Solutions to Optimize the Design of Electrical Power
& Earth/Ground Connections



ERIFLEX

Table of Contents

FLEXIBLE CONDUCTORS FOR VARIOUS APPLICATIONS.....	06
CERTIFICATES & NVENT ERIFLEX SOFTWARE	08
PRODUCT OVERVIEW.....	09
NVENT ERIFLEX FLEXIBAR INSULATED FLEXIBLE BUSBAR.....	10
ACCESSORIES	22
HYDRAULIC AND MANUAL TOOLS FOR BUSBAR & FLEXIBAR	26
INSULATED BRAIDED CONDUCTOR (IBS, IBSB, IBSBR & IBSHY).....	28
EARTH/GROUND COPPER BRAIDS (MBJ & BJ)	38
EARTH/GROUND STAINLESS STEEL BRAIDS (CPI & CPIW)	40
POWER SHUNT (PBC & PPS).....	44
FLAT COPPER & STAINLESS STEEL BRAIDS IN COILS (FTCB, FRCB, FSSB & FTCBI).....	46
ROUND AND TUBULAR COPPER BRAIDS IN COILS (RTCBI, RTCB, RRCB, RRCBI & TTCE).....	48
MAKE YOUR OWN BRAIDED CONNECTIONS.....	49
MADE-TO-ORDER SOLUTIONS.....	50
CROSS REFERENCE LIST	52

Flexible Conductors for Low-Voltage Industries

EVENT OFFERS

- A strong worldwide expertise in different markets
- A worldwide team of experts in electrical power connections
- Global solutions manufacturing
- Complete range of high-quality, reliable, certified products
- Innovative and compatible product solutions

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

- Air Conditioning
- Elevators, Escalators & Automatic Doors



PANELBOARD

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



MACHINERY

- Tunneling
- Crushers
- Printing
- Welding
- Packaging
- Woodworking

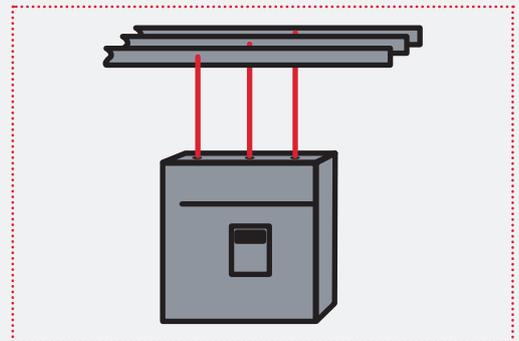


Flexible Conductors for Various Applications

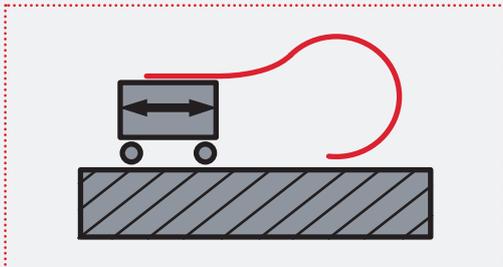
nVent is well-known for producing high quality flexible conductors for low voltage power connections. Flexible conductors made out of braids or laminates are used in a variety of applications for current transfer or grounding/earthing connections.



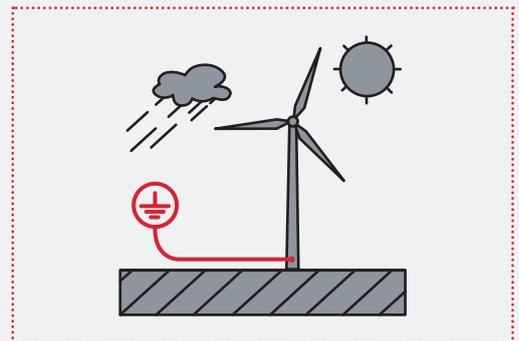
Worldwide certifications, applications and product availability



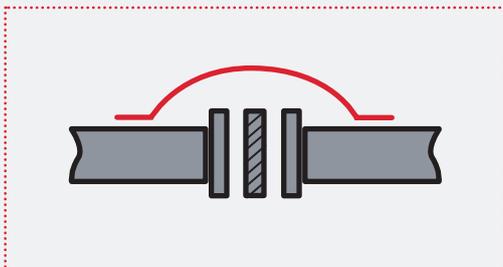
Busbar and active electrical component connection (Example: circuit breaker, contactor) including most compact components on the market



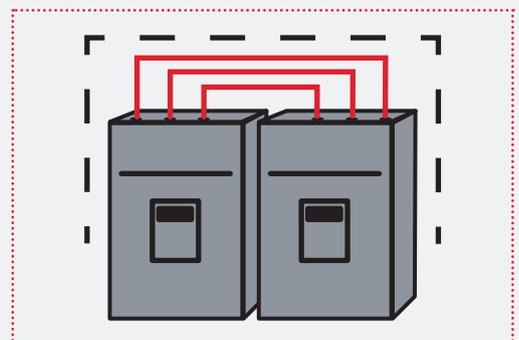
Flexible connection between fixed and moving parts



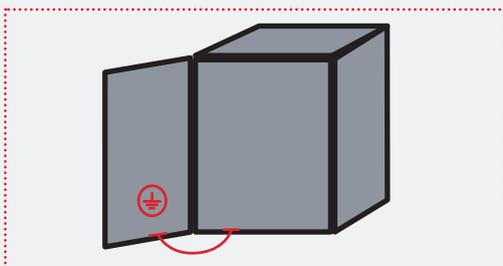
Outdoor/offshore application or difficult environment (Example: abrasion, corrosion, UV...)



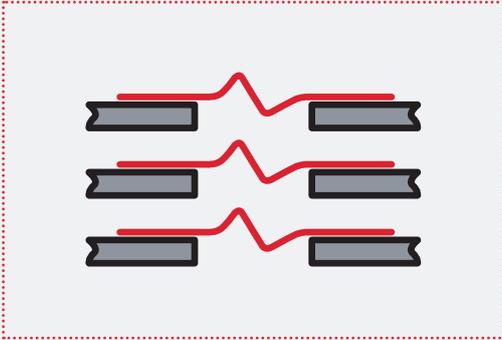
Earthing/grounding interconnection (Example: pipeline)



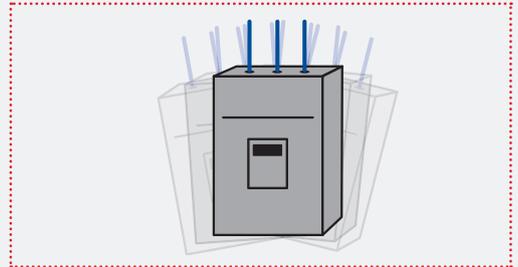
Short and compact connection between electrical components for volume reduction



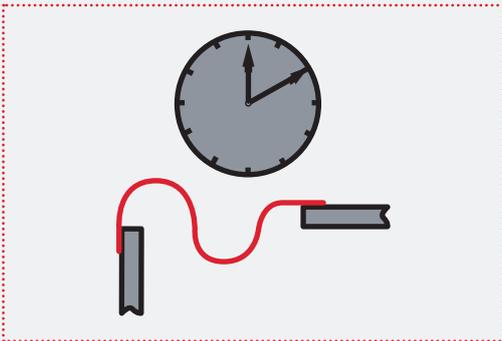
Earthing/grounding connection with excellent electro-magnetic compatibility



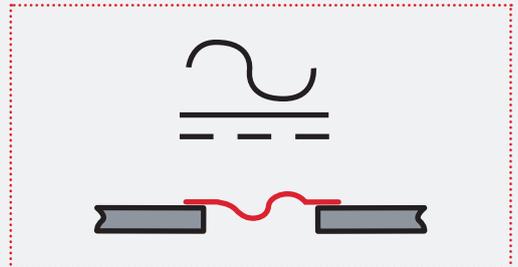
Expansion connections for busbar systems



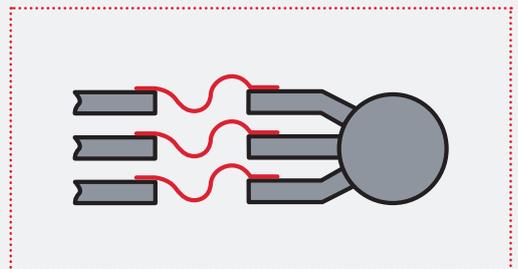
Vibration and reliability solution for connection



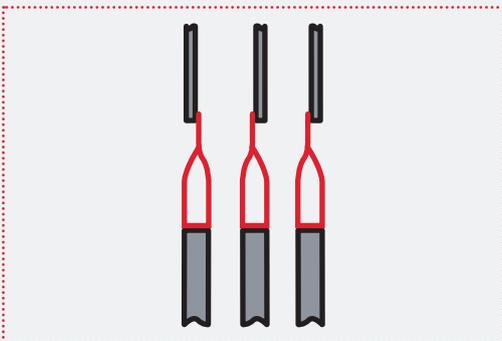
Reduce time assembly or maintenance connection



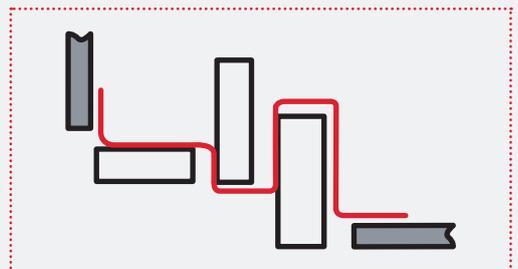
Connection for alternating current or direct current application



Motor, generator or transformer connection with busbar system



Power connection between horizontal and vertical system

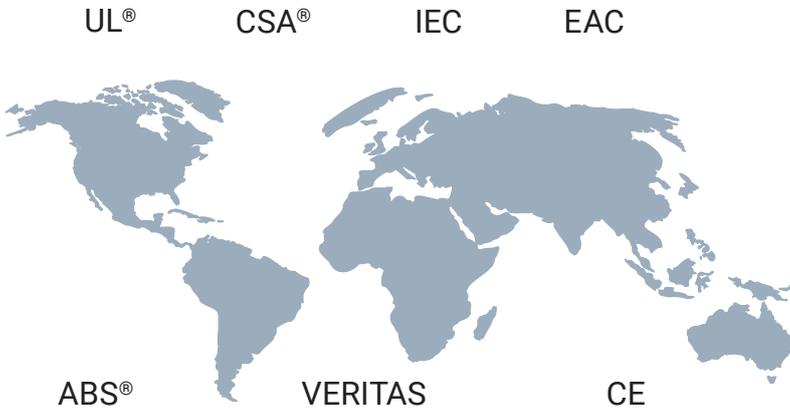


Connection everywhere

Certificates & Eriflex Software

TESTS & CERTIFICATES

nVent ERIFLEX components are compliant with several agencies and standards to meet all requirements



DEDICATED NVENT ERIFLEX SOFTWARE AVAILABLE

nVent has designed an interactive software that allows drawing your technical panel layout with all components and relevant information on them.

The software is developed according to the new IEC 61439-1 standard. Inside, you will discover: updated pricing, products information and project calculator.

Whether you're interested in making a complete low-voltage busbar system, a distribution kit, or if you need to determine a flexible connection with nVent ERIFLEX Flexibar, you can trust nVent ERIFLEX software to help simplify the process.

In fact, the software will provide you with technical and commercial datasheets dedicated to your project.

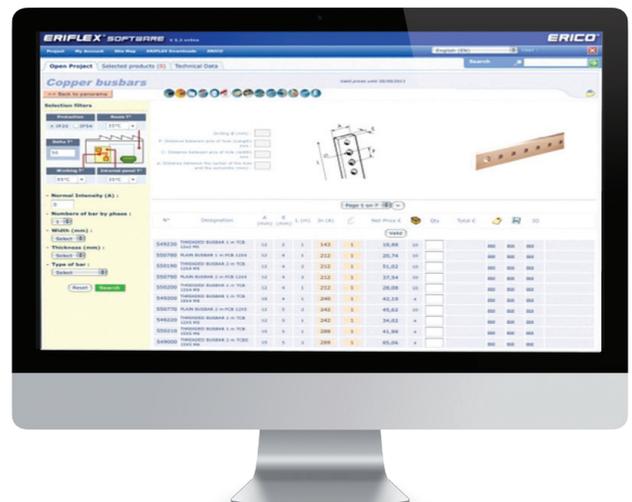
For more information or to request your personal login information, contact your local nVent representative or visit nVent.com/ERIFLEX

A COMPLETE SOLUTION FOR:

- Optimal design
- Standard compliance
- Cost effective
- Quality environment

nVent.com/ERIFLEX

- 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
CSA Certified, file No 700 443 70
- ABS American Bureau of Shipping
Certificate No. 08-HS365878-1-PDA-DUP & Certificate No. 13-HS1018106-1-PDA-DUP
Marine & Offshore Applications
- European Conformity
- Bureau VERITAS
Certificate No. 02859 / DO BV for shipboard use
- EAC
Certificate compliance for Russia
- RoHS Compliant
- Halogen-free materials



Product Overview

Product Range	Typical Uses	Typical Market
NVENT ERIFLEX Flexibar: Advanced, Standard, Summum 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Switchgear & control equipment • Transport • Electrical equipment manufacturers • Power generation • Machinery manufacturer
Insulated braided conductor (IBS, IBSB, IBSBR & IBSHY) 	<ul style="list-style-type: none"> • Interconnects for low voltage power distribution units • IBSB specially designed for industrial circuit breaker connection • Overcome vibration/alignment problems • Battery connections • Earth/ground connections 	<ul style="list-style-type: none"> • Switchgear & control equipment • Transport • Electrical equipment manufacturers • Power generation
Power shunt (PBC & PPS) 	<ul style="list-style-type: none"> • Transformer or generator to busbar connection • Overcome vibration/alignment problems • Power interconnection 	<ul style="list-style-type: none"> • Switchgear & control equipment • Power distribution • Transportation
Earth/ground copper braids (MBJ & BJ) 	<ul style="list-style-type: none"> • Power, earthing/grounding and equipotential connections • Electrical bonding enclosure door • EMI effect reduction application 	<ul style="list-style-type: none"> • Switchgear & control equipment • Rail transportation • Electrical equipment manufacturers • Power generation (wind, solar) • Data center
Earth/ground stainless steel braids (CPI & CPIW) 	<ul style="list-style-type: none"> • Earthing/grounding and equipotential connections • Superior abrasion, corrosion, chemical, and UV resistance for outdoor applications • Expansion joints • Connections for lightning protection systems 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Earth/ground connections • Power interconnection • Lightning protection • Flexible links • Overcome vibration/alignment problems 	<ul style="list-style-type: none"> • Defense & aerospace • Rail transportation • Automotive • Electronics • General electrical sector • Civil construction
Tubular copper braids in coils 	<ul style="list-style-type: none"> • Screening of cables from electromagnetic, electrostatic and RF interference • Mechanical support • Protection against abrasion and corrosion • EMC & EMH applications 	<ul style="list-style-type: none"> • Defense & aerospace • Transportation • Electronics & communication • Cable harness & assembly makers • Component distributors

Insulated Flexible Busbar

A COMPLETE RANGE FLEXIBLE BUSBAR

- Patent insulation on Flexibar:
 - Advanced
 - Standard
 - Summum



ENHANCED FLEXIBILITY

nVent'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

INNOVATIVE PATENT INSULATION

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 to reduce the contact surface between the central conductor and the insulation material. This results enhances the flexibility of the flexible busbar.

Result: <20% of the inner surface is in contact with the central conductor.

This nVent ERIFLEX patent idea makes 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.

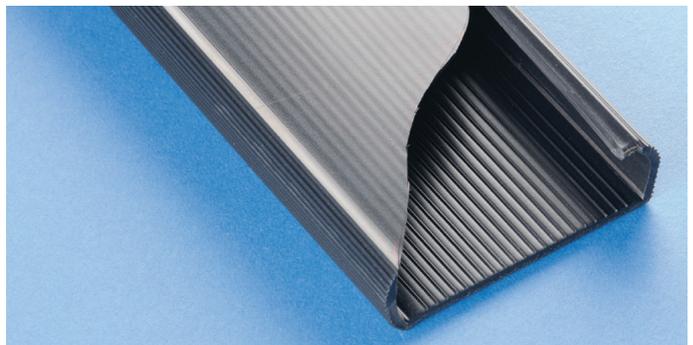
THE REFERENCE CONDUCTOR

- Flexibar is composed by with multiple layers of thin electrolytic copper, available in plain (Standard and Summum) or tin plated (Advanced & Standard)
- Flexibar connections are made by punching directly through the laminates. There are no lugs to purchase, which eliminates faulty connection problems and makes installation easier and faster
- The insulation is a high-resistance, self-extinguishing TPE (Flexibar Advanced), Silicone (Flexibar Summum) or PVC (Flexibar Classic) compound
- Traceability code and designation Part Number on product
- Easily formed, Flexibar improves assembly flexibility and aesthetics of panels
- Optimal alternative to large cable & rigid busbar
- Quality: 100% production dielectric tested
- Full range from 24 mm² up to 1200 mm²



FEATURES

- Self-extinguishable/flame retardant
- 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

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

COST SAVINGS

- Eliminates cost and installation of lugs
- Reduces inventory costs

IMPROVES RELIABILITY

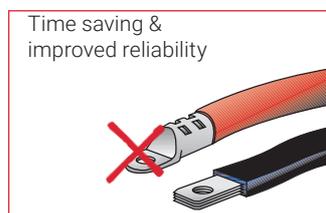
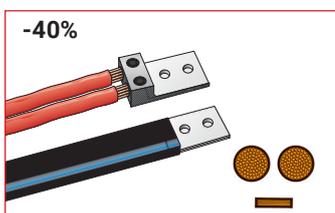
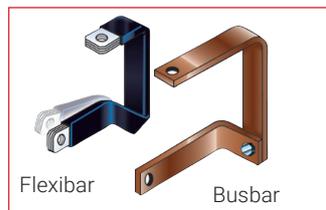
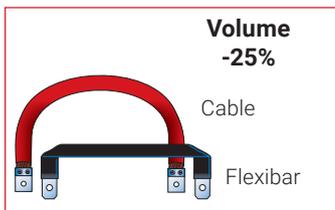
- Flexibar is directly connected thus eliminating the cable lug connection
- Excellent resistance to vibration
- No crimping

AESTHETICS

- Optimal flexibility for an easy access

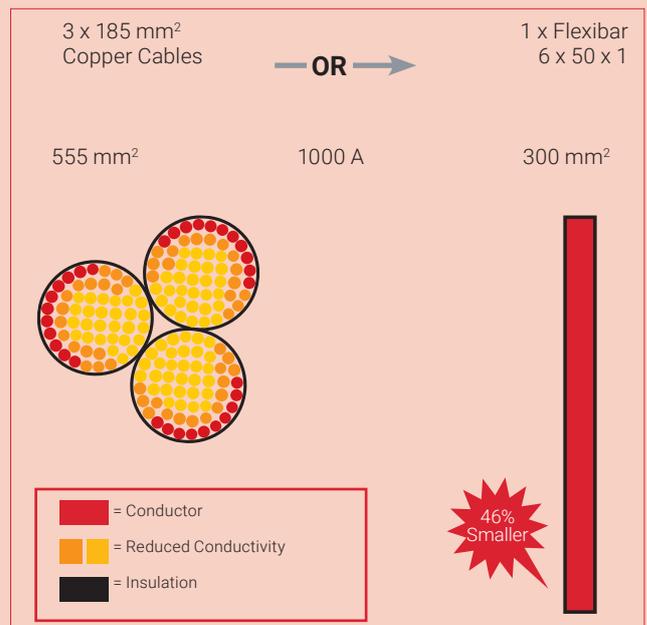
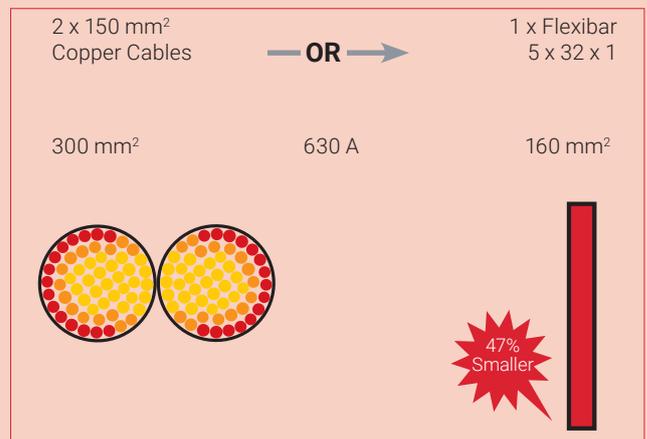
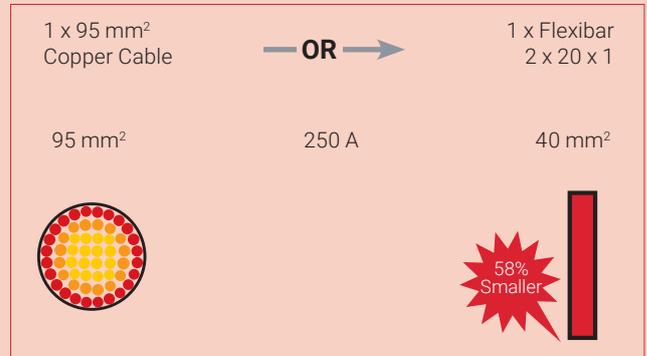
EASY INSTALLATION

- Thanks to its design all Flexibar can be easily bent and shaped for all sizes



SKIN EFFECT ON A.C. APPLICATION

Comparison to the penetration depth between:



Representative to scale.
Flexibar intensity and cable intensity are based on conductor temperature rise of 50°C.

Flexibar Advanced



UNIQUE - SAFER - FLEXIBLE



FLEXIBAR ADVANCED UNIQUE – SAFER – FLEXIBLE

- Conductor is electrolytic **tinned** copper (Cu-ETP)
- Insulation is a high-resistance TEP **Low Smoke, Halogen Free and Flame Retardant (LSHFRR)**, compound:
 - Typical elongation: 500%
 - Working temperature: -50°C 105°C
 - Typical thickness: 1.8 mm
 - Self-extinguishing: UL 94 V0
 - Dielectric strength: 20kV/mm
 - Nominal voltage: 1000 V AC/1500 V DC (IEC – UL)
 - Dielectric strength: 20kV/mm

WHY IS FLEXIBAR ADVANCED A SAFER INSULATION?

Low smoke features:

- Generates less corrosive smoke ISO 5659-2.
- Improves visibility for people to be able to easily locate the emergency exit and also allows rescue workers to better assess an emergency situation.

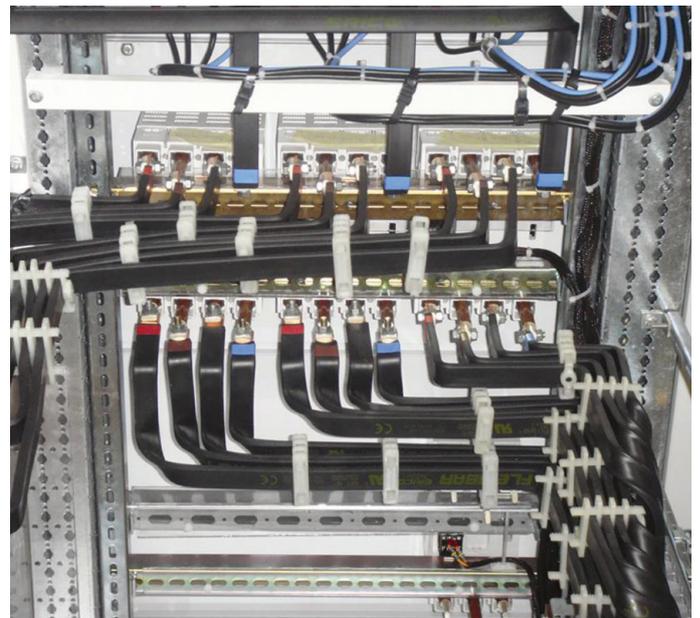
The halogen-free feature enables:

- Reduction in the quantity of toxic smoke
- Minimum of toxicity with no halogens (according to IEC 60754-1)
- Use in enclosed spaces for specific applications such as submarines, switchboards, and other enclosed environments that require a low emissions solution

The flame retardant portion of the test illustrates the self-extinguish feature:

- Compliant with the UL 94-V0 Glow wire test @ 960°C (IEC 60695-2) testing standard.
- Reduces the risk of the spread of fire
- Less damage to your electrical installation

Flexibar Advanced has a unique insulation on the market that combine **low smoke, halogen-free and flame retardant** features that improve both the reliability of your electrical installation and safety for equipment and people.



Some photographs in the Flexibar Advanced section may actually be using Flexibar

FLEXIBAR ADVANCED TECHNICAL CHARACTERISTICS



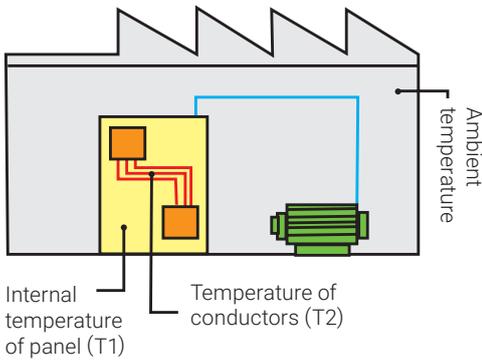
A	Part Number	N	Section		mm ²	ΔT (K)						Current Coefficient	
			A	B		70	60	50	40	30	20		
125 A	534001	3	x 9	x 0,8	21,6	158	147	134	120	104	85	1,72	2,25
	534000	8	x 6	x 0,5	24	196	182	166	143	128	105	1,72	2,25
	534004	3	x 13	x 0,5	19,5	198	184	167	150	130	106	1,72	2,25
	534006	2	x 15,5	x 0,8	24,8	252	234	212	191	165	134	1,72	2,25
	534002	6	x 9	x 0,8	43,2	290	269	245	220	190	155	1,72	2,25
250 A	534005	6	x 13	x 0,5	39	300	277	253	226	196	160	1,72	2,25
	534003	9	x 9	x 0,8	64,8	314	291	265	237	206	168	1,72	2,25
	534010	2	x 20	x 1	40	326	300	275	246	214	174	1,72	2,25
	534007	4	x 15,5	x 0,8	49,6	380	350	320	286	248	202	1,72	2,25
	534011	3	x 20	x 1	60	428	395	360	323	280	228	1,72	2,25
534016	2	x 24	x 1	48	450	416	380	340	295	240	1,72	2,25	
400 A	534008	6	x 15,5	x 0,8	74,4	476	440	402	360	318	254	1,72	2,25
	534012	4	x 20	x 1	80	476	440	402	360	312	254	1,72	2,25
	534023	2	x 32	x 1	64	480	445	406	363	315	257	1,72	2,25
	534017	3	x 24	x 1	72	490	453	413	370	320	261	1,72	2,25
	534013	5	x 20	x 1	100	498	460	420	376	326	266	1,72	2,25
	534009	10	x 15,5	x 0,8	124	538	498	455	407	352	288	1,72	2,25
	534030	2	x 40	x 1	80	538	500	455	406	352	288	1,72	2,25
	534014	6	x 20	x 1	120	546	506	462	413	358	292	1,72	2,25
	534018	4	x 24	x 1	96	550	510	465	416	360	294	1,72	2,25
	534024	3	x 32	x 1	96	570	525	480	430	372	304	1,72	2,25
500 A	534019	5	x 24	x 1	120	608	563	514	460	398	325	1,72	2,25
	534031	3	x 40	x 1	120	617	570	522	466	405	330	1,72	2,25
	534025	4	x 32	x 1	128	648	600	548	490	425	347	1,72	2,25
	534020	6	x 24	x 1	144	670	620	566	506	438	358	1,72	2,25
	534037	3	x 50	x 1	150	700	650	592	530	460	374	1,72	2,25
	534032	4	x 40	x 1	160	727	673	615	550	476	389	1,72	2,25
630 A	534026	5	x 32	x 1	160	758	702	640	573	496	405	1,72	2,25
	534015	10	x 20	x 1	200	762	706	645	576	500	408	1,72	2,25
	534021	8	x 24	x 1	192	802	743	678	606	525	429	1,72	2,25
	534027	6	x 32	x 1	192	846	783	715	640	555	452	1,72	2,25
	534038	4	x 50	x 1	200	860	795	727	650	563	460	1,72	2,25
	534033	5	x 40	x 1	200	900	832	760	680	590	481	1,72	2,25
800 A	534022	10	x 24	x 1	240	948	877	800	716	592	506	1,72	2,25
	534044	4	x 63	x 1	252	1010	935	855	763	661	541	1,65	2,12
	534028	8	x 32	x 1	256	1018	943	860	770	667	544	1,72	2,25
	534034	6	x 40	x 1	240	1018	943	860	770	667	544	1,72	2,25
	534039	5	x 50	x 1	250	1100	1016	930	830	718	588	1,72	2,25
1000 A	534049	4	x 80	x 1	320	1200	1110	1015	906	785	642	1,65	2,12
	534045	5	x 63	x 1	315	1220	1125	1030	920	797	651	1,65	2,12
	534040	6	x 50	x 1	300	1225	1135	1035	925	802	655	1,72	2,25
	534029	10	x 32	x 1	320	1230	1140	1040	930	805	658	1,72	2,25
	534035	8	x 40	x 1	320	1230	1140	1040	930	805	658	1,72	2,25
	534041	8	x 50	x 1	400	1393	1290	1175	1050	912	743	1,72	2,25
	534050	5	x 80	x 1	400	1390	1285	1175	1050	910	743	1,65	2,12
	534036	10	x 40	x 1	400	1400	1295	1181	1055	915	747	1,72	2,25
	534046	6	x 63	x 1	378	1437	1330	1215	1085	941	768	1,65	2,12
1250 A	534051	6	x 80	x 1	480	1627	1505	1375	1230	1065	870	1,65	2,12
	534055	5	x 100	x 1	500	1635	1515	1385	1235	1070	876	1,6	2,02
	534042	10	x 50	x 1	500	1650	1525	1395	1245	1080	882	1,72	2,25
	534047	8	x 63	x 1	504	1650	1525	1395	1245	1080	882	1,65	2,12
	534056	6	x 100	x 1	600	1843	1705	1550	1393	1205	980	1,6	2,02
1600 A	534048	10	x 63	x 1	630	1895	1755	1600	1435	1240	1012	1,65	2,12
	534052	8	x 80	x 1	640	1895	1755	1600	1430	1240	1012	1,65	2,12
	534053	10	x 80	x 1	800	2100	1945	1775	1585	1375	1123	1,65	2,12
	534057	8	x 100	x 1	800	2147	1990	1815	1625	1405	1148	1,6	2,02
	534058	10	x 100	x 1	1000	2350	2170	1985	1775	1535	1255	1,6	2,02
	534059	12	x 100	x 1	1200	2500	2315	2115	1890	1636	1338	1,6	2,02
	534060	10	x 120	x 1	1200	2755	2550	2330	2070	1792	1474	1,49	1,95

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.

Flexibar Advanced

UNIQUE - SAFER - FLEXIBLE

Selection of Flexibar Advanced according to the internal temperature of the panel



TEMPERATURE RISE OF CONDUCTOR = $T2 - T1 = \Delta T$ (K)

Ex: For a current of 630A, with: $T1 = 40^{\circ}\text{C}$ - $T2 = 90^{\circ}\text{C}$

- 1) $\Delta T = 90 - 40 = 50\text{K}$
- 2) In the 50°K column, find the closest current value to 630A.
Flexibar Advanced 5x32x1 - 552650 - 160 mm² - 640A.
- 3) Select Flexibar Advanced according to the terminal width of the equipment being connected.

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

FLEXIBAR ADVANCED IN PARALLEL

When using 2 or 3 Flexibar Advanced on edge in parallel for the same phase, use the coefficient:

Ex: $5 \times 32 \times 1 - \Delta T^{\circ} = 50\text{K}$: 640 A

2 bars in parallel > $640\text{ A} \times 1,72 = 1100\text{ A}$

3 bars in parallel > $640\text{ A} \times 2,25 = 1440\text{ A}$

CERTIFICATION & APPROVALS

- International Commission Electrotechnique (IEC) - Meets all requirements of IEC 61439.1
- UL 67 Recognized component in the "Panelboard and Switchboard accessories – component category (UL file E125470) for US
- UL 758 Recognized component in the "Appliance wiring material - component" category style 11681
- CE Conformity
- RoHS compliant
- Class II Conductors (IEC 61439-1, Chapter 8.4.4 - Protection by total insulation)
- Low Smoke ISO 5659-2
- Halogen-free IEC 60754-1
- Flame retardant UL94-V0
- Glow wire test @ 960°C (IEC 60695-2)



Flexibar Advanced Part Numbers

2 METERS TINNED COPPER

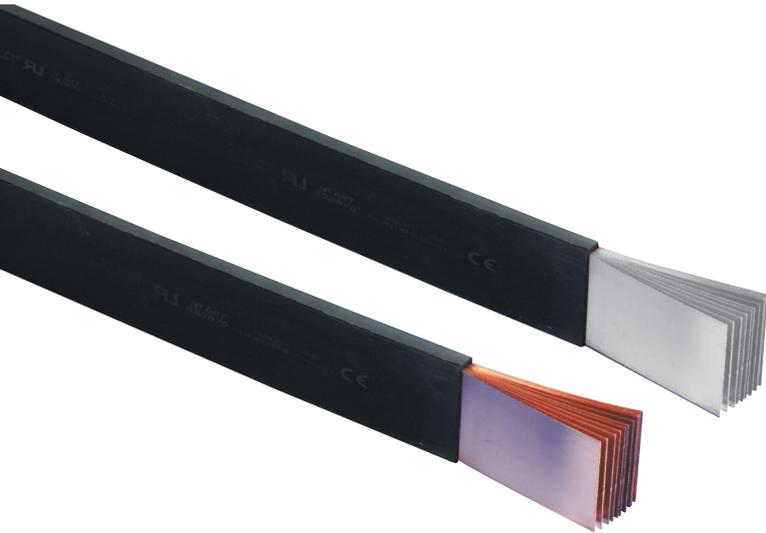
Part Number	Global Part Number	Flexibar Description		 Kg
534000	FADV2MTC8X6	Flexibar Advanced 2 m Tinned Copper 8X6X0,5	4	0,35
534001	FADV2MTC3X9	Flexibar Advanced 2 m Tinned Copper 3X9X0,8	4	0,43
534002	FADV2MTC6X9	Flexibar Advanced 2 m Tinned Copper 6X9X0,8	4	0,81
534003	FADV2MTC9X9	Flexibar Advanced 2 m Tinned Copper 9X9X0,8	4	1,19
534004	FADV2MTC3X13	Flexibar Advanced 2 m Tinned Copper 3X13X0,5	4	0,45
534005	FADV2MTC6X13	Flexibar Advanced 2 m Tinned Copper 6X13X0,5	4	0,79
534006	FADV2MTC2X15-5	Flexibar Advanced 2 m Tinned Copper 2X15,5X0,8	4	0,51
534007	FADV2MTC4X15-5	Flexibar Advanced 2 m Tinned Copper 4X15,5X0,8	4	1,02
534008	FADV2MTC6X15-5	Flexibar Advanced 2 m Tinned Copper 6X15,5X0,8	4	1,50
534009	FADV2MTC10X15-5	Flexibar Advanced 2 m Tinned Copper 10X15,5X0,8	4	2,20
534010	FADV2MTC2X20X1	Flexibar Advanced 2 m Tinned Copper 2X20X1	3	1,05
534011	FADV2MTC3X20X1	Flexibar Advanced 2 m Tinned Copper 3X20X1	3	1,42
534012	FADV2MTC4X20X1	Flexibar Advanced 2 m Tinned Copper 4X20X1	3	1,78
534013*	FADV2MTC5X20X1	Flexibar Advanced 2 m Tinned Copper 5X20X1	3	2,15
534014*	FADV2MTC6X20X1	Flexibar Advanced 2 m Tinned Copper 6X20X1	3	2,41
534015*	FADV2MTC10X20X1	Flexibar Advanced 2 m Tinned Copper 10X20X1	3	3,99
534016	FADV2MTC2X24X1	Flexibar Advanced 2 m Tinned Copper 2X24X1	3	1,24
534017	FADV2MTC3X24X1	Flexibar Advanced 2 m Tinned Copper 3X24X1	3	1,68
534018	FADV2MTC4X24X1	Flexibar Advanced 2 m Tinned Copper 4X24X1	3	2,12
534019*	FADV2MTC5X24X1	Flexibar Advanced 2 m Tinned Copper 5X24X1	3	2,55
534020*	FADV2MTC6X24X1	Flexibar Advanced 2 m Tinned Copper 6X24X1	3	2,99
534021*	FADV2MTC8X24X1	Flexibar Advanced 2 m Tinned Copper 8X24X1	3	3,87
534022*	FADV2MTC10X24X1	Flexibar Advanced 2 m Tinned Copper 10X24X1	3	4,75
534023	FADV2MTC2X32X1	Flexibar Advanced 2 m Tinned Copper 2X32X1	2	1,62
534024	FADV2MTC3X32X1	Flexibar Advanced 2 m Tinned Copper 3X32X1	2	2,20
534025	FADV2MTC4X32X1	Flexibar Advanced 2 m Tinned Copper 4X32X1	2	2,78
534026*	FADV2MTC5X32X1	Flexibar Advanced 2 m Tinned Copper 5X32X1	2	3,36
534027*	FADV2MTC6X32X1	Flexibar Advanced 2 m Tinned Copper 6X32X1	2	3,94
534028*	FADV2MTC8X32X1	Flexibar Advanced 2 m Tinned Copper 8X32X1	2	5,10
534029*	FADV2MTC10X32X1	Flexibar Advanced 2 m Tinned Copper 10X32X1	2	6,27
534030	FADV2MTC2X40X1	Flexibar Advanced 2 m Tinned Copper 2X40X1	2	1,99
534031	FADV2MTC3X40X1	Flexibar Advanced 2 m Tinned Copper 3X40X1	2	2,72
534032	FADV2MTC4X40X1	Flexibar Advanced 2 m Tinned Copper 4X40X1	2	3,44
534033*	FADV2MTC5X40X1	Flexibar Advanced 2 m Tinned Copper 5X40X1	2	4,16
534034*	FADV2MTC6X40X1	Flexibar Advanced 2 m Tinned Copper 6X40X1	2	4,89
534035*	FADV2MTC8X40X1	Flexibar Advanced 2 m Tinned Copper 8X40X1	2	6,33
534036*	FADV2MTC10X40X1	Flexibar Advanced 2 m Tinned Copper 10X40X1	2	7,78
534037	FADV2MTC3X50X1	Flexibar Advanced 2 m Tinned Copper 3X50X1	1	3,37
534038*	FADV2MTC4X50X1	Flexibar Advanced 2 m Tinned Copper 4X50X1	1	4,27
534039*	FADV2MTC5X50X1	Flexibar Advanced 2 m Tinned Copper 5X50X1	1	5,17
534040*	FADV2MTC6X50X1	Flexibar Advanced 2 m Tinned Copper 6X50X1	1	6,07
534041*	FADV2MTC8X50X1	Flexibar Advanced 2 m Tinned Copper 8X50X1	1	7,87
534042*	FADV2MTC10X50X1	Flexibar Advanced 2 m Tinned Copper 10X50X1	1	9,68
534044*	FADV2MTC4X63X1	Flexibar Advanced 2 m Tinned Copper 4X63X1	1	5,34
534045*	FADV2MTC5X63X1	Flexibar Advanced 2 m Tinned Copper 5X63X1	1	6,48
534046*	FADV2MTC6X63X1	Flexibar Advanced 2 m Tinned Copper 6X63X1	1	7,61
534047*	FADV2MTC8X63X1	Flexibar Advanced 2 m Tinned Copper 8X63X1	1	9,88
534048*	FADV2MTC10X63X1	Flexibar Advanced 2 m Tinned Copper 10X63X1	1	12,14
534049*	FADV2MTC4X80X1	Flexibar Advanced 2 m Tinned Copper 4X80X1	1	6,75
534050*	FADV2MTC5X80X1	Flexibar Advanced 2 m Tinned Copper 5X80X1	1	8,19
534051*	FADV2MTC6X80X1	Flexibar Advanced 2 m Tinned Copper 6X80X1	1	9,62
534052*	FADV2MTC8X80X1	Flexibar Advanced 2 m Tinned Copper 8X80X1	1	12,49
534053*	FADV2MTC10X80X1	Flexibar Advanced 2 m Tinned Copper 10X80X1	1	15,37
534055*	FADV2MTC5X100X1	Flexibar Advanced 2 m Tinned Copper 5X100X1	1	10,20
534056*	FADV2MTC6X100X1	Flexibar Advanced 2 m Tinned Copper 6X100X1	1	11,99
534057*	FADV2MTC8X100X1	Flexibar Advanced 2 m Tinned Copper 8X100X1	1	15,57
534058*	FADV2MTC10X100	Flexibar Advanced 2 m Tinned Copper 10X100X1	1	19,16
534059*	FADV2MTC12X100	Flexibar Advanced 2 m Tinned Copper 12X100X1	1	22,74
534060*	FADV2MTC10X120	Flexibar Advanced 2 m Tinned Copper 10X120X1	1	22,90

All **Flexibar Advanced** cross sections can be bent, folded or twisted with a small bending radius for shorter and more compact power connections, from 125A up to 4500A applications.



*nVent ERIFLEX Patent insulation

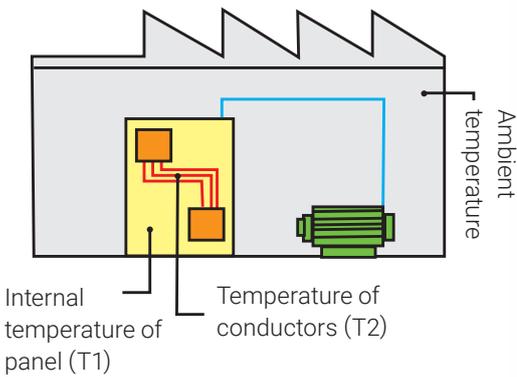
Flexibar Standard



FLEXIBAR STANDARD

- Conductor is electrolytic copper (Cu-ETP)
- Insulation is a high-resistance vinyl compound:
 - Elongation: 370%
 - Operating temperature: -50°C -105°C
 - Thickness: 2 mm ± 0,2
 - Self-extinguishing: UL 94 V0
 - Dielectric strength: 20kV/mm
 - Nominal voltage = 1000 V AC/1500 V DC (UL & IEC)

Selection of Flexibar 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.
Flexibar 5x32x1 - 552650 - 160 mm² - 640A.
- 3) Select Flexibar according to the terminal width of the equipment being connected.

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

FLEXIBAR IN PARALLEL

When using 2 or 3 Flexibar on edge in parallel for the same phase, use the coefficient:

Ex: $5 \times 32 \times 1 - \Delta T^\circ = 50 \text{ K}: 640 \text{ A}$

2 bars in parallel > $640 \text{ A} \times 1,72 = 1100 \text{ A}$

3 bars in parallel > $640 \text{ A} \times 2,25 = 1440 \text{ A}$

FLEXIBAR STANDARD TECHNICAL CHARACTERISTICS



A	Part Number	N	A	B	Section mm ²	ΔT (K)						Current Coefficient	
						70	60	50	40	30	20		
125 A	552400	8	x 6	x 0,5	24	196	182	166	143	128	105	1,72	2,25
	552410	3	x 9	x 0,8	21,6	158	147	134	120	104	85	1,72	2,25
	552420	6	x 9	x 0,8	43,2	290	269	245	220	190	155	1,72	2,25
	552440	3	x 13	x 0,5	19,5	198	184	167	150	130	106	1,72	2,25
	552390	2	x 15,5	x 0,8	24,8	252	234	212	191	165	134	1,72	2,25
250 A	552430	9	x 9	x 0,8	64,8	314	291	265	237	206	168	1,72	2,25
	552450	6	x 13	x 0,5	39	300	277	253	226	196	160	1,72	2,25
	552460	4	x 15,5	x 0,8	49,6	380	350	320	286	248	202	1,72	2,25
	552490	2	x 20	x 1	40	326	300	275	246	214	174	1,72	2,25
	552500	3	x 20	x 1	60	428	395	360	323	280	228	1,72	2,25
	552550	2	x 24	x 1	48	450	416	380	340	295	240	1,72	2,25
400 A	552470	6	x 15,5	x 0,8	74,4	476	440	402	360	318	254	1,72	2,25
	552480	10	x 15,5	x 0,8	124	538	498	455	407	352	288	1,72	2,25
	552510	4	x 20	x 1	80	476	440	402	360	312	254	1,72	2,25
	552520	5	x 20	x 1	100	498	460	420	376	326	266	1,72	2,25
	552530	6	x 20	x 1	120	546	506	462	413	358	292	1,72	2,25
	552560	3	x 24	x 1	72	490	453	413	370	320	261	1,72	2,25
	552570	4	x 24	x 1	96	550	510	465	416	360	294	1,72	2,25
	552620	2	x 32	x 1	64	480	445	406	363	315	257	1,72	2,25
	552630	3	x 32	x 1	96	570	525	480	430	372	304	1,72	2,25
	552690	2	x 40	x 1	80	538	500	455	406	352	288	1,72	2,25
500 A	552580	5	x 24	x 1	120	608	563	514	460	398	325	1,72	2,25
	552590	6	x 24	x 1	144	670	620	566	506	438	358	1,72	2,25
	552640	4	x 32	x 1	128	648	600	548	490	425	347	1,72	2,25
	552700	3	x 40	x 1	120	617	570	522	466	405	330	1,72	2,25
	552710	4	x 40	x 1	160	727	673	615	550	476	389	1,72	2,25
	552760	3	x 50	x 1	150	700	650	592	530	460	374	1,72	2,25
630 A	552540	10	x 20	x 1	200	762	706	645	576	500	408	1,72	2,25
	552600	8	x 24	x 1	192	802	743	678	606	525	429	1,72	2,25
	552650	5	x 32	x 1	160	758	702	640	573	496	405	1,72	2,25
	552660	6	x 32	x 1	192	846	783	715	640	555	452	1,72	2,25
	552720	5	x 40	x 1	200	900	832	760	680	590	481	1,72	2,25
	552770	4	x 50	x 1	200	860	795	727	650	563	460	1,72	2,25
800 A	552610	10	x 24	x 1	240	948	877	800	716	592	506	1,72	2,25
	552670	8	x 32	x 1	256	1018	943	860	770	667	544	1,72	2,25
	552730	6	x 40	x 1	240	1018	943	860	770	667	544	1,72	2,25
	552780	5	x 50	x 1	250	1100	1016	930	830	718	588	1,72	2,25
	552830	4	x 63	x 1	252	1010	935	855	763	661	541	1,65	2,12
1000 A	552680	10	x 32	x 1	320	1230	1140	1040	930	805	658	1,72	2,25
	552740	8	x 40	x 1	320	1230	1140	1040	930	805	658	1,72	2,25
	552750	10	x 40	x 1	400	1400	1295	1181	1055	915	747	1,72	2,25
	552790	6	x 50	x 1	300	1225	1135	1035	925	802	655	1,72	2,25
	552800	8	x 50	x 1	400	1393	1290	1175	1050	912	743	1,72	2,25
	552840	5	x 63	x 1	315	1220	1125	1030	920	797	651	1,65	2,12
	552850	6	x 63	x 1	378	1437	1330	1215	1085	941	768	1,65	2,12
	552890	4	x 80	x 1	320	1200	1110	1015	906	785	642	1,65	2,12
	552900	5	x 80	x 1	400	1390	1285	1175	1050	910	743	1,65	2,12
1250 A	552810	10	x 50	x 1	500	1650	1525	1395	1245	1080	882	1,72	2,25
	552860	8	x 63	x 1	504	1650	1525	1395	1245	1080	882	1,65	2,12
	552910	6	x 80	x 1	480	1627	1505	1375	1230	1065	870	1,65	2,12
	552950	5	x 100	x 1	500	1635	1515	1385	1235	1070	876	1,6	2,02
	552960	6	x 100	x 1	600	1843	1705	1550	1393	1205	980	1,6	2,02
1600 A	552870	10	x 63	x 1	630	1895	1755	1600	1435	1240	1012	1,65	2,12
	552920	8	x 80	x 1	640	1895	1755	1600	1430	1240	1012	1,65	2,12
	552930	10	x 80	x 1	800	2100	1945	1775	1585	1375	1123	1,65	2,12
	552970	8	x 100	x 1	800	2147	1990	1815	1625	1405	1148	1,6	2,02
	552980	10	x 100	x 1	1000	2350	2170	1985	1775	1535	1255	1,6	2,02
	552990	12	x 100	x 1	1200	2500	2315	2115	1890	1636	1338	1,6	2,02
	538650	10	x 120	x 1	1200	2755	2550	2330	2070	1792	1474	1,49	1,95

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.

Flexibar Standard

CERTIFICATION & APPROVALS

- International Commission Electrotechnique (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)
- Bureau 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
- EAC compliant
- RoHS compliant
- Class II Conductors (IEC 61439-1, Chapter 8.4.4 - Protection by total insulation)

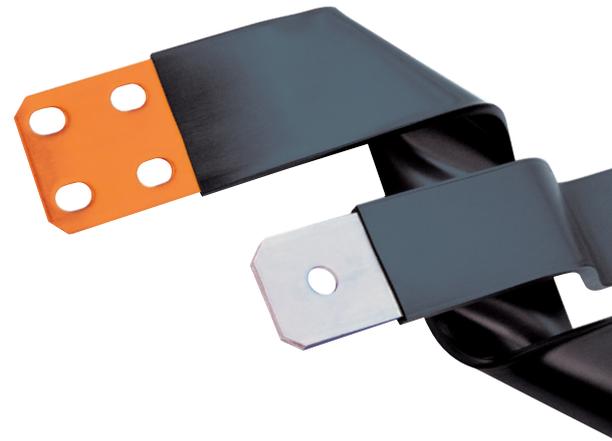


Flexibar Standard Part Numbers

2 METERS RED COPPER

Part Number	Flexibar Description		 Kg
552400	2M 8 x 6 x 0,5	10	0,35
552410	2M 3 x 9 x 0,8	10	0,43
552420	2M 6 x 9 x 0,8	10	0,81
552430	2M 9 x 9 x 0,8	10	1,19
552440	2M 3 x 13 x 0,5	10	0,45
552450	2M 6 x 13 x 0,5	10	0,79
552390	2M 2 x 15,5 x 0,8	10	0,51
552460	2M 4 x 15,5 x 0,8	10	1,02
552470	2M 6 x 15,5 x 0,8	10	1,50
552480	2M 10 x 15,5 x 0,8	10	2,20
552490	2M 2 x 20 x 1	5	1,05
552500	2M 3 x 20 x 1	5	1,42
552510	2M 4 x 20 x 1	5	1,78
552520*	2M 5 x 20 x 1	5	2,15
552530*	2M 6 x 20 x 1	5	2,41
552540*	2M 10 x 20 x 1	5	3,99
552550	2M 2 x 24 x 1	5	1,24
552560	2M 3 x 24 x 1	5	1,68
552570	2M 4 x 24 x 1	5	2,12
552580*	2M 5 x 24 x 1	5	2,55
552590*	2M 6 x 24 x 1	5	2,99
552600*	2M 8 x 24 x 1	5	3,87
552610*	2M 10 x 24 x 1	5	4,75
552620	2M 2 x 32 x 1	5	1,62
552630	2M 3 x 32 x 1	5	2,20
552640	2M 4 x 32 x 1	5	2,78
552650*	2M 5 x 32 x 1	5	3,36
552660*	2M 6 x 32 x 1	5	3,94
552670*	2M 8 x 32 x 1	5	5,10
552680*	2M 10 x 32 x 1	5	6,27
552690	2M 2 x 40 x 1	5	1,99
552700	2M 3 x 40 x 1	5	2,72
552710	2M 4 x 40 x 1	5	3,44
552720*	2M 5 x 40 x 1	5	4,16
552730*	2M 6 x 40 x 1	5	4,89
552740*	2M 8 x 40 x 1	5	6,33
552750*	2M 10 x 40 x 1	5	7,78
552760	2M 3 x 50 x 1	5	3,37
552770*	2M 4 x 50 x 1	5	4,27
552780*	2M 5 x 50 x 1	5	5,17
552790*	2M 6 x 50 x 1	2	6,07
552800*	2M 8 x 50 x 1	2	7,87
552810*	2M 10 x 50 x 1	2	9,68
552830*	2M 4 x 63 x 1	2	5,34
552840*	2M 5 x 63 x 1	2	6,48
552850*	2M 6 x 63 x 1	2	7,61
552860*	2M 8 x 63 x 1	2	9,88
552870*	2M 10 x 63 x 1	2	12,14
552890*	2M 4 x 80 x 1	2	6,75
552900*	2M 5 x 80 x 1	2	8,19
552910*	2M 6 x 80 x 1	2	9,62
552920*	2M 8 x 80 x 1	2	12,49
552930*	2M 10 x 80 x 1	2	15,37
552950*	2M 5 x 100 x 1	2	10,20
552960*	2M 6 x 100 x 1	2	11,99
552970*	2M 8 x 100 x 1	2	15,57
552980*	2M 10 x 100 x 1	2	19,16
552990*	2M 12 x 100 x 1	2	22,74
538650*	2M 10 x 120 x 1	1	22,90

* nVent ERIFLEX patent insulation



All Flexibar cross sections can be bent, folded or twisted with a small bending radius for shorter and more compact power connections, from 125A up to 4500A applications.

3 METERS RED COPPER

Part Number	Flexibar Description		 Kg
541060	3M 4 x 15,5 x 0,8	5	1,53
541090	3M 2 x 20 x 1	5	1,58
541100	3M 3 x 20 x 1	5	2,13
541110	3M 4 x 20 x 1	5	2,67
541150	3M 2 x 24 x 1	5	1,86
541160	3M 3 x 24 x 1	5	2,52
541170	3M 4 x 24 x 1	5	3,18
541180*	3M 5 x 24 x 1	5	3,83
541230	3M 3 x 32 x 1	2	3,30
541240	3M 4 x 32 x 1	2	4,17
541250*	3M 5 x 32 x 1	2	5,04
541260*	3M 6 x 32 x 1	2	5,91
541270*	3M 8 x 32 x 1	2	7,65
541320*	3M 5 x 40 x 1	2	6,24
541380*	3M 5 x 50 x 1	2	7,76

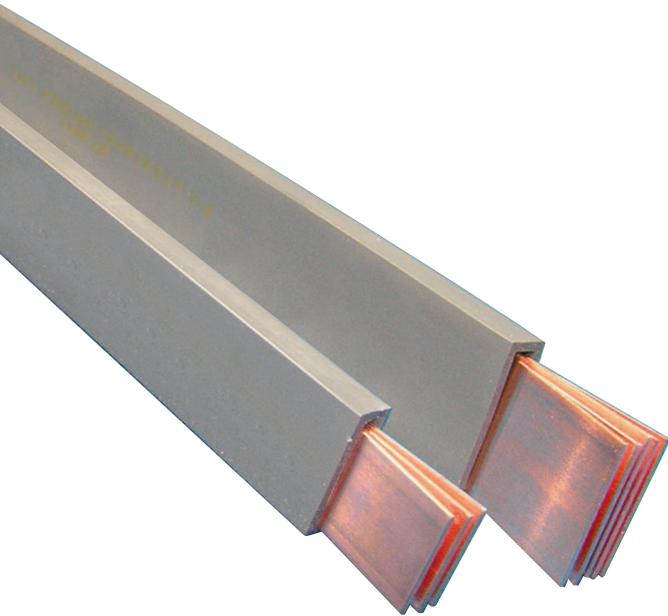
* ERIFLEX patent insulation

3 METERS TINNED COPPER

Part Number	Flexibar Description		 Kg
505501	3MTC 2 x 20 x 1	5	1,58
505502	3MTC 3 x 20 x 1	5	2,13
505503	3MTC 4 x 20 x 1	5	2,67
505506	3MTC 2 x 24 x 1	5	1,86
505507	3MTC 3 x 24 x 1	5	2,52
505508	3MTC 4 x 24 x 1	5	3,18
505509*	3MTC 5 x 24 x 1	5	3,83
505510*	3MTC 6 x 24 x 1	5	4,48
505514	3MTC 3 x 32 x 1	2	3,30
505515	3MTC 4 x 32 x 1	2	4,17
505516*	3MTC 5 x 32 x 1	2	5,04
505517*	3MTC 6 x 32 x 1	2	5,91
505518*	3MTC 8 x 32 x 1	2	7,65
505519*	3MTC 10 x 32 x 1	2	9,40
505523*	3MTC 5 x 40 x 1	2	6,24
505526*	3MTC 10 x 40 x 1	2	11,67

*nVent ERIFLEX patent insulation

Flexibar Summum



FLEXIBAR SUMMUM

HALOGEN FREE - HIGH TEMPERATURE

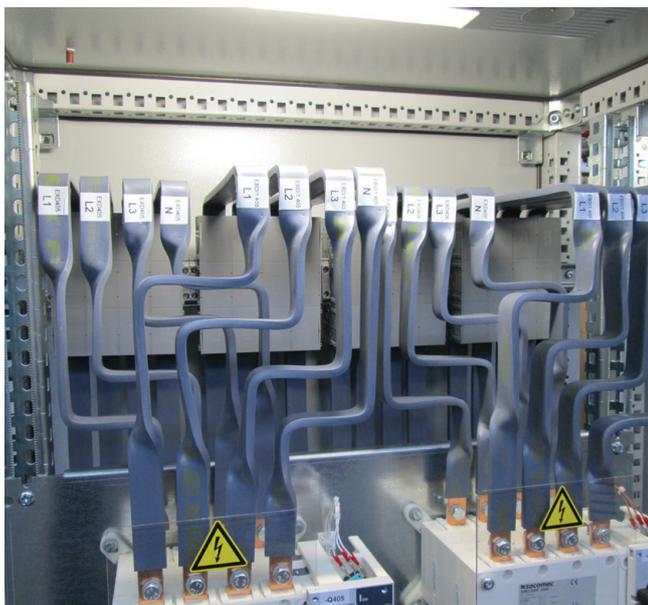
- Halogen-free
- High current density
- High ambient temperature
- High flexibility
- High insulation value

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)
 - Low smoke
 - Very high UV & ozone withstanding
 - Self-extinguishing: UL 94 V 0
 - 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
 - IEC 60439.1
 - IEC 61439.1.



On request: Tinned Flexibar Summum





2 METER RED COPPER

Part Number	Flexibar Description		 Kg	Section mm ²	IEC® Ampacity ΔT (°k)					Current Coefficient	
					70	60	50	40	30		
566490	Flexibar Summum 2 M 2 x 20 x 1	5	1,05	40	326	300	275	246	214	1,72	2,25
566500	Flexibar Summum 2 M 3 x 20 x 1	5	1,42	60	428	395	360	323	280	1,72	2,25
566510	Flexibar Summum 2 M 4 x 20 x 1	5	1,78	80	476	440	402	360	312	1,72	2,25
566520	Flexibar Summum 2 M 5 x 20 x 1	5	2,15	100	498	460	420	376	326	1,72	2,25
566550	Flexibar Summum 2 M 2 x 24 x 1	5	1,24	48	450	416	380	340	295	1,72	2,25
566560	Flexibar Summum 2 M 3 x 24 x 1	5	1,68	72	490	453	413	370	320	1,72	2,25
566570	Flexibar Summum 2 M 4 x 24 x 1	5	2,12	96	550	540	465	416	360	1,72	2,25
566580	Flexibar Summum 2 M 5 x 24 x 1	5	2,55	120	608	563	514	460	398	1,72	2,25
566590	Flexibar Summum 2 M 6 x 24 x 1	5	2,99	144	670	620	566	506	438	1,72	2,25
566630	Flexibar Summum 2 M 3 x 32 x 1	5	2,2	96	570	525	480	430	372	1,72	2,25
566640	Flexibar Summum 2 M 4 x 32 x 1	5	2,78	128	648	600	548	490	425	1,72	2,25
566650	Flexibar Summum 2 M 5 x 32 x 1	5	3,36	160	758	702	640	573	496	1,72	2,25
566660	Flexibar Summum 2 M 6 x 32 x 1	5	3,94	192	846	783	715	640	555	1,72	2,25
566670	Flexibar Summum 2 M 8 x 32 x 1	5	5,1	256	1018	943	860	770	667	1,72	2,25
566720	Flexibar Summum 2 M 5 x 40 x 1	5	4,16	200	900	832	760	680	590	1,72	2,25
566730	Flexibar Summum 2 M 6 x 40 x 1	5	4,89	240	1018	943	860	770	667	1,72	2,25
566750	Flexibar Summum 2 M 10 x 40 x 1	5	7,78	400	1400	1295	1181	1055	915	1,72	2,25
566780	Flexibar Summum 2 M 5 x 50 x 1	5	5,17	250	1100	1016	930	830	718	1,72	2,25
566800	Flexibar Summum 2 M 8 x 50 x 1	2	7,87	400	1393	1290	1175	1050	912	1,72	2,25
566810	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.

Some photographs in the Flexibar Summum section may actually be using Flexibar

Accessories



FLEXIBAR STANDARD KITS

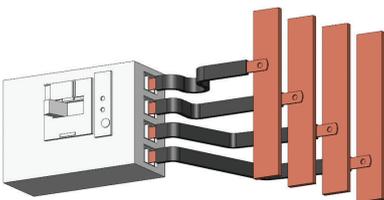
- Application: connections between busbar and fixed switchgear
- Kit is comprised of Flexibar Standard preformed and punched at the 2 extremities & end covers
- Only 1 kit for 3 configurations
- Intensity range: from 250A to 630A



END COVER 20, 24 & 32

- **End Cover 20:** Kit 250A T, Kit 250A TN, IBS 25, IBS 50, IBSB 50 and IBSB 70.
- **End Cover 24:** 24 mm and IBSB 100
- **End Cover 32:** Kit 630A T, Kit 630A TN, IBSB 120, 185 and 240.
- Transparent cover Visual inspection
- Halogen-free
- Self-extinguishing: UL 94 V-0
- RoHS compliant
- Easy-fitting after bolting
- IEC 60439.1
- IEC 61439.1

FLEXIBAR STANDARD KIT 250A

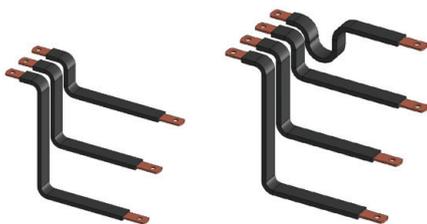


3 Phases

3 Phases + Neutral

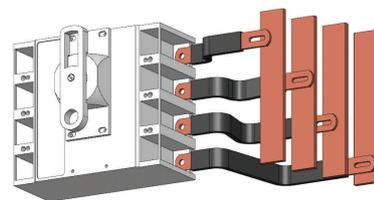
Kit 250A T

Kit 250A TN



Part No.	Description		Kg/lbs
541800	Kit 250A T	1	0,76/1.68
541805	Kit 250A TN	1	0,98/2.16

FLEXIBAR STANDARD KIT 630A

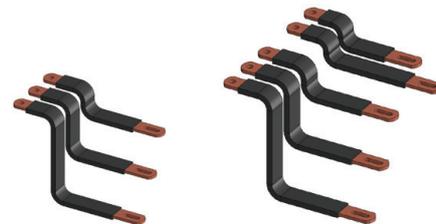


3 Phases

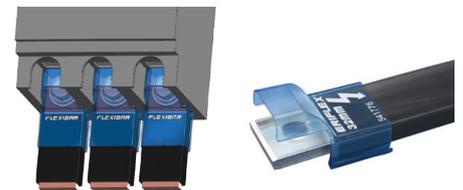
3 Phases + Neutral

Kit 630A T

Kit 630A TN



Part No.	Description		kg/lbs
541810	Kit 630A T	1	2,10/4.63
541815	Kit 630A TN	1	3,10/6.83



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

Accessories



SPACER CLAMPS

- Easy to install
- Fixes and maintains the weight of Flexibar range
- Facilitates cooling



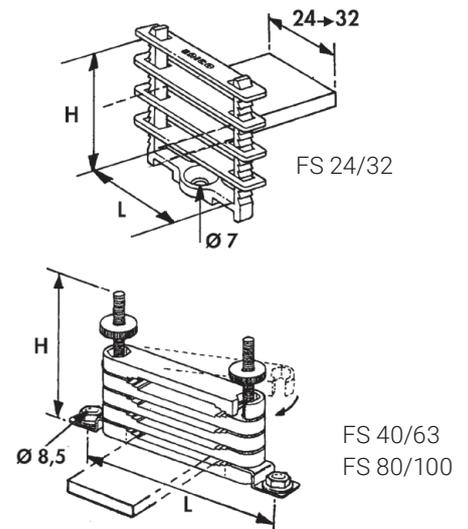
UFS KIT SUPPORT

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 Flexibar range
- Recommended distance between clamps: 400 mm max.

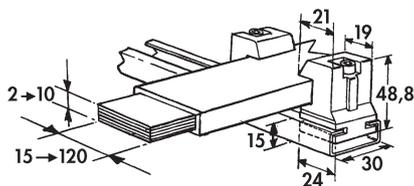
FS SPACER CLAMP

- Ensures correct support for Flexibar range, IBSB & IBSBR in parallel, without damage to the insulation.
- Maintains correct space for optimum cooling.
- 4 Flexibar range in parallel maximum
- UL 67
- Recommended distance between clamps: 400 mm



Part No.	Description	Type*	H mm	L mm		Kg
553550	FS 24	=< 24 mm	53	30	25	0,015
553560	FS 32	=< 32 mm	53	38	25	0,018
553570	FS 40-63	40-50 & 63 mm	95	150	10	0,100
553580	FS 80-100	80/100 mm	140	200	10	0,250

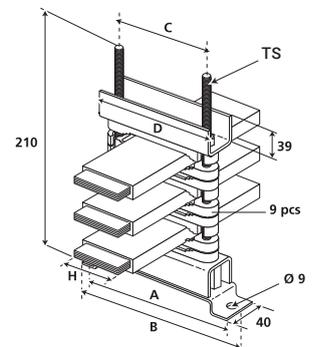
* Type of Flexibar and IBS/IBSB/IBSBR



Part No.	Description		Kg
553590	UFS Kit	1	2,3

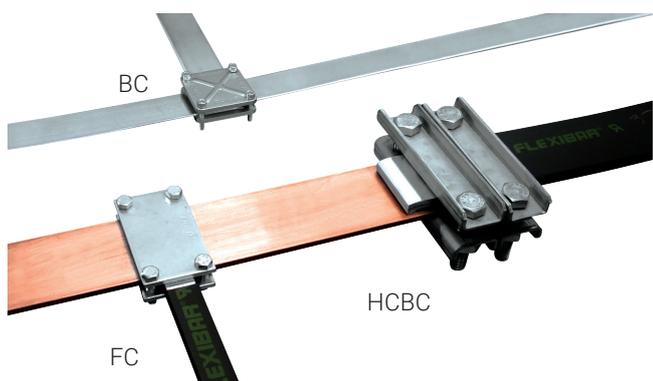
RFS REINFORCED SUPPORT

- Allows up to 8 Flexibar range in parallel.
- Easy mounting in the panel. (25 mm pitch)
- Recommended distance between clamps: 400 mm



Part No.	Description	A mm	B mm	C mm	D mm	TS	Flexibar H mm		Kg
553370	RFS 40-63	150	175	90	120	M8	40=>63	1	0,932
553380	RFS 80-100	200	225	140	170	M10	80=>100	1	1,430

Accessories

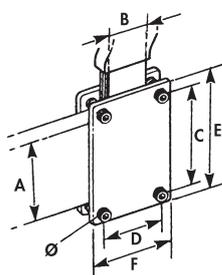


CONNECTING CLAMPS

- Excellent electrical contact
- Saves space
- Fast installation
- Ideal for "on site" modifications

FC CLAMP

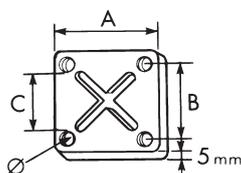
- Clamping capacity: 20 mm
- 2 zinc plated steel plates complete with M8 screws 8.8 class



Part No.	Description	A mm	B mm	C mm	D mm	E mm	F mm	Torque N.m		Kg
553020	FC 50 x 24	50	20-24	60	36	75	52	10	3	0,319
553030	FC 50 x 32	50	32	60	44	75	60	10	3	0,362
553040	FC 50 x 40	50	40	60	52	75	68	10	3	0,412
553050	FC 80 x 24	80	20-24	90	36	105	52	10	3	0,432
553060	FC 80 x 32	80	32	90	44	105	60	10	3	0,492
553070	FC 80 x 50	80	50	90	62	105	78	10	3	0,642
568700	FC 100 x 32	100	32	110	44	125	60	10	3	0,670
568730	FC 120 x 32	120	32	130	44	145	60	10	3	0,760

BC RIBBED-STEEL BUSBAR CLAMP

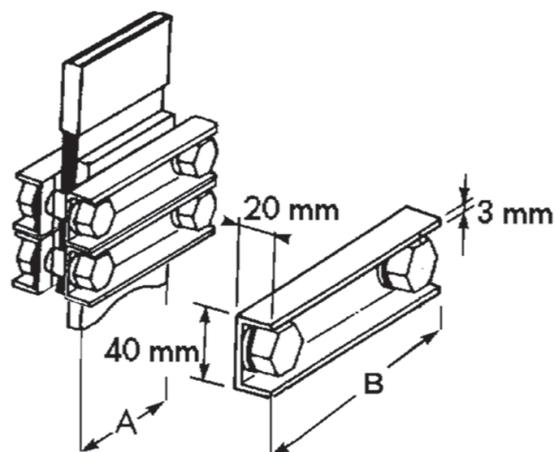
- Clamping capacity: 20 mm
- 2 ribbed zinc-plated hardened-steel plates complete with screws
- Maximum clamping capacity is 50 mm using longer screws 8.8 class
- UL 67 recognized



Part No.	Description	A mm	B mm	C mm	Ø mm	Torque N.m		Kg
553200	BC 30	56	42	30	M6	7	8	0,31
553210	BC 40	66	52	40	M6	7	8	0,37
553220	BC 50	83	64	50	M8	20	8	0,59
553230	BC 63	93	74	63	M8	20	4	0,74
553250	BC 80	118	96	80	M10	40	4	0,118
553260	BC 100	144	118	100	M10	40	4	1,72

HCBC HIGH CURRENT BUSBAR CLAMP

- Clamping capacity: 40 mm
- This modular busbar clamp is designed with non-magnetic materials for high current connections between Flexibar range and rigid busbars such as transformer terminals
- Design assures rigidity and even contact pressure
- Use 2 clamps to guarantee the contact pressure



Part No.	Description	A mm	B mm	Torque N.m		Kg
553100	HSBC 80	80	140	100	1	0,84
553110	HSBC 100	100	160	100	1	0,92
553120	HSBC 120	120	180	100	1	1,00

Accessories



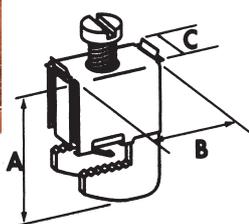
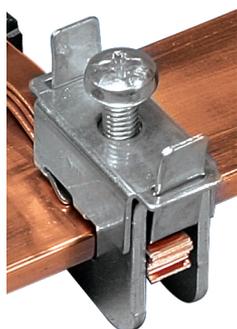
FBC CONNECTORS FOR CONNECTING WITHOUT DRILLING

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

FLEXIBAR TYPE

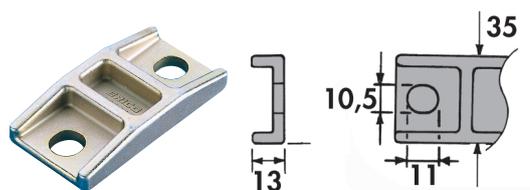
Connectors for busbar thickness 5 mm

Part No.	Description	A mm	B mm	C mm	Flexibar Type (mm)	Torque N.m	Cable Size mm ²			Kg
553405	FBC 5 x 4	23	29	11	-	2	1 - 4	15		0,016
553400	FBC 5 x 6	28	31	14	6	3	2,5 - 16	15		0,028
553410	FBC 5 x 9	36	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	48	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	Flexibar Type (mm)	Torque N.m	Cable Size mm ²			Kg
553505	FBC 10 x 4	28	29	12	-	2	1 - 4	15		0,018
553430	FBC 10 x 6	33	31	14	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

- For Flexibar thickness < 5 mm = 1 clamp
- For Flexibar thickness > 5 mm = 2 clamps

Part No.	Description	Flexibar width		L mm	F mm			Kg
		min. mm	max. mm					
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
- Enhanced electrical contact
 - 100 nuts - 100 bolts - 200 flat washers
 - 200 contact washers (class 8/8 ZN8C protection)

Part No.	Description	Dimensions	Torque N.m			Kg
558310	Cont Kit M6 x 16	HM 6 x 16	13	100		0,012
558340	Cont Kit M8 x 30	HM 8 x 30	30	100		0,028
558370	Cont Kit M10 x 30	HM 10 x 30	60	100		0,052
558410	Cont Kit M10 x 50	HM 10 x 50	60	100		0,062
558440	Cont Kit M12 x 30	HM 12 x 30	110	100		0,081
558460	Cont Kit M12 x 40	HM 12 x 40	110	100		0,091
558480	Cont Kit M12 x 50	HM 12 x 50	110	100		0,097
567880	Cont Kit M12 x 60	HM 12 x 60	110	100		0,116
558490	Cont Kit M12 x 80	HM 12 x 80	110	100		0,150

Flexibar Hydraulic Work Center



To discover our full range of tools, please request a copy of our specific "Hydraulic & Manual Tools" brochure.



Hydraulic Busbar & Flexibar Puncher



Hydraulic Busbar Bender



Hydraulic Busbar Cutter



Shearing Tool Ruler



Hydraulic Pump & Foot Controller

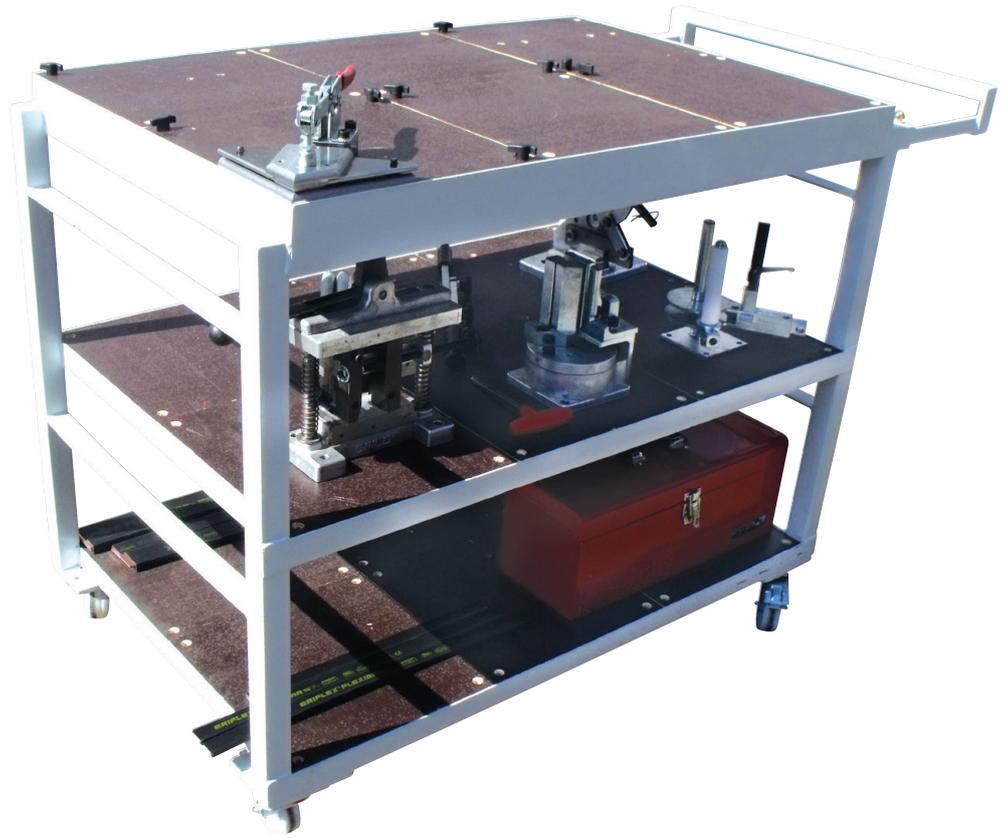


Hydraulic Flexibar Shearing Tool



Shearing Tool Guide

Flexibar Manual Work Center



Shearing Tools



Bending Tools



Twisting Tool



Drilling Tool



Folding Tool



Stripping Tool



Stripping Knife



Bending Tool

Insulated Braided Conductor (IBSB & IBSBR)



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



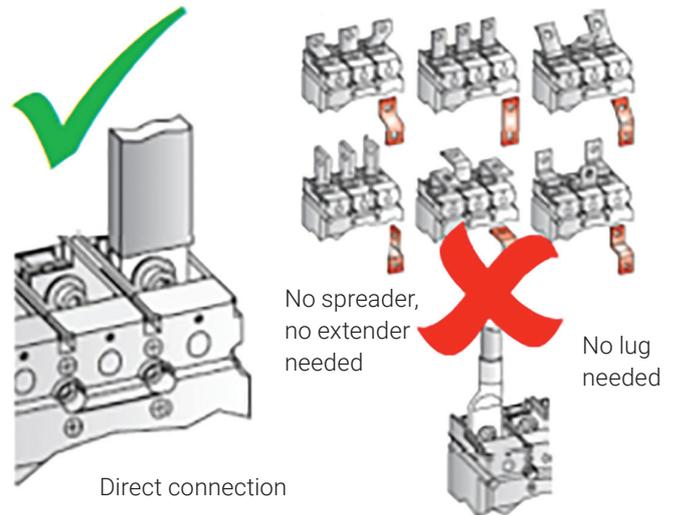
IDEAL CONNECTION FOR MOLDED CASE CIRCUIT BREAKERS

The IBSB and IBSBR range can be used as an alternative to cable for all low-voltage power 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 TECHNICAL FEATURES

- 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. Time saving for installation
- Weight savings: A flat braid weights 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





THE OPTIMIZED ALTERNATIVE TO CABLE - READY TO USE.

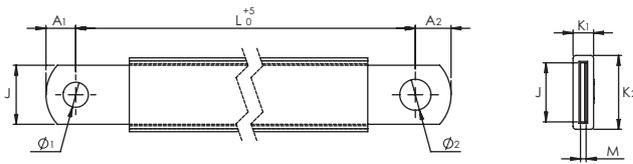
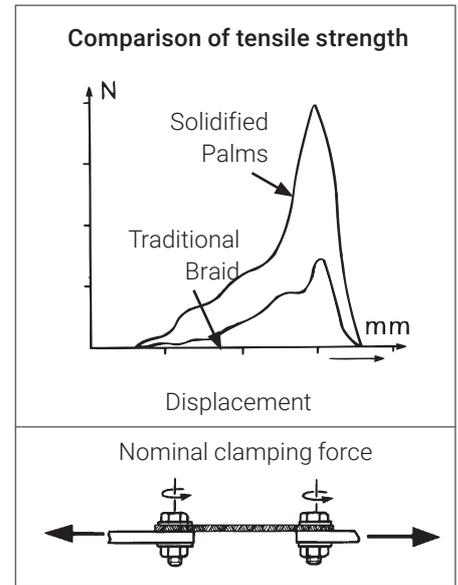
nVent ERIFLEX has developed a unique, state-of-the-art manufacturing line to massivate directly the palms of IBSB and IBSBR braids.

This 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, nVent ERIFLEX's process is suitable for red copper, and tinned plated copper. The electrical contact between each wire is optimized.

This nVent ERIFLEX process also helps to 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)



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

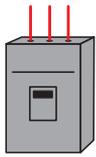
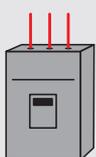
- Tinned (IBSB 25-50-70-100) or red (IBSBR 120-185-240) electrolytic copper
- Wire diameter: 0.15 mm for maximum flexibility - According to EN 13602
- Upper resistance to vibration

CERTIFICATION & APPROVALS

- IEC 60439.1 & IEC 61439.1
- cRUus per UL67 & CAN/CSA C22.2 No. 29 (File E125470)
- RU per UL758 (E316390)
- CE conformity
- RoHS compliant
- American Bureau of Shipping (ABS) - Certificate No. 13-HS1070074-PDA - Marine & Offshore Applications
- Bureau Veritas Marine and offshore division for classification of steel ships and according to IEC 60092
- CSA C22.2 No 210 for appliance wiring material products
- EAC



INSULATED BRAIDED CONDUCTORS TECHNICAL CHARACTERISTICS

Use with circuit breaker	Part Number	Description	S mm ²	L mm	Ø1 mm	Ø2 mm	A1 mm	A2 mm	J mm	M mm	K1 mm	K2 mm		 Kg
IBSB - Tinned Copper														
125/160A  IBSB 25	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
250A  IBSB 50	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
300A  IBSB 70	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
350A  IBSB 100	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														
400A  IBSBR 120	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
500A  IBSBR 185	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
630A  IBSBR 240	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)



FEATURES

- 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
- Strong 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 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

BRAID

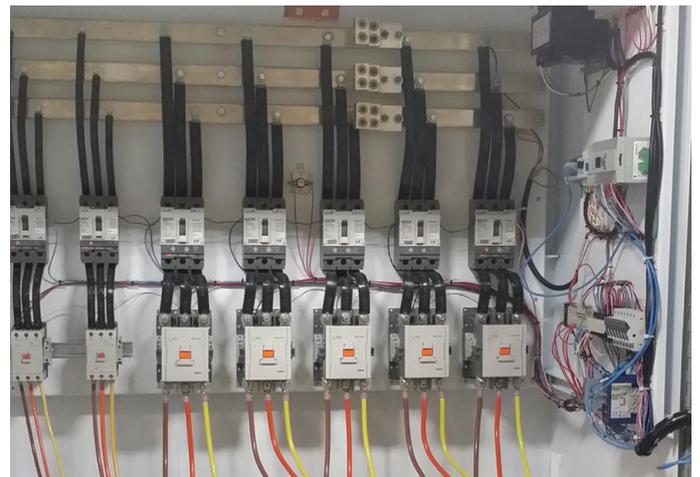
- Tinned electrolytic copper for better corrosion protection
- Wire diameter: 0.15 mm for maximum flexibility
- Strong resistance to vibration

CERTIFICATION & APPROVAL

- IEC 60439.1 & IEC 61439.1
- cRUus per UL67 & CAN/CSA C22.2 No. 29
- CE conformity
- RoHS compliant
- RU per UL758
- American Bureau of Shipping (ABS)
- CSA C22.2 No 210 for appliance wiring material products

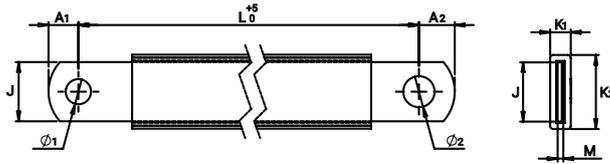
DIELECTRIC TEST

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



Insulated Braided Conductor (IBS)

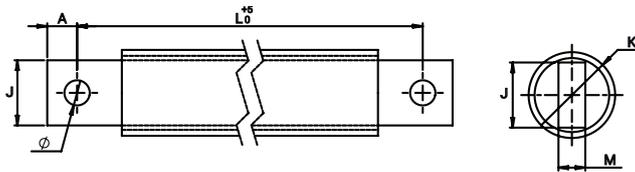
IBS 25
IBS 50



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

IBSHY Insulated Braided Conductor for Compact Circuit Breakers



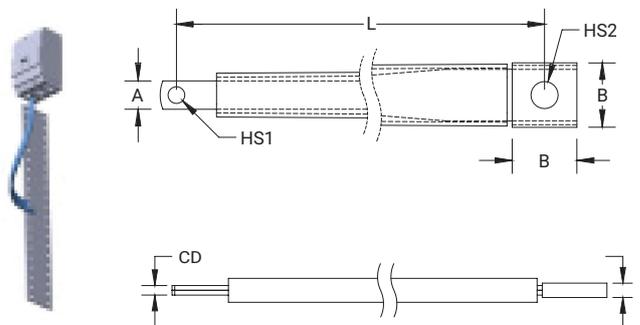
FEATURES

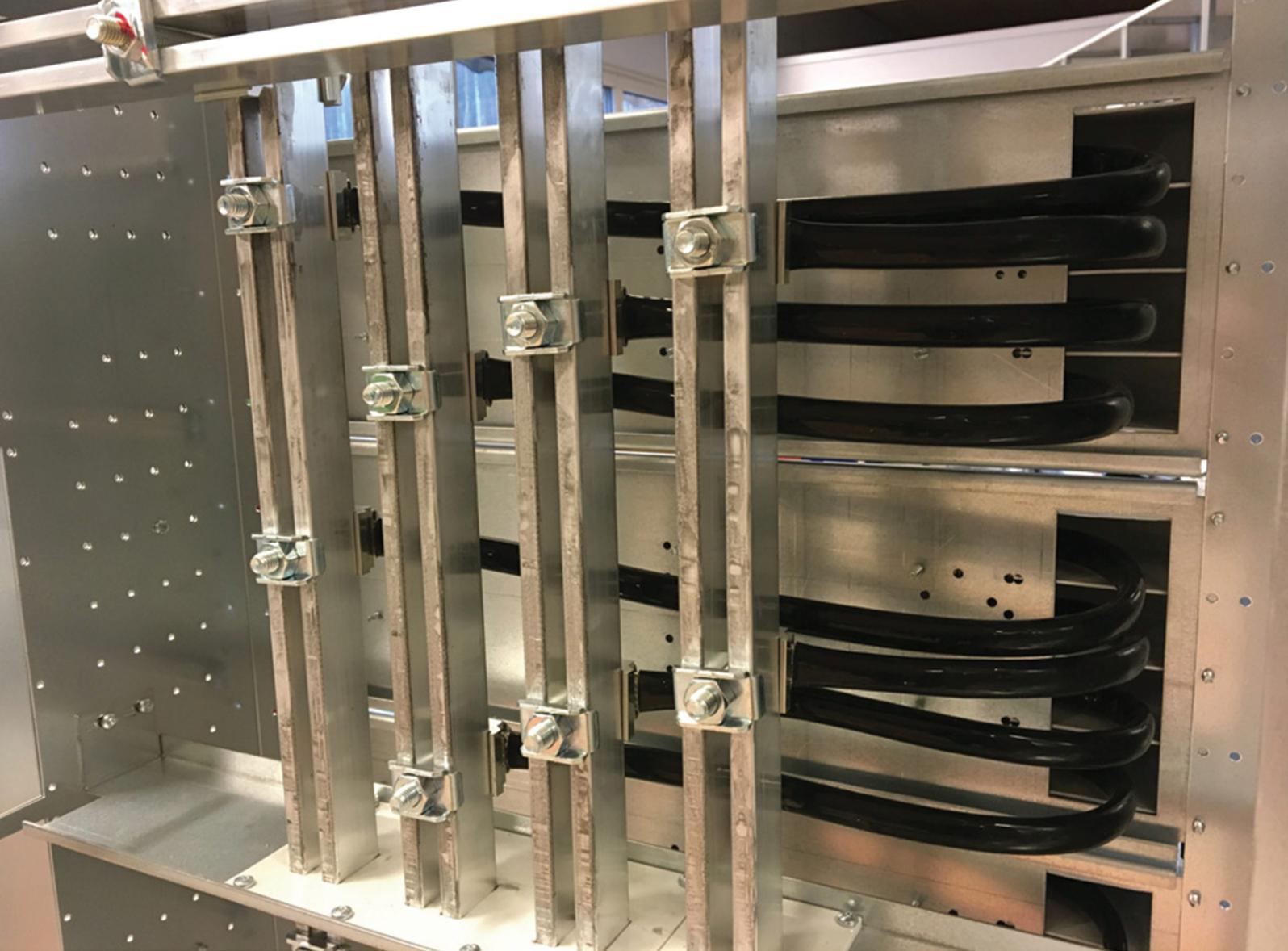
- Suitable for all main 125/160 A electrical devices and specifically molded case circuit breakers
- Resistant to vibration, improving reliability and performance
- Improves assembly flexibility and aesthetics
- Quick and easy installation
- No additional cutting, stripping, crimping and punching needed
- Small wire diameter provides maximum flexibility
- Halogen-free solution for applications requiring a low smoke solution
- Conforms to NF EN 45545 obtaining an HL2 classification for chapters R22 and R23
- High working temperature
- RoHS compliant



IBSHY INSULATED BRAIDED CONDUCTOR SPECIFICATIONS

- Typical Application Current Rating: 160 A
- Finish: Tinned
- Material: Copper; Glass Fibre Reinforced Silicon
- Flammability Rating: UL 1441 VW-1
- Max Working Voltage, IEC (Ui): 1 000 VAC; 1 500 VDC
- Operating Temperature: from -60 °C to 250 °C
- Wire Diameter: 0,15 mm
- IEC 60439-1; IEC 61439-1 compliant





IBSHY INSULATED BAIDED CONDUCTOR TECHNICAL CHARACTERISTICS

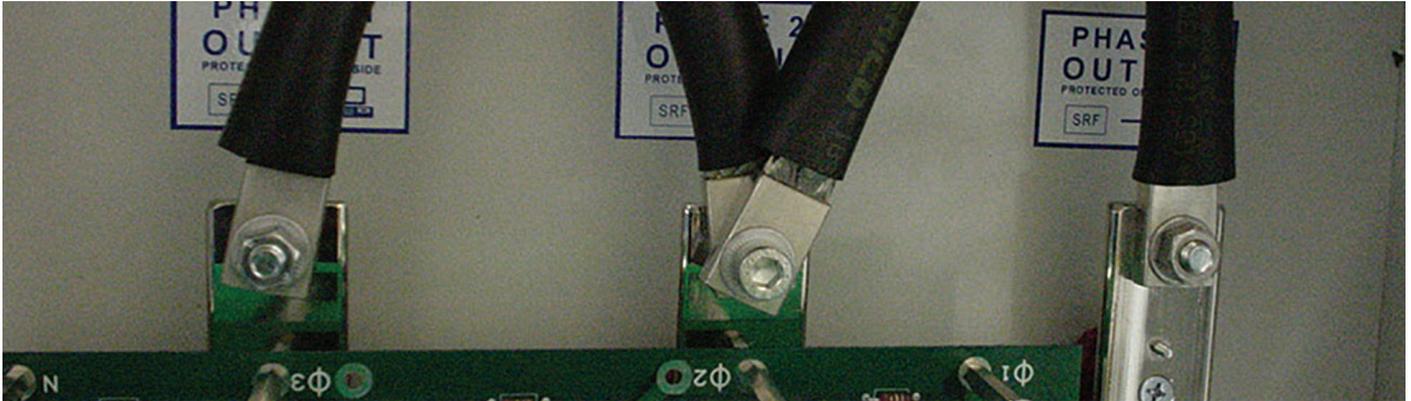
Part No.	Article No.	Cross Section	Length L	A	B	C	D	Hole Size 1 HS1	Hole Size 2 HS2
IBSHY32-230	558584	32 mm ²	230 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-330	558586	32 mm ²	330 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-365	558587	32 mm ²	365 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-430	558588	32 mm ²	430 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-500	558589	32 mm ²	500 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-565	558591	32 mm ²	565 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-630	558592	32 mm ²	630 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-700	558593	32 mm ²	700 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-765	558594	32 mm ²	765 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-830	558595	32 mm ²	830 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm

Maximum Ampacity Ratings															
Cross Section (mm ² /kcmil)	ΔT 30° C (A)	ΔT 35° C (A)	ΔT 40° C (A)	ΔT 45° C (A)	ΔT 50° C (A)	ΔT 55° C (A)	ΔT 60° C (A)	ΔT 65° C (A)	ΔT 70° C (A)	ΔT 75° C (A)	ΔT 80° C (A)	ΔT 100° C (A)	ΔT 120° C (A)	2 Bar Current Coefficient	3 Bar Current Coefficient
32/63.15	142	153	164	174	184	193	201	209	217	225	235	263	290	1.6	2

ΔT = Temperature of conductors – Internal temperature of panel.

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.

Insulated Braided Conductor (IBS, IBSB, IBSBR & IBSHY)



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.

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

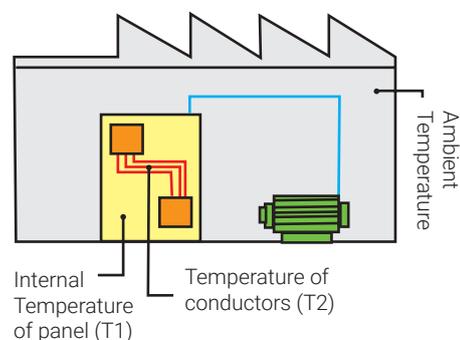
When using 2 or 3 insulated braided conductors in parallel for the same phase, use the current coefficient:

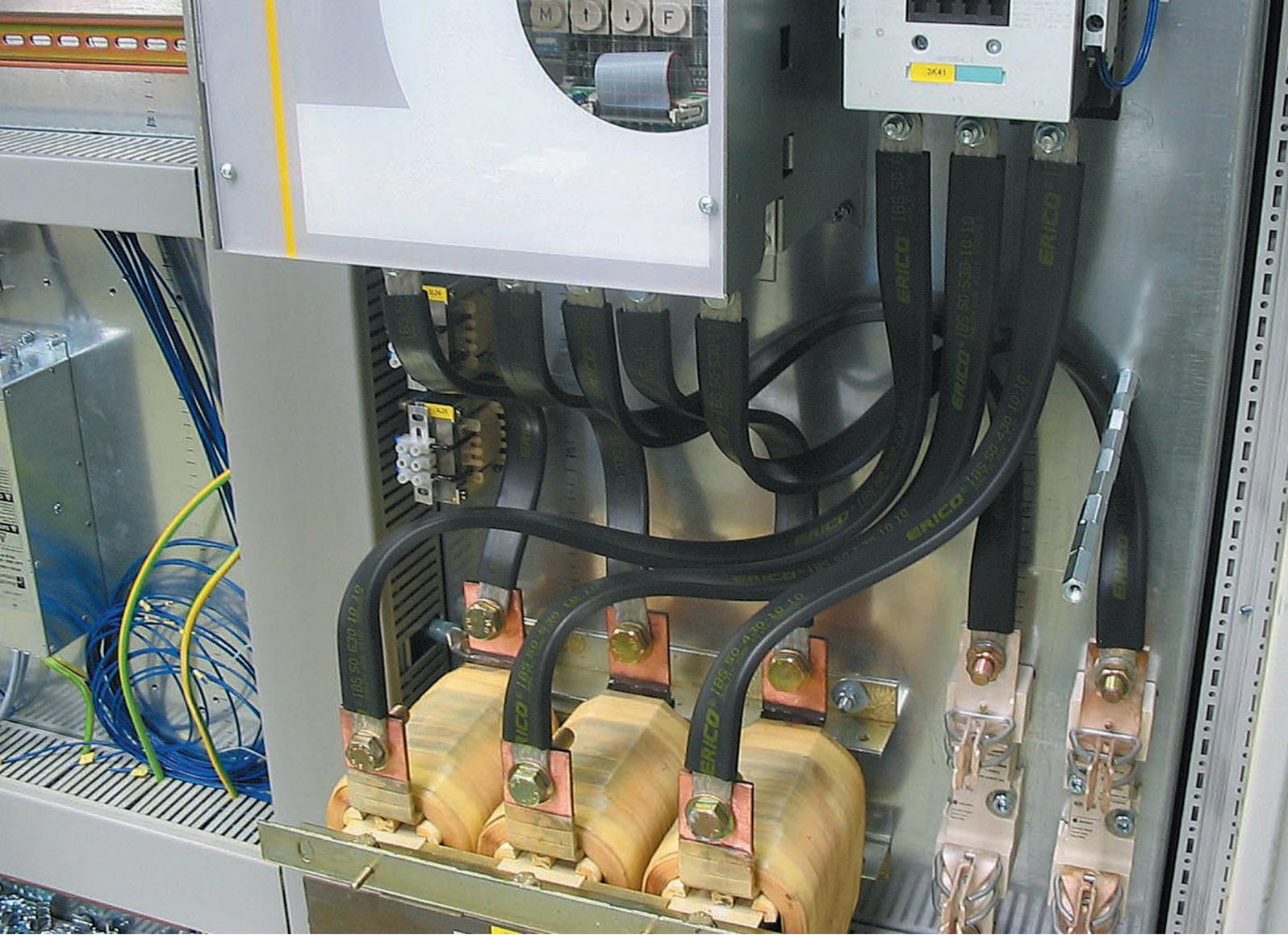
Ex.: IBSB 100 - $\Delta T^\circ = 50\text{K}$: 385 A

2 braids in parallel > $385\text{ A} \times 1,6 = 616\text{ A}$

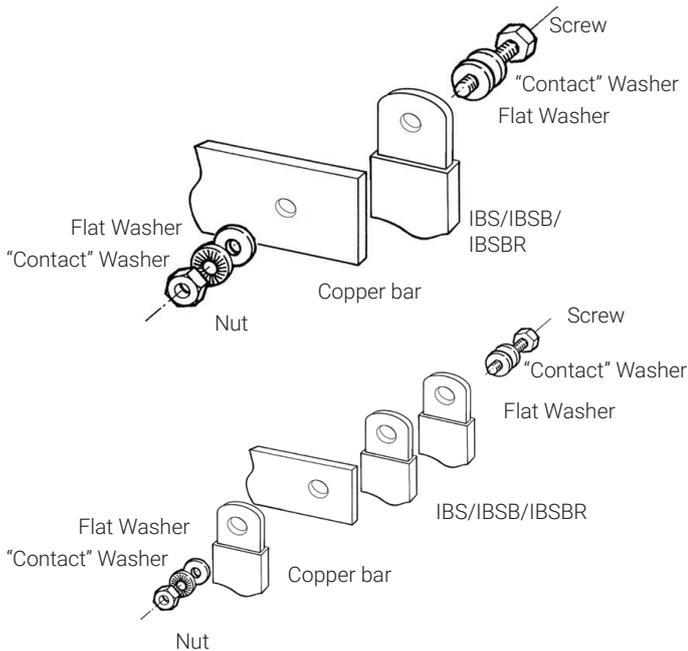
3 braids in parallel > $385\text{ A} \times 2 = 770\text{ A}$

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



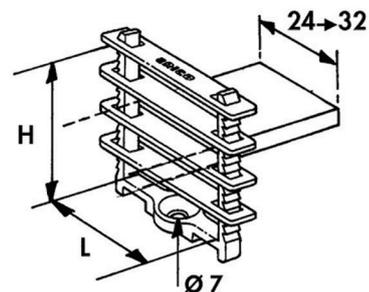


ASSEMBLY INSTRUCTIONS



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

Earth/Ground Copper Braids (MBJ & BJ)



TINNED COPPER EARTH/GROUND BRAIDS TECHNICAL FEATURES

With integral palm

- A complete range of earth/ground flexible connections from 6 to 100 mm² section and from 100 to 500 mm length
- Strong 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

INNOVATIVE, STATE-OF-THE-ART MANUFACTURING PROCESS.

nVent ERIFLEX 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, nVent ERIFLEX's process is suitable for red copper, but also for tin plated copper. The electrical contact between each wire is optimized.

This nVent ERIFLEX 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.

BJ

Round braids with crimped lugs

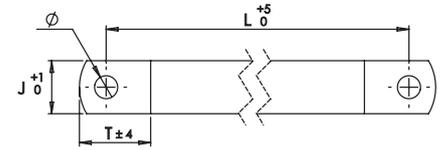
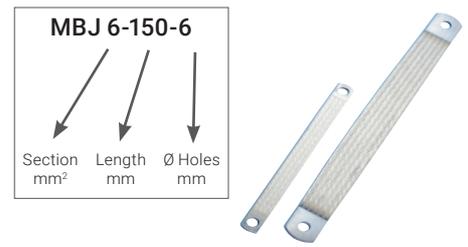


Part No.	Description	Section mm	L mm	Ø D mm	Intensity A		 Kg
556900	BJ 6-150 S	6	150	6,5	45	10	0,010
556910	BJ 6-200 S	6	200	6,5	45	10	0,015
556920	BJ 10-300 S	10	300	6,5	75	10	0,033



EARTH/GROUND COPPER BRAIDS (MBJ & BJ) TECHNICAL CHARACTERISTICS

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	10		0,01
563410	MBJ 6-200-6	40	1,1	6	200	6,5	11	18	10		0,0167
556930	MBJ 10-200-6	75	1,1	10	200	6,5	11	18	10		0,022
556610	MBJ 10-300-6	75	1,1	10	300	6,5	11	18	10		0,033
563540	MBJ 16-100-6	120	1,5	16	100	6,5	15	20	10		0,018
556620	MBJ 16-100-8	120	1,5	16	100	8,5	15	20	10		0,018
563550	MBJ 16-150-6	120	1,5	16	150	6,5	15	20	10		0,035
556630	MBJ 16-150-8	120	1,5	16	150	8,5	15	20	10		0,035
563300	MBJ 16-200-6	120	1,5	16	200	6,5	15	20	10		0,033
556640	MBJ 16-200-8	120	1,5	16	200	8,5	15	20	10		0,033
556650	MBJ 16-250-8	120	1,5	16	250	8,5	15	20	10		0,04
563320	MBJ 16-300-6	120	1,5	16	300	6,5	15	20	10		0,05
556660	MBJ 16-300-8	120	1,5	16	300	8,5	15	20	10		0,05
556940	MBJ 16-500-8	120	1,5	16	500	8,5	15	20	10		0,082
556670	MBJ 25-100-10	150	1,5	25	100	10,5	22	28	10		0,027
556680	MBJ 25-150-10	150	1,5	25	150	10,5	22	28	10		0,039
563340	MBJ 25-200-6	150	1,5	25	200	6,5	22	28	10		0,052
556690	MBJ 25-200-10	150	1,5	25	200	10,5	22	28	10		0,052
563430	MBJ 25-200-12	150	1,5	25	200	12,5	22	28	10		0,052
556700	MBJ 25-250-10	150	1,5	25	250	10,5	22	28	10		0,064
556710	MBJ 25-300-10	150	1,5	25	300	10,5	22	28	10		0,077
556950	MBJ 25-500-10	150	1,5	25	500	10,5	22	28	10		0,13
556720	MBJ 30-100-10	180	2	30	100	10,5	22	28	10		0,032
556730	MBJ 30-150-10	180	2	30	150	10,5	22	28	10		0,047
556740	MBJ 30-200-10	180	2	30	200	10,5	22	28	10		0,062
556750	MBJ 30-250-10	180	2	30	250	10,5	22	28	10		0,075
556760	MBJ 30-300-10	180	2	30	300	10,5	22	28	10		0,092
556960	MBJ 30-500-10	180	2	30	500	10,5	22	28	10		0,155
556770	MBJ 35-100-10	197	2,1	35	100	10,5	22	28	10		0,037
556780	MBJ 35-150-10	197	2,1	35	150	10,5	22	28	10		0,054
556790	MBJ 35-200-10	197	2,1	35	200	10,5	22	28	10		0,072
556800	MBJ 35-250-10	197	2,1	35	250	10,5	22	28	10		0,089
565000	MBJ 35-250-25	197	1,5	35	250	25,5	40	45	10		0,089
556810	MBJ 35-300-10	197	2,1	35	300	10,5	22	28	10		0,11
556970	MBJ 35-500-10	197	2,1	35	500	10,5	22	28	10		0,18
556820	MBJ 50-100-10	250	2,5	50	100	10,5	28	33	10		0,052
556830	MBJ 50-150-10	250	2,5	50	150	10,5	28	33	10		0,077
563350	MBJ 50-200-6	250	2,5	50	200	6,5	28	33	10		0,12
556840	MBJ 50-200-10	250	2,5	50	200	10,5	28	33	10		0,12
563440	MBJ 50-200-12	250	2,5	50	200	12,5	28	33	10		0,12
563360	MBJ 50-200-16	250	2,5	50	200	16,5	28	33	10		0,11
563370	MBJ 50-200-18	250	2,5	50	200	18,5	28	33	10		0,11
556850	MBJ 50-250-10	250	2,5	50	250	10,5	28	33	10		0,127
563380	MBJ 50-300-6	250	2,5	50	300	6,5	28	33	10		0,15
556860	MBJ 50-300-10	250	2,5	50	300	10,5	28	33	10		0,153
563390	MBJ 50-300-16	250	2,5	50	300	16,5	28	33	10		0,15
563400	MBJ 50-300-18	250	2,5	50	300	18,5	28	33	10		0,14
556980	MBJ 50-500-10	250	2,5	50	500	10,5	28	33	10		0,255
563560	MBJ 50-500-12	250	2,5	50	500	12,5	28	33	10		0,255
563450	MBJ 70-300-6	290	3,4	70	300	6,5	28	33	10		0,21
563460	MBJ 70-300-10	290	3,4	70	300	10,5	28	33	10		0,21
563420	MBJ 70-300-12	290	3,4	70	300	12,5	28	33	10		0,21
563470	MBJ 70-300-16	290	3,4	70	300	16,5	28	33	10		0,2
563480	MBJ 70-300-22	290	2,8	70	300	22,5	40	45	10		0,2
563490	MBJ 70-500-10	290	3,4	70	500	10,5	28	33	10		0,34
563500	MBJ 100-250-16	349	4	100	250	16,5	50	55	10		0,254
563510	MBJ 100-250-30	349	4	100	250	30,5	50	55	10		0,254
563520	MBJ 100-500-16	349	4	100	500	16,5	50	55	10		0,508
563530	MBJ 100-500-30	349	4	100	500	30,5	50	55	10		0,508



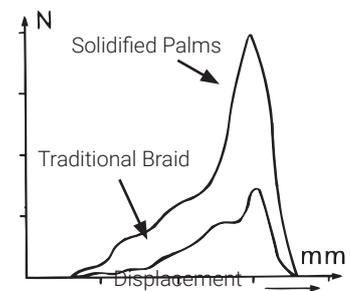
TECHNICAL DATA

- 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

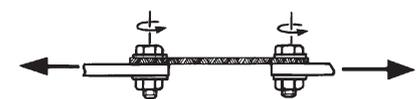
CERTIFICATION & APPROVALS

- UL Listed (UL467) except BJ
- EAC certificate
- RoHS 2002/95/EC Compliant
- IEC 60439-1 & 61439-1

Comparison of tensile strength



Nominal clamping force



Earth/Ground Stainless Steel Braids (CPI & CPIW)



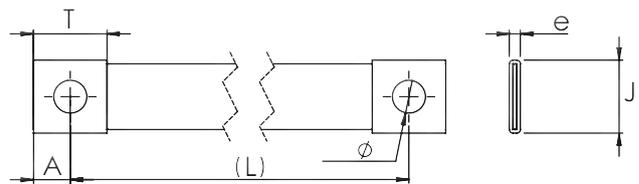
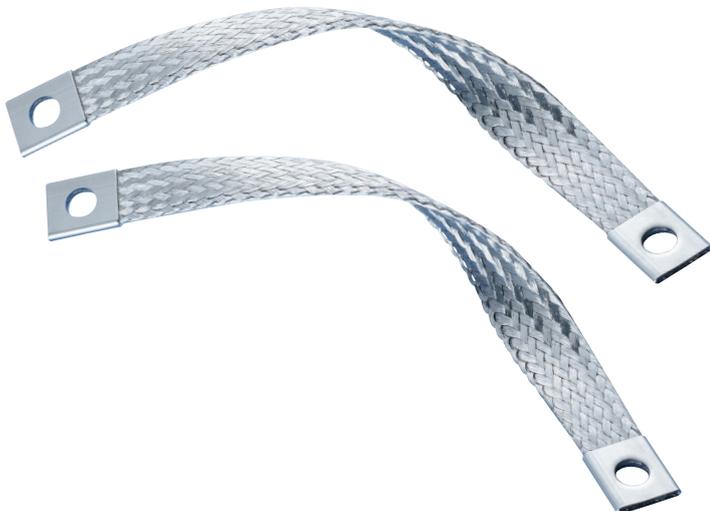
FEATURES

- 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
- 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
- Strong resistance to vibration and fatigue
- Recommended by the EMC directives
- Reduced maintenance

READY-TO-USE STAINLESS STEEL BRAIDS FOR MULTIPLE APPLICATIONS

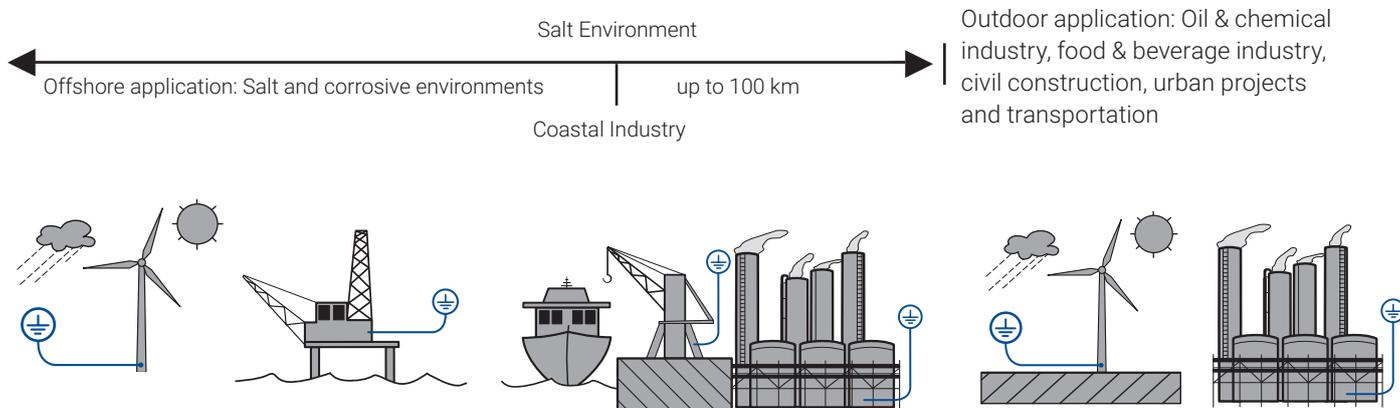
nVent ERIFLEX develops and manufactures a range of earth/ground stainless steel braids. These high-quality 316L stainless steel braids can be installed in extremely corrosive environments, like offshore applications or coastal applications. The CPI braid is ideal for applications using stainless steel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

nVent ERIFLEX offers 316L stainless steel, one of the highest resistant stainless steel options on the market. nVent ERIFLEX 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.



EARTH/GROUND STAINLESS STEEL BRAIDS CPI TECHNICAL CHARACTERISTICS

WHERE STAINLESS BRAIDS CAN BE USED:



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
- Strong resistance to vibration

CERTIFICATIONS & 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

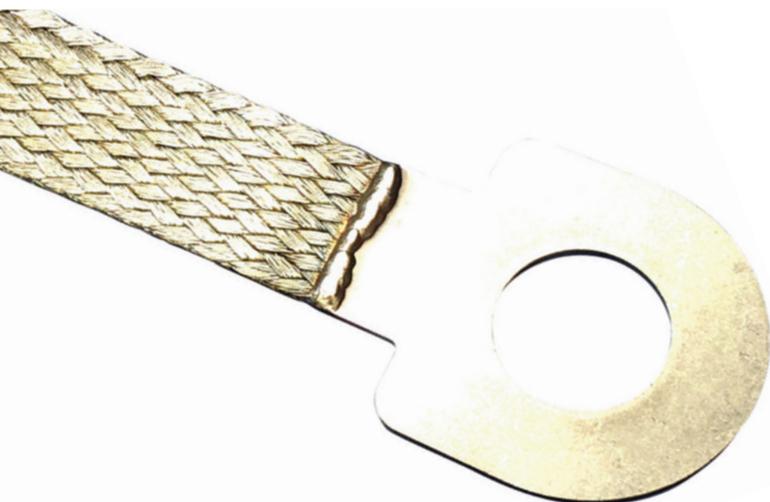
Part Number	Description	Section mm ²	L mm	Ø mm	J mm	A mm	T mm	e mm		Kg
554277	CPI 16-150-8	16	150	8,5	17,5	10	20	3	10	0,031
554278	CPI 16-200-8	16	200	8,5	17,5	10	20	3	10	0,037
554279	CPI 16-250-8	16	250	8,5	17,5	10	20	3	10	0,043
554280	CPI 16-300-8	16	300	8,5	17,5	10	20	3	10	0,050
554282	CPI 16-400-8	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

CPIW Grounding and Bonding Braid, Stainless Steel for Large Bolts



High-quality CPIW stainless steel grounding and bonding braids can be installed in corrosive environments like offshore applications or coastal applications. The full range of CPIW braids are ideal for applications using stainless steel pipe or tanks, like the food and beverage industry, building industry, transportation or oil and chemical industry.

nVent ERIFLEX offers 316L stainless steel braids, one of the highest resistant stainless steel options on the market. Our proprietary manufacturing process has been optimized to provide the best braiding, welding and connection palm.

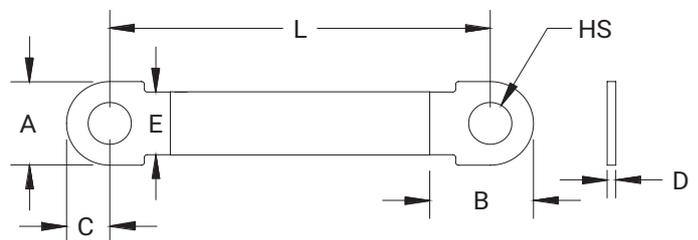


FEATURES

- Superior abrasion, corrosion, chemical and UV resistance make CPIW braids ideal for outdoor applications
- Covering from M20 (3/4"-10) up to M42 (1 1/2"-6) bolt fixation point
- Great for expansion joints where constant movement requires a flexible and durable solution
- Ready to use out of the box, eliminates the need for cutting, stripping, crimping and punching
- Quick and easy to install
- Resistant to vibration and fatigue, reducing maintenance
- Will not rust or discolor, so the appearance will never fade or change
- Excellent electrical contact
- No additional lugs or terminals needed
- Non-magnetic material
- Recommended by the EMC/EMI directives
- Performs to the class C5 (very high) category as per ISO 12944-2
- EAC compliant
- RoHS compliant

CPIW GROUNDING AND BONDING BRAID SPECIFICATIONS

- Material: Stainless Steel 316L (EN 1.4404)
- Certification details: UL 467
- Complies with: IEC 60439-1; IEC 61439-1



CPIW GROUNDING AND BONDING BRAID, TECHNICAL CHARACTERISTICS



Part No.	Article No.	Cross Section (mm ²)	L (mm)	HS (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Unit Weight (kg)	Minimum Order Quantity
CPIW50-200-20B	554386B	50	200	21	42	51	21	3	30	0.128	50
CPIW50-200-24B	554401B	50	200	25	52	62	26	3	30	0.154	50
CPIW50-250-20B	554398B	50	250	21	42	51	21	3	30	0.148	50
CPIW50-250-24B	554403B	50	250	25	52	62	26	3	30	0.176	50
CPIW50-250-27B	554405B	50	250	28	58	69	29	3	30	0.195	50
CPIW50-250-30B	554407B	50	250	31	62	74	31	3	30	0.207	50
CPIW50-300-20B	554427B	50	300	21	42	51	21	3	30	0.200	50
CPIW50-300-24B	554428B	50	300	25	52	62	26	3	30	0.210	50
CPIW50-300-27B	554429B	50	300	28	58	69	29	3	30	0.220	50
CPIW50-300-30B	554409B	50	300	31	62	74	31	3	30	0.229	50
CPIW50-300-33B	554412B	50	300	34	68	78	34	3	30	0.246	50
CPIW50-300-39B	554416B	50	300	40	78	89	39	3	30	0.284	50
CPIW50-300-42B	554421B	50	300	43	82	94	41	3	30	0.301	50
CPIW50-400-33B	554414B	50	400	34	68	78	34	3	30	0.288	50
CPIW50-400-39B	554418B	50	400	40	78	89	39	3	30	0.327	50
CPIW50-400-42B	554423B	50	400	43	82	94	41	3	30	0.344	50
CPIW70-200-20B	554397B	70	200	21	42	51	21	3	30	0.149	50
CPIW70-200-24B	554402B	70	200	25	52	62	26	3	30	0.175	50
CPIW70-250-20B	554399B	70	250	21	42	51	21	3	30	0.178	50
CPIW70-250-24B	554404B	70	250	25	52	62	26	3	30	0.203	50
CPIW70-250-27B	554406B	70	250	28	58	69	29	3	30	0.221	50
CPIW70-250-30B	554408B	70	250	31	62	74	31	3	30	0.233	50
CPIW70-300-30B	554411B	70	300	31	62	74	31	3	30	0.262	50
CPIW70-300-33B	554413B	70	300	34	68	78	34	3	30	0.278	50
CPIW70-300-39B	554417B	70	300	40	78	89	39	3	30	0.315	50
CPIW70-300-42B	554422B	70	300	43	82	94	41	3	30	0.331	50
CPIW70-400-20B	554388B	70	400	21	42	51	21	3	30	0.264	50
CPIW70-400-33B	554415B	70	400	34	68	78	34	3	30	0.336	50
CPIW70-400-39B	554419B	70	400	40	78	89	39	3	30	0.373	50
CPIW70-400-42B	554424B	70	400	43	82	94	41	3	30	0.389	50

Power Shunt (PBC)

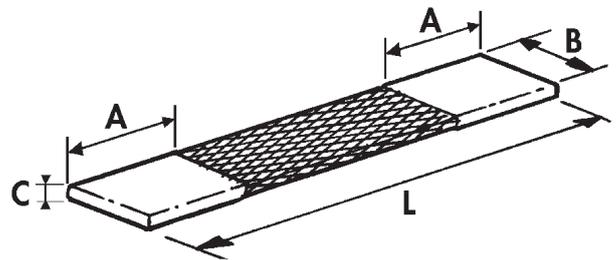


- High flexibility
- Reduce vibrations
- Ideal for transformer-busduct link
- Intensity: Up to 4600 A

PBC BRAIDED POWER SHUNTS



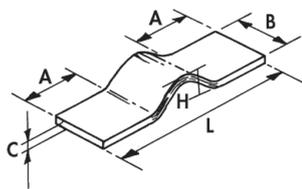
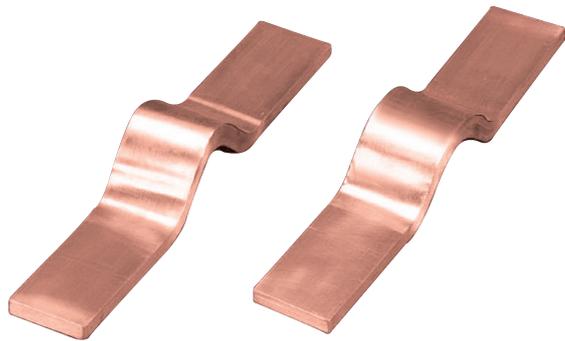
- Undrilled palms to customer's specific designs, fitted by power press
- Extra-flexible power connections (expansion rings, busbar...)
- Tinned electrolytic copper strand \varnothing 0,15 mm
- When used in parallel, the 2 shunts must be spaced with a minimum distance equal to the thickness of the shunt to allow air cooling



Part No.	Description	Section mm ²	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	2	0,38
564050	PBC 100 x 500	100	349	600	462	795	35	40	7,0	500	2	0,63
564010	PBC 120 x 250	120	385	670	511	877	35	40	7,5	250	2	0,42
564100	PBC 150 x 250	150	440	757	583	1003	55	50	8,0	250	2	0,63
564150	PBC 150 x 500	150	440	757	583	1003	55	50	8,0	500	2	0,90
564200	PBC 200 x 250	200	550	946	729	1253	55	50	9,0	250	2	0,76
564250	PBC 200 x 500	200	550	946	729	1253	55	50	9,0	500	2	1,20
564300	PBC 250 x 300	250	651	1120	863	1484	85	50	10,5	300	2	1,03
564400	PBC 300 x 400	300	716	1180	948	1565	85	60	11,0	400	1	1,53
564500	PBC 400 x 400	400	853	1360	1131	1808	85	80	11,0	400	1	2,20
564600	PBC 500 x 400	500	917	1561	1216	1944	105	100	11,0	400	1	2,64
564700	PBC 600 x 450	600	1101	1762	1459	2334	105	100	13,0	450	1	3,40
564800	PBC 800 x 450	800	1376	2202	1823	2917	105	100	14,0	450	1	4,26
564900	PBC 1000 x 450	1000	1651	2642	2188	3500	105	100	16,0	450	1	5,47
564030	PBC 1200 x 500	1200	1982	3170	2626	4208	125	120	17,5	500	1	7,16

PPS

Presswelded Power Shunts



FEATURES

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

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

CUSTOM SOLUTIONS

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

nVent ERIFLEX 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 nVent ERIFLEX 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	25 m	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	25 m	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
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	25 m	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
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

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	500 m	Kg
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	25 m	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, RRCT, TTCE)

- A large range of braids
- Bare or insulated

- Tubulars for shielding
- Stainless steel for corrosive environment



RTCB / RTCB HL TINNED COPPER ROUND BRAIDS



Part No.	Description	Section mm ²	External dia in mm	Number of Wire	Nominal Current A		
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

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		
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		
			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 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 mm ²	External dia in mm	Number of Wire	Nominal Current A	 25 m	 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

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 mm ²	External dia in mm	Number of Wire	Nominal Current A	 25 m	 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

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



Make Your Own Braided Connections



BD CRIMP AND DRILL TOOL

- This tool has been developed by nVent ERIFLEX 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

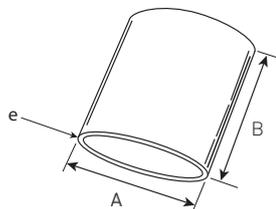
HCT 3-4 CRIMPING TOOL FOR HYDRAULIC WORK CENTER

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

Part No.	Description		 Kg
545980	HCT 3-4	1	1,850

PB LUGS FOR FLAT BRAIDS (FTCB OR FCRB)

- In tinned annealed copper



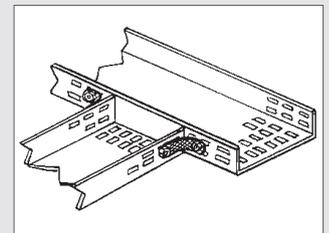
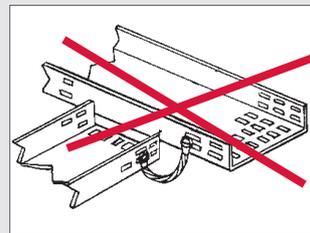
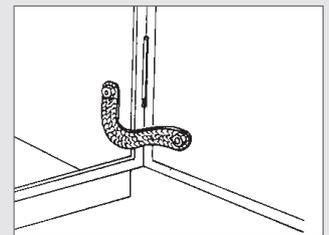
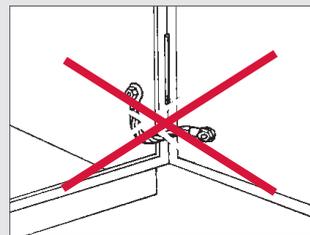
Part No.	Description	For Flat	A	B	e		 Kg
557180	PB 16	FTCB or FRCB 15-16	16	15	1	100	0,004
557190	PB 25	FTCB or FRCB 15-25	22	25	1	100	0,010
557380	PB 50	FTCB or FRCB 15-50	30	30	1	100	0,017

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)

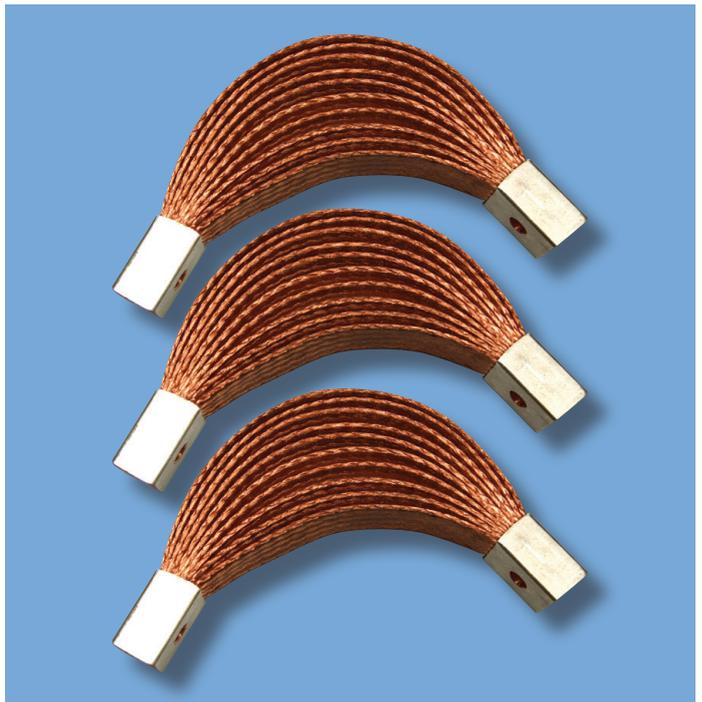
FLEXIBAR CUSTOM SOLUTIONS (MADE TO ORDER)

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



BRAIDED CONDUCTORS CUSTOM SOLUTIONS (MADE TO ORDER)

nVent ERIFLEX 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 nVent ERIFLEX solve your design and production scheduling challenges.



Made to Order Solutions

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 nVent ERIFLEX 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 require).....

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.

The image shows six technical drawings of terminal cross-sections. The first three drawings show rectangular terminals with one, two, and three circular holes respectively. The last three drawings show rectangular terminals with one circular hole, one oval hole, and a solid rectangular terminal. Each drawing includes dimension lines for width, height, hole diameter, and hole spacing. To the right of these drawings is a large grid for sketching.

Conductor Dimensions:
 Availability: Drawing Specification Samples
 Cross Section _____ mm²
 Flat or Round Section _____
 Width of the Conductor _____ mm
 Thickness of the Conductor _____ mm
 Length of the Conductor _____ mm
 Quantity _____

The image contains a grid for sketching conductor dimensions, located to the right of the text input fields.

Contact/Requested by:

Company _____
 Contact Name _____
 Phone Number _____

E-mail address _____
 Address (City & Country) _____

Cross Reference List

Part Number	Page
503400	48
503410	48
503420	48
503430	48
503440	48
503500	46
503510	46
503520	46
503530	46
503540	46
503600	46
503610	46
503620	46
503700	47
503710	47
503720	47
503730	47
503800	48
503810	48
503820	48
503830	48
504690	47
505501	19
505502	19
505503	19
505506	19
505507	19
505508	19
505514	19
505515	19
510100	47
510110	47
510120	47
510130	47
510140	47
510150	47
510160	47
510170	47
510180	47
510300	46
510310	46
510320	46
510340	46
510500	48
510510	48
538650	17
541060	19
541090	19
541100	19
541110	19
541150	19
541160	19
541170	19
541230	19
541240	19
541774	22
541775	22
541776	22
541800	22
541805	22

Part Number	Page
541810	22
541815	22
545980	39
552390	17
552390	19
552400	17
552400	19
552410	17
552410	19
552420	17
552420	19
552430	17
552430	19
552440	17
552440	19
552450	17
552450	19
552460	17
552460	19
552470	17
552470	19
552480	17
552480	19
552490	17
552490	19
552500	17
552500	19
552510	17
552510	19
552520	17
552530	17
552540	17
552550	17
552550	19
552560	17
552560	19
552570	17
552570	19
552580	17
552590	17
552600	17
552610	17
552620	17
552620	19
552630	17
552630	19
552640	17
552640	19
552650	17
552660	17
552670	17
552680	17
552690	17
552690	19
552700	17
552700	19
552710	17
552710	19
552720	17
552730	17

Part Number	Page
552740	17
552750	17
552760	17
552760	19
552770	17
552780	17
552790	17
552800	17
552810	17
552830	17
552840	17
552850	17
552860	17
552870	17
552880	19
552890	17
552900	17
552910	17
552920	17
552930	17
552950	17
552960	17
552970	17
552980	17
552990	17
553020	24
553030	24
553040	24
553050	24
553060	24
553070	24
553100	24
553110	24
553120	24
553200	24
553210	24
553220	24
553230	24
553250	24
553260	24
553370	23
553380	23
553400	25
553405	25
553410	25
553430	25
553440	25
553505	25
553510	25
553520	25
553530	25
553540	25
553550	23
553550	37
553560	23
553560	37
553570	23
553580	23
553590	23
554277	41

Cross Reference List

Part Number	Page
554278	41
554279	41
554280	41
554282	41
554286	41
554299	41
554300	41
554301	41
554302	41
554304	41
554308	41
554321	41
554322	41
554323	41
554324	41
554326	41
554330	41
554343	41
554344	41
554345	41
554346	41
554348	41
554352	41
554365	41
554366	41
554367	41
554368	41
554370	41
554374	41
554378	41
554384	41
556600	39
556610	39
556620	39
556630	39
556640	39
556650	39
556660	39
556670	39
556680	39
556690	39
556700	39
556710	39
556720	39
556730	39
556740	39
556750	39
556760	39
556770	39
556780	39
556790	39
556800	39
556810	39
556820	39
556830	39
556840	39
556850	39
556860	39
556900	38
556910	38

Part Number	Page
556920	38
556930	39
556940	39
556950	39
556960	39
556970	39
556980	39
557000	46
557010	46
557020	46
557030	46
557040	46
557050	46
557060	46
557070	46
557080	46
557090	46
557100	46
557110	46
557120	46
557130	46
557150	46
557160	46
557170	46
557180	49
557190	49
557200	46
557210	46
557220	46
557230	46
557240	46
557250	46
557260	46
557270	46
557280	46
557290	46
557300	46
557310	46
557320	46
557330	46
557350	46
557380	49
557390	46
557400	47
557410	47
557420	47
557430	47
557440	47
557450	47
557460	47
557470	47
557480	47
557600	47
557610	47
557620	47
557630	47
557640	47
557650	47
557660	47
557670	47

Part Number	Page
557680	47
558240	33
558241	33
558242	33
558243	33
558244	33
558249	33
558250	33
558255	33
558256	33
558260	33
558261	33
558262	33
558263	33
558264	33
558270	33
558271	33
558272	33
558273	33
558274	33
558276	33
558280	33
558281	33
558282	33
558283	33
558284	33
558285	33
558290	33
558291	33
558292	33
558293	33
558294	33
558295	33
558310	25
558340	25
558370	25
558410	25
558440	25
558460	25
558480	25
558490	25
558500	31
558501	31
558502	31
558503	31
558504	31
558505	31
558506	31
558507	31
558508	31
558509	31
558510	31
558511	31
558512	31
558513	31
558514	31

Cross Reference List

Part Number	Page
558515	31
558516	31
558517	31
558518	31
558519	31
558520	31
558521	31
558522	31
558523	31
558524	31
558525	31
558526	31
558527	31
558528	31
558529	31
558530	31
558531	31
558532	31
558533	31
558534	31
558535	31
558536	31
558537	31
558538	31
558539	31
558540	31
558541	31
558542	31
558543	31
558544	31
558545	31
558546	31
558610	49
558620	49
558630	49
558640	49
558880	25
561200	25
561210	25
561220	25
563300	39
563320	39
563340	39
563350	39
563360	39
563370	39
563380	39
563390	39
563400	39
563410	39
563420	39
563430	39
563440	39
563450	39
563460	39
563470	39
563480	39
563490	39
563500	39
563510	39

Part Number	Page
563520	39
563530	39
563540	39
563550	39
563560	39
564000	44
564010	44
564030	44
564050	44
564100	44
564150	44
564200	44
564250	44
564300	44
564400	44
564500	44
564600	44
564700	44
564800	44
564900	44
564960	44
564961	44
564962	44
564963	44
564964	44
564965	44
564966	44
564967	44
564968	44
564969	44
564970	44
564971	44
564972	44
565000	39
566000	35
566020	45
566030	45
566040	45
566050	45
566060	45
566070	45
566490	21
566500	21
566510	21
566520	21
566550	21
566560	21
566570	21
566580	21
566590	21
566630	21
566640	21
566650	21
566660	21
566670	21
566720	21
566730	21
566750	21
566780	21
566800	21

Part Number	Page
566810	21
568700	25
568730	25
505509*	18
505510*	18
505516*	18
505517*	18
505518*	18
505519*	18
505523*	18
505526*	18
538650*	18
541180*	18
541250*	18
541260*	18
541270*	18
541320*	18
541380*	18
552520*	18
552530*	18
552540*	18
552580*	18
552590*	18
552600*	18
552610*	18
552650*	18
552660*	18
552670*	18
552680*	18
552720*	18
552730*	18
552740*	18
552750*	18
552770*	18
552780*	18
552790*	18
552800*	18
552810*	18
552830*	18
552840*	18
552850*	18
552860*	18
552870*	18
552890*	18
552900*	18
552910*	18
552920*	18
552930*	18
552950*	18
552960*	18
552970*	18
552980*	18
552990*	18
534000	13
534001	13
534002	13
534003	13
534004	13
534005	13
534006	13

Cross Reference List

Part Number	Page
534007	13
534008	13
534009	13
534010	13
534011	13
534012	13
534013*	13
534014*	13
534015*	13
534016	13
534017	13
534018	13
534019*	13
534020*	13
534021*	13
534022*	13
534023	13
534024	13
534025	13
534026*	13
534027*	13
534028*	13
534029*	13
534030	13
534031	13
534032	13
534033*	13
534034*	13
534035*	13
534036*	13
534037	13
534038*	13
534039*	13
534040*	13
534041*	13
534042*	13
534044*	13
534045*	13
534046*	13
534047*	13
534048*	13
534049*	13
534050*	13
534051*	13
534052*	13
534053*	13
534055*	13
534056*	13
534057*	13
534058*	13
534059*	13
534060*	13

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