

Date	01.02.2022	Classification	
Entreprise	Rixen Cableway GmbH	☐ OS ☐ IS ☒ O ☐ I	
N° de document	BU220003		
Substitué	-----		
Éditeur	Gentil	Assembly	Number of pages
WoLu / NaAu	Plante en général	Ropes	4

Rope connections

In order to establish a frictional and secure connection between a wire rope and the attachment point, there are various solutions, but most of them are standardized and designed with high safety factors. A standing solution for a guy rope is shackle – press chew at the top of the mast and rope lock – shackle at the anchor. The size and type of the rope connection is determined by the static calculation and should in no case be replaced by other elements.



Figure 1: Rope connection with a rope lock and shackle

Fasteners

All standardized fasteners have embossed load or size specifications as proof of use. These must be taken into account during installation. Incorrect use or assembly can lead to a wire rope crack.

Press chews

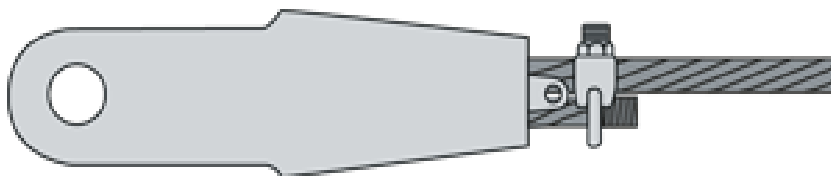


The most common version of guy ropes has a press chew and a loose end. The aluminium press connection according to DIN EN 13411-3 is the most widely used. A press chew is an inseparable compound.

The aluminium press connection cannot be used for use in salt water or with particularly aggressive media!

Rope lock

For the loose end of ropes, a rope lock according to DIN EN 13411-7 is usually used. The diameter of the wire rope must be embossed and suitable for the respective rope lock on the top of the. Only wedges and bolts supplied with the rope lock may be used. The end of the wire rope must be connected to at least one wire rope clamp after the rope lock.



Wire rope clamps

Another connection for the loose end of ropes is a wire rope clamp according to DIN EN 13411-5. The diameter of the wire rope must be embossed and suitable for the respective wire rope clamp on the underside of the jaw. Only brackets and nuts supplied with the wire rope clamp may be used. The wire rope ends must be connected to a minimum number of wire rope clamps depending on the wire rope diameter (see table)



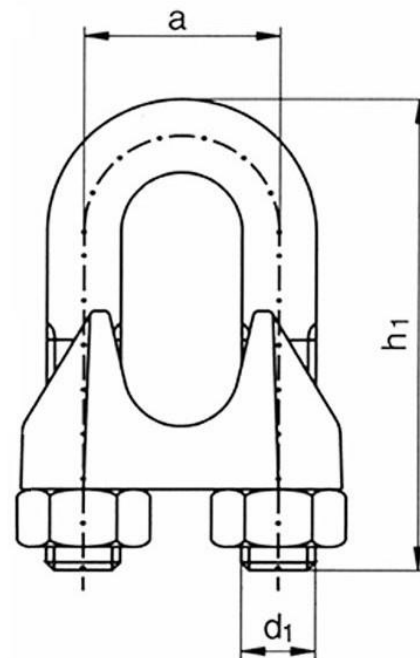
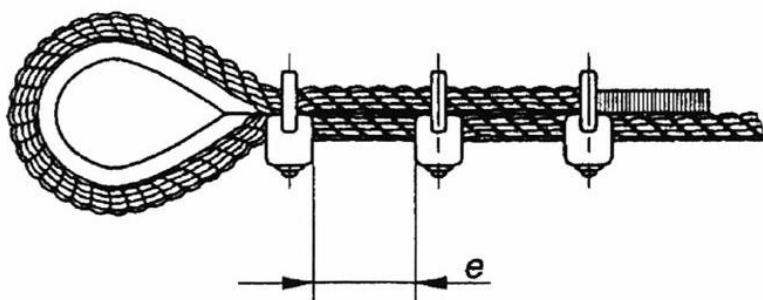
Maße gemäß Zeichnung (mm)

Seildurchmesser	DIN	Gewicht/Stk kg	Gewinde d1	Höhe h1	innere Weite a	Anziehdrehmoment Nm	Mindestanzahl Seilklemmen pro Endverbindung
2-3mm	741	0,012	M 4	20mm	9mm	2,00	3
4mm	741	0,013	M 4	22mm	11mm	2,00	3
5mm	13411-5	0,021	M 5	24mm	12mm	2,00	3
6mm	13411-5	0,040	M 5	32mm	14mm	3,50	4
8mm	13411-5	0,082	M 8	41mm	18mm	6,00	4
10mm	13411-5	0,092	M 8	46mm	20mm	9,00	4
12mm	13411-5	0,171	M 10	56mm	24mm	20,00	4
14mm	13411-5	0,277	M 12	66mm	28mm	33,00	4
16mm	13411-5	0,43	M 14	76mm	32mm	49,00	4

Montageanweisung Drahtseilklemmen

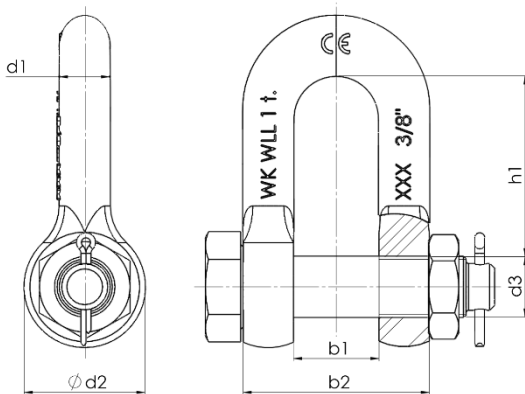
Der Abstand „e“ zwischen den Drahtseilklemmen soll min. 1,5x und nicht mehr als 3x der Breite der Klemmbacke betragen.

Bei Verwendung einer Kausche in der Schlaufenkonstruktion sollte die erste Drahtseilklemme unmittelbar an der Kausche angebracht werden.
Die Klemmbacke sollte immer auf dem belasteten Teil des Seil angebracht werden.



Shackle

The connection between the bezeled ends and the anchoring points usually takes place with shackles. High-strength shackles according to DIN EN 13889 are available in curly and straight shape as well as with screw bolts or with bolt nut and splint. The load capacity (WLL) of the shackle must always be higher than the load specified from the statics.



The bolt of a shackle must always be secured with a wire or a sapwood to prevent it from being turned on

Replacement of rope connectors

When replacing rope connectors, only use products approved by the manufacturer. Breaking strength and design must correspond to the original part!

If you have any doubts or questions, please do not hesitate to contact our service team.

Your contact persons:

Wolfgang Lunghamer

Technical Manager

Tel. +49 8131-33569-7425

w.lunghamer@rixencableway.com

Phillip Hirschfeld

Service Manager

Tel. +49 8131-33569-7426

p.hirschfeld@rixencableway.com

Please include this bulletin in the operating instructions of the system!

Thank you in advance for your understanding and for your cooperation. The Rixen service team is looking forward to a continued good cooperation.