eXLink®- Ethernet/USB

1 eXLink 4-pole + PA for Zone 1 and Zone 21

Ethernet/USB in hazardous environment

The inlets and receptacles **eXLink** Ethernet and **eXLink** USB extend the proven connector series **eXLink** for hazardous areas. They can be used for plug-in connection for industrial LAN/ Ethernet and USB applications with each other in areas with an explosion hazard. The normally used electrical isolation of an intrinsically safe interface is no longer necessary. The Ex-de technology of the connectors allows the use of full industrial Ethernet power without barriers. This increases the efficiency of the bus architecture and reduces the susceptibility to faults and therefore the costs.

The sockets of the inlets and receptacles designed with Ex-de degree of protection have the proven CEAG contacts of shutter-like, punched and specially treated copper-beryllium band which provides a perfect electrical connection continuously with its large number of contact points. An Ex-d space around each plug pin provides a reliable ex-d chamber for explosion protection during connection and disconnection of the connectors in zones 1, 2, 21 and 22. To rule out incorrect assignment, the inlets and receptacles are coded according to time similar to the IEC 60309 system.

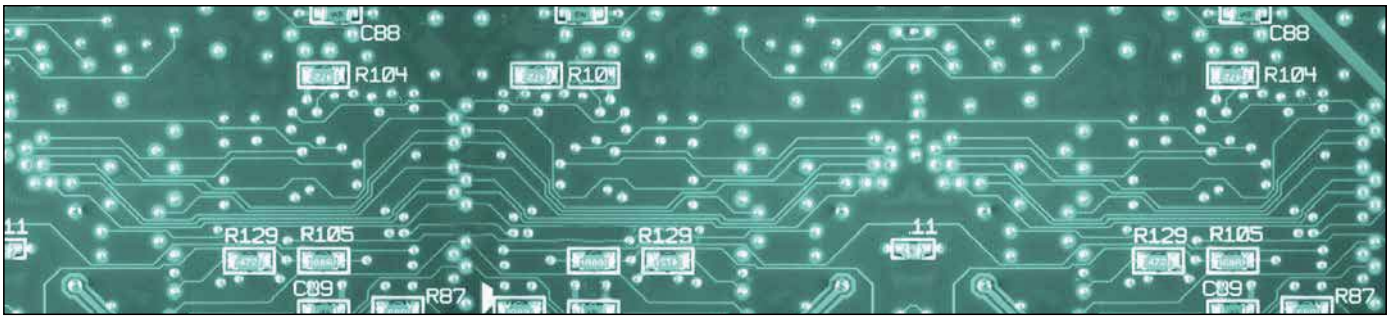
In accordance with the requirements of a contemporary, safe and time-saving assembly, all the components are equipped with earthing cables, cable stub and pre-assembled RJ plug male/female or USB plug male/ female.

With the M20 screw-in thread the nickel-plated brass components (optionally stainless steel) can be integrated in all flameproof design enclosures, allowing the use of industrial Ethernet cards/instruments inside without limits.



Features

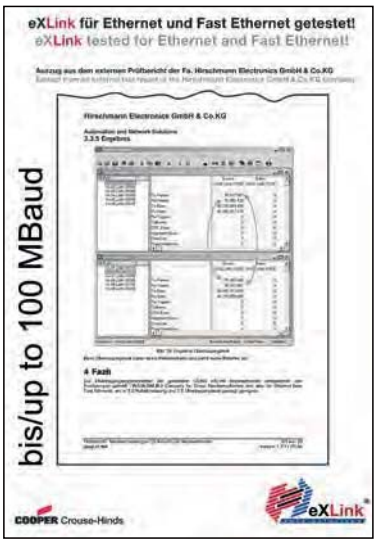
- **Hot swap**
- **Compact design**
- **High degree of protection IP66 / IP68**
- **Simple assembly**
- **Frequency range up to 100 MHz or USB 2.0**
- **Transfer rate up to 100 MBaud (Ethernet)**
- **Available for 10 BASE-T, 100 BASE-T**



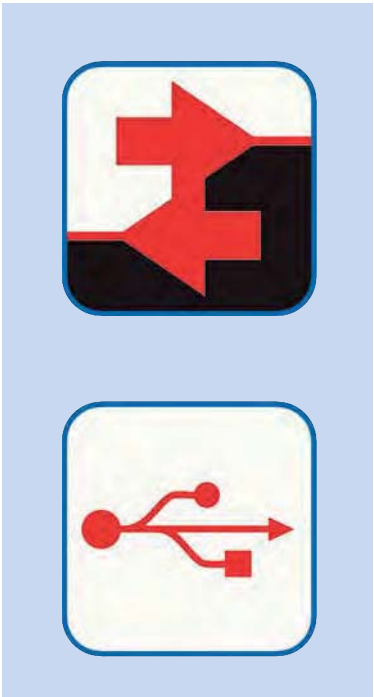
Innovative connectors for Ethernet systems

Combine the safety of an innovative explosion-protected connector system with the advantages of a homogeneous communication structure between the host, control and process level! With **eXLink Ethernet** and **eXLink USB** you can also use efficient, Ethernet-based communication systems in the hazardous areas. This enables you to use a modern information architecture at the same time as efficiently satisfying all criteria for explosion protection.

Conventional field bus systems are designed exclusively for data communication with the process and production control. With Ethernet as a communication medium you can implement a homogeneous infrastructure from the host level via the control level to the process level. In the industrial environment, **eXLink** connector systems replace the familiar connectors of the IT office world. Therefore this systems also offers you the real time performance of Ethernet networks – hot swap – in addition to high safety standards in areas with an explosion hazard. Adapt your control to the changing production processes. Child's play with **eXLink** connectors because Ethernet components and explosion protection have a modular structure. This means that you can update your information architecture without having to change your explosion-protected installation by simply changing the components in their pressurised enclosures. You can use conventional industrial components because the explosion-protected connection to your network is provided by the **eXLink** installed in the enclosure which also enables hot swapping of your terminating equipment without isolating and without hot work permit. The **eXLink** also put your data transmission on the safe side. Independent measurements of a well-known laboratory have classified the use of the **eXLink 4-pole + PA** up to 100 MHz and with transfer rates up to 100 Mbaud according to the requirements layed out in TIA/EIA-568-B.2 Category 5e as safe. The **eXLink 4-pole + PA** system can therefore be used in **Fast Ethernet®** or **Ethernet®** networks as well as for the implementation of explosion-protected USB interfaces such as hard disk driver.



Advanced technology with eXLink available by now





eXLink Ethernet with inlet



eXLink Ethernet with flange socket

Technical data

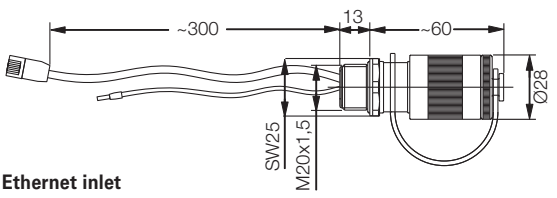
	eXLink Ethernet 4-pole + PA
Marking accd. to 2014/34/EU	Ⓔx II 2 G Ex de IIC T6 / Ⓔx II 2 D tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 03 ATEX 1016 X
IECEx Certificate of Conformity	IECEx BKI 06.0005X
Marking accd. to IECEx	Ex ed IIC T6 / Ex ia/ib IIC T6 Ex tD A21 IP66 T80 °C
Permissible ambient temperature	-55°C up to +40°C
Store temperature in original wrapping	-55°C up to +80°C
Rated voltage	BUS
Rated current	max. 1 A
Frequency range	0-100 MHz, Fast Ethernet® compatible
Terminal cross section	Ethernet-cable 300 mm CAT 5e with plug RJ 45 male/female[1)]
Protection class acc. to EN 60598	I
Transmission performance acc. to TIA/EIA-568-B.2	Category 5e up to 100 Mbaud
Degree of protection accd. to EN 60529	IP66/IP68 with closed and locked protective caps or duly plugged and locked components
Enclosure material	Nickel-plated brass / stainless steel 316L
Coding	1 h
Cable gland inlet and flange socket	M20 x 1.5 / 1/2" NPT
Accessories (option)	Padlocking facility

Ordering details

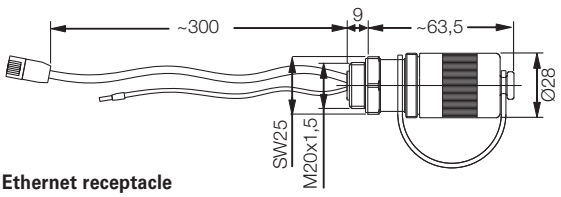
Scope of delivery	Order No.
eXLink Ethernet inlet with cable and RJ plug male (nickel-plated brass)	**GHG 574 9101 R3002**
eXLink Ethernet receptacle with cable and RJ plug male (nickel-plated brass)	**GHG 574 8101 R3002**

[1)] other length on request
All versions including protective caps

Dimension drawing



Ethernet inlet



Ethernet receptacle

Pin allocation eXLink:
Pin 1: white/green
Pin 2: white/orange
Pin 3: green
Pin 4: orange

Dimensions in mm



eXLink USB with inlet



eXLink USB with flange socket

Technical data

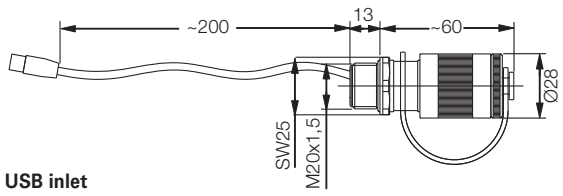
	eXLink USB 4-pole
Marking accd. to 2014/34/EU	Ⓔx II 2 G Ex de IIC T6 / Ⓔx II 2 D tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 03 ATEX 1016 X
IECEx Certificate of Conformity	IECEx BKI 06.0005X
Marking accd. to IECEx	Ex ed IIC T6 / Ex ia/ib IIC T6 Ex tD A21 IP66 T80 °C
Permissible ambient temperature	-55°C up to +40°C
Store temperature in original wrapping	-55°C up to +80°C
Rated voltage	BUS
Rated current	max. 1 A
Frequency range	USB 2.0
Terminal cross section	Data cable 200 mm with USB plug male/female1)
Protection class acc. to EN 60598	I
Degree of protection accd. to EN 60529	IP66/IP68 with closed and locked protective caps or duly plugged and locked components
Enclosure material	Nickel-plated brass / stainless steel 316L
Coding	2 h
Cable gland inlet and flange socket	M20 x 1.5 / 1/2" NPT
Accessories (option)	Padlocking facility

Ordering details

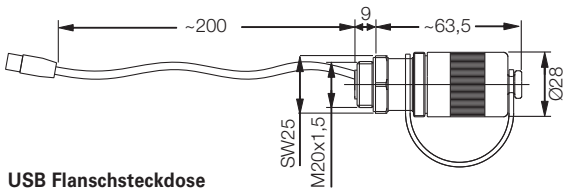
Scope of delivery	Order No.
eXLink inlet with cable and USB plug male (Nickel-plated brass)	**GHG 571 9102 R3003**
eXLink inlet with cable and USB coupler female (nickel-plated brass)	**GHG 571 9102 R3004**
eXLink receptacle with cable and USB plug female (nickel-plated brass)	**GHG 571 8102 R3003**
eXLink receptacle with cable and USB plug male (nickel-plated brass)	**GHG 571 8102 R3004**

[1] other length on request
All versions including protective caps

Dimension drawing



USB inlet



USB Flanschsteckdose

Pin allocation eXLink:
Pin 1: white/green
Pin 2: white/orange
Pin 3: green
Pin 4: orange

Dimensions in mm