



Photo: HELUKABEL®

HELUTEC® Signal and power connectors

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HELUTEC® – Quick and safe: Three technologies for easy handling



EMC
IP 66/67
-20G-
VIBRATION PROOF



EMC
IP 66/67
-20G-
VIBRATION PROOF

The innovative HELUTEC®-system

This sensational quick connect system is as stable as it is reliable and saves precious time and installation costs. The vibration proof system was designed for connectors size M17, M23 and M40, which are included in the HELUTEC®-Series 617, 917, 623, 723, 923 and 940. HELUTEC® receptacle connectors are always compatible with a standard thread connector or alternatively with the innovative speedtec system – downward compatibility is guaranteed.

Slide on, turn, perfect fit!

Patented perfection included.

The patented special development for the HELUTEC®-Serie 615/915

Is perfect when space is tight. The selflocking system can be connected comfortably even in confined space. The spring system in the coupling nut lets it slide on the mating connector and the prestressed spring mechanism locks securely. For disconnection it requires just a quarter turn and a slight pull on the connector. The connection is absolutely vibration proof. Accidental loosening is impossible. Specifically designed and patented for HELUTEC®-Series 615/915 connectors.



The assembly-ready „overmold“ solution

The bond for life. Once the connector housing and the shell are united in the assembly process they can not be separated anymore. This would destroy the connector. Like any other standard overmold connector locktec connectors are manipulation proof and can not be tampered with in the field. It is compatible with all standard cable sizes and length. There are two types of connection techniques available: A standard thread or the patented proprietary fast-lock system. The overmold without overmold, bend relief already integrated. A great variety of pin layouts available.

HELUTEC® – Functional design for harsh environments



Frost protection down to -50 °C

A cool thing: HELUTEC® Connectors are temperature-resistant way down below freezing point and therefore predestined for special tasks in extreme climate zones. The electrical and mechanical characteristics remain stable, even when it gets hot. Intercontec connectors do not have a problem with 130 °C, they do not sweat. No matter if you are using a large size connector or a model from the smaller series. They withstand harsh conditions and keep their unique design.



Protection classes IP 66/67 & 69K

Perfect for wetlands: Generally all HELUTEC® connectors are protected against water spray and temporary immersion. Every cable assembly with an is IP 66/67 protected. For special application in water or steam Intercontec offers a special qualification to reach IP 69K. In this process the cable clamp is fine tuned to the individual cable. Moisture does not have a chance.



Protection class IP 68

Working under pressure: The HELUTEC® Series 615/915 are also capable of long-term missions under water. 120 hours at 15 meters under water with 1.5 bar pressure do not cause any problems, as tests have shown. Therefore the system is rated IP 68.

HELUTEC®-Series 617 / 623 / 627

Signal connectors – Controlling and monitoring



Well-engineered, versatile, safe:
Complicated applications where space is limited are a speciality of HELUTEC®. Wherever you need to transmit signals, control motors or monitor the functions of complex machines, HELUTEC® connectors Series 617, 623 and 627 do the job. A great variety of pin layouts in various kinds of connector housings are available. Even the classic HELUTEC® connector lines show time and again their innovative side when confronted with new applications.

Properties:

- Drive Systems
- Robotics
- Mechanical Engineering
- Automation Mechatronics
- Medical/Chemical Engineering
- Packaging and Printing
- Aerospace
- Equipment Construction Machinery
- Railroad/ Transportation
- Shipbuilding
- Renewable Energies
- Lightning Sound Staging
- Food Industry
- Textile Industry

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helukabel.de.

HELUTEC®-Series 917 / 923 / 932 / 940 / 958

Powerful & safe: Power connectors



Extremely durable: HELUTEC®-power connectors reliably rev up drive motors, spindle drives and servomotors to high speed. With ease they can handle millions of start-stop manoeuvres. Voltage up to 630V and currents up to 200 A are transmitted dependably in continuous operation and in the roughest of environments. Depending on the particular application the integration of 50 mm² wires as well as small installation sizes are available from HELUTEC®, perfectly EMC shielded. Strong vibrations and sudden shocks do not pose a problem during daily operation, neither do heat, cold, moisture, dust and dirt. All connectors are tested in the test lab to safeguard the long-term durability in the field. Besides special stress tests (vibrations up to 50 G) individual customer requirements are analysed in terms of adjustments to the installation situation and integrated system solutions.

Properties:

- Drive Systems
- Robotics
- Mechanical Engineering
- Automation Mechatronics
- Medical/Chemical Engineering
- Packaging and Printing
- Aerospace
- Equipment Construction Machinery
- Railroad/ Transportation
- Shipbuilding
- Renewable Energies
- Lightning Sound Staging
- Food Industry
- Textile Industry

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helukabel.de.

HELUTEC®-Series 723

The unique and first hybrid connector with bus modul



Full speed ahead with five power and six signal contacts plus one quadrax element. The latter provides for fast Industrial Ethernet connections in real time mode and opens completely new possibilities with its ready-to-assemble, separately shielded Ethernet element. For the first time this system meets requirements for higher electric strength. When daisy-chaining decentrally controlled servo motors for example, it is possible to run 850VDC. Therefore the super-hybrid connector size M23 can also handle 30A of current and a wire cross section up to 4mm².

The superior technical data speak for themselves as well as the many versions that are available: No matter if you prefer straight, angled or continuously rotatable connector housings – the HELUTEC® connector is the new star on the horizon for applications in automation technology.

Hinweise:

High-speed data transmission at a variety of field bus systems is possible.



CANopen

DeviceNet

EtherCAT
Technology Group

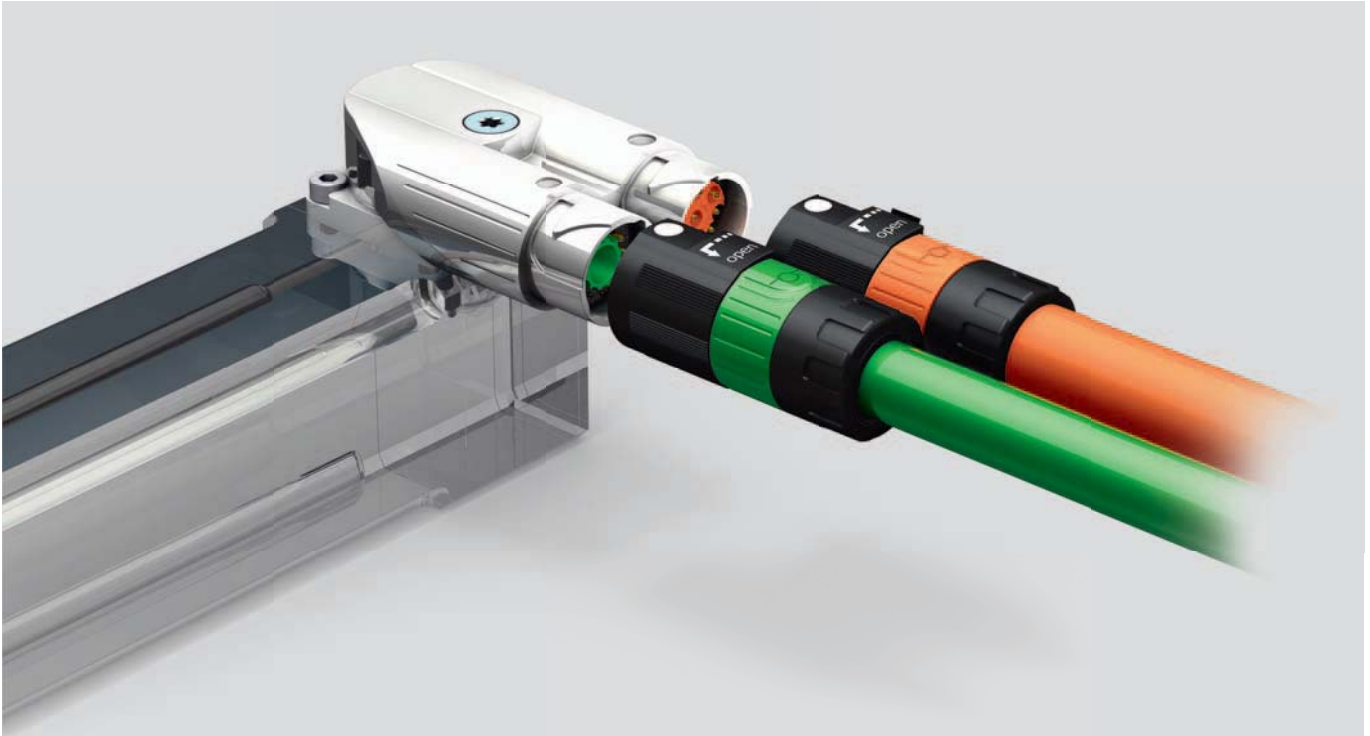


PROFINET
BUS

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helutec.de.

HELUTEC®-Series 615 / 915

Tiny connectors for small space



Small in size yet great in performance: The system impresses with high performance in a small format. Only one mounting hole is required to realize a combination of power and signal connection or power and bus connection on a small motor. The optimal partition of connector lid and connector housing creates a lot of room inside the connector for the assembly process. Mechanical as well as color codings provide additional safety. Contact assembly has never been easier. Except for crimping the system requires no special tools. After installation the system remains 300° continuously rotatable thus allowing the user to choose the most convenient direction of cable outlet.

The single version offers the same characteristics as its big brother and is available as signal or power connector. Thus it is perfectly suitable for miniaturized applications, where space is critical and room for cabling limited. There is no easier way to establish safe connections today.

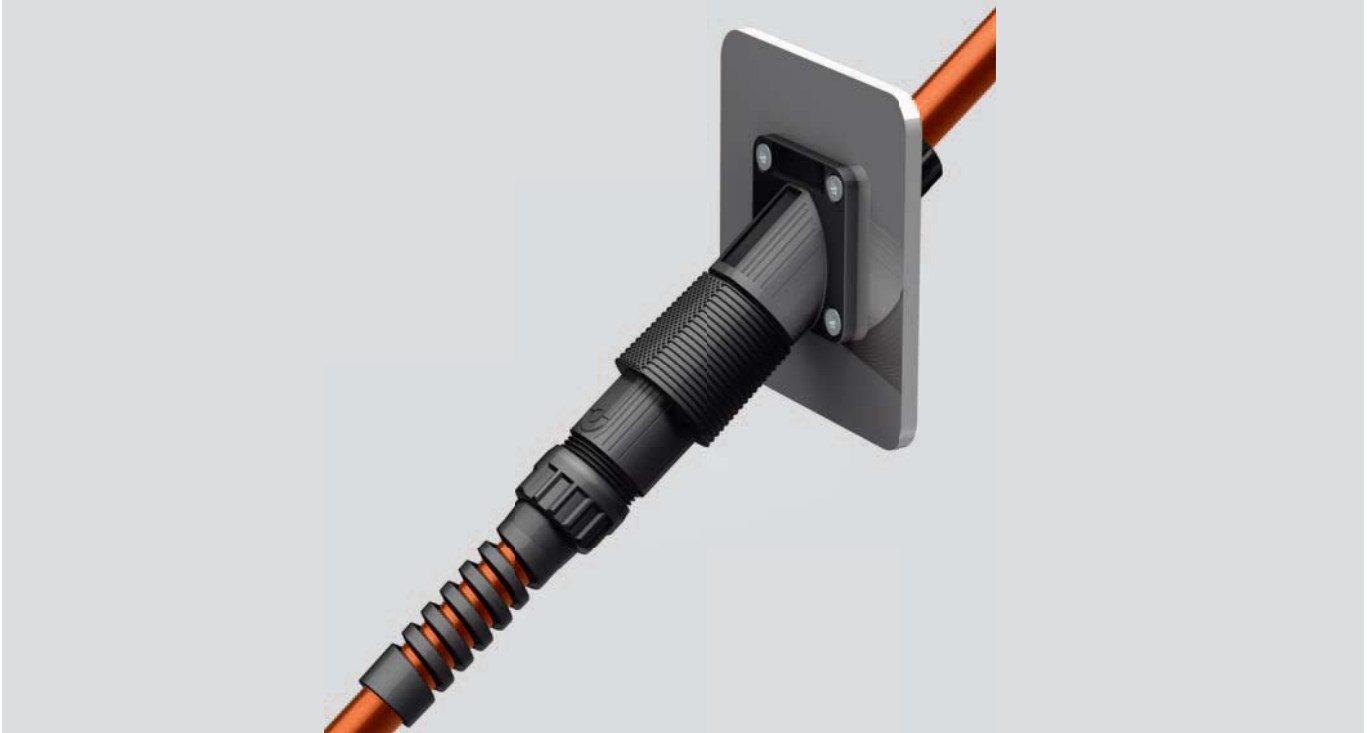
Properties:

- EMC
- IP 66/67
- -20G-
VIBRATION PROOF
- c  US

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helukabel.de.

HELUTEC®-Series 926

A plastic connector for stage and lighting



Curtains up for the Series 926 and for everybody who stands in the limelight treading the boards! These connectors are a shining example for an innovative, reliable and easy to use plastic connector. They proudly serve and make sure everybody and everything appears in the right light.

Safety is a top-priority: Lightning and stage technicians must be protected from electric shock when handling cables and equipment.

The solid plastic design, flame retardant according to UL 94 V0 and the modern connection method with a one hand push-pull mechanism point the way into the future. Connectors are also clearly coded facilitating fast and intuitive handling. But the Series 926 connectors are not limited to the show biz.

With 630 V rated voltage and 66 A rated current while ready to take on 16 mm² wires and protecting everything IP 66/67 they have the power to shine in other areas as well. Offshore and marine applications from oil rigs and wind turbines to any kind of seafaring vessel are only examples for the capabilities of this system.

Properties:

- IP 66/67

Tools and accessories

Crimping pliers



CRIMPING PLIERS A, B AND F SERIES

Manual crimping pliers

for \varnothing 1 mm contacts
max. crimping range 1 mm²
including positioning insert
[Order-no C0.101.00](#)



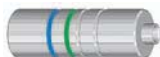
CRIMPING PLIERS A, B, C, D AND F SERIES

Manual crimping pliers

for \varnothing 1 mm contacts and \varnothing 2 mm
contacts max. crimping range 4 mm²
[Order-no. C0.201.00](#)



Positioning insert
for \varnothing 1 mm contacts
[Order-no. C0.003.00](#)



Positioning insert
for \varnothing 2 mm contacts
[Order-no. C0.004.00](#)



Positioning insert
for \varnothing 1 mm and
 \varnothing 2 mm contacts
[Order-no. C0.009.00](#)

Tools and accessories

Crimping pliers



CRIMPING PLIERS M17 SERIES

Manual crimping pliers

for \varnothing 0.6 mm contacts
max. crimping range 0.5 mm²
including positioning insert
[Order-no. C0.231.00](#)



Positioning insert

for \varnothing 0.6 mm contacts suitable
for crimping pliers C0.101.00
[Order-no. C0.228.00](#)



CRIMPING PLIERS C SERIES

Manual crimping pliers

for \varnothing 3.6 mm contacts
max. crimping range 16 mm²
[Order-no. C0.008.00](#)



Positioniereinsatz

für \varnothing 3,6 mm Kontakte
[Order-no. C0.010.00](#)

Tools and accessories

Crimping pliers



PNEUMATIC CRIMPER

for \varnothing 3.6 mm and \varnothing 2.0 mm contacts,
crimping range 1.5 - 16 mm²

Order-no. C0.044.00



Crimping Insert
for crimper C0.044.00



Locator
for crimper C0.044.00

Order-no.	Contact	Crimping range
C0.042.00	Male \varnothing 2.0 mm	1.5 / 2.5 mm ²
C0.041.00	Female \varnothing 3.6 mm	1.5 / 2.5 mm ²
C0.040.00	Male/female \varnothing 3.6 mm	4.0 / 6.0 mm ²
C0.043.00	Male/female \varnothing 3.6 mm	10.0 mm ²
C0.233.00	Male/female \varnothing 3.6 mm	16.0 mm ²

Order-no.	Contact	Crimping range
C0.036.00	Male/female \varnothing 2.0 mm	1.5 / 2.5 mm ²
C0.037.00	Male/female \varnothing 3.6 mm	1.5 - 10.0 mm ²
C0.038.00	Male/female \varnothing 3.6 mm	1.5 - 16.0 mm ²



BATTERY POWERED CRIMPING PLIERS S AND D SERIES

B131-C

Order-no. C0.207.00



Crimping inserts
max. 10 mm², 16 mm²
Order-no. C0.211.00



Crimping inserts
max. 25 mm²
Order-no. C0.210.00



Crimping inserts
max. 35 mm²
Order-no. C0.209.00



Crimping inserts
max. 50 mm²
Order-no. C0.208.00

Tools and accessories

Crimping pliers



CRIMPING PLIERS FOR REEL FEED CONTACTS FOR A AND F SERIES

Manual crimping pliers for reel feed Ø 1 mm
 Crimping range: 0.03 - 1.0 mm²
 Order-no. [C0.237.00](#)



Reel feed male contacts 1 mm

Order-no.	Crimping range
61.170.80.025	0.03 - 0.08 mm ²
61.171.80.025	0.08 - 0.20 mm ²
61.172.80.025	0.20 - 0.52 mm ²
61.173.80.025	0.75 - 1.00 mm ²

Unit: 10 x 25 pcs.



Reel feed female contacts 1 mm

Order-no.	Crimping range
60.198.80.021	0.03 - 0.08 mm ²
60.199.80.021	0.08 - 0.20 mm ²
60.200.80.021	0.20 - 0.52 mm ²
60.201.80.021	0.75 - 1.00 mm ²

Unit: 10 x 25 pcs.



CRIMPING PLIERS FOR REEL FEED FEMALE CONTACTS B UND C SERIES

Manual crimping pliers for reel feed contacts Ø 2 mm
 Crimping range: 1.5 - 2.5 mm²
 Order-no. [C0.073.00](#)

Manual crimping pliers for reel feed contacts Ø 2 mm
 Crimping range: 0.5 - 1.0 mm²
 Order-no. [C0.072.00](#)

■ Unit not included



Reel feed female contact Ø 2 mm

Crimping range: 0.5 - 2.5 mm²
 Order-no. [60.046.21.015](#)

Packaging unit:

200 pcs. reel feed female contacts per unit

Tools and accessories

Stripping and crimping machine



New! Closed reel feed contact system, Ø 1 mm

STRIPPING AND CRIMPING MACHINE STRIPCRIMP 750 FOR A, B, C AND F SERIES

B131-C

Order-no. [WA10043](#)

Order-no.	Reel feed	Crimping range	Crimping size	Tool-no.
contacts 1 mm				
60.198.80	female contact	0.03 - 0.08 mm ²	1	WM10241
60.199.80	female contact	0.08 - 0.20 mm ²	2	WM10242
60.200.80	female contact	0.20 - 0.52 mm ²	3	WM10243
60.201.80	female contact	0.75 - 1.00 mm ²	4	WM10244
61.170.80	male contact	0.03 - 0.08 mm ²	1	WM10241
61.171.80	male contact	0.08 - 0.20 mm ²	2	WM10242
61.172.80	male contact	0.20 - 0.52 mm ²	3	WM10243
61.173.80	male contact	0.75 - 1.00 mm ²	4	WM10244
Packaging unit: 7000 pcs. reel feed contacts per unit				
contacts 2 mm				
60.046.21	female contact	0.50 - 2.50 mm ²		WM10246
Packaging unit: 3000 pcs. reel feed contacts per unit				

HELUTECH®
Hightech connector solutions

HELUTECH® – the new cable accessory program from HELUKABEL®. Signal and power circular connector series for industrial applications.

Our Online Service:
www.helutech.de

Test our **Connector Configurator** at www.helutech.de. This online service allows you to configure standard types of HELUTECH® industrial connectors.



HELUTECH®
Industrial connectors

**HELUTECH® is
also available
pre-assembled.**

Any questions? Please contact us directly:

For further information, please order our detailed HELUTECH® technical documentation.

Selection Guide

Application	Technical Data						Series	Type
	Ampacity (in A)	Nominal voltage (in V)	Pin arrangement	Contact diameter (in mm)	Max. termination diameter (in mm ²)	Max. cable clamp diameter (in mm) special sizes on demand		
Signal	5	63	12	1	1	4.5 - 12	615	on request
	5 / 14	63	15 (12+3)	1	0.75/1.5	4.5 - 12		on request
	9	40	7	1	1	4 - 8		on request
Signal	7	32	12	1	1	3.5 - 12	617	M17
	3.6	63	17	0.6	0.5	3.5 - 12		M17
Signal	20	32	6/7	2	2.5	3.5 - 17	623	M23
	10	160	9 (8+1)	1/2	1/2.5	3.5 - 17		M23
	10	160	9	1	1	3.5 - 17		M23
	9	125	10	1	1	3.5 - 17		M23
	7	160	12	1	1	3.5 - 17		M23
	7	125	17	1	1	3.5 - 17		M23
	7	63	19 (16+3)	1/1.5	1/1.5	3.5 - 17		M23
	7	63	19 (15+4)	1	1	4.2 - 17		twintec B
Signal	9	60	26	1	1.5	4.2 - 17	627	M27

Selection Guide

Application	Technical Data						Series	Type
	Ampacity (in A)	Nominal voltage (in V)	Pin arrangement	Contact diameter (in mm)	Max. termination diameter (in mm ²)	Max cable clamp diameter (in mm) special sizes on demand		
Power	14/3.6	630/63	9 (4+5)	1	0.75/1.5	4.5 - 12	915	on request
Power	20	630	4	1.5	2.5	3.5 - 12	917	M17
	14	630	7	1	1.5	3.5 - 12		M17
	14/3.6	630/63	9 (4+5)	1	0.75/1.5	3.5 - 12		M17
	64	630	1	3.6	10	3.5 - 12		singletec
Power	30	630	6	2	4	4.2 - 17	623	M23
	30	630/250	8 (4+4)	2/1	4/1.5	4.2 - 17		M23
	30	630/250	9 (4+5)	2/1	4/1.5	4.2 - 17		M23
	200	630	1	8	50	4.2 - 17		singletec
Power	66	630	3	3	16	4.2 - 14.5	926	eltec
Power	75/30	630/250	6 (4+2)	3.6/2	16/4	7 - 25	940	M40
	75/30	630/250	8 (4+4)	3.6/2	16/4	7 - 25		M40
	75/30	630/250	9 (4+5)	3.6/2	16/4	7 - 25		M40
Power	150/12	630/250	8 (4+4)	10/1.6	50/1.5	17 - 36	958	M58