

## CARATTERISTICHE

### SPECIFICATION

Place the clips as shown below, bearing in mind that the loaded rope must always be placed on the bridge of the clip while the u-bolt should be placed on the rope tail (dead end of the rope).

Never alternate the toward of the wire rope clips. Turn back wire rope length so that the required minimum number of clips can be installed according to the instructions below.

The first grip must be placed one bridge width from the turned backed rope tail or dead end of the rope, according to figure 1. Tighten the nuts to the specific torque.

The second clip must be placed immediately against the thimble but nevertheless in such a position that the correct tightening of the clip does not damage the outer wires of the rope (fig. 2). Tighten the nuts firmly but not yet to the specific torque.

The following clip should be placed on the wire rope between the first and second clip in such way that they are separated by at least 1,5 times the clip width with a maximum of 3 times the clip width, according to figure 3.

Apply light tension on the rope and tighten all nuts evenly, alternating until reaching the specific torque. During assembly and before the rope is taken into service, the nuts must be tightened once again to the prescribed torque. After the load is applied for the first time, the torque value must be checked again and corrected if necessary. Periodically re-tightening of the nuts must be done at 10.000 cycles (heavy usage), 20.000 cycle (moderate usage) or 50.000 cycles (light usage).

If cycles are unknown, a fixed time period could be used, e.g. every three months, six months, annually. Operating temperature:  $-20^{\circ}\text{C} \div 80^{\circ}\text{C}$ .

Posizionare i morsetti come di seguito illustrato, tenendo presente che il tratto di fune in tiro deve sempre poggiare sulla base del morsetto mentre il cavallotto deve rimanere sul tratto rinvio.

Non alternare mai il verso dei morsetti.

Il tratto di fune rinvio deve essere di lunghezza tale da consentire il fissaggio del numero di morsetti indicato in tabella.

Il primo morsetto va applicato verso la fine del tratto rinvio serrandolo in modo definitivo (fig. 1); il secondo immediatamente a ridosso della redancia facendo attenzione a non danneggiare la fune (fig. 2), con serraggio intermedio; il morsetto successivo deve essere posizionato tra i due ad una distanza minima di 1,5 volte e massima di 3 volte la larghezza del morsetto (fig. 3).

Applicare una leggera tensione alla fune e quindi serrare i dadi con la corretta coppia di serraggio.

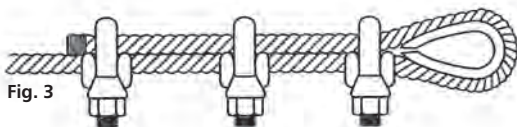
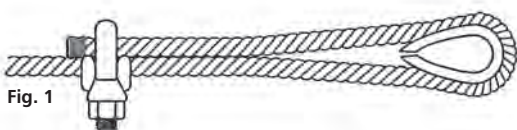
Dopo aver messo in tensione la fune, controllare la forza di serraggio e, se necessario, stringere ancora.

Il serraggio dei dadi deve essere ripetuto ogni 10.000 cicli (in caso di uso pesante), 20.000 cicli (uso moderato) o 50.000 cicli (in caso di poco utilizzo).

Se non fosse possibile calcolare i cicli di lavoro, considerate di ripetere il serraggio dei dadi stabilendo dei limiti temporali in funzione dell'impiego (es. ogni 3 mesi, 6 mesi o annualmente).

Considerare sempre la perdita di carico di questo tipo di fissaggio.

Temperatura di impiego:  $-20^{\circ}\text{C} \div 80^{\circ}\text{C}$ .



La coppia di serraggio è valida per condizioni standard di fornitura. L'uso del morsetto in condizioni diverse (es. ingrassaggio della filettatura) comporta valori diversi della coppia di serraggio.

The tightening torque is valid for standard conditions of supply. The use of the wire rope clips in different conditions (es. greasing of the thread) involves different values of the tightening torque.



## Accessori per fune

Wire rope fittings

## MORSETTI ZINCATI

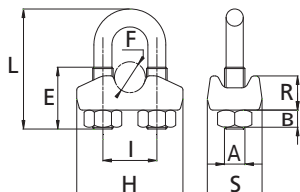
WIRE ROPE CLIPS

### Tipo CVL

Finitura: zincatura elettrolitica

#### CVL Type

Finish: electrolytic galvanized



| Codice<br>Code | Fune<br>Rope |             | Dimensioni<br>Dimensions |         |         |         |         |         |         |         | Peso<br>100 pezzi<br>Weight<br>100 pcs | Coppia<br>serraggio<br>Tightening<br>torque | N° min.<br>morsetti<br>Min. N°<br>of wire rope<br>clips |
|----------------|--------------|-------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|----------------------------------------|---------------------------------------------|---------------------------------------------------------|
|                | Ø<br>mm      | Ø<br>inches | A                        | B<br>mm | E<br>mm | H<br>mm | I<br>mm | L<br>mm | R<br>mm | S<br>mm | Kg                                     | Nm                                          |                                                         |
| ACVL1/8"       | 3            | 1/8         | M4                       | 3,2     | 12      | 18      | 9       | 20      | 7       | 10      | 1,2                                    | 1,5                                         | 3                                                       |
| ACVL3/16"      | 5            | 3/16        | M5                       | 4       | 13      | 24      | 13      | 24      | 10      | 15      | 2,2                                    | 3                                           | 3                                                       |
| ACVL1/4"       | 6            | 1/4         | M6                       | 5       | 15      | 27      | 15      | 28      | 11      | 16      | 3,5                                    | 5,2                                         | 3                                                       |
| ACVL5/16"      | 8            | 5/16        | M6                       | 5       | 19      | 31      | 17      | 34      | 12      | 18      | 4,4                                    | 5,2                                         | 5                                                       |
| ACVL3/8"       | 10           | 3/8         | M8                       | 6,5     | 22      | 37      | 20      | 42      | 13      | 21      | 7,5                                    | 12,5                                        | 5                                                       |
| ACVL7/16"      | 11           | 7/16        | M8                       | 6,5     | 22      | 41      | 22      | 44      | 14      | 24      | 8,6                                    | 12,5                                        | 5                                                       |
| ACVL1/2"       | 12-13        | 1/2         | M10                      | 8       | 33      | 44      | 25      | 55      | 15      | 26      | 14                                     | 25                                          | 5                                                       |
| ACVL9/16"      | 14           | 9/16        | M10                      | 8       | 33      | 47      | 27      | 57      | 18      | 27      | 15                                     | 25                                          | 5                                                       |
| ACVL5/8"       | 16           | 5/8         | M10                      | 8       | 33      | 51      | 29      | 63      | 20      | 28      | 18                                     | 25                                          | 5                                                       |
| ACVL11/16"     | 18           | 11/16       | M12                      | 10      | 44      | 56      | 34      | 75      | 21      | 32      | 26                                     | 42                                          | 5                                                       |
| ACVL3/4"       | 20           | 3/4         | M12                      | 10      | 44      | 62      | 34      | 75      | 22      | 33      | 30                                     | 42                                          | 5                                                       |
| ACVL7/8"       | 22           | 7/8         | M12                      | 10      | 52      | 65      | 39      | 85      | 25      | 35      | 35                                     | 42                                          | 7                                                       |
| ACVL1"         | 24-26        | 1           | M14                      | 11      | 50      | 72      | 42      | 95      | 27      | 40      | 48                                     | 67                                          | 7                                                       |
| ACVL1-1/16"    | 28           | 1 1/16      | M14                      | 11      | 50      | 75      | 45      | 100     | 30      | 42      | 52                                     | 67                                          | 8                                                       |
| ACVL1-1/8"     | 30-32        | 1 1/8       | M14                      | 11      | 50      | 80      | 47      | 110     | 33      | 44      | 60                                     | 67                                          | 8                                                       |
| ACVL1-1/4"     | 34-36        | 1 1/4       | M16                      | 13      | 55      | 88      | 53      | 120     | 37      | 48      | 80                                     | 106                                         | 8                                                       |
| ACVL1-1/2"     | 38-40        | 1 1/2       | M16                      | 13      | 60      | 98      | 59      | 140     | 40      | 54      | 112                                    | 106                                         | 8                                                       |
| ACVL2"         | 45-50        | 2           | M20                      | 16      | 80      | 120     | 72      | 150     | 57      | 60      | 192                                    | 206                                         | 8                                                       |

Non idonei per sollevamento.

Not suitable for lifting purposes.

### Tipo CVL-EN Green Pin®

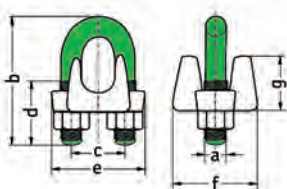
In accordo a EN 13411-5 tipo B

- Base: acciaio alta resistenza SAE 1045
- Cavallo: SAE 1015
- Finitura base: zincata a caldo
- Finitura cavallo:  $\geq 1/2"$  zincatura a caldo  
 $< 1/2"$  zincatura elettrolitica

#### CVL-EN Green Pin® Type

According to EN 13411-5 B type

- Bridge: high tensile steel SAE 1045
- U-bolt: SAE 1015
- Base finish: hot dipped galvanized
- U-bolt finish:  $\geq 1/2"$  hot dipped galvanized  
 $< 1/2"$  electro galvanized



| Codice<br>Code | Fune<br>Rope |             | Dimensioni<br>Dimensions |         |         |         |         |         |         | Peso<br>100 pezzi<br>Weight<br>100 pcs | Coppia<br>serraggio<br>Tightening<br>torque | N° min.<br>morsetti<br>Min. N°<br>of wire rope<br>clips |
|----------------|--------------|-------------|--------------------------|---------|---------|---------|---------|---------|---------|----------------------------------------|---------------------------------------------|---------------------------------------------------------|
|                | Ø<br>mm      | Ø<br>inches | a<br>mm                  | b<br>mm | c<br>mm | d<br>mm | e<br>mm | f<br>mm | g<br>mm | Kg                                     | Nm                                          |                                                         |
| ACVLVB3/16"    | 5            | 3/16        | 6                        | 31      | 15      | 13      | 29      | 24      | 13      | 7                                      | 10,2                                        | 2                                                       |
| ACVLVB1/4"     | 6-7          | 1/4         | 8                        | 34      | 19      | 13      | 37      | 30      | 18      | 8                                      | 20,3                                        | 2                                                       |
| ACVLVB5/16"    | 8            | 5/16        | 10                       | 45      | 22      | 19      | 43      | 33      | 19      | 13                                     | 40,7                                        | 3                                                       |
| ACVLVB3/8"     | 9-10         | 3/8         | 11                       | 49      | 26      | 19      | 49      | 42      | 25      | 19                                     | 61                                          | 3                                                       |
| ACVLVB7/16"    | 11           | 7/16        | 12                       | 60      | 30      | 25      | 58      | 46      | 26      | 33                                     | 88                                          | 3                                                       |
| ACVLVB1/2"     | 12-13        | 1/2         | 13                       | 61      | 30      | 25      | 58      | 48      | 31      | 34                                     | 88                                          | 3                                                       |
| ACVLVB9/16"    | 14-15        | 9/16        | 14                       | 72      | 33      | 32      | 63      | 52      | 31      | 45                                     | 129                                         | 3                                                       |
| ACVLVB5/8"     | 16           | 5/8         | 14                       | 74      | 33      | 32      | 64      | 54      | 36      | 45                                     | 129                                         | 3                                                       |
| ACVLVB3/4"     | 18-20        | 3/4         | 16                       | 86      | 38      | 37      | 72      | 57      | 38      | 68                                     | 176                                         | 4                                                       |
| ACVLVB7/8"     | 22           | 7/8         | 19                       | 98      | 45      | 41      | 80      | 62      | 40      | 108                                    | 305                                         | 4                                                       |
| ACVLVB1"       | 24-26        | 1           | 19                       | 108     | 48      | 46      | 88      | 67      | 47      | 113                                    | 305                                         | 5                                                       |
| ACVLVB1-1/8"   | 28-30        | 1 1/8       | 19                       | 117     | 51      | 51      | 91      | 73      | 48      | 140                                    | 305                                         | 6                                                       |
| ACVLVB1-1/4"   | 32-34        | 1 1/4       | 22                       | 130     | 59      | 54      | 105     | 79      | 56      | 207                                    | 488                                         | 7                                                       |
| ACVLVB1-3/8"   | 36           | 1 3/8       | 22                       | 140     | 60      | 59      | 108     | 79      | 58      | 234                                    | 488                                         | 7                                                       |
| ACVLVB1-1/2"   | 38-40        | 1 1/2       | 22                       | 147     | 66      | 60      | 112     | 85      | 64      | 254                                    | 488                                         | 8                                                       |
| ACVLVB1-5/8"   | 42           | 1 5/8       | 25                       | 161     | 70      | 67      | 121     | 92      | 67      | 329                                    | 583                                         | 8                                                       |
| ACVLVB1-3/4"   | 44-46        | 1 3/4       | 29                       | 174     | 78      | 70      | 134     | 97      | 76      | 441                                    | 800                                         | 8                                                       |
| ACVLVB2"       | 48-52        | 2           | 32                       | 195     | 86      | 78      | 150     | 113     | 85      | 603                                    | 1017                                        | 8                                                       |
| ACVLVB2-1/4"   | 56-58        | 2 1/4       | 32                       | 213     | 98      | 81      | 162     | 116     | 100     | 707                                    | 1017                                        | 8                                                       |
| ACVLVB2-1/2"   | 62-65        | 2 1/2       | 32                       | 227     | 105     | 87      | 168     | 119     | 113     | 806                                    | 1017                                        | 9                                                       |
| ACVLVB2-3/4"   | 68-72        | 2 3/4       | 32                       | 243     | 112     | 91      | 174     | 127     | 124     | 1000                                   | 1017                                        | 10                                                      |
| ACVLVB3"       | 75-78        | 3           | 38                       | 271     | 121     | 98      | 194     | 135     | 136     | 1472                                   | 1627                                        | 10                                                      |

Non idonei per sollevamento.

Not suitable for lifting purposes.

## CARATTERISTICHE

### SPECIFICATION

#### APPLICATIONS

Turnbuckles are designed for lifting or tensioning cables, ropes or bars provided that the applied forces are always aligned. The turnbuckle must not side loaded.

#### DESIGN

- Green Pin® turnbuckles are manufactured in accordance with ASTM F 1145-92 (formerly U.S. Fed. Spec. FF-T-791).
- All attachments are interchangeable.
- Locking nuts (locknuts) are supplied with all sizes.

#### MAIN INDICATIONS FOR USE

- Turnbuckles must be used for in-line applications only; lateral loads must not be applied, as the turnbuckles were not designed for this purpose.
- Special care must be taken to avoid overloading.
- Make sure that the connecting element is suitable for the load-bearing characteristics of the turnbuckle and guarantees sufficient mechanical resistance to the traction exerted.
- During tensioning, avoid forces on the turnbuckle that could cause it to deform. If a tensioner begins to deform, the tension must be immediately reduced and the deformed parts must be replaced.
- Insert only one rope or element for each terminal.
- Exert traction by acting on the body, making sure that, once the working condition is reached, the threaded part of the terminals is inserted into the body for at least one thread diameter.
- Provide a locking nut to prevent unscrewing.
- The pulling force must be applied only by rotating the body of the turnbuckle : do not overload by other means. When applying the tension, take care not to rotate the rope or chain connected to the ends of the turnbuckle.
- Before use, always check the integrity of the turnbuckle and the threaded parts.
- The turnbuckles must be inspected regularly in accordance with current safety standards.

#### APPLICAZIONI

I tenditori vengono utilizzati per il sollevamento o il tensionamento di cavi, funi o barre a condizione che le forze applicate siano sempre allineate. Il tenditore non deve essere sottoposto a carichi laterali.

#### PROGETTAZIONE

- I tenditori Green Pin® sono realizzati in conformità alla norma ASTM F 1145-92 (precedentemente U.S. Fed. Spec. FF-T-791).
- Tutti gli attacchi sono intercambiabili.
- I dadi di bloccaggio (controdadi) sono forniti con tutte le misure.

#### PRINCIPALI INDICAZIONI D'USO

- I tenditori devono essere utilizzati solo per applicazioni in linea; non devono essere applicati carichi laterali, poiché i tenditori non sono stati progettati per questo scopo.
- Prestare particolare attenzione a evitare sovraccarichi.
- Assicurarsi che l'elemento di collegamento sia adeguato alle caratteristiche di portata del tenditore e garantisca una resistenza meccanica sufficiente alla trazione esercitata.
- Durante il tensionamento, evitare forze sul tenditore che potrebbero causarne la deformazione. Se un tenditore inizia a deformarsi, la tensione deve essere immediatamente ridotta e le parti deformate devono essere sostituite.
- Inserire solo una fune o un elemento per ogni terminale.
- Esercitare la trazione agendo sulla canaula facendo attenzione che, una volta raggiunta la condizione di lavoro, la parte filettata dei terminali sia inserita nella canaula per almeno un diametro di filetto.
- Prevedere un dado di chiusura per prevenire lo svitamento.
- La forza di tiro deve essere applicata solo tramite rotazione della canaula: non sovraccaricare con altri mezzi. Durante l'applicazione del tiro porre attenzione a non far ruotare la fune o la catena collegata alle estremità del tenditore.
- Prima dell'utilizzo, verificare sempre l'integrità del tenditore e delle parti filettate.
- I tenditori devono essere ispezionati regolarmente in conformità con gli standard di sicurezza vigenti.



| Codice<br>Code                   | Codice<br>Code                           | Diametro<br>filetto<br>Thread<br>diameter | Regolazione<br>Take up |     | Portata<br>WLL | Tenditore<br>Turnbuckle |                |                  | Dimensioni<br>Dimensions |         |         |         |         | Peso<br>Weight |
|----------------------------------|------------------------------------------|-------------------------------------------|------------------------|-----|----------------|-------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|----------------|
| Con coppiglia<br>With cotter pin | Con dado e coppiglia<br>With safety bolt |                                           |                        |     |                | Chiuso<br>Closed        | Aperto<br>Open | Chiuso<br>Closed |                          |         |         |         |         |                |
| G 6313                           | G 6323                                   | a<br>inch                                 | inch                   | mm  | t              | b<br>mm                 | c<br>mm        | d<br>mm          | e<br>mm                  | f<br>mm | g<br>mm | h<br>mm | i<br>mm | Kg             |
| -                                | ATENFFDC0106                             | 3/8                                       | 6                      | 150 | 0,54           | 273                     | 409            | 305              | 12                       | 21      | 8       | 9       | 21      | 0,57           |
| -                                | ATENFFDC0206                             | 1/2                                       | 6                      | 150 | 1              | 305                     | 435            | 344              | 16                       | 26      | 10      | 11      | 26      | 0,96           |
| -                                | ATENFFDC0209                             | 1/2                                       | 9                      | 230 | 1              | 380                     | 587            | 418              | 16                       | 26      | 10      | 11      | 26      | 1,18           |
| -                                | ATENFFDC0212                             | 1/2                                       | 12                     | 305 | 1              | 455                     | 739            | 494              | 16                       | 26      | 10      | 11      | 26      | 1,5            |
| -                                | ATENFFDC0306                             | 5/8                                       | 6                      | 150 | 1,59           | 346                     | 469            | 406              | 18                       | 32      | 13      | 14      | 33      | 1,84           |
| -                                | ATENFFDC0309                             | 5/8                                       | 9                      | 230 | 1,59           | 421                     | 622            | 481              | 18                       | 32      | 13      | 14      | 33      | 2,12           |
| -                                | ATENFFDC0312                             | 5/8                                       | 12                     | 305 | 1,59           | 496                     | 773            | 556              | 18                       | 32      | 13      | 14      | 33      | 2,56           |
| ATENFF0406                       | ATENFFDC0406                             | 3/4                                       | 6                      | 150 | 2,36           | 368                     | 487            | 438              | 24                       | 38      | 16      | 16      | 41      | 2,68           |
| ATENFF0409                       | ATENFFDC0409                             | 3/4                                       | 9                      | 230 | 2,36           | 442                     | 639            | 512              | 24                       | 38      | 16      | 16      | 41      | 3,03           |
| ATENFF0412                       | ATENFFDC0412                             | 3/4                                       | 12                     | 305 | 2,36           | 518                     | 791            | 588              | 24                       | 38      | 16      | 16      | 41      | 3,29           |
| ATENFF0418                       | ATENFFDC0418                             | 3/4                                       | 18                     | 457 | 2,36           | 671                     | 1095           | 740              | 24                       | 38      | 16      | 16      | 41      | 3,65           |
| ATENFF0512                       | ATENFFDC0512                             | 7/8                                       | 12                     | 305 | 3,27           | 559                     | 825            | 636              | 27                       | 42      | 19      | 19      | 48      | 4,9            |
| ATENFF0518                       | ATENFFDC0518                             | 7/8                                       | 18                     | 457 | 3,27           | 712                     | 1131           | 789              | 27                       | 42      | 19      | 19      | 48      | 5,95           |
| ATENFF0606                       | ATENFFDC0606                             | 1                                         | 6                      | 150 | 4,54           | 447                     | 555            | 532              | 30                       | 50      | 22      | 20      | 55      | 5,21           |
| ATENFF0612                       | ATENFFDC0612                             | 1                                         | 12                     | 305 | 4,54           | 598                     | 859            | 683              | 30                       | 50      | 22      | 20      | 55      | 6,5            |
| ATENFF0618                       | ATENFFDC0618                             | 1                                         | 18                     | 457 | 4,54           | 750                     | 1164           | 835              | 30                       | 50      | 22      | 20      | 55      | 8,1            |
| ATENFF0624                       | ATENFFDC0624                             | 1                                         | 24                     | 610 | 4,54           | 902                     | 1469           | 987              | 30                       | 50      | 22      | 20      | 55      | 8,6            |
| ATENFF0712                       | ATENFFDC0712                             | 1 1/4                                     | 12                     | 305 | 6,9            | 641                     | 916            | 748              | 44                       | 71      | 28      | 26      | 68      | 11,2           |
| ATENFF0718                       | ATENFFDC0718                             | 1 1/4                                     | 18                     | 457 | 6,9            | 803                     | 1228           | 910              | 44                       | 71      | 28      | 26      | 68      | 13,6           |
| ATENFF0724                       | ATENFFDC0724                             | 1 1/4                                     | 24                     | 610 | 6,9            | 961                     | 1538           | 1069             | 44                       | 71      | 28      | 26      | 68      | 15             |
| ATENFF0812                       | ATENFFDC0812                             | 1 1/2                                     | 12                     | 305 | 9,71           | 675                     | 941            | 806              | 52                       | 71      | 35      | 28      | 80      | 17,1           |
| ATENFF0818                       | ATENFFDC0818                             | 1 1/2                                     | 18                     | 457 | 9,71           | 825                     | 1244           | 956              | 52                       | 71      | 35      | 28      | 80      | 19,3           |
| ATENFF0824                       | ATENFFDC0824                             | 1 1/2                                     | 24                     | 610 | 9,71           | 980                     | 1550           | 1111             | 52                       | 71      | 35      | 28      | 80      | 21,8           |
| ATENFF0918                       | ATENFFDC0918                             | 1 3/4                                     | 18                     | 457 | 12,7           | 938                     | 1316           | 1092             | 60                       | 86      | 42      | 33      | 90      | 27,3           |
| ATENFF0924                       | ATENFFDC0924                             | 1 3/4                                     | 24                     | 610 | 12,7           | 1084                    | 1614           | 1246             | 60                       | 86      | 42      | 33      | 90      | 31,7           |
| ATENFF1024                       | ATENFFDC1024                             | 2                                         | 24                     | 610 | 16,8           | 1153                    | 1672           | 1338             | 63                       | 93      | 50      | 41      | 108     | 49             |
| ATENFF1124                       | ATENFFDC1124                             | 2 1/2                                     | 24                     | 610 | 27,2           | 1254                    | 1830           | 1479             | 75                       | 114     | 57      | 41      | 143     | 88             |
| ATENFF1224                       | ATENFFDC1224                             | 2 3/4                                     | 24                     | 610 | 34             | 1348                    | 1882           | 1604             | 90                       | 110     | 70      | 41      | 158     | 103            |

- Coefficiente di sicurezza 5.
- Temperatura di utilizzo: -20°C ÷ 200°C.
- Safety factor 5.
- Operating temperature: -20°C ÷ 200°C.

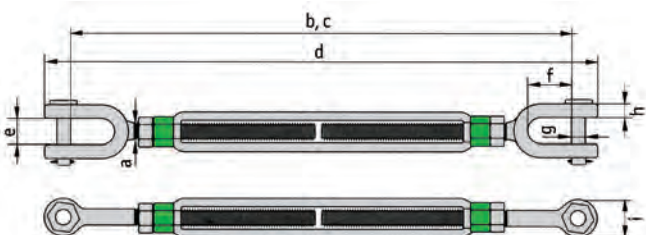
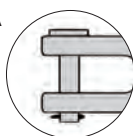


### Tipo G 6313 FORCELLA-FORCELLA Con coppiglia

Acciaio alta resistenza  
Finitura: zincatura a caldo

#### G 6313 JAW-JAW Type

With cotter pin  
Drop forged high tensile steel  
Finish: hot dipped galvanized

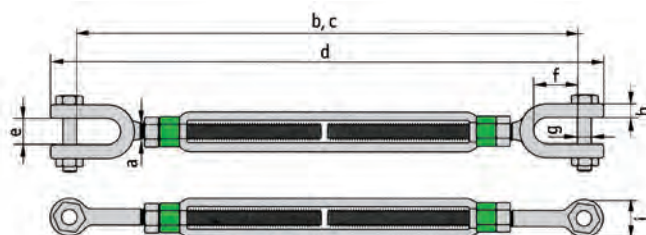
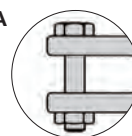


### Tipo G 6323 FORCELLA-FORCELLA Con dado e coppiglia

Acciaio alta resistenza  
Finitura: zincatura a caldo

#### G 6323 JAW-JAW Type

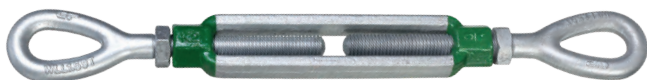
With safety bolt  
Drop forged high tensile steel  
Finish: hot dipped galvanized



Nota: da 3/8" a 5/8" solo con dado e coppiglia (tipo G6323).  
Note: from 3/8" to 5/8" only with nut and split pin (G6323 type).

| Codice<br>Code | Diametro filetto<br>Thread diameter | Regolazione<br>Take up |     | Portata<br>WLL | Tenditore<br>Turnbuckle |                | Dimensioni<br>Dimensions |         |         |         |                  | Peso<br>Weight |
|----------------|-------------------------------------|------------------------|-----|----------------|-------------------------|----------------|--------------------------|---------|---------|---------|------------------|----------------|
|                |                                     |                        |     |                | Chiuso<br>Closed        | Aperto<br>Open |                          |         |         |         | Chiuso<br>Closed |                |
|                | a<br>inch                           | inch                   | mm  | t              | b<br>mm                 | c<br>mm        | d<br>mm                  | e<br>mm | f<br>mm | g<br>mm | h<br>mm          | Kg             |
| ATENOO0106     | 3/8                                 | 6                      | 150 | 0,54           | 292                     | 428            | 183                      | 10      | 13      | 29      | 49               | 0,47           |
| ATENOO0206     | 1/2                                 | 6                      | 150 | 1              | 325                     | 455            | 193                      | 12      | 18      | 36      | 58               | 0,84           |
| ATENOO0209     | 1/2                                 | 9                      | 230 | 1              | 400                     | 607            | 269                      | 12      | 18      | 36      | 57               | 1005           |
| ATENOO0212     | 1/2                                 | 12                     | 305 | 1              | 476                     | 760            | 346                      | 12      | 18      | 36      | 57               | 1,26           |
| ATENOO0306     | 5/8                                 | 6                      | 150 | 1,59           | 381                     | 503            | 203                      | 14      | 21      | 44      | 79               | 1,35           |
| ATENOO0309     | 5/8                                 | 9                      | 230 | 1,59           | 455                     | 655            | 279                      | 14      | 21      | 44      | 78               | 1,60           |
| ATENOO0312     | 5/8                                 | 12                     | 305 | 1,59           | 531                     | 808            | 356                      | 14      | 21      | 44      | 78               | 1,92           |
| ATENOO0406     | 3/4                                 | 6                      | 150 | 2,36           | 414                     | 532            | 213                      | 17      | 25      | 54      | 90               | 2,03           |
| ATENOO0409     | 3/4                                 | 9                      | 230 | 2,36           | 488                     | 684            | 289                      | 17      | 25      | 54      | 89               | 2,49           |
| ATENOO0412     | 3/4                                 | 12                     | 305 | 2,36           | 564                     | 837            | 366                      | 17      | 25      | 54      | 89               | 2,65           |
| ATENOO0418     | 3/4                                 | 18                     | 457 | 2,36           | 717                     | 1142           | 518                      | 17      | 25      | 54      | 89               | 3,06           |
| ATENOO0512     | 7/8                                 | 12                     | 305 | 3,27           | 601                     | 869            | 376                      | 20      | 32      | 61      | 100              | 3,98           |
| ATENOO0518     | 7/8                                 | 18                     | 457 | 3,27           | 754                     | 1174           | 528                      | 20      | 32      | 61      | 101              | 5,12           |
| ATENOO0606     | 1                                   | 6                      | 150 | 4,54           | 497                     | 604            | 233                      | 24      | 36      | 75      | 118              | 4,35           |
| ATENOO0612     | 1                                   | 12                     | 305 | 4,54           | 647                     | 909            | 386                      | 24      | 36      | 75      | 117              | 5,92           |
| ATENOO0618     | 1                                   | 18                     | 457 | 4,54           | 800                     | 1214           | 538                      | 24      | 36      | 75      | 117              | 7,17           |
| ATENOO0624     | 1                                   | 24                     | 610 | 4,54           | 950                     | 1517           | 690                      | 24      | 36      | 75      | 116              | 7,8            |
| ATENOO0712     | 1 1/4                               | 12                     | 305 | 6,9            | 711                     | 984            | 385                      | 30      | 46      | 90      | 145              | 9,3            |
| ATENOO0718     | 1 1/4                               | 18                     | 457 | 6,9            | 861                     | 1286           | 537                      | 30      | 46      | 90      | 144              | 11,3           |
| ATENOO0724     | 1 1/4                               | 24                     | 610 | 6,9            | 1015                    | 1592           | 690                      | 29      | 47      | 91      | 144              | 12,1           |
| ATENOO0812     | 1 1/2                               | 12                     | 305 | 9,71           | 756                     | 1023           | 401                      | 32      | 54      | 105     | 156              | 14,2           |
| ATENOO0818     | 1 1/2                               | 18                     | 457 | 9,71           | 916                     | 1335           | 553                      | 32      | 54      | 105     | 160              | 16,5           |
| ATENOO0824     | 1 1/2                               | 24                     | 610 | 9,71           | 1065                    | 1636           | 706                      | 32      | 55      | 106     | 158              | 17,3           |
| ATENOO0918     | 1 3/4                               | 18                     | 457 | 12,7           | 1019                    | 1396           | 577                      | 38      | 60      | 119     | 197              | 23,9           |
| ATENOO0924     | 1 3/4                               | 24                     | 610 | 12,7           | 1171                    | 1703           | 730                      | 38      | 61      | 102     | 196              | 26,7           |
| ATENOO1024     | 2                                   | 24                     | 610 | 16,8           | 1264                    | 1783           | 746                      | 45      | 69      | 146     | 231              | 38,3           |
| ATENOO1124     | 2 1/2                               | 24                     | 610 | 27,2           | 1429                    | 1934           | 800                      | 51      | 80      | 165     | 274              | 64             |
| ATENOO1224     | 2 3/4                               | 24                     | 610 | 34             | 1450                    | 1988           | 800                      | 57      | 84      | 178     | 311              | 84             |

- Coefficiente di sicurezza 5.
- Temperatura di utilizzo: -20°C ÷ 200°C.
- Safety factor 5.
- Operating temperature: -20°C ÷ 200°C.

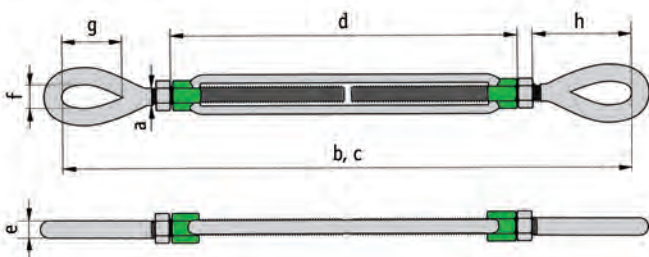


### Tipo G 6311 OCCHIO-OCCHIO

Acciaio alta resistenza  
Finitura: zincatura a caldo

### G 6311 EYE-EYE Type

Drop forged high tensile steel  
Finish: hot dipped galvanized

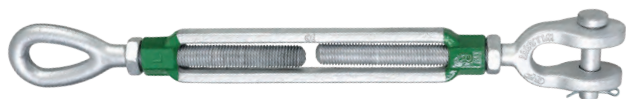


| Codice<br>Code | Diametro filetto<br>Thread diameter | Regolazione<br>Take up |     | Portata<br>WLL | Tenditore<br>Turnbuckle |                | Dimensioni<br>Dimensions |         |         |         |         |         |         |         |                  |      | Peso<br>Weight |
|----------------|-------------------------------------|------------------------|-----|----------------|-------------------------|----------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|------------------|------|----------------|
|                |                                     |                        |     |                | Chiuso<br>Closed        | Aperto<br>Open |                          |         |         |         |         |         |         |         | Chiuso<br>Closed |      |                |
|                | a<br>inch                           | inch                   | mm  | t              | b<br>mm                 | c<br>mm        | d<br>mm                  | e<br>mm | f<br>mm | g<br>mm | h<br>mm | i<br>mm | j<br>mm | k<br>mm | l<br>mm          | Kg   |                |
| ATENOF0106     | 3/8                                 | 6                      | 150 | 0,54           | 283                     | 418            | 12                       | 21      | 8       | 9       | 21      | 10      | 13      | 29      | 49               | 0,51 |                |
| ATENOF0206     | 1/2                                 | 6                      | 150 | 1              | 315                     | 445            | 16                       | 26      | 10      | 11      | 26      | 12      | 18      | 36      | 58               | 0,89 |                |
| ATENOF0209     | 1/2                                 | 9                      | 230 | 1              | 389                     | 597            | 16                       | 26      | 10      | 11      | 26      | 12      | 18      | 36      | 57               | 1,10 |                |
| ATENOF0212     | 1/2                                 | 12                     | 305 | 1              | 465                     | 749            | 16                       | 26      | 10      | 11      | 26      | 12      | 18      | 36      | 57               | 1,31 |                |
| ATENOF0306     | 5/8                                 | 6                      | 150 | 1,59           | 363                     | 486            | 18                       | 32      | 13      | 14      | 33      | 14      | 21      | 44      | 79               | 1,58 |                |
| ATENOF0309     | 5/8                                 | 9                      | 230 | 1,59           | 438                     | 638            | 18                       | 32      | 13      | 14      | 33      | 14      | 21      | 44      | 78               | 1,84 |                |
| ATENOF0312     | 5/8                                 | 12                     | 305 | 1,59           | 514                     | 790            | 18                       | 32      | 13      | 14      | 33      | 14      | 21      | 44      | 78               | 2,22 |                |
| ATENOF0406     | 3/4                                 | 6                      | 150 | 2,36           | 391                     | 509            | 24                       | 38      | 16      | 16      | 41      | 17      | 25      | 54      | 90               | 2,34 |                |
| ATENOF0409     | 3/4                                 | 9                      | 230 | 2,36           | 465                     | 661            | 24                       | 38      | 16      | 16      | 41      | 17      | 25      | 54      | 89               | 2,72 |                |
| ATENOF0412     | 3/4                                 | 12                     | 305 | 2,36           | 541                     | 814            | 24                       | 38      | 16      | 16      | 41      | 17      | 25      | 54      | 89               | 2,95 |                |
| ATENOF0418     | 3/4                                 | 18                     | 457 | 2,36           | 694                     | 1118           | 24                       | 38      | 16      | 16      | 41      | 17      | 25      | 54      | 89               | 3,30 |                |
| ATENOF0512     | 7/8                                 | 12                     | 305 | 3,27           | 580                     | 847            | 27                       | 42      | 19      | 19      | 48      | 20      | 32      | 61      | 100              | 4,35 |                |
| ATENOF0518     | 7/8                                 | 18                     | 457 | 3,27           | 733                     | 1152           | 27                       | 42      | 19      | 19      | 48      | 20      | 32      | 61      | 101              | 5,46 |                |
| ATENOF0606     | 1                                   | 6                      | 150 | 4,54           | 472                     | 579            | 30                       | 50      | 22      | 20      | 55      | 24      | 36      | 75      | 118              | 4,66 |                |
| ATENOF0612     | 1                                   | 12                     | 305 | 4,54           | 623                     | 884            | 30                       | 50      | 22      | 20      | 55      | 24      | 36      | 75      | 117              | 6,35 |                |
| ATENOF0618     | 1                                   | 18                     | 457 | 4,54           | 775                     | 1189           | 30                       | 50      | 22      | 20      | 55      | 24      | 36      | 75      | 117              | 7,98 |                |
| ATENOF0624     | 1                                   | 24                     | 610 | 4,54           | 926                     | 1493           | 30                       | 50      | 22      | 20      | 55      | 24      | 36      | 75      | 116              | 8,39 |                |
| ATENOF0712     | 1 1/4                               | 12                     | 305 | 6,9            | 676                     | 949            | 44                       | 71      | 29      | 26      | 68      | 29      | 47      | 91      | 145              | 10,9 |                |
| ATENOF0718     | 1 1/4                               | 18                     | 457 | 6,9            | 832                     | 1257           | 44                       | 71      | 29      | 26      | 68      | 29      | 47      | 91      | 144              | 11   |                |
| ATENOF0724     | 1 1/4                               | 24                     | 610 | 6,9            | 989                     | 1566           | 44                       | 71      | 29      | 26      | 68      | 29      | 47      | 91      | 144              | 13,2 |                |
| ATENOF0812     | 1 1/2                               | 12                     | 305 | 9,71           | 716                     | 982            | 52                       | 71      | 35      | 28      | 80      | 32      | 55      | 106     | 156              | 13,1 |                |
| ATENOF0818     | 1 1/2                               | 18                     | 457 | 9,71           | 871                     | 1289           | 52                       | 71      | 35      | 28      | 80      | 32      | 55      | 106     | 160              | 14,7 |                |
| ATENOF0824     | 1 1/2                               | 24                     | 610 | 9,71           | 1023                    | 1594           | 52                       | 71      | 35      | 28      | 80      | 32      | 55      | 106     | 158              | 19,7 |                |
| ATENOF0918     | 1 3/4                               | 18                     | 457 | 12,7           | 980                     | 1356           | 60                       | 86      | 41      | 33      | 90      | 38      | 61      | 120     | 197              | 25,1 |                |
| ATENOF0924     | 1 3/4                               | 24                     | 610 | 12,7           | 1130                    | 1662           | 60                       | 86      | 41      | 33      | 90      | 38      | 61      | 120     | 196              | 29   |                |
| ATENOF1024     | 2                                   | 24                     | 610 | 16,8           | 1208                    | 1728           | 63                       | 93      | 51      | 41      | 108     | 45      | 69      | 147     | 231              | 42,9 |                |
| ATENOF1124     | 2 1/2                               | 24                     | 610 | 27,2           | 1341                    | 1899           | 75                       | 114     | 57      | 41      | 143     | 51      | 80      | 165     | 274              | 68   |                |
| ATENOF1224     | 2 3/4                               | 24                     | 610 | 34             | 1399                    | 1953           | 90                       | 110     | 70      | 41      | 158     | 57      | 84      | 178     | 311              | 91   |                |

- Coefficiente di sicurezza 5.
- Temperatura di utilizzo: -20°C ÷ 200°C.
- Safety factor 5.
- Operating temperature: -20°C ÷ 200°C.

Nota: da 3/8" a 5/8" perno con dado e coppiglia (tipo G 6323).  
Da 3/4" in poi con coppiglia.

Note: from 3/8" to 5/8" pin with nut and split pin (G 6323 type).  
From 3/4" with split pin.

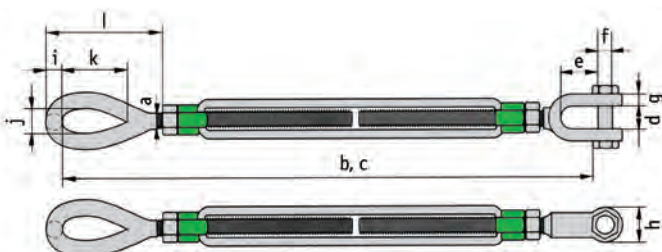


#### Tipo G 6315 OCCHIO-FORCELLA

Acciaio alta resistenza  
Finitura: zincatura a caldo

#### G 6315 EYE-JAW Type

Drop forged high tensile steel  
Finish: hot dipped galvanized



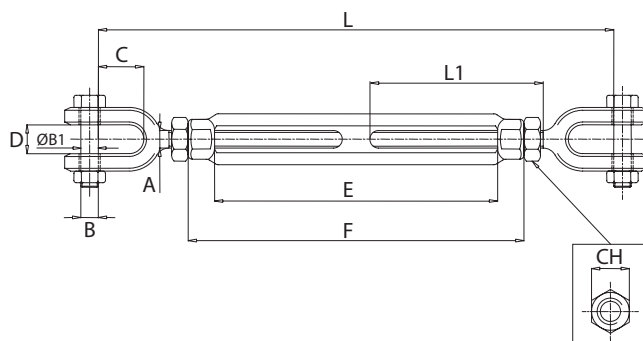
| Codice<br>Code | Diametro<br>filetto<br>Thread<br>diameter | Regolazione<br>Take up |             | Portata<br>WLL | Tenditore<br>Turnbuckle |                | Dimensioni<br>Dimensions |      |           |         |         |         |         |          |      | Peso<br>Weight |
|----------------|-------------------------------------------|------------------------|-------------|----------------|-------------------------|----------------|--------------------------|------|-----------|---------|---------|---------|---------|----------|------|----------------|
|                |                                           |                        |             |                | Chiuso<br>Closed        | Aperto<br>Open | L1<br>mm                 | B    | ØB1<br>mm | C<br>mm | D<br>mm | E<br>mm | F<br>mm | CH<br>mm |      |                |
|                |                                           | L min<br>mm            | L max<br>mm |                |                         |                |                          |      |           |         |         |         |         |          |      |                |
| ATENFFR0106    | 3/8                                       | 6                      | 152         | 0,54           | 258                     | 410            | 94                       | 5/16 | 7,8       | 21,5    | 12      | 152     | 183     | 17       | 0,37 |                |
| ATENFFR0206    | 1/2                                       | 6                      | 152         | 1              | 306                     | 458            | 99                       | 3/8  | 9,6       | 26      | 16      | 152     | 193     | 19       | 0,43 |                |
| ATENFFR0209    | 1/2                                       | 9                      | 229         | 1              | 368                     | 597            | 138,5                    | 3/8  | 9,6       | 26      | 16      | 229     | 269     | 19       | 0,79 |                |
| ATENFFR0212    | 1/2                                       | 12                     | 305         | 1              | 456                     | 761            | 176                      | 3/8  | 9,6       | 26      | 16      | 305     | 346     | 19       | 1,1  |                |
| ATENFFR0306    | 5/8                                       | 6                      | 152         | 1,59           | 346                     | 498            | 105                      | 1/2  | 12,5      | 32,5    | 18      | 152     | 202     | 24       | 1,18 |                |
| ATENFFR0309    | 5/8                                       | 9                      | 229         | 1,59           | 401                     | 630            | 143,5                    | 1/2  | 12,5      | 32,5    | 18      | 229     | 279     | 24       | 1,47 |                |
| ATENFFR0312    | 5/8                                       | 12                     | 305         | 1,59           | 500                     | 805            | 192,5                    | 1/2  | 12,5      | 32,5    | 18      | 305     | 366     | 24       | 2,46 |                |
| ATENFFR0406    | 3/4                                       | 6                      | 152         | 2,36           | 369                     | 521            | 110                      | 5/8  | 15,5      | 38      | 24      | 152     | 213     | 30       | 1,92 |                |
| ATENFFR0409    | 3/4                                       | 9                      | 229         | 2,36           | 432                     | 660            | 149                      | 5/8  | 15,5      | 38      | 24      | 229     | 289     | 30       | 2,31 |                |
| ATENFFR0412    | 3/4                                       | 12                     | 305         | 2,36           | 519                     | 824            | 187                      | 5/8  | 15,5      | 38      | 24      | 305     | 366     | 30       | 2,72 |                |
| ATENFFR0418    | 3/4                                       | 18                     | 457         | 2,36           | 671                     | 1128           | 263                      | 5/8  | 15,5      | 38      | 24      | 457     | 518     | 30       | 3,7  |                |
| ATENFFR0512    | 7/8                                       | 12                     | 305         | 3,27           | 542                     | 847            | 192,5                    | 3/4  | 18,6      | 42,5    | 27,5    | 305     | 376     | 32       | 3,71 |                |
| ATENFFR0518    | 7/8                                       | 18                     | 457         | 3,27           | 713                     | 1170           | 268,5                    | 3/4  | 18,6      | 42,5    | 27,5    | 457     | 528     | 32       | 4,65 |                |
| ATENFFR0606    | 1                                         | 6                      | 152         | 4,54           | 425                     | 577            | 121                      | 7/8  | 22        | 50,5    | 30,5    | 152     | 234     | 36       | 3,86 |                |
| ATENFFR0612    | 1                                         | 12                     | 305         | 4,54           | 577                     | 882            | 198                      | 7/8  | 22        | 50,5    | 30,5    | 305     | 386     | 36       | 5,44 |                |
| ATENFFR0618    | 1                                         | 18                     | 457         | 4,54           | 751                     | 1208           | 274                      | 7/8  | 22        | 50,5    | 30,5    | 457     | 538     | 36       | 6,46 |                |
| ATENFFR0712    | 1 1/4                                     | 12                     | 305         | 6,9            | 644                     | 948            | 211                      | 29   | -         | 71,5    | 44      | 305     | 385     | 46       | 9,75 |                |
| ATENFFR0718    | 1 1/4                                     | 18                     | 457         | 6,9            | 796                     | 1253           | 287                      | 29   | -         | 71,5    | 44      | 457     | 537     | 46       | 11   |                |
| ATENFFR0724    | 1 1/4                                     | 24                     | 610         | 6,9            | 948                     | 1558           | 363,5                    | 29   | -         | 71,5    | 44      | 610     | 689     | 46       | 12,7 |                |
| ATENFFR0812    | 1 1/2                                     | 12                     | 305         | 9,71           | 675                     | 942            | 222                      | 35   | -         | 71      | 52      | 305     | 401     | 55       | 17,3 |                |
| ATENFFR0818    | 1 1/2                                     | 18                     | 457         | 9,71           | 825                     | 1282           | 298                      | 35   | -         | 71      | 52      | 457     | 553     | 55       | 19,4 |                |
| ATENFFR0824    | 1 1/2                                     | 24                     | 610         | 9,71           | 979                     | 1589           | 374                      | 46   | -         | 71      | 52      | 610     | 706     | 55       | 21,6 |                |
| ATENFFR0918    | 1 3/4                                     | 18                     | 457         | 12,7           | 938                     | 1316           | 295                      | 41   | -         | 86      | 59,5    | 457     | 577     | 70       | 30,9 |                |

- Coefficiente di sicurezza 5.
- Temperatura di utilizzo: 0°C ÷ 200°C.
- Filetto UNC.
- Safety factor 5.
- Temperature range: 0°C ÷ 200°C.
- UNC thread.



**Tipo RF FORCELLA-FORCELLA**  
Perno, canaula e forcelle acciaio C45  
Vite acciaio classe resistenza 8  
Finitura: zincatura a caldo

**RF JAW-JAW Type**  
Pin, body and jaws steel C45  
Screw steel strenght class 8  
Finish: hot dipped galvanized



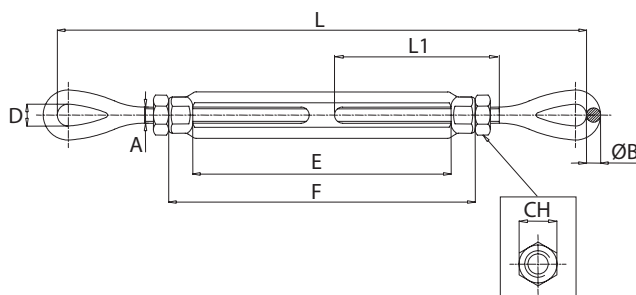
| Codice<br>Code | Diametro<br>filetto<br>Thread<br>diameter | Regolazione<br>Take up |      | Portata<br>WLL<br><br>t | Tenditore<br>Turnbuckle |                  | Dimensioni<br>Dimensions |          |          |         |         |         | Peso<br>Weight<br><br>Kg |          |
|----------------|-------------------------------------------|------------------------|------|-------------------------|-------------------------|------------------|--------------------------|----------|----------|---------|---------|---------|--------------------------|----------|
|                |                                           | A<br>inch              | inch |                         | mm                      | Chiuso<br>Closed | Aperto<br>Open           | L1<br>mm | ØB<br>mm | D<br>mm | E<br>mm | F<br>mm |                          | CH<br>mm |
|                |                                           |                        |      |                         |                         | L min<br>mm      | L max<br>mm              |          |          |         |         |         |                          |          |
| ATENOOR0106    | 3/8                                       | 6                      | 152  | 0,54                    | 292                     | 444              | 94                       | 9,5      | 13,5     | 152     | 183     | 17      | 0,34                     |          |
| ATENOOR0206    | 1/2                                       | 6                      | 152  | 1                       | 320                     | 467              | 100                      | 11,5     | 18       | 152     | 193     | 19      | 0,43                     |          |
| ATENOOR0209    | 1/2                                       | 9                      | 229  | 1                       | 408                     | 637              | 138,5                    | 11,5     | 18       | 229     | 269     | 19      | 0,83                     |          |
| ATENOOR0306    | 5/8                                       | 6                      | 152  | 1,59                    | 308                     | 503              | 113                      | 13,5     | 21,5     | 152     | 203     | 24      | 1,33                     |          |
| ATENOOR0309    | 5/8                                       | 9                      | 229  | 1,59                    | 449                     | 677              | 143,5                    | 13,5     | 21,5     | 229     | 279     | 24      | 1,42                     |          |
| ATENOOR0312    | 5/8                                       | 12                     | 305  | 1,59                    | 530                     | 835              | 192,5                    | 13,5     | 21,5     | 305     | 366     | 24      | 2,00                     |          |
| ATENOOR0406    | 3/4                                       | 6                      | 152  | 2,36                    | 410                     | 552              | 110                      | 16,5     | 25,5     | 152     | 213     | 30      | 1,66                     |          |
| ATENOOR0409    | 3/4                                       | 9                      | 229  | 2,36                    | 492                     | 721              | 149                      | 16,5     | 25,5     | 229     | 289     | 30      | 2,09                     |          |
| ATENOOR0412    | 3/4                                       | 12                     | 305  | 2,36                    | 560                     | 856              | 187                      | 16,5     | 25,5     | 305     | 366     | 30      | 2,54                     |          |
| ATENOOR0418    | 3/4                                       | 18                     | 457  | 2,36                    | 710                     | 1160             | 263                      | 16,5     | 25,5     | 457     | 518     | 30      | 3,2                      |          |
| ATENOOR0512    | 7/8                                       | 12                     | 305  | 3,27                    | 592                     | 897              | 192,5                    | 19,5     | 32,5     | 305     | 376     | 32      | 3,67                     |          |
| ATENOOR0518    | 7/8                                       | 18                     | 457  | 3,27                    | 754                     | 1211             | 268,5                    | 19,5     | 32,5     | 457     | 528     | 32      | 4,55                     |          |
| ATENOOR0606    | 1                                         | 6                      | 152  | 4,54                    | 507                     | 660              | 121                      | 23,5     | 36,6     | 152     | 234     | 36      | 4,23                     |          |
| ATENOOR0612    | 1                                         | 12                     | 305  | 4,54                    | 660                     | 964              | 198                      | 23,5     | 36,6     | 305     | 386     | 36      | 5,41                     |          |
| ATENOOR0618    | 1                                         | 18                     | 459  | 4,54                    | 801                     | 1215             | 274,5                    | 23,5     | 36,6     | 459     | 539     | 36      | 7,27                     |          |
| ATENOOR0712    | 1 1/4                                     | 12                     | 305  | 6,9                     | 719                     | 1024             | 211                      | 29,5     | 46,5     | 305     | 385     | 46      | 8,62                     |          |
| ATENOOR0718    | 1 1/4                                     | 18                     | 457  | 6,9                     | 872                     | 1329             | 287                      | 29,5     | 46,5     | 457     | 537     | 46      | 10,4                     |          |
| ATENOOR0724    | 1 1/4                                     | 24                     | 610  | 6,9                     | 1024                    | 1634             | 363,5                    | 29,5     | 46,5     | 610     | 689     | 46      | 12,3                     |          |
| ATENOOR0812    | 1 1/2                                     | 12                     | 305  | 9,71                    | 756                     | 1023             | 222                      | 32       | 54,5     | 305     | 401     | 55      | 13,5                     |          |
| ATENOOR0818    | 1 1/2                                     | 18                     | 457  | 9,71                    | 916                     | 1370             | 298                      | 32       | 54,5     | 457     | 553     | 55      | 16                       |          |
| ATENOOR0918    | 1 3/4                                     | 18                     | 457  | 12,7                    | 1020                    | 1396             | 295                      | 38       | 60,5     | 457     | 577     | 70      | 24,7                     |          |

- Coefficiente di sicurezza 5.
- Temperatura di utilizzo: 0°C ÷ 200°C.
- Filetto UNC.
- Safety factor 5.
- Temperature range: 0°C ÷ 200°C.
- UNC thread.



**Tipo RO OCCHIO-OCCHIO**  
Canaula e occhi acciaio C45  
Finitura: zincatura a caldo

**RO EYE-EYE Type**  
Body and jaws steel C45  
Finish: hot dipped galvanized



## Accessori per fune

Wire rope fittings

## TENDITORI AD ALTA RESISTENZA

### TIPO ROF OCCHIO-FORCELLA

TURNBUCKLES  
ROF EYE-JAW TYPE

| Codice<br>Code | Diametro<br>filetto<br>Thread<br>diameter | Regolazione<br>Take up |             | Portata<br>WLL | Tenditore<br>Turnbuckle |                | Dimensioni<br>Dimensions |      |           |         |          |         |         |         |          |      | Peso<br>Weight |
|----------------|-------------------------------------------|------------------------|-------------|----------------|-------------------------|----------------|--------------------------|------|-----------|---------|----------|---------|---------|---------|----------|------|----------------|
|                |                                           |                        |             |                | Chiuso<br>Closed        | Aperto<br>Open | L1<br>mm                 | B    | ØB2<br>mm | C<br>mm | C2<br>mm | D<br>mm | E<br>mm | F<br>mm | CH<br>mm |      |                |
|                |                                           | L min<br>mm            | L max<br>mm | Kg             |                         |                |                          |      |           |         |          |         |         |         |          |      |                |
| ATENOFRO106    | 3/8                                       | 6                      | 152         | 0,54           | 283                     | 418            | 94                       | 5/16 | 9,5       | 26      | 13,5     | 12      | 152     | 183     | 17       | 0,52 |                |
| ATENOFRO206    | 1/2                                       | 6                      | 152         | 1              | 312                     | 451            | 99                       | 3/8  | 11,5      | 26      | 18       | 16      | 152     | 193     | 19       | 0,92 |                |
| ATENOFRO209    | 1/2                                       | 9                      | 229         | 1              | 390                     | 619            | 138,5                    | 3/8  | 11,5      | 26      | 18       | 16      | 229     | 269     | 19       | 1,1  |                |
| ATENOFRO306    | 5/8                                       | 6                      | 152         | 1,59           | 363                     | 486            | 105                      | 1/2  | 13,5      | 32,5    | 21,5     | 18      | 152     | 203     | 24       | 1,55 |                |
| ATENOFRO309    | 5/8                                       | 9                      | 229         | 1,59           | 438                     | 639            | 143,5                    | 1/2  | 13,5      | 32,5    | 21,5     | 18      | 229     | 279     | 24       | 1,8  |                |
| ATENOFRO312    | 5/8                                       | 12                     | 305         | 1,59           | 514                     | 800            | 180                      | 1/2  | 13,5      | 32,5    | 21,5     | 18      | 305     | 356     | 24       | 1,8  |                |
| ATENOFRO406    | 3/4                                       | 6                      | 152         | 2,36           | 391                     | 543            | 110                      | 5/8  | 16,5      | 38      | 25,5     | 24      | 152     | 213     | 30       | 2,2  |                |
| ATENOFRO409    | 3/4                                       | 9                      | 229         | 2,36           | 465                     | 694            | 149                      | 5/8  | 16,5      | 38      | 25,5     | 24      | 229     | 289     | 30       | 2,8  |                |
| ATENOFRO412    | 3/4                                       | 12                     | 305         | 2,36           | 541                     | 846            | 187                      | 5/8  | 16,5      | 38      | 25,5     | 24      | 305     | 366     | 30       | 3,25 |                |
| ATENOFRO512    | 7/8                                       | 12                     | 305         | 3,27           | 570                     | 875            | 192,5                    | 3/4  | 18,6      | 42,5    | 32,5     | 27,5    | 305     | 376     | 32       | 4,6  |                |
| ATENOFRO606    | 1                                         | 6                      | 152         | 4,54           | 472                     | 624            | 121                      | 7/8  | 23,5      | 50,5    | 36,6     | 30,5    | 152     | 234     | 36       | 5,2  |                |
| ATENOFRO612    | 1                                         | 12                     | 305         | 4,54           | 623                     | 928            | 198                      | 7/8  | 23,5      | 50,5    | 36,6     | 30,5    | 305     | 386     | 36       | 6,2  |                |
| ATENOFRO712    | 1 1/4                                     | 12                     | 305         | 6,9            | 676                     | 981            | 211                      | 29   | 29,5      | 71,5    | 46,5     | 44      | 305     | 385     | 46       | 12   |                |
| ATENOFRO718    | 1 1/4                                     | 18                     | 457         | 6,9            | 833                     | 1258           | 287                      | 29   | 29,5      | 71,5    | 46,5     | 44      | 457     | 537     | 46       | 12,3 |                |
| ATENOFRO724    | 1 1/4                                     | 24                     | 610         | 6,9            | 989                     | 1566           | 363,5                    | 29   | 29,5      | 71,5    | 46,5     | 44      | 610     | 689     | 46       | 14,5 |                |
| ATENOFRO812    | 1 1/2                                     | 12                     | 305         | 9,71           | 715                     | 1020           | 222                      | 35   | 32        | 71      | 54,5     | 52      | 305     | 401     | 55       | 17   |                |
| ATENOFRO818    | 1 1/2                                     | 18                     | 457         | 9,71           | 870                     | 1327           | 298                      | 35   | 32        | 71      | 54,5     | 52      | 457     | 553     | 55       | 19   |                |
| ATENOFRO918    | 1 3/4                                     | 18                     | 457         | 12,7           | 938                     | 1316           | 295                      | 41   | 38        | 86      | 60,5     | 59,5    | 457     | 577     | 70       | 26,5 |                |

- Coefficiente di sicurezza 5.
- Temperatura di utilizzo: 0°C ÷ 200°C.
- Filetto UNC.
- Safety factor 5.
- Temperature range: 0°C ÷ 200°C.
- UNC thread.

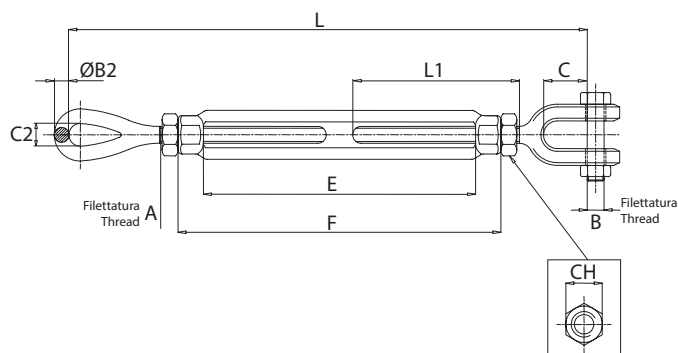


#### Tipo ROF OCCHIO-FORCELLA

Perno, canaula, forcelle e occhi acciaio C45  
Finitura: zincatura a caldo

#### ROF EYE-JAW Type

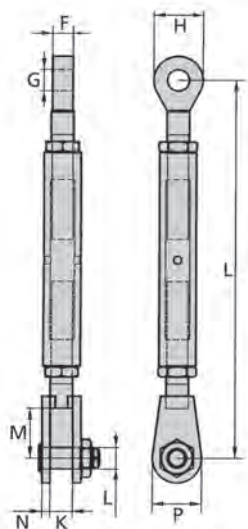
Pin, body and jaws steel C45  
Finish: hot dipped galvanized



## Tenditori ad alta resistenza tipo T2

Heavy duty turnbuckles T2 type

Acciaio alta resistenza  
Coefficiente di sicurezza 5  
Finitura: verniciati  
High tensile steel  
Safety factor 5  
Finish: painted



| Portata<br>WLL<br><br>t | Forcella-Forcella<br>Fork-Fork |                             |                           | Occhio-Occhio<br>Eye-Eye |                             |                           | Occhio-Forcella<br>Eye-Fork |                             |                           |
|-------------------------|--------------------------------|-----------------------------|---------------------------|--------------------------|-----------------------------|---------------------------|-----------------------------|-----------------------------|---------------------------|
|                         | Codice<br>Code                 | Chiuso<br>Closed<br>L<br>mm | Aperto<br>Open<br>L<br>mm | Codice<br>Code           | Chiuso<br>Closed<br>L<br>mm | Aperto<br>Open<br>L<br>mm | Codice<br>Code              | Chiuso<br>Closed<br>L<br>mm | Aperto<br>Open<br>L<br>mm |
| 13,5                    | ATENFF013,5                    | 935                         | 1260                      | ATENOO013,5              | 840                         | 1165                      | ATENOF013,5                 | 890                         | 1215                      |
| 17                      | ATENFF017                      | 1010                        | 1360                      | ATENOO017                | 920                         | 1270                      | ATENOF017                   | 965                         | 1315                      |
| 25                      | ATENFF025                      | 1085                        | 1415                      | ATENOO025                | 975                         | 1305                      | ATENOF025                   | 1030                        | 1360                      |
| 30                      | ATENFF030                      | 1160                        | 1530                      | ATENOO030                | 1020                        | 1390                      | ATENOF030                   | 1090                        | 1460                      |
| 35                      | ATENFF035                      | 1250                        | 1650                      | ATENOO035                | 1100                        | 1500                      | ATENOF035                   | 1175                        | 1575                      |
| 45                      | ATENFF045                      | 1300                        | 1780                      | ATENOO045                | 1170                        | 1650                      | ATENOF045                   | 1235                        | 1715                      |
| 55                      | ATENFF055                      | 1380                        | 1890                      | ATENOO055                | 1270                        | 1780                      | ATENOF055                   | 1325                        | 1835                      |
| 70                      | ATENFF070                      | 1480                        | 2025                      | ATENOO070                | 1390                        | 1940                      | ATENOF070                   | 1435                        | 1985                      |
| 85                      | ATENFF085                      | 1565                        | 2200                      | ATENOO085                | 1515                        | 2150                      | ATENOF085                   | 1540                        | 2175                      |
| 100                     | ATENFF100                      | 1630                        | 2360                      | ATENOO100                | 1600                        | 2330                      | ATENOF100                   | 1615                        | 2345                      |
| 120                     | ATENFF120                      | 1745                        | 2340                      | ATENOO120                | 1735                        | 2330                      | ATENOF120                   | 1740                        | 2335                      |
| 160                     | ATENFF160                      | 1870                        | 2470                      | ATENOO160                | 1860                        | 2460                      | ATENOF160                   | 1865                        | 2465                      |
| 200                     | ATENFF200                      | 2020                        | 2640                      | ATENOO200                | 2000                        | 2620                      | ATENOF200                   | 2010                        | 2630                      |
| 250                     | ATENFF250                      | 2170                        | 2840                      | ATENOO250                | 2210                        | 2880                      | ATENOF250                   | 2190                        | 2860                      |

| Portata<br>WLL<br><br>t | Filettatura<br>Thread | Dimensioni<br>Dimensions |         |         |         |         |         |         |         | Peso<br>Weight<br><br>kg |
|-------------------------|-----------------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|--------------------------|
|                         |                       | K<br>mm                  | N<br>mm | M<br>mm | L<br>mm | P<br>mm | F<br>mm | H<br>mm | G<br>mm |                          |
| 13,5                    | Tr 55x8               | 55                       | 20      | 122     | 51      | 120     | 50      | 120     | 53      | 52                       |
| 17                      | Tr 65x8               | 65                       | 28      | 130     | 63      | 140     | 55      | 140     | 65      | 69                       |
| 25                      | Tr 70x8               | 76                       | 30      | 145     | 70      | 140     | 70      | 140     | 72      | 85                       |
| 30                      | Tr 75x8               | 80                       | 35      | 160     | 72      | 150     | 70      | 150     | 74      | 100                      |
| 35                      | Tr 80x8               | 90                       | 40      | 175     | 80      | 170     | 80      | 170     | 82      | 140                      |
| 45                      | Tr 90x8               | 100                      | 45      | 175     | 90      | 190     | 90      | 190     | 93      | 180                      |
| 55                      | Tr 100x8              | 110                      | 50      | 175     | 100     | 210     | 100     | 210     | 103     | 240                      |
| 70                      | Tr 110x8              | 110                      | 55      | 175     | 108     | 230     | 100     | 230     | 111     | 340                      |
| 85                      | Tr 120x8              | 130                      | 75      | 175     | 127     | 270     | 125     | 270     | 130     | 420                      |
| 100                     | Tr 130x8              | 140                      | 90      | 175     | 140     | 290     | 125     | 290     | 143     | 510                      |
| 120                     | Tr 140x8              | 155                      | 90      | 190     | 152     | 340     | 140     | 340     | 155     | 600                      |
| 160                     | Tr 160x8              | 170                      | 100     | 210     | 178     | 380     | 160     | 380     | 181     | 700                      |
| 200                     | Tr 180x8              | 190                      | 110     | 250     | 190     | 400     | 170     | 400     | 193     | 960                      |
| 250                     | Tr 200x8              | 210                      | 120     | 280     | 250     | 520     | 190     | 520     | 253     | 1120                     |

- Temperatura di utilizzo: -40°C ÷ +180°C.
- Disponibili su richiesta con dispositivo di chiusura per sollevamento.
- Temperature range: -40°C ÷ +180°C.
- Additional locking device on request.

## Accessori per fune

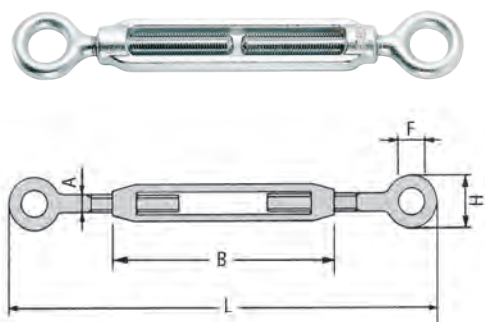
Wire rope fittings

## TENDITORI ZINCATI

GALVANIZED TURNBUCKLES

### Tipo OCCHIO-OCCHIO

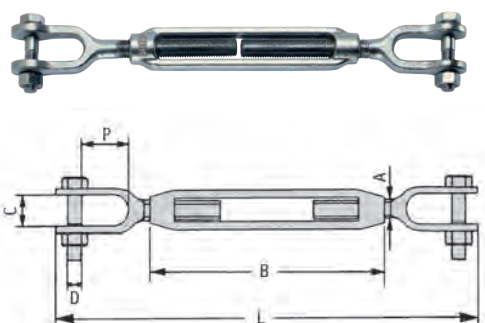
EYE-EYE type



| Codice<br>Code | Misura<br>Size |        | Forza limite<br>di lavoro<br>WFL<br>Kg | Dimensioni<br>Dimensions |         |         |             |             | Peso<br>Weight<br>g |
|----------------|----------------|--------|----------------------------------------|--------------------------|---------|---------|-------------|-------------|---------------------|
|                | A              | A "    |                                        | B<br>mm                  | F<br>mm | H<br>mm | L min<br>mm | L max<br>mm |                     |
| ATENOC05       | M5             | 3/16   | 115                                    | 80                       | 8       | 16      | 118         | 175         | 48                  |
| ATENOC06       | M6             | 1/4    | 160                                    | 80                       | 10      | 20      | 130         | 193         | 62                  |
| ATENOC08       | M8             | 5/16   | 300                                    | 105                      | 11      | 22      | 158         | 240         | 109                 |
| ATENOC10       | M10            | 3/8    | 470                                    | 125                      | 14      | 27      | 192         | 289         | 194                 |
| ATENOC12       | M12            | 1/2    | 690                                    | 140                      | 17      | 33      | 226         | 332         | 325                 |
| ATENOC14       | M14            | 9/16   | 940                                    | 170                      | 18      | 35      | 256         | 386         | 520                 |
| ATENOC16       | M16            | 5/8    | 1290                                   | 190                      | 23      | 46      | 290         | 435         | 790                 |
| ATENOC18       | M18            | 11/16  | 1660                                   | 205                      | 28      | 59      | 358         | 512         | 1260                |
| ATENOC20       | M20            | 3/4    | 2130                                   | 220                      | 28      | 59      | 358         | 522         | 1530                |
| ATENOC22       | M22            | 7/8    | 2630                                   | 240                      | 34      | 70      | 400         | 579         | 2220                |
| ATENOC24       | M24            | 1      | 3060                                   | 260                      | 36      | 76      | 436         | 628         | 2740                |
| ATENOC27       | M27            | 1 1/8  | 4000                                   | 270                      | 38      | 82      | 474         | 668         | 4570                |
| ATENOC30       | M30            | 1 3/16 | 4860                                   | 280                      | 40      | 86      | 498         | 694         | 5250                |
| ATENOC33       | M33            | 1 1/4  | 6040                                   | 290                      | 41      | 89      | 516         | 732         | 5880                |
| ATENOC36       | M36            | 1 3/8  | 6500                                   | 300                      | 43      | 95      | 532         | 740         | 7220                |
| ATENOC39       | M39            | 1 1/2  | 7900                                   | 300                      | 45      | 102     | 544         | 743         | 8550                |

### Tipo FORCELLA-FORCELLA

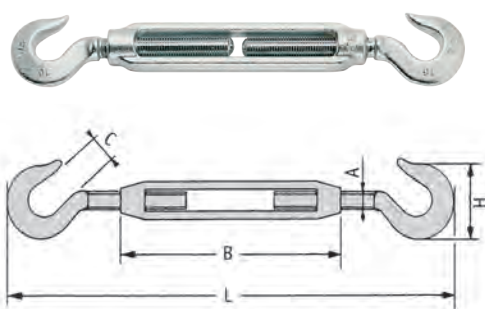
JAW-JAW type



| Codice<br>Code | Misura<br>Size |        | Forza limite<br>di lavoro<br>WFL<br>Kg | Dimensioni<br>Dimensions |         |     |         |             |             | Peso<br>Weight<br>g |
|----------------|----------------|--------|----------------------------------------|--------------------------|---------|-----|---------|-------------|-------------|---------------------|
|                | A              | A''    |                                        | B<br>mm                  | C<br>mm | D   | P<br>mm | L min<br>mm | L max<br>mm |                     |
| ATENFF08       | M8             | 5/16   | 300                                    | 105                      | 10      | M6  | 22      | 192         | 274         | 175                 |
| ATENFF10       | M10            | 3/8    | 470                                    | 125                      | 12      | M8  | 26      | 234         | 331         | 310                 |
| ATENFF12       | M12            | 1/2    | 690                                    | 140                      | 16      | M10 | 33      | 274         | 380         | 545                 |
| ATENFF14       | M14            | 9/16   | 940                                    | 170                      | 20      | M12 | 38      | 342         | 472         | 970                 |
| ATENFF16       | M16            | 5/8    | 1290                                   | 190                      | 20      | M12 | 38      | 372         | 517         | 1140                |
| ATENFF18       | M18            | 11/16  | 1660                                   | 205                      | 24      | M16 | 42      | 406         | 560         | 1800                |
| ATENFF20       | M20            | 3/4    | 2130                                   | 220                      | 24      | M16 | 42      | 406         | 570         | 2070                |
| ATENFF22       | M22            | 7/8    | 2630                                   | 240                      | 28      | M20 | 46      | 466         | 645         | 3140                |
| ATENFF24       | M24            | 1      | 3060                                   | 260                      | 28      | M20 | 46      | 486         | 678         | 3440                |
| ATENFF27       | M27            | 1 1/8  | 4000                                   | 270                      | 32      | M22 | 51      | 510         | 704         | 5550                |
| ATENFF30       | M30            | 1 3/16 | 4860                                   | 280                      | 36      | M24 | 58      | 566         | 762         | 7310                |

### Tipo GANCIO-GANCIO

HOOK-HOOK type



| Codice<br>Code | Misura<br>Size |       | Forza limite<br>di lavoro<br>WFL<br>Kg | Dimensioni<br>Dimensions |         |         |             |             | Peso<br>Weight<br>g |
|----------------|----------------|-------|----------------------------------------|--------------------------|---------|---------|-------------|-------------|---------------------|
|                | A              | A''   |                                        | B<br>mm                  | C<br>mm | H<br>mm | L min<br>mm | L max<br>mm |                     |
| ATENGG05       | M5             | 3/16  | 25                                     | 80                       | 6       | 17      | 124         | 187         | 50                  |
| ATENGG06       | M6             | 1/4   | 45                                     | 80                       | 8       | 22      | 134         | 197         | 60                  |
| ATENGG08       | M8             | 5/16  | 95                                     | 105                      | 10      | 30      | 181         | 262         | 121                 |
| ATENGG10       | M10            | 3/8   | 140                                    | 125                      | 12.5    | 36      | 211         | 303         | 210                 |
| ATENGG12       | M12            | 1/2   | 300                                    | 140                      | 17.5    | 56      | 262         | 368         | 475                 |
| ATENGG14       | M14            | 9/16  | 420                                    | 170                      | 21      | 66      | 312         | 442         | 780                 |
| ATENGG16       | M16            | 5/8   | 570                                    | 190                      | 24      | 77      | 354         | 499         | 1200                |
| ATENGG18       | M18            | 11/16 | 700                                    | 205                      | 27      | 85      | 388         | 542         | 1520                |
| ATENGG20       | M20            | 3/4   | 900                                    | 220                      | 30      | 95      | 424         | 588         | 2150                |
| ATENGG22       | M22            | 7/8   | 1100                                   | 240                      | 34      | 106     | 466         | 645         | 2820                |
| ATENGG24       | M24            | 1     | 1300                                   | 260                      | 36      | 114     | 504         | 696         | 4160                |
| ATENGG27       | M27            | 1 1/8 | 2300                                   | 270                      | 38      | 123     | 532         | 726         | 5630                |

- Finitura: zincatura elettrolitica.
- Coefficiente di sicurezza 4.
- Finish: electrolytic galvanized.
- Safety factor 4.

Non idonei per sollevamento.  
Not suitable for lifting purposes.

## Accessori per fune

Wire rope fittings

## CALZE TIRACAVI ZINCATE

GALVANIZED WIRE ROPE GRIPS

The minimum breaking load shown below can be applied only to socks properly introduced for all the useful length, straight line used and in the absence of bending or twisting.

The maximum working load permitted by cable sock must be equal to 1/5 of the breaking load.

It is recommended to use a swivel to avoid twisting.

Il carico di rottura indicato si intende per calze montate regolarmente con la fune introdotta per tutta la lunghezza utile della calza, utilizzata con linea di tiro retta in assenza di piegamenti o torsioni.

Il carico di lavoro massimo consentito dalla calza tiracavi deve essere pari a 1/5 del carico di rottura.

Si raccomanda l'uso di un giunto girevole per evitare torsioni.

### Con una redancia tipo TCR

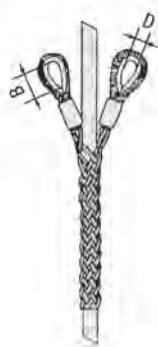
TCR type with one thimble



| Codice<br>Code | Fune<br>Rope<br>Ø<br>mm | Carico di rottura<br>Min. breaking load<br>Kg | Dimensioni<br>Dimensions |         | Lunghezza<br>Length<br>mm |
|----------------|-------------------------|-----------------------------------------------|--------------------------|---------|---------------------------|
|                |                         |                                               | B<br>mm                  | D<br>mm |                           |
| ACALZER20      | 10-20                   | 2000                                          | 28                       | 16      | 900                       |
| ACALZER30      | 20-30                   | 2400                                          | 38                       | 18      | 900                       |
| ACALZER40      | 30-40                   | 4000                                          | 38                       | 18      | 1200                      |
| ACALZER50      | 40-50                   | 4000                                          | 38                       | 18      | 1500                      |
| ACALZER60      | 45-60                   | 4500                                          | 38                       | 18      | 1600                      |
| ACALZER80      | 60-80                   | 5200                                          | 38                       | 18      | 1800                      |

### Con doppia redancia tipo TDR

TDR type double thimbles



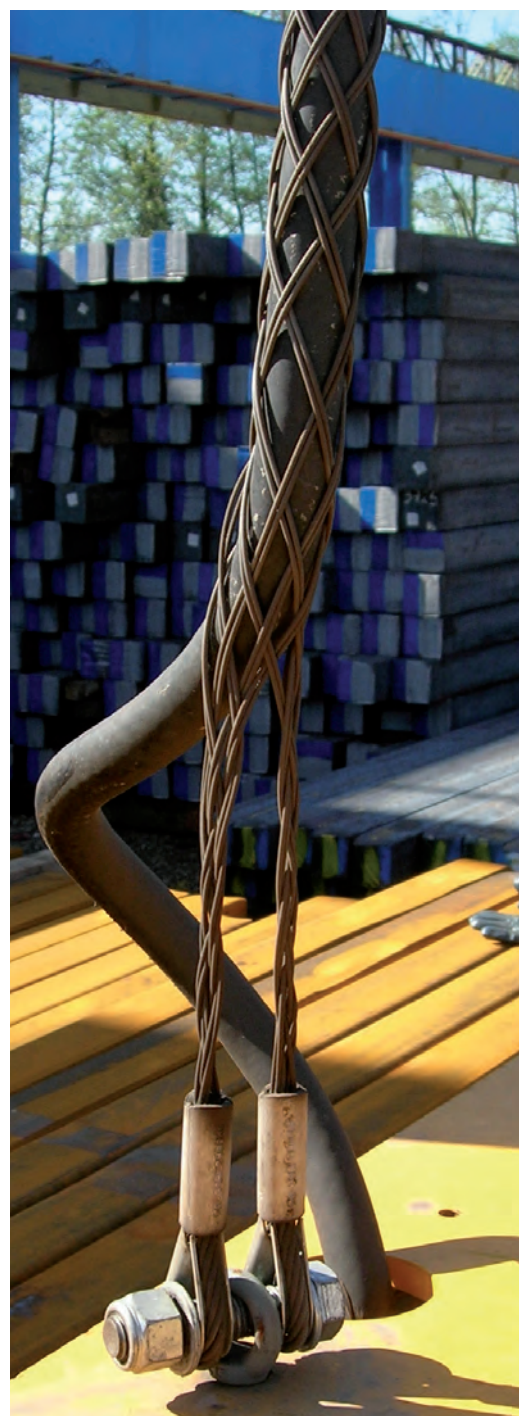
| Codice<br>Code | Fune<br>Rope<br>Ø<br>mm | Carico di rottura<br>Min. breaking load<br>Kg | Dimensioni<br>Dimensions |         | Lunghezza<br>Length<br>mm |
|----------------|-------------------------|-----------------------------------------------|--------------------------|---------|---------------------------|
|                |                         |                                               | B<br>mm                  | D<br>mm |                           |
| ACALZEDR20     | 10-20                   | 2000                                          | 28                       | 16      | 750                       |
| ACALZEDR30     | 20-30                   | 2400                                          | 38                       | 18      | 750                       |
| ACALZEDR40     | 30-40                   | 4000                                          | 38                       | 18      | 900                       |
| ACALZEDR50     | 40-50                   | 4000                                          | 38                       | 18      | 1050                      |
| ACALZEDR60     | 45-60                   | 4500                                          | 38                       | 18      | 1050                      |
| ACALZEDR80     | 60-80                   | 5200                                          | 38                       | 18      | 1050                      |

### Per doppia giunzione tipo TCG

TCG type open end



| Codice<br>Code | Fune<br>Rope<br>Ø<br>mm | Carico di rottura<br>Min. breaking load<br>Kg | Lunghezza<br>Length<br>mm |
|----------------|-------------------------|-----------------------------------------------|---------------------------|
|                |                         |                                               |                           |
| ACALZE08       | 6-8                     | 450                                           | 800                       |
| ACALZE20       | 10-20                   | 2000                                          | 1200                      |
| ACALZE30       | 20-30                   | 2400                                          | 1200                      |
| ACALZE40       | 30-40                   | 4000                                          | 1400                      |
| ACALZE50       | 40-50                   | 4000                                          | 1600                      |
| ACALZE60       | 50-60                   | 4500                                          | 1600                      |
| ACALZE80       | 60-80                   | 5200                                          | 1600                      |
| ACALZE100      | 80-100                  | 6000                                          | 2000                      |

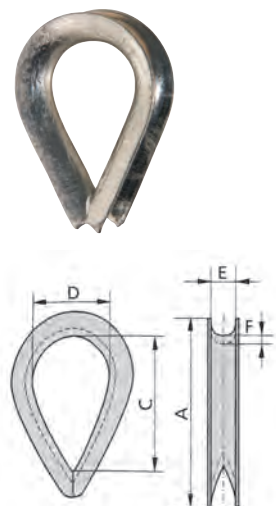


## Redance pesanti simili a DIN 6899 B tipo K

K type heavy thimbles generally to DIN 6899 B

Finitura: zincatura a caldo  
Diametro 5 e 6: zincatura elettrolitica

Finish: hot deep galvanized  
Diameter 5 and 6: electrolytic galvanized

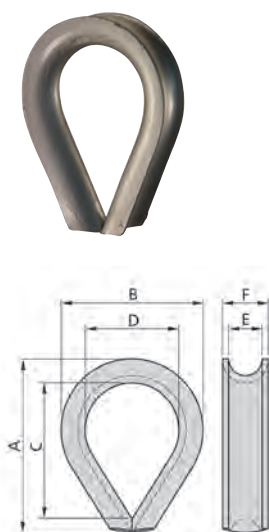


| Codice<br>Code | Fune<br>Rope<br><br>Ø<br>mm | Dimensioni<br>Dimensions |         |         |         |         | Peso<br>Weight<br><br>Kg |
|----------------|-----------------------------|--------------------------|---------|---------|---------|---------|--------------------------|
|                |                             | A<br>mm                  | C<br>mm | D<br>mm | E<br>mm | F<br>mm |                          |
| AREDLM05       | 5                           | 38                       | 25      | 16      | 6       | 2,4     | 0,016                    |
| AREDLM06       | 6                           | 44                       | 28      | 18      | 7       | 2,4     | 0,016                    |
| AREDLM07       | 7                           | 51                       | 32      | 20      | 8       | 2,8     | 0,030                    |
| AREDLM09       | 8-9                         | 57                       | 38      | 24      | 10      | 3,1     | 0,047                    |
| AREDLM11       | 10-11                       | 64                       | 45      | 28      | 12      | 3,3     | 0,068                    |
| AREDLM13       | 12-13                       | 76                       | 51      | 32      | 13      | 3,7     | 0,100                    |
| AREDLM15       | 14-15                       | 83                       | 58      | 36      | 16      | 3,8     | 0,150                    |
| AREDLM16       | 16                          | 89                       | 61      | 38      | 17      | 4,7     | 0,180                    |
| AREDLM18       | 18                          | 102                      | 72      | 45      | 20      | 5,7     | 0,290                    |
| AREDLM20       | 20                          | 114                      | 80      | 50      | 22      | 5,7     | 0,320                    |
| AREDLM22       | 22                          | 127                      | 90      | 56      | 24      | 6,5     | 0,470                    |
| AREDLM24       | 24                          | 140                      | 99      | 62      | 26      | 6,8     | 0,600                    |
| AREDLM26       | 26                          | 152                      | 112     | 70      | 28      | 8       | 0,800                    |
| AREDLM28       | 28                          | 165                      | 120     | 75      | 30      | 8       | 1,100                    |
| AREDLM30       | 30                          | 178                      | 128     | 80      | 32      | 8       | 1,230                    |
| AREDLM32       | 32                          | 203                      | 152     | 95      | 34      | 8,5     | 1,560                    |

## Redance molto pesanti tipo K2

K2 type very heavy thimbles

Finitura: zincatura a caldo  
Finish: hot deep galvanized



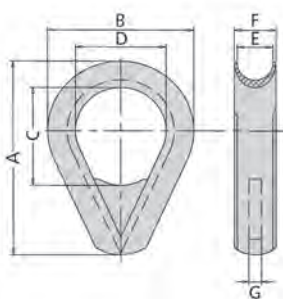
| Codice<br>Code | Fune<br>Rope<br><br>Ø<br>mm | Dimensioni<br>Dimensions |         |         |         |         |         | Peso<br>Weight<br><br>Kg |
|----------------|-----------------------------|--------------------------|---------|---------|---------|---------|---------|--------------------------|
|                |                             | A<br>inches              | B<br>mm | C<br>mm | D<br>mm | E<br>mm | F<br>mm |                          |
| AREDK224       | 24                          | 6                        | 115     | 120     | 70      | 25      | 34      | 1,00                     |
| AREDK228       | 26-28                       | 7                        | 135     | 140     | 80      | 30      | 38      | 1,60                     |
| AREDK232       | 30-32                       | 8                        | 155     | 160     | 100     | 33      | 44      | 1,80                     |
| AREDK236       | 34-36                       | 9                        | 175     | 185     | 115     | 38      | 49      | 3,50                     |
| AREDK240       | 38-40                       | 10                       | 190     | 195     | 120     | 41      | 52      | 4,40                     |
| AREDK244       | 42-44                       | 11                       | 210     | 215     | 130     | 46      | 60      | 5,20                     |
| AREDK250       | 50                          | 12                       | 245     | 250     | 145     | 52      | 65      | 7,30                     |
| AREDK254       | 54                          | 14                       | 260     | 290     | 155     | 60      | 72      | 11,00                    |
| AREDK268       | 68                          | 17                       | 310     | 370     | 190     | 70      | 84      | 16,00                    |
| AREDK278       | 78                          | 19                       | 350     | 420     | 230     | 81      | 119     | 28,00                    |
| AREDK290       | 90                          | 22                       | 395     | 480     | 255     | 92      | 130     | 36,50                    |
| AREDK2100      | 100                         | 24                       | 430     | 540     | 280     | 105     | 145     | 44,00                    |

- Tolleranza  $\pm 5\%$ .
- Tolerance  $\pm 5\%$ .

### Redance con rinforzo tipo K2B

K2B type reinforced thimbles

Finitura: zincatura a caldo  
Finish: hot deep galvanized



| Codice<br>Code | Fune<br>Rope |             | Dimensioni<br>Dimensions |         |         |         |         |         |         | Grillo max<br>applicabile<br>Max shackle<br>allowed<br>t | Peso<br>Weight<br>Kg |
|----------------|--------------|-------------|--------------------------|---------|---------|---------|---------|---------|---------|----------------------------------------------------------|----------------------|
|                | Ø<br>mm      | Ø<br>inches | A<br>inches              | B<br>mm | C<br>mm | D<br>mm | E<br>mm | F<br>mm | G<br>mm |                                                          |                      |
| AREDK2B16      | 16           | 5/8         | 4                        | 75      | 50      | 50      | 17      | 22      | 6       | 4,75                                                     | 0,4                  |
| AREDK2B18      | 18           | 3/4         | 4 1/2                    | 85      | 50      | 53      | 19      | 25      | 6       | 4,75                                                     | 0,5                  |
| AREDK2B20      | 20           | 13/16       | 5                        | 100     | 60      | 60      | 21      | 29      | 8       | 6,5                                                      | 0,8                  |
| AREDK2B22      | 22           | 7/8         | 5 1/2                    | 110     | 60      | 65      | 23      | 33      | 8       | 6,5                                                      | 0,9                  |
| AREDK2B24      | 24           | 15/16       | 6                        | 115     | 70      | 70      | 25      | 34      | 8       | 8,5                                                      | 1                    |
| AREDK2B28      | 28           | 1 1/8       | 7                        | 135     | 75      | 80      | 30      | 38      | 10      | 12                                                       | 1,7                  |
| AREDK2B32      | 32           | 1 1/4       | 8                        | 155     | 80      | 100     | 33      | 44      | 10      | 17                                                       | 2,5                  |
| AREDK2B36      | 36           | 1 7/16      | 9                        | 175     | 110     | 115     | 38      | 49      | 10      | 25                                                       | 4                    |
| AREDK2B40      | 40           | 1 5/8       | 10                       | 190     | 120     | 120     | 41      | 52      | 15      | 35                                                       | 4,5                  |
| AREDK2B44      | 44           | 1 3/4       | 11                       | 210     | 120     | 130     | 46      | 60      | 15      | 35                                                       | 7                    |
| AREDK2B50      | 50           | 2           | 12                       | 245     | 140     | 145     | 52      | 65      | 15      | 42,5                                                     | 8,3                  |
| AREDK2B54      | 54           | 2 1/8       | 14                       | 260     | 155     | 155     | 60      | 72      | 20      | 55                                                       | 12,5                 |
| AREDK2B68      | 68           | 2 3/4       | 17                       | 310     | 200     | 190     | 70      | 84      | 20      | 85                                                       | 18                   |
| AREDK2B80      | 78           | 3 1/8       | 19                       | 350     | 235     | 230     | 81      | 119     | 20      | 120                                                      | 31                   |
| AREDK2B90      | 90           | 3 5/8       | 22                       | 395     | 240     | 255     | 92      | 130     | 20      | 150                                                      | 40                   |
| AREDK2B100     | 100          | 4           | 24                       | 430     | 275     | 280     | 105     | 145     | 25      | 150                                                      | 49                   |
| AREDK2B120     | 120          | 4 3/4       | 26                       | 450     | 295     | 285     | 120     | 155     | 30      | 150                                                      | 54                   |

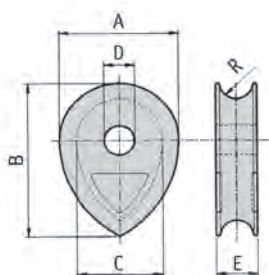
- Tolleranza  $\pm 5\%$ .
- Tolerance  $\pm 5\%$ .



## Redance piene in ghisa

Cast iron thimbles

Finitura: naturale  
Finish: self coloured

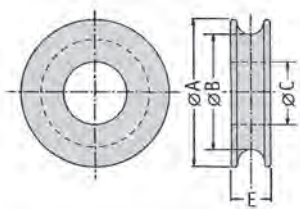


| Codice<br>Code | Fune<br>Rope<br><br>Ø<br>mm | Dimensioni<br>Dimensions |         |         |             |         |         | Peso<br>Weight<br><br>Kg |
|----------------|-----------------------------|--------------------------|---------|---------|-------------|---------|---------|--------------------------|
|                |                             | A<br>mm                  | B<br>mm | C<br>mm | D<br>mm     | E<br>mm | R<br>mm |                          |
| ARPN01         | 20/21                       | 84                       | 113     | 61      | 26/31/36    | 30      | 11,5    | 0,9                      |
| ARPN02         | 22/24                       | 90                       | 120     | 65      | 36/41/46    | 32      | 12,5    | 1,1                      |
| ARPN03         | 26/27                       | 105                      | 140     | 76      | 31/41       | 37      | 14,5    | 1,9                      |
| ARPN04         | 28/30                       | 120                      | 160     | 87      | 31/41/46/56 | 38      | 16,5    | 2,8                      |
| ARPN05         | 32/34                       | 140                      | 190     | 105     | 41/46/51    | 44      | 17,5    | 4,3                      |
| ARPN06         | 36/38                       | 153                      | 210     | 170     | 51/56       | 55      | 20      | 6,1                      |

## Bussole zincate

Round thimbles

Finitura: zincatura elettrolitica  
Finish: electrolytic galvanized



| Fune<br>Rope<br><br>Ø<br>mm | Dimensioni<br>Dimensions |         |         |         | Peso<br>Weight<br><br>Kg |
|-----------------------------|--------------------------|---------|---------|---------|--------------------------|
|                             | A<br>mm                  | B<br>mm | C<br>mm | E<br>mm |                          |
| 10÷14                       | 65                       | 49      | 16      | 20      | 0,30                     |
| 15÷18                       | 85                       | 65      | 20      | 25      | 0,60                     |
| 20÷22                       | 90                       | 66      | 25      | 32      | 0,70                     |
| 24÷28                       | 120                      | 88      | 30      | 35      | 1,65                     |
| 30÷32                       | 125                      | 90      | 35      | 42      | 1,90                     |
| 34÷36                       | 130                      | 90      | 40      | 45      | 2,40                     |
| 40÷42                       | 150                      | 104     | 45      | 55      | 3,00                     |
| 44÷46                       | 170                      | 115     | 50      | 60      | 4,00                     |

- Su richiesta è possibile modificare le dimensioni.
- Upon demand different dimensions available.



## Accessori per fune

Wire rope fittings

## LUBRIFICANTI PER FUNI METALLICHE

LUBRICANTS FOR WIRE ROPES

The lubricants are specifically designed for the ropes, with excellent anti-corrosive and adhesive ability and penetration.

A regular lubrication protects the rope from corrosion, reduces the friction between the leads and helps to increase the useful life of the rope.

After cleaning the surface of the rope from dust, sand and other materials in general with a wire brush or with the help of special detergents, proceed with the lubrication of the rope using a brush.

### ELASKON 30

Recommended lubricant for ropes subjected to normal use. It has a transparent bronze color and forms a light protective film on the surface of the rope.

### BERULIT GA 400 AND BERULIT GA 2500

Very high performance lubricants, recommended for the maintenance of ropes subjected to intense work (cranes for steel mills, excavators).

They are composed of special EP additives and selected solid lubricants that make the product able to withstand severe stress and high peripheral speeds.

The product is free from bitumen and solvents and has remarkable anticorrosive properties.

### Storage

Store in the original packaging at a temperature not exceeding 30°C.

I lubrificanti FAS sono prodotti studiati appositamente per le funi metalliche, con eccellenti proprietà anti-corrosive e capacità adesive e di penetrazione.

Una regolare lubrificazione protegge infatti la fune dalla corrosione e attenua lo sfregamento tra i fili.

Dopo avere pulito la superficie della fune da polvere, sabbia e altri materiali in genere con una spazzola metallica o con l'aiuto di appositi detergenti, procedere alla lubrificazione della fune per mezzo di un pennello.

### ELASKON 30

Lubrificante consigliato per funi sottoposte ad impieghi normali.

Si presenta di colore bronzo trasparente e forma una leggera pellicola protettiva sulla superficie della fune.

### BERULIT GA 400 E BERULIT GA 2500

Lubrificanti ad altissimo rendimento, consigliati per la manutenzione delle funi sottoposte a lavoro intenso (gru per acciaierie, escavatori).

Sono composti da speciali additivi EP e da sostanze lubrificanti solide selezionate che rendono il prodotto in grado di resistere a sollecitazioni severe e ad alte velocità periferiche.

Il prodotto è esente da bitumi e solventi e possiede notevoli proprietà anticorrosive.

### Stoccaggio

Conservare nell'imballo originale ad una temperatura non superiore a 30°C.



| Codice<br>Code | Denominazione<br>Name  | Tipo<br>Type                                                | Temperature di impiego<br>Operating temperatures | Penetrazione<br>Penetration | Confezione<br>Packing              |
|----------------|------------------------|-------------------------------------------------------------|--------------------------------------------------|-----------------------------|------------------------------------|
| ALUBELA25      | Elaskon 30             | Olio sintetico<br>Synthetic oil                             | -20°C ÷ 80°C                                     | DIN 51580 ca. 130           | 25 kg                              |
| ALUBBER10      | Bechem Berulit GA 400  | Olio minerale<br>Mineral oil                                | -20°C ÷ 180°C                                    | DIN ISO 2137 355-385        | 10 kg                              |
| ALUBBERSP      | Bechem Berulit GA 2500 | Olio minerale, olio sintetico<br>Mineral oil, synthetic oil | +5°C ÷ 200°C                                     | DIN ISO 2137 ca. 415±15     | Bombole 500 ml<br>Spray can 500 ml |