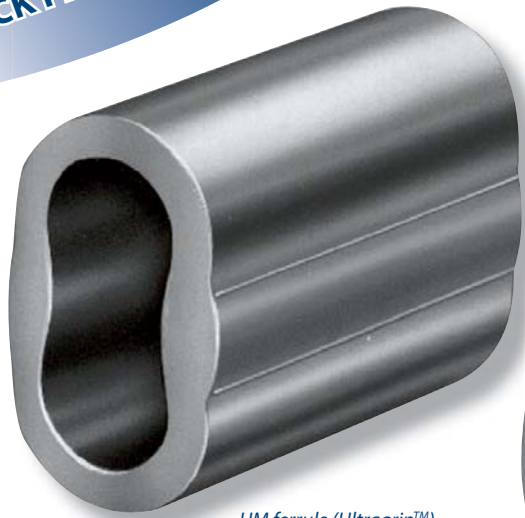


TURNBACK FERRULES



UM ferrule (Ultragrip™)



K ferrule (Konit™)

3.5 UM AND K FERRULES TALURIT™ SYSTEM

GENERAL DESCRIPTION

The aluminium ferrules UM (Ultragrip™) and K (Konit™) are made from a special designed profile. The UM ferrule corresponds to EN 13411-3, the European standard and also to the Japanese standard for turnback ferrule or ferrule secured eye termination (FSET). The K ferrule has been validated according to TALURIT™ splicing system requirements. The ferrules are produced from seamfree extrusions which are extruded seamlessly over mandrel and the aluminium alloy is EN AW-5051A according to EN 573-3.

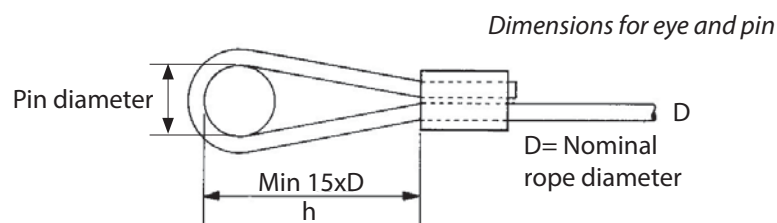
APPLICATIONS

The UM ferrule and the K ferrule can be used in basic applications, with bright or galvanized single layer steel wire ropes with round strands up to fill factor 0,60 and grade 1960. The types of rope lay shall be Ordinary or Lang lay. For fibre core wire ropes larger than 60 mm the maximum rope grade is 1770. Wire ropes shall conform to EN 12385-4 and 5.

THE CORRECT SIZE OF THE SLING EYE

If a thimble is not used, the distance from the swaged ferrule to the inner bearing point of the soft eye must be at least 15 x the wire rope diameter (D), as per the figure. The width of the eye without load shall be approximately half its length. When using a pin or a hook, the minimum eye size should be verified with the formulas below.

h min. = 3 x pin diameter
 h min. = 3 x hook width
 Note! Eye size (h) must always be at least 15 x D



TO BE NOTED

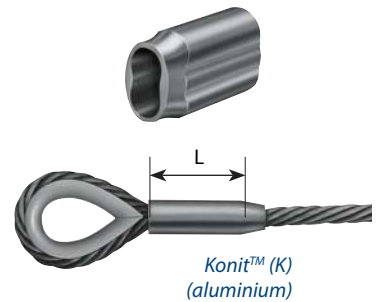
The UM ferrule and the K ferrule become smaller in diameter after pressing than the T ferrule. The UM ferrule can be used as an alternative to the T ferrule at wire rope grades up to and including 1960. The UM ferrule and the K ferrule are available from stock in sizes from 09-90.

TALURIT™ SPLICING SYSTEM

Selection table for UM and K ferrules

Ferrule No.		Wire Rope Capacity Diameter (mm)				Die Identification		Straight length, L, after pressing approx.	Required pressure approx. Valid only for UM
		Fill factor (f=0,40-0,45) Fibre Core C=0,314-0,353		Fill factor (f=0,45-0,60) Fibre Core and Steel Core C=0,353-0,471		Dies marked	Diameter after pressing		
UM	K	Min	Max	Min	Max	UM, K	(mm) / Tol	mm	(kN)
9	9	8,3	9,0	7,6	8,2	9	16 +0,3	36	320
10	10	9,1	10,1	8,3	9,2	10	18 0	41	410
11	11	10,2	11,2	9,3	10,2	11	20 +0,4	45	500
12	12	11,3	12,3	10,3	11,2	12	22 0	50	600
13	13	12,4	13,4	11,3	12,2	13	24	55	720
14	14	13,5	14,5	12,3	13,2	14	26	59	850
16	16	14,6	16,1	13,3	14,7	16	28 +0,5	64	1 000
18	18	16,2	18,2	14,8	16,6	18	32 0	73	1 300
20	20	18,3	20,2	16,7	18,4	20	36 +0,6	82	1 600
22	22	20,3	22,4	18,5	20,4	22	40 0	91	2 000
24	24	22,5	24,6	20,5	22,5	24	44	100	2 400
26	26	24,7	26,9	22,6	24,6	26	48 +0,8	109	2 900
28	28	27,0	28,6	24,7	26,1	28	52 0	118	3 400
30	30	28,7	30,8	26,2	28,1	30	56	127	3 900
32	32	30,9	32,7	28,2	29,9	32	60 +1,0	136	4 500
34	34	32,8	34,9	30,0	31,9	34	64 0	146	5 100
36	36	35,0	37,1	32,0	33,8	36	68	155	5 800
38	38	37,2	39,2	33,9	35,7	38	72 +1,1	164	6 500
40	40	39,3	41,4	35,8	37,8	40	76 0	173	7 200
42	42	41,5	43,6	37,9	39,8	42	80	182	8 000
44	44	43,7	45,7	39,9	41,7	44	84 +1,3	191	8 800
46	46	45,8	48,0	41,8	43,8	46	88 0	200	9 700
50	50	48,1	50,6	43,9	46,2	50	92	209	10 600
54		50,7	55,0	46,3	50,2	54	100 +1,6	228	12 500
58		55,1	59,4	50,3	54,2	58	108 0	246	14 600
62		59,5	63,8	54,3	58,2	62	116 +1,7 0	264	16 800
66		63,9	67,6	58,3	61,7	66	124 +1,8	282	19 200
70		67,7	71,9	61,8	65,6	70	132 0	300	22 000
74		72,0	76,3	65,7	69,7	74	140 +2,0	319	24 500
78		76,4	80,7	69,8	73,6	78	148 0	337	27 000
82		80,8	85,0	73,7	77,6	82	156	355	30 000
90		89,5	93,7	81,7	85,5	90	172 +2,2 0	391	34 000

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



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.

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

UM/K ferrules: The UM ferrules have been validated according to EN 13411-3 regarding Ferrule Secured Eye terminations and Ferrule Secured Endless slings. The K ferrules have been validated according to TALURIT™ splicing system requirements. Please read our TALURIT™ Splicing Instructions carefully to secure a safe and correct swaging operation.

Wire rope: The table applies to new bright or galvanized single layer steel wire ropes with round strands. Maximum rope grade is 1960. 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, please contact our Technical Department.

Swaging: The UM ferrules and the K 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 the length after swaging does not match our given after swage dimensions, then 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 must be seen as guidelines. There will always be cases where some specifications are different from what has been tested. Always contact our technical department for guidance.