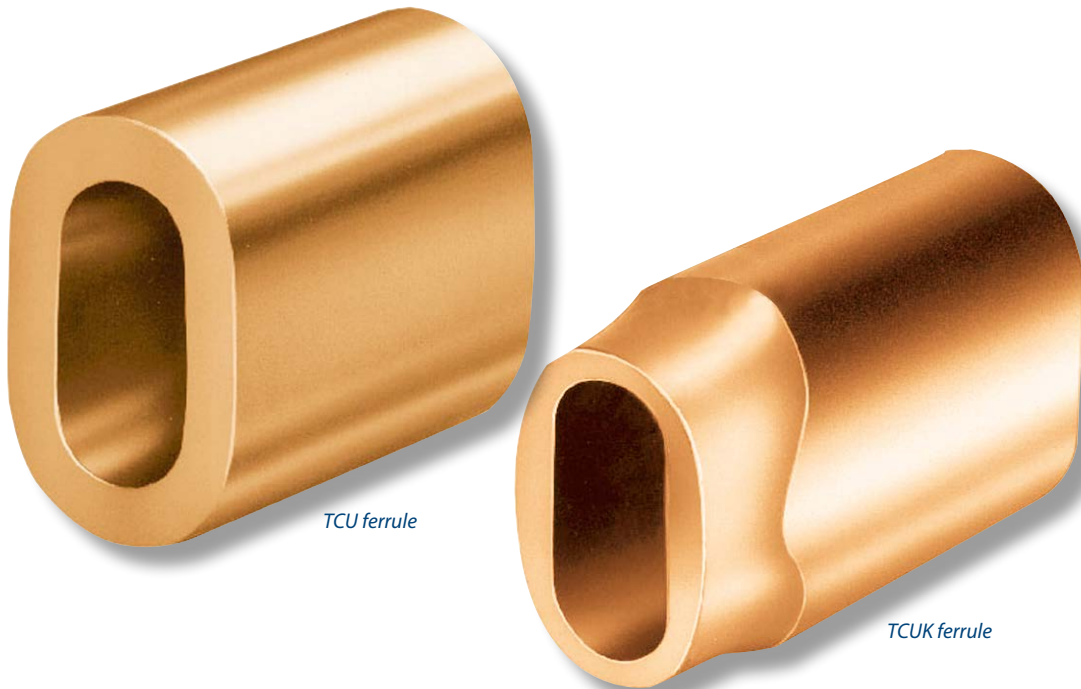


TURNBACK FERRULES*TCU ferrule**TCUK ferrule*

3.6 TCU AND TCUK FERRULES TALURIT® SYSTEM

GENERAL DESCRIPTION

TCU and TCUK ferrules are TALURIT's splicing system with ferrules made from Copper. It is mainly intended to be used together with stainless steel wire ropes where galvanic corrosion is to be avoided. EN 13411-3 do not mention Copper as a material but the TCU and TCUK ferrules have been validated according to TALURIT® splicing system, which is within the type testing framework of EN 13411-3.

The TCUK ferrule does not comply with the EN standard due to giving no possibility to inspect the dead end. If needed, Talurit can provide ferrules with inspection holes. If used in any application the selection table is the same as for TCU.

APPLICATIONS

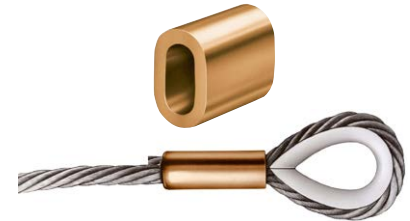
Copper is used together with stainless steel wire ropes to avoid galvanic corrosion in a saltwater environment. The same dies as in aluminium turnback ferrules should be used. The material is high grade copper in soft condition and the ferrules are seamlessly extruded over mandrel.

The ferrules can be used together with many types of wire ropes, but mainly intended for usage together with single layer stainless steel wire ropes as well as bright or galvanized single layer wire ropes, grade 1570-1960.

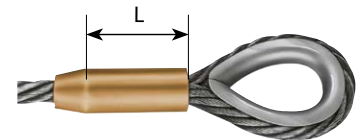
TALURIT® SPLICING SYSTEM Selection table for TCU and TCUK ferrules

Ferrule No.		Measured Wire Rope Diameter Range (mm)				Die Identification			Straight length, L, after pressing approx. mm	Required pressure approx. Valid for TCU (kN)
		Fill factor (f=0,40-0,50) Fibre Core C=0,314-0,393		Fill factor (f=0,50-0,60) Steel Core C=0,393-0,471		Dies marked	Diameter after pressing			
TCU	TCUK	Min	Max	Min	Max	T	(mm) / Tol.			
1		0,9	1,0	0,8	0,9	1	3	+0,2	6,5	10
1,5		1,1	1,5	1,0	1,4	1,5	3,8	0	8	20
2		1,6	2,0	1,5	1,9	2	4		9	30
2,5		2,1	2,6	2,0	2,4	2,5	5		12	45
3		2,7	3,1	2,5	2,8	3	6		14	60
3,5		3,2	3,6	2,9	3,3	3,5	7		16	80
4		3,7	4,1	3,4	3,8	4	8		18	100
4,5		4,2	4,6	3,9	4,2	4,5	9		20	125
5		4,7	5,1	4,3	4,7	5	10		23	180
6		5,2	6,1	4,8	5,6	6	12	+0,4	27	210
6,5		6,2	6,6	5,7	6,1	6,5	13	0	29	250
7		6,7	7,1	6,2	6,6	7	14		32	320
8	8	7,2	8,2	6,7	7,5	8	16		36	410
9	9	8,3	9,0	7,6	8,2	9	18		40	500
10	10	9,1	10,1	8,3	9,2	10	20	+0,5	45	600
11	11	10,2	11,2	9,3	10,2	11	22	0	50	720
12	12	11,3	12,3	10,3	11,2	12	24		54	850
13	13	12,4	13,4	11,3	12,2	13	26		59	1 000
14	14	13,5	14,5	12,3	13,2	14	28	+0,7	63	1 300
16	16	14,6	16,1	13,3	14,7	16	32	0	72	1 600
18	18	16,2	18,2	14,8	16,6	18	36	+0,9	81	2 000
20	20	18,3	20,2	16,7	18,4	20	40	0	90	2 400
22	22	20,3	22,4	18,5	20,4	22	44		99	2 900
24	24	22,5	24,6	20,5	22,5	24	48	+1,1	108	3 400
26		24,7	26,9	22,6	24,6	26	52	0	117	3 900
28		27,0	28,6	24,7	26,1	28	56		126	4 500
30		28,7	30,8	26,2	28,1	30	60	+1,4 0	135	5 100

Please note that these instructions are only applicable to products produced and supplied by Talurit AB, Sweden and Talurit GmbH, Germany!



Copper ferrule (TCU)



Copper ferrule (TCUK)

f = Fill factor, is the ratio between the sum of the nominal metallic cross-sectional areas of all the wires in the rope and the circumscribed area of the rope based on its nominal diameter.

C = Nominal metallic cross-sectional area factor of the rope.

$$C = \frac{f \cdot \pi}{4}$$

TCU and TCUK ferrules: The TCU and TCUK ferrules have been validated according to TALURIT® splicing system, which is within the frames of EN 13411-3. A termination performed according to our instructions will normally withstand a tensile strength of 90% of minimum breaking load (MBL) of the wire rope. Please read our TALURIT® Splicing Instructions carefully to secure a safe and correct swaging operation.

Wire rope: Above table applies to new stainless steel wire ropes as well as bright or galvanized wire ropes. It applies to single layer wire ropes with round strands and rope grade 1 570-1 960. Wire ropes shall conform to EN 12385-4 and -5. The types of rope shall be Ordinary or Lang lay. For higher tensile grade and higher Fill factor or other constructions, please contact our Technical Department.

Swaging: The TCU and TCUK ferrules are swaged according to our specified swaging method for turnback ferrules. Please read the swaging instructions for turnback ferrules.

Note! If the required pressure is higher than indicated in our tables or that the length after swaging does not match our given after swage dimensions, special care must be taken! This is an indication that something is wrong or not matching the parameters in our tables. All selection tables are recommendations built on test results, standard requirements and experience and has to be seen as guidelines. There will always be cases where some specifications are different from what is proven. Always contact our technical department for guidance.