

TRADITION, EVOLUTION, VISION.

TRADITION, EVOLUTION, VISION.

**HIGH CURRENT COMPONENTS.
BAUTEILE FÜR STARKSTROMANLAGEN.**

With our experienced team we successfully meet the requirements of our customers. The list of Kunz references is evidence of long-standing and reliable partnerships.

THE COMPANY

Knowhow and commitment to the realization of optimum solutions have determined the history of the Kunz Brothers GmbH since 1922. Since the end of the sixties we have developed and produced high quality components for high current components.

Today the enterprise – at the beginning more like a craftsman's establishment, operates very successfully on the market in its 3rd generation. The name Kunz represents flexible and innovative overall solutions in the field of high current engineering. Then and now it has been our managerial philosophy that – based on traditional values – long-lasting success is always the results of progress and competence.

Our performance consists of highly developed quality and – above all –customer oriented awareness. Of course, we take in mind into account the steadily growing requirement as to the saving of energy and environmental protection.

This is one of the reasons why we have belonged to the innovative and successful manufacturers of components for high current installations for many years. We continually review our activities, acting and looking ahead, developing, designing and manufacturing specifically for the needs of the market.



Even in times, determined by faster and faster changes of competition, markets and target group, we will be successful.

Therefore, we learn quicker and better through permanent renewal to create essential and managerial values.

OUR MISSION:

"WE DO EVERYTHING

IN ORDER TO ENABLE YOU

TO ACHIEVE YOUR COMPANY OBJECTIVES"

In the area of globalization markets continually change. All enterprises which succeed in adapting themselves faster to changing situations will be successful. And we would like to rank among them.

ENGINEERING

We supply you with the complete high current technology as an overall solution from one source.

Within our scope of services also integrated products and services from our staffs and suppliers, your variety of interface problems will be solved and reduced.

Our knowhow engineers have acquired from worldwide will attend, based on your installation layout, to the:

PLANNING

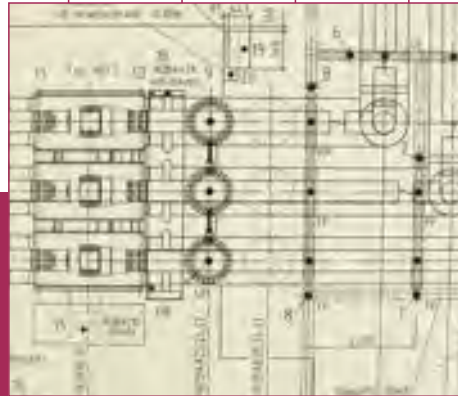
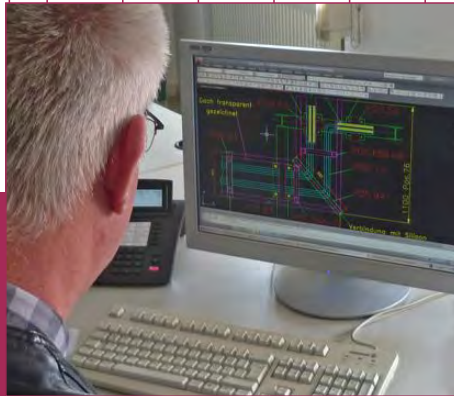
of the components required ensuring their integration into your plant and installation.

CALCULATION

of the system components.

CONSTRUCTION

of the system components in modern CAD technology.



QUALITY MANAGEMENT SYSTEM

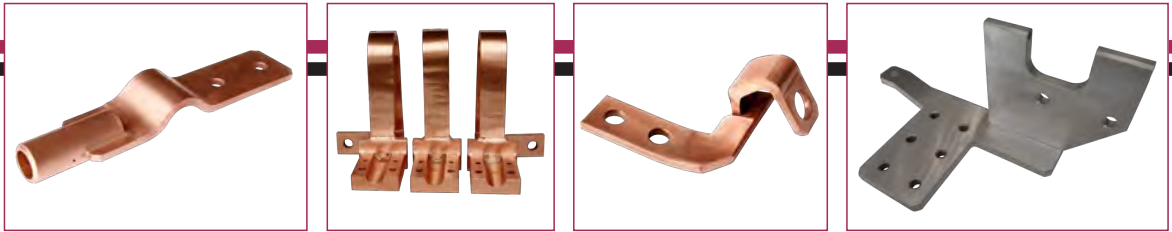
By means of expansion and innovative revision of our products we meet the demands of our customers at home and abroad. We assure quality in line with market conditions from the acceptance of the order via manufacturing up to the delivery of the product desired.

The organizational structure orientates itself to the customer. Therefore we always adapt our QA management system to the latest standards according to DIN EN ISO, whereas environmental protection and safety at work rank particularly high. The TÜV Rheinland is the competent certifying body of this part of the market.

OUR QUALITY PRINCIPLE:

“QUALITY CANNOT BE TESTED

ONLY PRODUCED!”



For more than 40 years Kunz has achieved closeness to the market in order to be recognized both at home and abroad as the customer's partner.

PRODUCTION OF COMPONENTS

We produce a wide spectrum of components for high current installations. Both the qualification and experience of our manufacturing staff guarantees a high quality standard of our products. This has been appreciated by our customers for many years. We supply the solution for your special field of application, whether expansion connectors, barring, or special components

POWER GENERATION AND DISTRIBUTION

Generator leakings, switches, transformer connexions.

PRIMARY INDUSTRY

High current components for electrolyses or melting.

TRAFFIC ENGINEERING

Barring Converter, ground connectors, thermoelectric coolers.

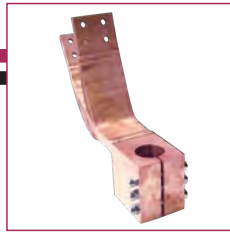
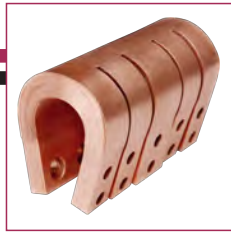
MECHANICAL ENGINEERING

Current connectors for welding machines and industrial robots.

BARRINGS AND SPECIAL COMPONENTS

We can manufacture according to your drawings or specifications or design into your layout of plant and support for installation.

Please contact our Product Development Department.



EXPANSION CONNECTORS

Our products use as links between switches, transformers, high current components and their inflexible barring. In contrast to inflexible connectors of mechanical changes arising from switch gear operations, vibration or from expansion caused by current heat.

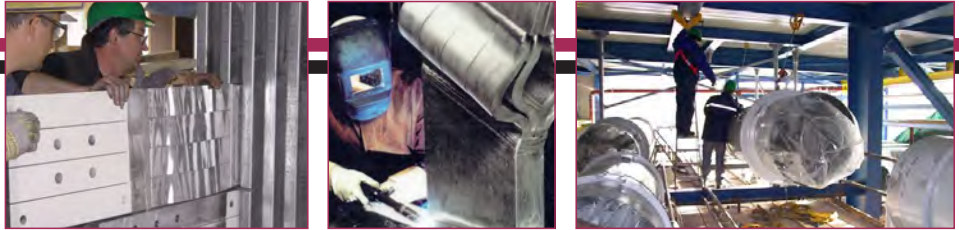
There are various manufacturing technologies available for each mode of application. In this respect please pay attention to our recommendations for Choice of Types:

Recommendations for Selection of Types:

- **PRESSURE WELDED COPPER EXPANSION CONNECTORS**
high elasticity, good conductivity, optional thickness, DIN form
- **PRESS RIVETED COPPER EXPANSION CONNECTORS**
for extremely high motion frequencies
- **INERT-GAS WELDED COPPER EXPANSION CONNECTORS**
good conductivity, facultative form of terminal ends
- **INERT-GAS WELDED ALUMINUM EXPANSION CONNECTORS**
for aluminium connections.
- **HIGH-FLEXIBLE COPPER BRAID**
high mobility, special applications

As surface coating of the contact areas

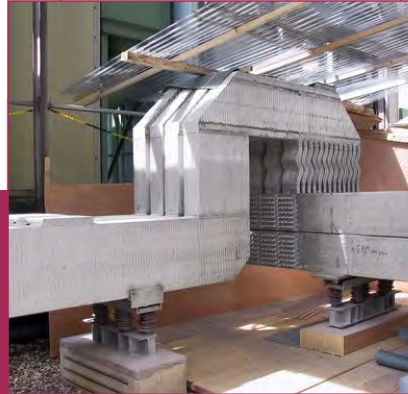
- **If, the conducting material is copper :**
We recommend TINNING or SILVER coating.
- **If, the conducting material is aluminum :**
We recommend NICKEL or SILVER coating.



We are offering more than a wide spectrum of successful products.

We are furthermore offering a comprehensive service for mounting and revision.

MOUNTING



Our offer is complemented and covered of any possibility site mounting in the field of medium and low voltage range. You will get rid of another interface problem.

Whether small or large site welding, provision of a supervisor or the installation of complete plant components, we would carry out all work according to your desired specification.



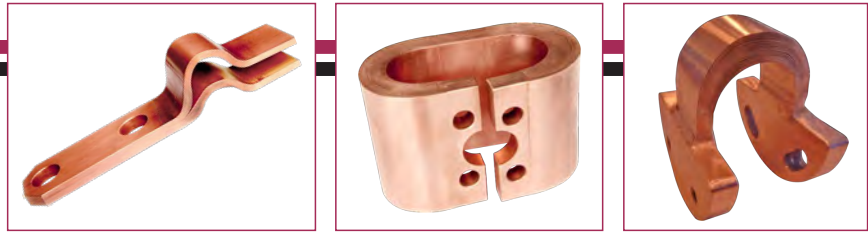
REVISION



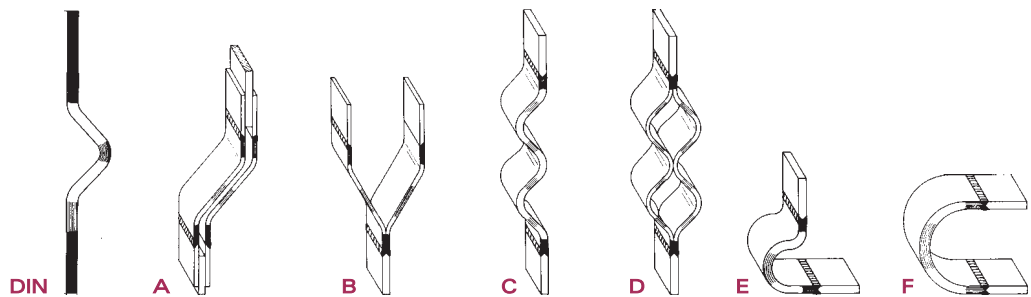
Our staff has a lot of experience in carrying out revisions in the field of medium and low voltage range – especially in POWER PLANT REVISION SERVICE.

If required, please ask for our performance specification and our list of references in power plant services.

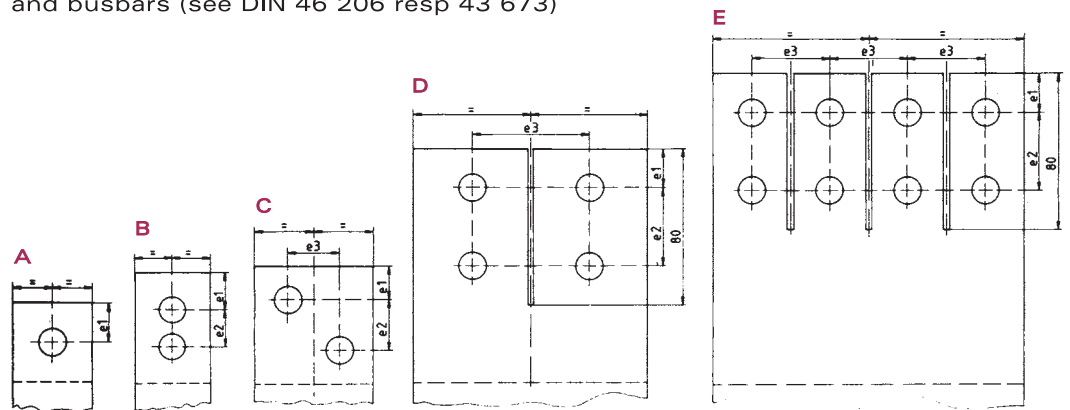
We would be happy to inspect and discuss regarding revision with you at your own site.



POSSIBLE FORMS AND SHAPES OF EXPANSION CONNECTORS



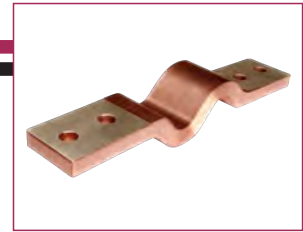
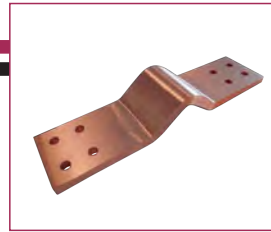
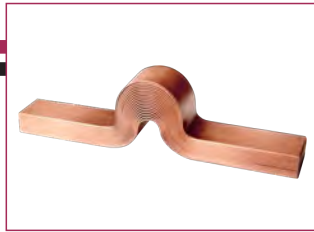
SHEETS OF DRILLINGS For connection between expansion connectors and busbars (see DIN 46 206 resp 43 673)



Form	A	B	B	B	C	C	D	D	D	E	E	E
Width	40	40	50	60	50	60	80	100	120	160	200	240
e1	20	20	20	20	14	17	20	20	20	20	20	20
e2	-	40	40	40	22	26	40	40	40	40	40	40
e3	-	-	-	-	22	26	40	50	60	40	50	60

All drillings D=14 mm

The drillings in the expansion connectors are suitable for longitudinal, angular and T-connections; upon request with slots having the necessary thickness



PRESSURE WELDED COPPER EXPANSION CONNECTORS DIN 46 276 – SERIES GKKP

Design

The expansion connectors are made entirely of copper foils. The contact ends, the copper foils are welded under pressure and heat to produce a compact and massive copper block.

Material

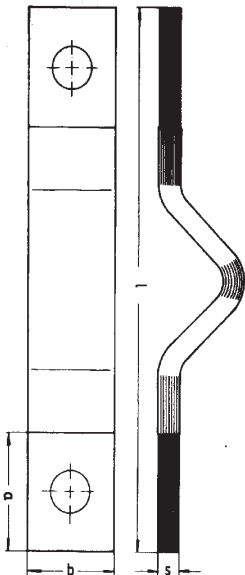
The copper foils made of SE-Cu, 0.1 to 0.3 mm. thick.

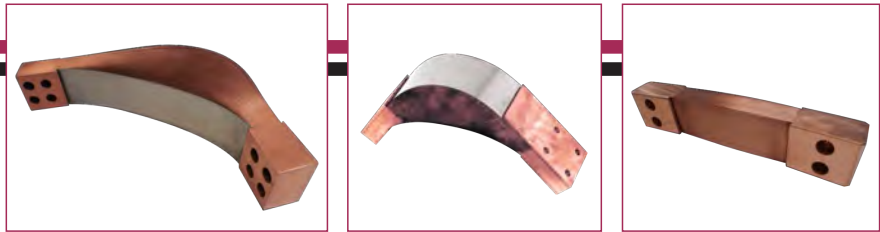
Drillings

Upon request drillings would be according to DIN 43 673 or according to customer specification.

Type GKKP – Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKKP 38/5-230	38	40	5	230	ca. 0,4
GKKP 38/10-230	38	40	10	230	ca. 0,9
GKKP 48/5-280	48	50	5	280	ca. 0,7
GKKP 48/5-300	48	80	5	300	ca. 0,7
GKKP 48/10-280	48	50	10	280	ca. 1,3
GKKP 48/10-300	48	80	10	300	ca. 1,4
GKKP 58/5-280	58	60	5	280	ca. 0,8
GKKP 58/5-300	58	80	5	300	ca. 0,9
GKKP 58/10-280	58	60	10	280	ca. 1,6
GKKP 58/10-300	58	80	10	300	ca. 1,7
GKKP 78/10-300	78	80	10	300	ca. 2,3
GKKP 78/15-280	78	80	15	280	ca. 3,2
GKKP 78/15-300	78	80	15	300	ca. 3,4
GKKP 98/10-320	98	80	10	320	ca. 3,1
GKKP 98/15-320	98	80	15	320	ca. 4,6
GKKP 98/20-320	98	80	20	320	ca. 6,1
GKKP 118/20-320	118	80	20	320	ca. 7,5





PRESSURE RIVETED COPPER EXPANSION CONNECTORS DIN 46 276 – SERIES GKKN

Design

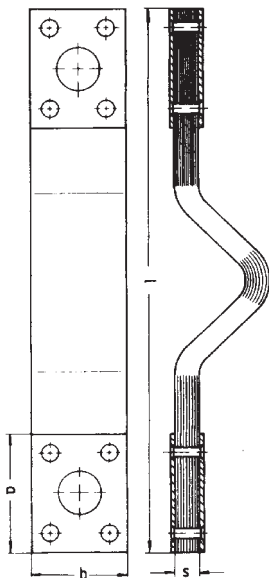
The expansion connectors are made entirely of high strength copper foils. The contact ends, the copper foils are riveted with copper sheet and pressed.

Material

The copper foils made of SE-Cu, 0.1 to 0.3 mm. thick. The riveted cover bar made of E-Cu. Dimension and numbers are according to the cross-section.

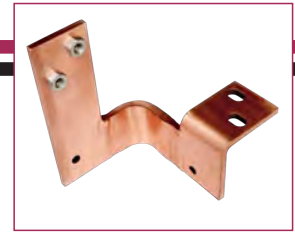
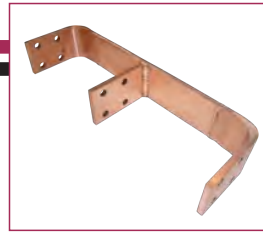
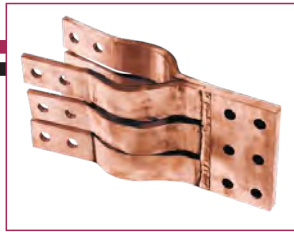
Drillings

The standard design without drillings. Upon request drillings would be according to DIN 43 673 or according to customer specification.



Type GKKN – Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKKN 40/5-230	40	40	5	230	ca. 0,6
GKKN 40/10-230	40	40	10	230	ca. 1,1
GKKN 50/5-230	50	50	5	230	ca. 0,8
GKKN 50/5-280	50	50	5	280	ca. 0,9
GKKN 50/5-300	50	80	5	300	ca. 1,0
GKKN 50/10-280	50	50	10	280	ca. 1,6
GKKN 50/10-300	50	80	10	300	ca. 1,8
GKKN 60/5-280	60	60	5	280	ca. 1,1
GKKN 60/5-300	60	80	5	300	ca. 1,3
GKKN 60/10-280	60	60	10	280	ca. 2,0
GKKN 60/10-300	60	80	10	300	ca. 2,2
GKKN 80/10-300	80	80	10	300	ca. 2,9
GKKN 80/15-280	80	80	15	280	ca. 3,9
GKKN 80/15-300	80	80	15	300	ca. 4,1
GKKN 100/10-320	100	80	10	320	ca. 3,8
GKKN 100/15-320	100	80	15	320	ca. 5,4
GKKN 100/20-320	100	80	20	320	ca. 7,0
GKKN 120/20-320	120	80	20	320	ca. 8,4



INERT-GAS WELDED COPPER EXPANSION CONNECTORS DIN 46 276 – SERIES GKKS

Design

The connectors are stacking build up by copper foils. The contact ends are made of flat copper. These flats are inert-gas welded to the copper foils.

Material

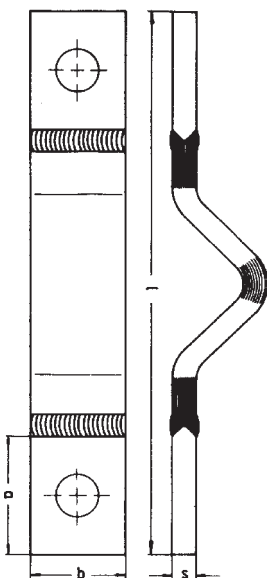
The connectors stacking : The copper foils made of SE-Cu, 0.1 to 0.3 mm. thick.
The contact ended : The flat copper made of E-Cu.

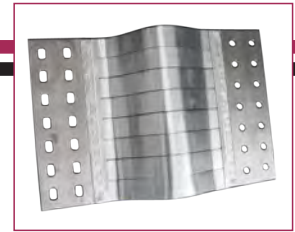
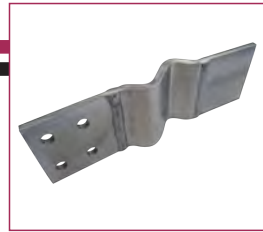
Drillings

The standard design without drillings. Upon request drillings would be according to DIN 43 673 or according to customer specification.

Type GKKS – Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKKS 40/5-230	40	40	5	230	ca. 0,5
GKKS 40/10-230	40	40	10	230	ca. 0,9
GKKS 50/5-280	50	50	5	280	ca. 0,7
GKKS 50/5-300	50	80	5	300	ca. 0,7
GKKS 50/10-280	50	50	10	280	ca. 1,4
GKKS 50/10-300	50	80	10	300	ca. 1,5
GKKS 60/5-300	60	80	5	300	ca. 0,9
GKKS 60/10-280	60	60	10	280	ca. 1,7
GKKS 60/10-300	60	80	10	300	ca. 1,8
GKKS 80/10-300	80	80	10	300	ca. 2,4
GKKS 80/15-300	80	80	15	300	ca. 3,5
GKKS 100/10-320	100	80	10	320	ca. 3,1
GKKS 100/15-320	100	80	15	320	ca. 4,7
GKKS 100/20-320	100	80	20	320	ca. 6,2
GKKS 120/20-320	120	80	20	320	ca. 7,5





INERT-GAS WELDED ALUMINIUM EXPANSION CONNECTORS DIN 46 276 – SERIES GKAS

Design

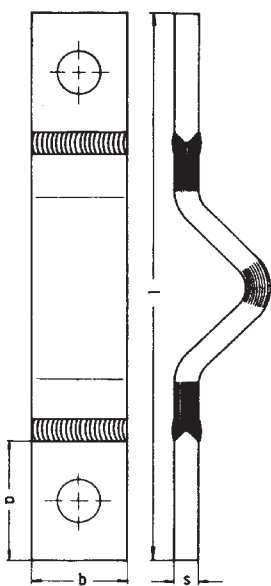
The connectors are stacking build up by aluminum foils. The contact ends are made of flat aluminum. These flats are inert-gas welded to the aluminum foils.

Material

The connectors stacking : The aluminum foils made of E-Al, 0.3 to 0.5 mm. thick.
The contact ended : The flat aluminum of E-Al or high-conductivity pantal.

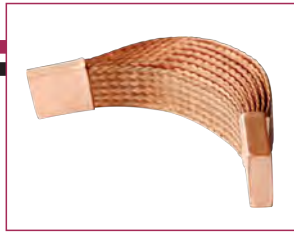
Drillings

The standard design without drillings. Upon request drillings would be according to DIN 43 673 or according to customer specification.



Type GKAS – Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKAS 40/5-230	40	40	5	230	ca. 0,1
GKAS 40/10-230	40	40	10	230	ca. 0,3
GKAS 50/5-280	50	50	5	280	ca. 0,2
GKAS 50/5-300	50	80	5	300	ca. 0,2
GKAS 50/10-280	50	50	10	280	ca. 0,4
GKAS 50/10-300	50	80	10	300	ca. 0,5
GKAS 60/5-300	60	80	5	300	ca. 0,3
GKAS 60/10-280	60	60	10	280	ca. 0,5
GKAS 60/10-300	60	80	10	300	ca. 0,5
GKAS 80/10-300	80	80	10	300	ca. 0,7
GKAS 80/15-300	80	80	15	300	ca. 1,1
GKAS 100/10-320	100	80	10	320	ca. 1,0
GKAS 100/15-320	100	80	15	320	ca. 1,4
GKAS 100/20-320	100	80	20	320	ca. 1,9
GKAS 120/20-320	120	80	20	320	ca. 2,3



HIGH-FLEXIBLE COPPER BRAIDS DIN 46 276 – SERIES GKKH

Design

The expansion connectors are made of copper or aluminum braids. The terminal contact ends, pressed copper tube under a precisely defined pressure.

Material

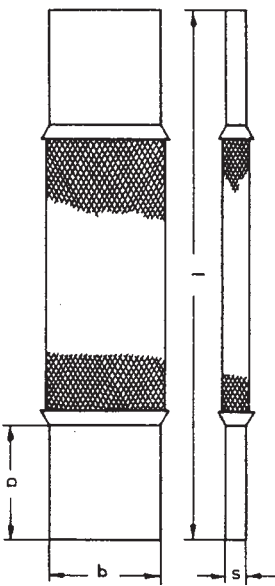
High-flexible bared or Tinned copper braid, are made of copper or aluminum. Diameter of wire is preferably 0.1 to 0.5 mm. Tubes or pipes for the contact ends made of copper.

Drillings

The standard design without drillings, Upon request drillings would be according to DIN 43 673 or according to customer specification.

Type GKKH – Ordering examples for frequent dimensions

Order No.	Steady Current	Cross-Section [mm ²]	Dimensions [mm]		Weight [kg]
	[A]		b	l	
GKKH 20/100	100	16	20	140	0,1
GKKH 25/150	150	25	25	150	0,1
GKKH 30/200	200	35	30	160	0,2
GKKH 30/250	250	50	30	160	0,2
GKKH 40/250	250	50	40	180	0,2
GKKH 30/300	300	70	30	160	0,3
GKKH 40/300	300	70	40	180	0,3
GKKH 50/300	300	70	50	200	0,3
GKKH 30/350	350	100	30	160	0,3
GKKH 40/350	350	100	40	180	0,4
GKKH 50/350	350	100	50	200	0,5
GKKH 40/400	400	120	40	180	0,4
GKKH 50/400	400	120	50	200	0,5
GKKH 50/600	600	200	50	200	0,8
GKKH 60/600	600	200	60	270	1,1
GKKH 50/750	750	280	50	250	1,1
GKKH 60/750	750	280	60	270	1,4
GKKH 50/850	850	350	50	250	1,4
GKKH 60/850	850	350	60	270	1,7



GEBR. KUNZ GMBH

Rudolf-Diesel-Straße 4
D-67133 Maxdorf/Pfalz

Tel. +49 (0) 6237 9268-0

Fax +49 (0) 6237 6181

info@kunz-starkstrom.de

www.kunz-starkstrom.de

www.kunz-highcurrent.com