

Chain & Accessories



Grade 80 Alloy Chain

GRADE 80 ALLOY CHAIN



- Alloy Steel.
- Heat Treated.
- Finish - Self Colored.
- Permanently embossed with manufacturer's marking and 8(Grade).

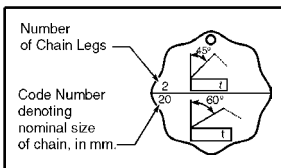
GRADE 80 ALLOY CHAIN

For overhead lifting applications.

| Chain Size (mm) | Meters Per Drum | Dimensions (mm) | Working Load Limit (t) | Weight Per Meter (kg) |
|-----------------|-----------------|-----------------|------------------------|-----------------------|
| 6 | 200 | 6 x 18 | 1.12 | .80 |
| 7 | 200 | 7 x 21 | 1.50 | 1.05 |
| 8 | 200 | 8 x 24 | 2.00 | 1.25 |
| 10 | 200 | 10 x 30 | 3.15 | 2.20 |
| 13 | 100 | 13 x 39 | 5.30 | 3.80 |
| 16 | 100 | 16 x 48 | 8.00 | 5.70 |
| 19 | 50 | 19 x 54 | 11.2 | 8.03 |
| 22 | 50 | 22 x 66 | 15.0 | 10.9 |
| 26 | - | 26 x 78 | 21.2 | 15.2 |
| 32 | - | 32 x 96 | 31.5 | 23.0 |

* Proof Loaded at 2-1/2 times the Working Load Limit. Minimum Ultimate Load is 4 times the Working Load Limit.

SLING ID TAG



Sling ID Tag Kit

- Octagonal metal sling tag.
- Prestamped - easy to add sling length, Working Load Limit, name, etc.
- Front side is shown - reverse is blank.
- Available with or without welded attached ring.
- Attaching ring size is 5mm x 50mm.
- Available completely blank for wire rope sling applications.
- Gold painted.

| ID Tag Stock No. With Ring | ID Tag Stock No. Without Ring | Application |
|----------------------------|-------------------------------|--------------------------------|
| 1152445 | 1200829 | For single leg sling : 90° |
| 1152444 | 1200830 | For multi-leg sling : 45°/ 60° |

Grade 80 Chain

GENERAL INFORMATION

WORKING LOAD LIMIT

The "Working Load Limit" is the maximum load which should ever be applied to chain, when the chain is new or "in as new" condition, and when the load is uniformly applied in direct tension to a straight length of chain.

PROOF TEST

The "Proof Test" is a term designating the tensile test applied to new chain for the sole purpose of detecting injurious defects in the material or manufacture. It is the load which the chain has withstood under a test in which the load has been applied in direct tension to a straight length of chain.

ANSI / ASME B30.9c-1997

Paragraph 9-1.4.2 "Mechanically assembled slings shall be comprised entirely of proof tested components." Paragraph 9-1.4.2c "If untested components are employed, the sling shall be proof tested per Para. 9-1.4.1 prior to initial use."

MINIMUM ULTIMATE LOAD

The "Minimum Ultimate Load" is the minimum load at which new chain will break when tested by applying direct tension to a straight length of chain at a uniform rate of speed in a testing machine.

ATTACHMENTS

Any attachments, such as hooks or links, should have a rated "Working Load Limit" at least equal to the chain with which it is used.

CAUTION

Only Crosby Alloy chain, Spectrum 8[®] or Spectrum 10[®], should be used for overhead lifting applications.

It must be recognized that certain factors in the usage of chain and attachments can be abusive and lessen the load that the chain or attachments can withstand. Some examples are twisting of the chain, disfigurement, deterioration by straining, usage, weathering and corrosion, rapid application of load or jerking and applying excessive loads, and sharp corners cutting action.

Due to the crushing effect Grab Hooks have upon chain, the design factor of all chain assemblies must be reduced by 20% for Grab Hook applications.

CHAIN INSPECTION

INSPECTION AND REMOVAL FROM SERVICE PER ANSI B30.9

FREQUENT INSPECTION

Normal Service - Monthly
Severe Service - Daily to Monthly

Check chain and attachments for wear, nicks, cracks, breaks, gouges, stretch, bend, weld splatter, discoloration from excessive temperature, and throat openings of hooks.

- Chain links and attachments should hinge freely to adjacent links.
- Latches on hooks, if present, should hinge freely and seat properly without evidence of permanent distortion.

PERIODIC INSPECTION - INSPECTION RECORDS REQUIRED

Normal Service - Yearly
Severe Service - Monthly

This inspection shall include everything in a frequent inspection plus each link and end attachment shall be examined individually, taking care to expose inner link surfaces of the chain and chain attachments.

- Worn links should not exceed values given in table 1 or recommended by the manufacturer.
- Sharp transverse nicks and gouges should be rounded out by grinding and the depth of the grinding should not exceed values in Table 1.
- Hooks should be inspected in accordance with ANSI B30.10
- If present, latches on hooks should seat properly, rotate freely, and show no permanent distortion.
- Chains use OSHA and ASME regulations and safety information.

See: OSHA 1926.2 (a) 4 and 1910.184

ASME B30.9 Slings
ASME B30.10 Hooks

| TABLE 1 MAXIMUM ALLOWABLE WEAR AT ANY POINT OF LINK | | |
|--|------|---|
| Normal Chain or Coupling Link Cross Section | | Maximum Allowable Wear Diameter (mm) |
| (in.) | (mm) | |
| — | 6 | .79 |
| 1/4 - 9/32 | 7 | .94 |
| 5/16 | 8 | 1.05 |
| 3/8 | 10 | 1.32 |
| 1/2 | 13 | 1.75 |
| 5/8 | 16 | 2.13 |
| 3/4 | 19 | 2.67 |
| 7/8 | 22 | 2.95 |
| 1 | 25 | 3.48 |
| 1 1/4 | 32 | 4.29 |

REFER TO ANSI B30.9


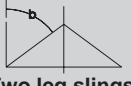

| Use of Crosby Spectrum 8 Chain Under Heat Condition | | | |
|---|--------------|---|--|
| Temperature of Chain | | Grade 80 | |
| (F°) | (C°) | Reduction* of Working Load Limit WHILE AT Temperature | Reduction of Working Load Limit AFTER EXPOSURE to Temperatures** |
| Below 400 | Below 204 | None | None |
| 400 | 204 | 10% | None |
| 500 | 260 | 15% | None |
| 600 | 316 | 20% | 5% |
| 700 | 371 | 30% | 10% |
| 800 | 427 | 40% | 15% |
| 900 | 482 | 50% | 20% |
| 1000 | 538 | 60% | 25% |

* Crosby does not recommend the use of Alloy Chain at temperatures above 800° F.**

**When chain is used at room temperature after being heated to temperatures shown in the first column.

Grade 80 Alloy Chain Slings

WORKING LOAD LIMIT — 4 TO 1 DESIGN FACTOR

| Nominal size of sling |  Single-leg slings |  Two leg slings | |  Three-and four-leg slings | | Choke hitch |
|-----------------------|--|---|--------------------------------------|---|--------------------------------------|-------------|
| | | 0° $\beta \leq 45^\circ$ | 45° $\beta \leq 60^\circ$ | 0° $\beta \leq 45^\circ$ | 45° $\beta \leq 60^\circ$ | |
| mm | t | t | t | t | t | t |
| 6 | 1,12 | 1,60 | 1,12 | 2,36 | 1,70 | 0,90 |
| 7 | 1,50 | 2,12 | 1,50 | 3,15 | 2,24 | 1,20 |
| 8 | 2 | 2,80 | 2 | 4,25 | 3 | 1,60 |
| 10 | 3,15 | 4,25 | 3,15 | 6,70 | 4,75 | 2,50 |
| 13 | 5,30 | 7,50 | 5,30 | 11,20 | 8 | 4,25 |
| 16 | 8 | 11,20 | 8 | 17 | 11,80 | 6,40 |
| 19 | 11,20 | 16 | 11,20 | 23,60 | 17 | 9 |
| 22 | 15 | 21,20 | 15 | 31,50 | 22,40 | 12 |
| 26 | 21,20 | 30 | 21,20 | 45 | 31,50 | 17 |
| 32 | 31,50 | 45 | 31,50 | 67 | 47,50 | 25,20 |

The design factor of 4 to 1 on Grade 80 Alloy Chain agrees with the design factor used by the International Standards Organization (I.S.O.) and ANSI B30.9 is the preferred set of Working Load Limit values to be used.

TO MAKE YOUR CROSBY GRADE 8[®] ALLOY CHAIN SLING

Follow these simple steps in making a sling assembly:

Determine the maximum load to be lifted by the sling assembly.

Choose the type of sling assembly suited for the shape of the load and the size of the sling assembly for the load to be lifted. The decision must take into account the angle of the sling legs in multileg slings.

Determine the overall reach for bearing point of master link to bearing point on hook.

Select components, assemble chain and components. Affix sling identification tag to sling. The tag is available from your Crosby Distributor. The tag should be stamped with size chain, reach, type sling, Working Load Limit at a specific angle of lift, and some identifying number for record keeping.

If measurement comes in the link, cut the following link. For two leg type slings count the links and use an even number for clevis hooks and an odd number for eye hooks. This will position hooks in the same plane. In multileg slings always use the same number of links in each leg.

CAUTION

Derate sling in accordance with working load limit chart shown above.

A chain grab hook application will result in 20% reduction of chain capacity.

Care should be taken to observe these derated applications or chain may fracture or permanently stretch at loads less than the advertised chain ultimate strength and proof load respectively.

Crosby® Chain Sling Components

CHAIN ASSEMBLY CHART

| Chain Size (mm) | A-344 | | A-347 (mm) | A-342 (in.) | A-337 (mm) | S-325A (mm) | S-311A (mm) | A-338 (mm) | A-328 (mm) |
|-----------------|------------|-------------|------------|-------------|------------|-------------|-------------|------------|------------|
| | 1 Leg (mm) | 2 Legs (mm) | | | | | | | |
| 6 | 12 | 12 | 13/12 | 1/2 | — | 6 | 6 | — | — |
| 7 | 12 | 13 | 17/13 | 1/2 | 7 | 7 - 8 | 7 - 8 | 7 | 7 |
| 8 | 13 | 17 | 19/13 | 5/8 | 8 | 7 - 8 | 7 - 8 | — | — |
| 10 | 17 | 19 | 22/17 | 3/4 | 10 | 10 | 10 | 10 | 10 |
| 13 | 19 | 22 | 28/22 | 1 | 13 | 13 | 13 | 13 | 13 |
| 16 | 22 | 25 | 31/25 | 1 | 16 | 16 | 16 | 16 | — |
| 19 | 25 | 31 | 40/31 | 1-1/4 | 19 | — | — | 19 | 19 |
| 22 | 31 | 36 | 46/36 | 1-1/2 | 22 | — | — | 22 | 22 |
| 26 | 36 | 45 | 51/45 | 1-3/4 | 26 | — | — | — | — |
| 32 | 45 | 51 | — | 2-1/4 | 32 | — | — | — | — |

| Chain Size (mm) | S-314A (mm) | A-339 (mm) | M-315A (mm) | S-316A (mm) | S-317A (mm) | S-320AN L-320AN t | S-322AN L-322AN t | S-326A (mm) |
|-----------------|-------------|------------|-------------|-------------|-------------|-------------------|-------------------|-------------|
| 6 | 6 | — | 6 | 6 | 6 | 1.25 | 1.25 | 6 |
| 7 | 7 - 8 | 7 | 7 - 8 | 7 - 8 | 7 - 8 | 1.6 | 1.6 | 7 - 8 |
| 8 | 7 - 8 | — | 7 - 8 | 7 - 8 | 7 - 8 | 2.5 | 2.5 | 7 - 8 |
| 10 | 10 | 10 | 10 | 10 | 10 | 3.2 | 3.2 | 10 |
| 13 | 13 | 13 | 13 | 13 | 13 | 5.4 | 5.4 | 13 |
| 16 | 16 | 16 | 16 | 16 | 16 | 8 | 8 | 16 |
| 19 | — | 19 | — | — | — | 11.5 | 11.5 | — |
| 22 | — | 22 | — | — | — | 16 | 16 | — |
| 26 | — | — | — | — | — | 22 | 22 | — |
| 32 | — | — | — | — | — | 31.5 | 31.5 | — |

Grade 8 Alloy Fitting

WELDED MASTER LINK

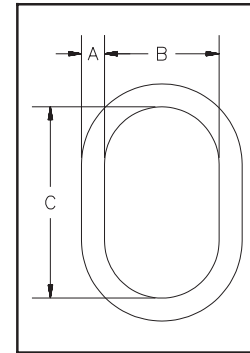
- Each link has a Product Identification Code (PIC) for material traceability, along with the size, and "CG" stamped into it.
- Available in sizes A13 through A51.
- Design Factor of 4 to 1.
- Based on DIN 5688, part 3
- Alloy Steel - Quenched and Tempered
- Individually Proof Tested at 2.5 times the Working Load Limit.



A343

| Size | Stock No. S.C. | Chain Size (mm) | | Working Load Limit**† t | Weight Each (kg) | Dimensions (mm) | | |
|------|----------------|-----------------|------------|-------------------------|------------------|-----------------|-----|-----|
| | | Single Leg | Double Leg | | | A | B | C |
| A13 | 593100 | 6 | 6 - 7 | 1.6 | .34 | 13 | 60 | 110 |
| A16 | 593102 | 8 | — | 2.0 | .53 | 16 | 60 | 110 |
| A18 | 593103 | 10 | 8 | 3.2 | .82 | 18 | 75 | 135 |
| A22 | 593104 | 13 | 10 | 5.3 | 1.50 | 22 | 90 | 160 |
| A26 | 593105 | 16 | 13 | 8.0 | 2.31 | 26 | 100 | 180 |
| A32 | 593106 | 18 - 19 | 16 | 11.2 | 3.95 | 32 | 110 | 200 |
| A36 | 593107 | 20 - 22 | 18 - 19 | 15.2 | 6.34 | 36 | 140 | 260 |
| A45 | 593109 | 26 - 28 | 22 | 25.5 | 12.82 | 45 | 180 | 340 |
| A51 | 593110 | 32 | 26 | 36 | 17.30 | 51 | 190 | 350 |

* Based on single leg sling. Ultimate Load is 4 times the Working Load Limit.



WELDED MASTER LINK ASSEMBLY

- Each link has a Product Identification Code (PIC) for material traceability, along with the size, and "CG" stamped into it.
- Available in sizes A18 - B13 through A51 - B36.
- Design Factor of 4 to 1.
- Based on DIN 5688, part 3.
- Alloy Steel - Quenched and Tempered
- Individually Proof Tested at 2.5 times the Working Load Limit.

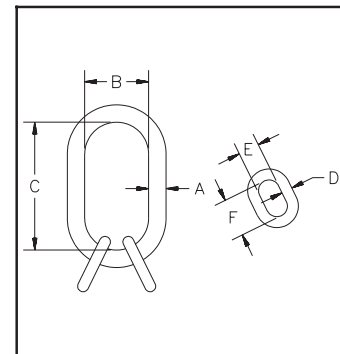


A346

| Size | Stock No. S.C. | Chain Size (mm) | Working Load Limit**† | Weight Each (kg) | Dimensions (mm) | | | | | |
|-----------|----------------|-----------------|-----------------------|------------------|-----------------|-----|-----|----|----|-----|
| | | | | | A | B | C | D | E | F |
| A18 - B13 | 1256010 | 6 | 2.4 | 1.16 | 18 | 75 | 135 | 13 | 25 | 54 |
| A22 - B16 | 1256080 | 8 | 4.3 | 2.22 | 22 | 90 | 160 | 16 | 34 | 70 |
| A26 - B17 | 1256150 | 10 | 6.70 | 3.37 | 26 | 100 | 180 | 18 | 40 | 85 |
| A32 - B22 | 1256220 | 13 | 11.2 | 6.07 | 32 | 110 | 200 | 22 | 50 | 115 |
| A36 - B26 | 1256290 | 16 | 17 | 10.00 | 36 | 140 | 260 | 26 | 65 | 140 |
| A38 - B32 | 1256360 | 18 | 23.6 | 18.92 | 45 | 180 | 340 | 32 | 70 | 150 |
| A51 - B32 | 1256395 | 20 | 27.0 | 23.40 | 51 | 190 | 350 | 32 | 70 | 150 |
| A51 - B36 | 1256430 | 22 | 32.5 | 25.94 | 51 | 190 | 350 | 35 | 75 | 170 |

*Ultimate Load is 4 times the Working Load Limit.

† Working Load Limit with coupling links at 90 degrees included angle maximum.



Alloy Master Links

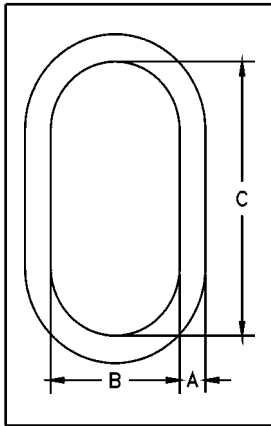


A-342



- Alloy Steel - Quenched and Tempered.
- Individually proof tested to values shown.
- For use with chain (S.F. = 4/1), proof tested to 2.5 times the working load limit.
- For use with rope (S.F. = 5/1), proof tested to 2 times the working load limit.
- Sizes from 13mm to 51mm are drop forged.

A-345



A-342 Alloy Master Links

| Size "A" (mm) | A-342 Stock No. | Working Load Limit S.F. = 5:1 for Rope (t)* | Working Load Limit S.F. = 4:1 for Chain (t) | Proofload in kN ** | Weight Each (kg) | Dimensions (mm) | | |
|---------------|-----------------|---|---|--------------------|------------------|-----------------|-----|-----------------------|
| | | | | | | B | C | Deformation Indicator |
| ** 13 | 1014262 | 3.17 | 2.54 | 63 | 0.37 | 63.5 | 127 | 76 |
| ** 16 | 1014280 | 4.08 | 3.26 | 81 | 0.69 | 76.0 | 152 | 89 |
| ** 19 | 1014306 | 5.58 | 4.46 | 110 | 0.94 | 70.0 | 140 | 89 |
| ** 22 | 1014315 | 6.44 | 5.15 | 127 | 1.59 | 95.5 | 162 | 114 |
| ** 25 | 1014324 | 11.05 | 8.83 | 217 | 2.20 | 89.0 | 178 | 114 |
| ** 32 | 1014342 | 16.42 | 13.13 | 323 | 4.34 | 111 | 222 | 140 |
| ** 38 | 1014360 | 25.67 | 20.54 | 504 | 7.36 | 133 | 267 | 165 |
| ** 44 | 1014388 | 38.51 | 30.81 | 756 | 11.4 | 152 | 305 | 191 |
| ** 51 | 1014404 | 46.54 | 37.23 | 913 | 16.8 | 178 | 356 | 229 |
| †† 57 | 1014422 | 65.6 | 52.47 | 1287 | 24.5 | 203 | 406 | - |
| **†† 63 | 1014468 | 66.8 | 58.00 | 1311 | 30.7 | 203 | 406 | - |
| †† 70 | 1014440 | 98.4 | 78.71 | 1930 | 39.8 | 241 | 406 | - |
| †† 76 | 1014486 | 103 | 82.73 | 2029 | 52 | 229 | 457 | - |
| †† 83 | 1014501 | 119 | 95.13 | 2334 | 66 | 254 | 508 | - |
| †† 89 | 1014529 | 126 | 101 | 2483 | 91 | 305 | 610 | - |
| †† 95 | 1015051 | 152 | 122 | 2990 | 90 | 254 | 508 | - |
| †† 102 | 1015060 | 169 | 135 | 3319 | 103 | 254 | 508 | - |
| †† 108 | 1015067 | 160 | 128 | 3150 | 137 | 305 | 610 | - |
| †† 121 | 1015079 | 163 | 130 | 3204 | 156 | 356 | 711 | - |
| †† 121 | 1015088 | 176 | 141 | 3462 | 198 | 356 | 711 | - |
| †† 127 | 1015094 | 179 | 143 | 3515 | 234 | 381 | 762 | - |

* Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees.

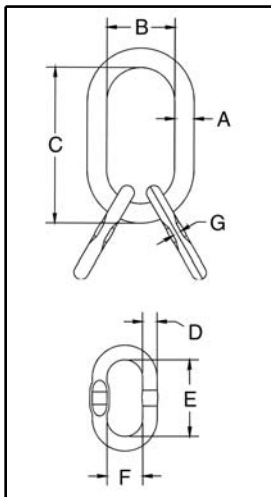
** Proof test load equals or exceeds the requirement of ASTM A957(8.1) and ASME B30.9-1.4 for the chain size and number of legs. For use with chain slings, see page 166.

†† Welded Master Link.

Chain & Accessories

A-345 Master Link Assembly

- Alloy Steel - Quenched and Tempered.
- Individually proof tested at 2.5 times the Working Load Limit with certification.
- Proof Test certification shipped with each link.



| "A" Size (mm) | A-345 Stock No. | Working Load Limit (t)* | | Weight Each (kg) | Dimensions (mm) | | | | | | Deformation Indicator | Engineered Flat for S-325A (in.) - (mm) |
|---------------|-----------------|--------------------------------|----------------------------|------------------|-----------------|------|-----|------|------|------|-----------------------|---|
| | | Based on Grade 80 Chain Rating | Based on 4:1 Design Factor | | B | C | D | E | F | G | | |
| 19 | 1014734 | 4.13 | 4.77 | 1.18 | 19.1 | 70.0 | 140 | 14.2 | 85.0 | 39.9 | 89 | 1/4"-5/16", 7-8mm |
| 25 | 1014752 | 8.35 | 11.0 | 2.77 | 25.4 | 89.0 | 178 | 17.5 | 100 | 60.0 | 114 | 3/8", 10mm |
| 32 | 1014770 | 14.1 | 16.3 | 5.99 | 31.8 | 111 | 222 | 22.4 | 100 | 60.0 | 140 | 1/2", 13mm |
| 38 | 1014798 | 21.3 | 24.6 | 11.0 | 38.1 | 133 | 267 | 28.7 | 150 | 70.0 | 165 | 5/8", 16mm |
| 44 | 1014814 | 33.3 | 38.5 | 16.2 | 44.5 | 152 | 305 | 31.8 | 160 | 90.0 | 191 | 3/4", 20mm |
| 51 | 1014832 | 40.3 | 46.6 | 26.0 | 51.0 | 178 | 356 | 38.1 | 180 | 100 | 229 | No Flat |

* Ultimate Load is 4 times the Working Load Limit. Proof Load is 2.5 times the Working Load Limit. Working Load Limit with coupler links at 60 degree included angle maximum.

See page 165 for proper chain selection for triple and quadruple leg slings.

Welded Master Links

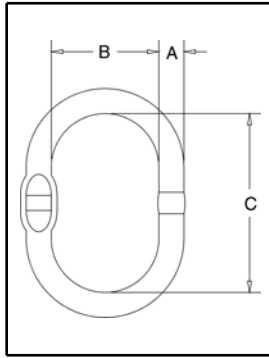


A-344



- Each link has a Product Identification Code (PIC) for material traceability, along with the size and "CG" (The Crosby Group).
- Design Factor of 4 to 1 for chain and 5 to 1 for wire rope.
- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2.5 times the Working Load Limit (4:1) with certification.
- Larger inside width and length for use with thimble.
- Engineered Flat for use with S-325A coupler link.

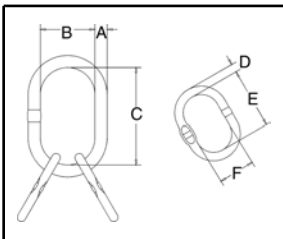
A-347



A-344 Welded Master Link with Engineered Flat

| Size (mm) | A-344 Stock No. | Working Load Limit (t)* | | Weight Each (kg) | Dimensions (mm) | | | Engineered Flat Size for S-325A (in.) - (mm) |
|-----------|-----------------|-------------------------|------|------------------|-----------------|-----|-----|--|
| | | 4:1 | 5:1 | | A | B | C | |
| 12 | 1256862-4 | 1.6 | 1.6 | .30 | 12 | 60 | 120 | 1/4" - 5/16", 7-8mm |
| 13 | 1256932-4 | 2.12 | 2.5 | .36 | 13 | 60 | 120 | 1/4" - 5/16", 7-8mm |
| 17 | 1257002-4 | 3.15 | 4 | .84 | 17 | 90 | 160 | 3/8", 10mm |
| 19 | 1257072-4 | 5.3 | 6.5 | 1.07 | 19 | 90 | 160 | 1/2", 13mm |
| 22 | 1257212-4 | 8 | 8 | 1.61 | 22 | 100 | 180 | 5/8", 16mm |
| 25 | 1257282-4 | 11.2 | 11.5 | 2.37 | 25 | 115 | 205 | 5/8", 16mm |
| 28 | 1257382-4 | 13 | 11.8 | 3.78 | 28 | 145 | 275 | No Flat |
| 31 | 1257422-4 | 16 | 16 | 4.69 | 31 | 145 | 275 | No Flat |
| 36 | 1257492-4 | 21.2 | 24 | 6.83 | 36 | 155 | 285 | No Flat |
| 40 | 1257532-4 | 25 | 25 | 8.90 | 40 | 160 | 300 | No Flat |
| 45 | 1257562-4 | 31.5 | 31.5 | 12.73 | 45 | 180 | 340 | No Flat |
| 51 | 1257632-4 | 40 | 45 | 17.26 | 51 | 215 | 390 | No Flat |

* Ultimate load based on in line pull. Calculated for a single leg sling or for the resultant load on a two leg sling with included angle not exceeding 90 degrees.



A-347 Welded Master Link Assembly

| Size (mm) | A-347 Stock No. | Working Load Limit (t)* | | Weight Each (kg) | Dimensions (mm) | | | | | | Engineered Flat Size for S-325A (in.) - (mm) |
|-----------|-----------------|-------------------------|------|------------------|-----------------|-----|-----|----|-----|-----|--|
| | | 4:1 | 5:1 | | A | B | C | D | E | F | |
| 13/12 | 1257692-4 | 2.36 | 2.4 | .81 | 13 | 60 | 120 | 12 | 85 | 45 | No Flat |
| 17/13 | 1257762-4 | 3.15 | 3.2 | 1.56 | 17 | 90 | 160 | 13 | 120 | 60 | No Flat |
| 19/13 | 1257832-4 | 4.25 | 4.2 | 1.79 | 19 | 90 | 160 | 13 | 120 | 60 | 1/4" - 5/16", 7-8mm |
| 22/17 | 1257972-4 | 6.7 | 8 | 3.29 | 22 | 100 | 180 | 17 | 160 | 90 | 3/8", 10mm |
| 28/22 | 1258142-4 | 11.2 | 12 | 7.00 | 28 | 145 | 275 | 22 | 180 | 100 | 1/2", 13mm |
| 31/25 | 1258182-4 | 17 | 17 | 9.43 | 31 | 145 | 275 | 25 | 210 | 115 | 5/8", 16mm |
| 40/31 | 1258332-4 | 23.6 | 25 | 18.28 | 40 | 160 | 300 | 31 | 270 | 140 | No flat |
| 45/36 | 1258402-4 | 31.5 | 31.5 | 26.39 | 45 | 180 | 340 | 36 | 285 | 155 | No flat |
| 51/45 | 1258462-4 | 45 | 45 | 42.88 | 51 | 190 | 350 | 45 | 340 | 180 | No flat |

* WLL for included angle of maximum 90 degrees. For larger included angles the WLL should be reduced.

Grade 80 Alloy Connecting Links

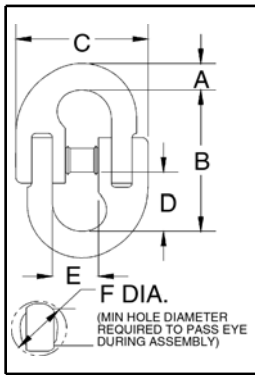


Fatigue Rated

A-337



- Individually Proof Tested at 2-1/2 times Working Load Limit with certification.
- Locking system that provides for simple assembly and disassembly - no special tools needed.
- Meets ASTM A-952-96 standards for Grade 80 chain fittings.
- Forged Alloy Steel - Quenched and Tempered.
- Fatigue rated.



LOK-A-LOY® 8 Alloy Connecting Link

| Chain Size | | A-337 Stock No. | Pkg. Qty. | Weight Each (kg) | Working Load Limit (t)* | Dimensions (mm) | | | | | |
|------------|------|-----------------|-----------|------------------|-------------------------|-----------------|------|------|------|------|------|
| (in.) | (mm) | | | | | A | B | C | D | E | F |
| 9/32 (1/4) | 7 | 1014720 | 24 | .13 | 1.5 | 8.40 | 47.8 | 47.0 | 19.8 | 16.0 | 14.2 |
| 5/16 | 8 | 1014584 | 24 | .15 | 2 | 9.15 | 55.4 | 50.0 | 23.1 | 16.8 | 16.0 |
| 3/8 | 10 | 1014721 | 24 | .34 | 3.15 | 11.4 | 64.3 | 63.5 | 26.2 | 21.6 | 19.1 |
| 1/2 | 13 | 1014722 | 12 | .75 | 5.3 | 16.3 | 87.4 | 81.8 | 36.6 | 27.7 | 23.9 |
| 5/8 | 16 | 1014723 | 12 | 1.30 | 8 | 19.1 | 105 | 96.0 | 43.9 | 35.1 | 28.7 |
| 3/4 | 20 | 1014724 | 1 | 2.26 | 11.2 | 23.6 | 126 | 118 | 53.1 | 40.4 | 32.5 |
| 7/8 | 22 | 1014725 | 1 | 3.41 | 15 | 26.9 | 140 | 143 | 58.7 | 50.0 | 36.6 |
| 1 | 25 | 1014727 | 1 | 5.00 | 21.2 | 31.0 | 152 | 157 | 63.5 | 56.4 | 47.8 |
| 1-1/4 | 32 | 1014728 | 1 | 9.25 | 31.5 | 38.1 | 189 | 194 | 78.5 | 64.3 | 55.6 |

* Ultimate Load is 4 times the Working Load Limit.

Chain & Accessories

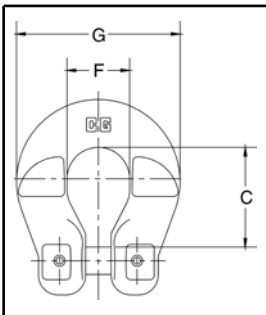


Fatigue Rated

S-325A



- Designed to connect Grade 80 chain fittings produced with "Engineered Flat" to Grade 80 chain.
- Individually Proof Tested at 2-1/2 times Working Load Limit with certification.
- Locking system that provides for simple assembly and disassembly - no special tools needed.
- Meets ASTM A-952-96 standards for Grade 80 chain fittings.
- Forged Alloy Steel - Quenched and Tempered.
- Fatigue Rated.



S-325A Grade 80 Coupling Link

| Chain Size | | S-325A Stock No. | Weight Each (kg) | Working Load Limit (t)* | Dimensions (mm) | | |
|------------|------|------------------|------------------|-------------------------|-----------------|------|------|
| (in.) | (mm) | | | | C | F | G |
| - | 6 | 1097995 | .11 | 1.12 | 26.2 | 19.3 | 44.7 |
| 1/4-5/16 | 7-8 | 1098001 | .23 | 2 | 35.8 | 23.4 | 59.0 |
| 3/8 | 10 | 1098005 | .34 | 3.15 | 46.7 | 30.0 | 69.0 |
| 1/2 | 13 | 1098009 | .75 | 5.3 | 55.5 | 38.1 | 94.5 |
| 5/8 | 16 | 1098013 | .86 | 8 | 71.5 | 49.8 | 112 |

* Ultimate Load is 4 times the Working Load Limit.

SHUR-LOC® Hook Series



Fatigue Rated®

S-316A

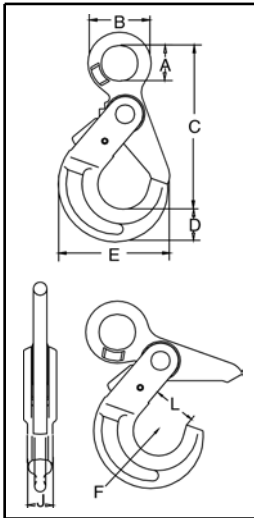


- Positive Lock Latch is Self-Locking when hook is loaded.
- Forged Alloy Steel- Quenched and Tempered.
- Rated for both Wire Rope and Grade 80 Chain.
- Meets ASTM A-952-96 and proposed Euronorm standards for Grade 80 chain fittings.
- Fatigue rated.
- The SHUR-LOC® hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.550 (g) (4) (iv) (B).
- G-414 Heavy Thimble should be used with wire rope slings.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.
- Trigger repair Kit available (S-4316). Consist of spring, roll pin and trigger.
- Designed with Engineered Flat to connect to Grade 80 chain fittings.
- "Look for the color Gold - Crosby Alloy Hooks".

S-326A



S-316A SHUR-LOC® Eye Hook

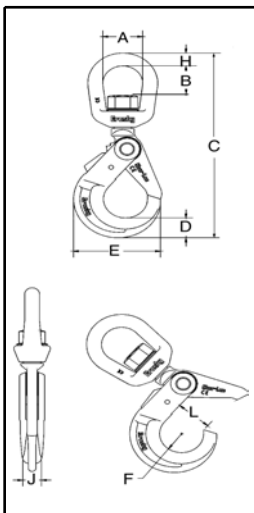


| Chain Size | | S-316A Stock No. | Grade 80 Alloy Chain Working Load Limit (t) 4:1* | Dimensions (mm) | | | | | | | | Flat Size | Weight Each (kg) |
|------------|------|------------------|--|-----------------|------|-----|------|------|------|------|------|------------------|------------------|
| (in.) | (mm) | | | A | B | C | D | E | F | J | L | | |
| - | 6 | 1097918 | 1.12 | 19.8 | 36.1 | 100 | 20.1 | 66.0 | 17.0 | 16.0 | 28.7 | - | .39 |
| 1/4-5/16 | 7-8 | 1097920 | 2.0 | 27.4 | 50.5 | 135 | 27.9 | 89.0 | 22.1 | 20.6 | 35.1 | 1/4-5/16", 7-8mm | .82 |
| 3/8 | 10 | 1097921 | 3.15 | 33.0 | 62.0 | 167 | 29.7 | 112 | 27.9 | 23.9 | 44.5 | 3/8", 10mm | 1.47 |
| 1/2 | 13 | 1097922 | 5.3 | 41.9 | 80.0 | 209 | 42.4 | 138 | 32.0 | 29.5 | 53.5 | 1/2", 13mm | 2.70 |
| 5/8 | 16 | 1097926 | 8.0 | 56.0 | 100 | 256 | 52.0 | 167 | 38.1 | 38.1 | 63.0 | 5/8", 16mm | 5.78 |

* Ultimate Load is 4 times the Working Load Limit based on Grade 8 Chain.

S-326A SHUR-LOC® Swivel Hooks

- U.S. Patent 5,381,650 and foreign equivalents.



| Chain Size | | S-326A Stock No. | Grade 80 Alloy Chain Working Load Limit (t)* | Dimensions (mm) | | | | | | | | | Weight Each (kg) |
|------------|------|------------------|--|-----------------|------|-----|------|------|------|------|------|------|------------------|
| (in.) | (mm) | | | A | B | C | D | E | F | H | J | L | |
| - | 6 | 1004201 | 1.12 | 38.1 | 33.5 | 156 | 20.1 | 66.0 | 17.0 | 12.7 | 16.0 | 28.7 | .57 |
| 1/4-5/16 | 7-8 | 1004210 | 2.0 | 44.5 | 40.4 | 193 | 27.9 | 89.0 | 22.1 | 16.0 | 20.6 | 35.1 | 1.19 |
| 3/8 | 10 | 1004223 | 3.15 | 51.0 | 43.9 | 224 | 29.7 | 112 | 27.9 | 19.1 | 23.9 | 44.5 | 2.13 |
| 1/2 | 13 | 1004234 | 5.3 | 63.5 | 60.5 | 284 | 42.4 | 138 | 32.0 | 25.4 | 29.5 | 53.5 | 3.92 |
| 5/8 | 16 | 1004235 | 8 | 70.0 | 64.5 | 330 | 52.0 | 167 | 38.1 | 28.7 | 38.1 | 63.0 | 7.71 |

* Ultimate Load is 4 times the Working Load Limit.

SHUR-LOC® Hook Series

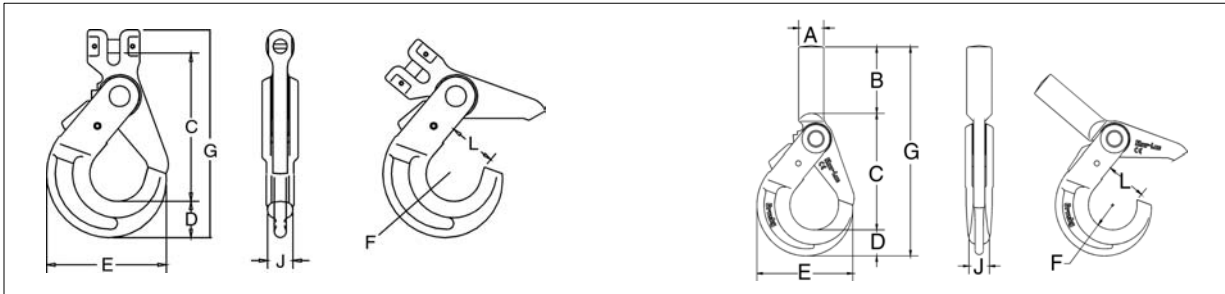


Fatigue Rated

S-317A



S-318A



S-317A SHUR-LOC® Clevis Hooks

| Chain Size | | S-317A Stock No. | Grade 80 Alloy Chain Working Load Limit (t)* | Dimensions (mm) | | | | | | | | Weight Each (kg) |
|------------|------|------------------|--|-----------------|------|------|------|-----|------|------|------|------------------|
| (in.) | (mm) | | | C | D | E | F | G | J | L | | |
| - | 6 | 1004084 | 1.12 | 87.0 | 20.1 | 66.0 | 17.0 | 121 | 16.0 | 28.7 | .35 | |
| 1/4-5/16 | 7-8 | 1004086 | 2.0 | 114 | 27.9 | 89.0 | 22.1 | 159 | 20.6 | 35.1 | .81 | |
| 3/8 | 10 | 1004095 | 3.15 | 140 | 29.7 | 112 | 27.9 | 192 | 23.9 | 44.5 | 1.45 | |
| 1/2 | 13 | 1004102 | 5.3 | 173 | 42.4 | 138 | 32.0 | 242 | 29.5 | 53.5 | 3.06 | |
| 5/8 | 16 | 1004111 | 8.0 | 209 | 52.0 | 167 | 38.1 | 295 | 38.1 | 63.0 | 5.42 | |

* Ultimate Load is 4 times the Working Load Limit.

S-318A SHUR-LOC® Shank Hooks

| Chain Size | | S-318A Stock No. | Grade 80 Alloy Chain Working Load Limit (t)* | Dimensions (mm) | | | | | | | | | Weight Each (kg) |
|------------|------|------------------|--|-----------------|------|------|------|------|------|-----|------|------|------------------|
| (in.) | (mm) | | | A† | B | C | D | E | F | G | J | L | |
| - | 6 | 1098101 | 1.12 | 20.1 | 55.0 | 84.0 | 20.1 | 66.0 | 17.0 | 159 | 16.0 | 28.7 | .45 |
| 1/4-5/16 | 7-8 | 1098112 | 2.0 | 25.4 | 61.0 | 106 | 27.9 | 89.0 | 22.1 | 195 | 20.6 | 35.1 | .90 |
| 3/8 | 10 | 1098123 | 3.15 | 29.0 | 75.0 | 131 | 29.7 | 112 | 27.9 | 235 | 23.9 | 44.5 | 1.61 |
| 1/2 | 13 | 1098134 | 5.3 | 34.0 | 85.0 | 160 | 42.4 | 138 | 32.0 | 288 | 29.5 | 53.5 | 3.18 |
| 5/8 | 16 | 1098145 | 8.0 | 41.4 | 100 | 185 | 52.0 | 167 | 38.1 | 337 | 38.1 | 63.0 | 7.26 |

* Ultimate Load is 4 times the Working Load Limit.

Chain & Accessories

Grade 80 Alloy Eye Hooks



Load Rated

Fatigue Rated



SEE APPLICATION AND WARNING INFORMATION

On Pages 112-113

S-320AN



- The most complete line of Eye hoist hooks.
- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and Crosby & U.S.A. in raised letters.
- Meets ASTM A-952-96 standards for Grade 80 chain fittings.
- Suitable for use with Grade 80 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component. Per ANSI B30.9-1.
- Forged Alloy Steel - Quenched and Tempered.
- Engineered Flat for use with S-325A coupler link (thru 5/8").
- **QUIC-CHECK®** Hoist hooks incorporate two types of strategically placed markings forged into the product which address two (2) **QUIC-CHECK®** features:
- Deformation Indicators and Angle Indicators (see following page for detailed definition).
- Fatigue rated to 20,000 cycles at 1.1/2 times the working load limit.
- "Look for the color Gold - Crosby Alloy Products."
- Can be proof tested to 2-1/2 times the Working Load Limit (4:1).
- Low profile hook tip.
- Working Load Limit for Wire Rope forged on raised lettering pad to allow user to grind off quickly and easily without affecting hook.
 - Crosby recommends grinding the Working Load Limit (which is for a 5 to 1 Design Factor) off the hook when using with Grade 80 chain.
- New integrated latch (S-4320) meets the World class standard for lifting.
 - Heavy duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
 - When secured with proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.550 (g) for personnel lifting.

Crosby S-320AN Eye Hoist Hook Featuring an Engineered Flat

| Grade 80 Alloy Chain Size | | Working Load Limit (t) 4:1 * | Hook ID Code | Working Load Limit for Wire Rope (t) 5:1 | S-320AN Stock No. | Weight Each (kg) | Replacement Latch Stock No. | Recommended Cotter Pin Dimensions (mm) | |
|---------------------------|-------|---------------------------------|--------------|---|-------------------|------------------|-----------------------------|--|--------|
| (in.) | (mm) | | | | | | | Dia | Length |
| 7/32 | 6 | 1.12 | DA | 1.00 | 1022375 | .27 | 1096325 | 3.2 | 20 |
| 1/4-5/16 | 7 - 8 | 2 | GA | 2.00 | 1022397 | .65 | 1096421 | 3.2 | 25 |
| 3/8 | 10 | 3.15 | HA | 2.55 | 1022406 | .93 | 1096468 | 5 | 32 |
| 1/2 | 13 | 5.3 | IA | 4.30 | 1022419 | 1.95 | 1096515 | 6.3 | 40 |
| 5/8 | 16 | 8 | JA | 6.40 | 1022430 | 3.76 | 1096562 | 8 | 50 |
| 3/4 | 20 | 11.2 | KA | 9.20 | 1022441 | 6.80 | 1096609 | 8 | 50 |
| 7/8 | 22 | 15 | LA | 12.80 | 1022452 | 9.79 | 1096657 | 10 | 80 |
| 1 | 26 | 21.2 | NA | 17.60 | 1022465 | 17.91 | 1096704 | 10 | 80 |

* Minimum Ultimate Load is 4 times the Working Load Limit.

Grade 80 Alloy Eye Hooks

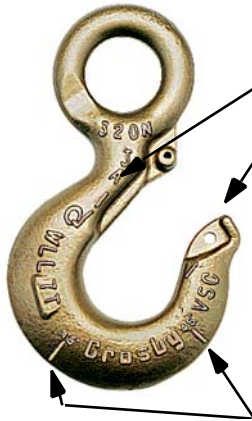


Load Rated

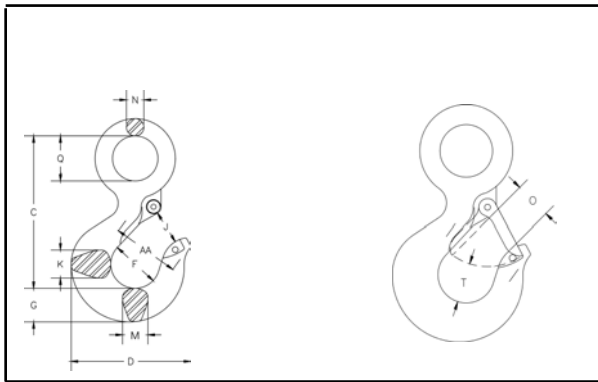
Fatigue Rated

SEE APPLICATION AND WARNING INFORMATION
On Pages 112-113

S-320AN



- Hoist hooks incorporate markings forged into the product which address two (2) **QUIC-CHECK®** features:
 - Deformation Indicators: Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a **QUIC-CHECK®** measurement to determine if the throat opening has changed, thus indicating abuse or overload. To check, use a measuring device (i.e., tape measure) to measure the distance between the marks. The marks should align. If the measurement does not meet this criteria, the hook should be inspected further for possible damage.
 - Angle Indicators: Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.



| Hook ID Code | Grade 80 Alloy Chain Size | | Working Load Limit (t) 4:1* | Dimensions (mm) | | | | | | | | | | |
|--------------|---------------------------|------|-----------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|
| | (in.) | (mm) | | C | D | F | G | J | K | M | N | O | Q | T |
| DA | 7/32 | 6 | 1.12 | 85 | 72.5 | 32.0 | 18.5 | 22.9 | 16.0 | 16.0 | 9.14 | 22.6 | 19.1 | 22.1 |
| GA | 1/4-5/16 | 7-8 | 2 | 108 | 90.0 | 38.1 | 25.4 | 25.1 | 22.4 | 22.4 | 12.7 | 25.4 | 28.7 | 26.2 |
| HA | 3/8 | 10 | 3.15 | 123 | 101 | 41.1 | 28.7 | 29.2 | 23.9 | 23.9 | 14.2 | 27.7 | 32.8 | 29.5 |
| IA | 1/2 | 13 | 5.3 | 150 | 124 | 51.0 | 36.6 | 38.6 | 33.3 | 33.3 | 17.5 | 34.5 | 39.6 | 38.9 |
| JA | 5/8 | 16 | 8 | 191 | 159 | 63.5 | 46.0 | 44.5 | 42.2 | 42.2 | 23.1 | 40.9 | 51.5 | 49.8 |
| KA | 3/4 | 19 | 11.2 | 233 | 191 | 76.0 | 57.0 | 61.0 | 47.8 | 41.4 | 28.2 | 52.0 | 62.0 | 62.5 |
| LA | 7/8 | 22 | 15 | 259 | 213 | 82.8 | 65.8 | 66.5 | 55.5 | 49.3 | 32.3 | 57.5 | 72.0 | 66.5 |
| NA | 1 | 26 | 21.2 | 326 | 263 | 108 | 76.2 | 86.5 | 68.5 | 60.5 | 39.9 | 76.5 | 89.0 | 72.0 |

* Minimum Ultimate Load is 4 times the Working Load Limit.

Chain & Accessories

Grade 80 Latching Clevis Hook

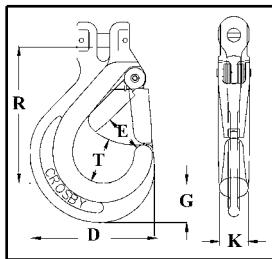


Fatigue Rated

S-314A



- Hook is Forged Alloy Steel - Quenched and Tempered.
- Integrated heavy duty latch.
- Large throat opening.
- Meets ASTM A-952-96 and proposed Euronorm standards for Grade 80 chain fittings.
- Anti-fouling due to carefully designed contours.
- Individually Proof Tested at 2.5 times the Working Load Limit with certification.
- Fatigue rated.
- "Look for the color Gold - Crosby Alloy Hooks."



S-314A

Clevis Chain Hook with Integrated Latch

| Chain Size | | S-314A Stock No. | Grade 80 Alloy Chain Working Load Limit (t) 4:1* | Weight Each (kg) | Dimensions (mm) | | | | | | Replacement Latch Stock No. |
|------------|-------|------------------|--|------------------|-----------------|------|------|------|-------|------|-----------------------------|
| (in.) | (mm) | | | | D | E | G | K | R | T | |
| - | 6 | 1225020 | 1.12 | .32 | 66.0 | 20.6 | 20.0 | 16.0 | 72.3 | 26.0 | 1291332 |
| 1/4 - 5/16 | 7 - 8 | 1225021 | 2 | .70 | 89.0 | 27.4 | 28.0 | 20.5 | 98.0 | 32.6 | 1291402 |
| 3/8 | 10 | 1225091 | 3.15 | 1.29 | 110.5 | 36.1 | 29.3 | 24.0 | 125.3 | 42.2 | 1291472 |
| 1/2 | 13 | 1225161 | 5.3 | 2.34 | 138.5 | 38.6 | 42.1 | 29.5 | 144.5 | 49.2 | 1291542 |
| 5/8 | 16 | 1225162 | 8 | 3.67 | 166.5 | 48.5 | 52.0 | 38.0 | 172.6 | 58.9 | 1291612 |

* Ultimate Load is 4 times the Working Load Limit.

Grade 80 Latching Eye Hook

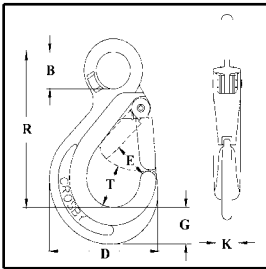


Fatigue Rated

S-315A



- Hook is Forged Alloy Steel - Quenched and Tempered.
- Integrated heavy duty latch.
- Large throat opening.
- Meets ASTM A-952-96 and proposed Euronorm standards for Grade 80 chain fittings.
- Anti-fouling due to carefully designed contours.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.
- Fatigue rated.
- "Engineered Flat" for use with S-325A Coupler Link.
- "Look for the color Gold - Crosby Alloy Hooks."



S-315A

Eye Chain Hook with Integrated Latch

| Chain Size | | S-315A Stock No. | Grade 80 Alloy Chain Working Load Limit (t) 4:1* | Working Load Limit for Wire Rope (t) 5:1 | Weight Each (kg) | Dimensions (mm) | | | | | | Replacement Latch Stock No. | |
|------------|------|------------------|--|--|------------------|-----------------|------|------|------|------|------|-----------------------------|---------|
| (in.) | (mm) | | | | | B | D | E | G | K | R | | T |
| - | 6 | 1029820 | 1.12 | 1 | .25 | 20.1 | 66.0 | 20.6 | 20.1 | 16.0 | 84.5 | 25.9 | 1291332 |
| 1/4-5/16 | 7-8 | 1029825 | 2 | 2 | .59 | 27.9 | 89.0 | 27.4 | 27.9 | 20.6 | 117 | 32.5 | 1291402 |
| 3/8 | 10 | 1029830 | 3.15 | 3 | 1.18 | 36.1 | 110 | 36.1 | 29.5 | 23.9 | 157 | 42.2 | 1291472 |
| 1/2 | 13 | 1029835 | 5.3 | 5 | 2.13 | 46.0 | 138 | 38.6 | 42.4 | 29.5 | 186 | 49.3 | 1291542 |
| 5/8 | 16 | 1029840 | 8 | 7 | 3.88 | 56.0 | 167 | 48.5 | 52.0 | 38.1 | 227 | 59.0 | 1291612 |

* Ultimate Load is 4 times the Working Load Limit.

Chain & Accessories

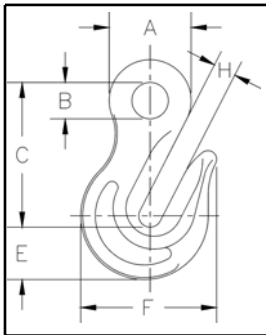
Grade 80 Alloy Fittings



A-328



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.



A-328 Eye Grab Hook

| Chain Size (mm) | A-328 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|------|
| | | | | A | B | C | E | F | H |
| 7 | 1026017 | 1.59 | .27 | 35.1 | 15.0 | 65.0 | 23.1 | 55.0 | 9.65 |
| 10 | 1026035 | 3.22 | .54 | 45.7 | 20.3 | 82.5 | 29.5 | 76.0 | 12.7 |
| 13 | 1026053 | 5.45 | 1.36 | 57.0 | 24.9 | 106 | 42.9 | 102 | 16.0 |
| 19 | 1026099 | 12.84 | 3.74 | 82.0 | 34.5 | 151 | 55.5 | 139 | 22.4 |
| 22 | 1026115 | 15.51 | 5.40 | 94.0 | 39.4 | 175 | 65.0 | 160 | 26.9 |

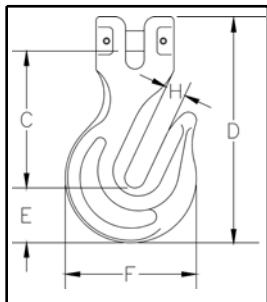
* Ultimate Load is 4 times the Working Load Limit.



A-338



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.
- Pin locking requires no special tools.



A-338 Clevis Grab Hook

| Chain Size (mm) | A-338 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|-----|------|------|------|
| | | | | C | D | E | F | H |
| 7 | 1027659 | 1.59 | .28 | 66.5 | 106 | 22.6 | 55.0 | 9.65 |
| 10 | 1027677 | 3.22 | .57 | 81.5 | 132 | 29.5 | 76.0 | 12.7 |
| 13 | 1027686 | 5.45 | 1.56 | 106 | 177 | 42.9 | 102 | 15.7 |
| 16 | 1027695 | 8.21 | 2.56 | 128 | 210 | 47.8 | 118 | 19.1 |
| 19 | 1027702 | 12.84 | 4.72 | 151 | 253 | 55.5 | 134 | 22.4 |
| 22 | 1027711 | 15.51 | 6.18 | 176 | 294 | 65.0 | 155 | 25.4 |

* Ultimate Load is 4 times the Working Load Limit.

Grade 80 Alloy Fittings

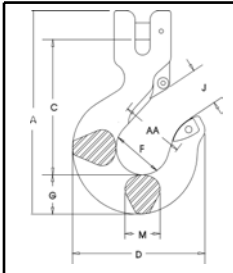
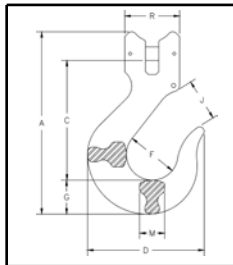


A-339N



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.
- Pin locking requires no special tools.
- New integrated latch (S-4320) fits 6mm - 16mm hooks.
 - Heavy duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
 - When secured with proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.550 (g) for personnel lifting.
- S-4088 Latch fits 3/4" & 7/8" hooks.

A-339 A-339N



A-339N Clevis Sling Hook

| Hook Size | | A-339N Stock No. | Hook ID Code | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | |
|------------|------|------------------|--------------|-------------------------|------------------|-----------------|------|------|------|------|------|------|------|
| (in.) | (mm) | | | | | A | C | D | F | G | J | M | AA |
| — | 6 | 1027910 | DA ‡ | 1.12 | .27 | 107 | 75.0 | 72.5 | 32.0 | 18.5 | 23.6 | 406 | 38.1 |
| 1/4 - 5/16 | 7-8 | 1027914 | HA ‡ | 2 | .68 | 144 | 101 | 98.0 | 41.1 | 26.2 | 30.2 | 484 | 51.0 |
| 3/8 | 10 | 1027923 | IA ‡ | 3.15 | .95 | 171 | 120 | 111 | 51.0 | 30.2 | 38.9 | 606 | 63.5 |
| 1/2 | 13 | 1027932 | JA ‡ | 5.3 | 1.90 | 213 | 150 | 142 | 63.5 | 36.6 | 45.2 | 729 | 76.2 |
| 5/8 | 16 | 1027941 | KA ‡ | 8 | 3.80 | 259 | 177 | 172 | 76.0 | 47.8 | 61.0 | 929 | 102 |
| 3/4** | 20 | 1027793 | - | 11.2 | 5.20 | 294 | 170 | 187 | 82.5 | 55.0 | 68.5 | 1019 | — |
| 7/8** | 22 | 1027800 | - | 15 | 8.00 | 334 | 193 | 215 | 92.0 | 62.0 | 77.5 | 1129 | — |

* Ultimate Load is 4 times the Working Load Limit

** Old Style 339 hooks.

‡ New A-339N Style hooks.

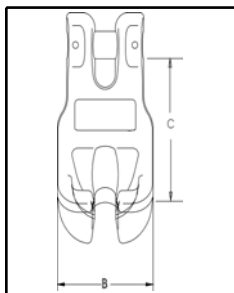


Fatigue Rated

S-311A



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.
- Fatigue rated.
- Provided with spring designed to retain chain.



S-311A Chain Shortener Link

| Chain Size | | Working Load Limit (t)* | S-311A Stock No. | Weight Each (kg) | Dimensions (mm) | |
|------------|-------|-------------------------|------------------|------------------|-----------------|------|
| (in.) | (mm) | | | | B | C |
| - | 6 | 1.12 | 1098051 | .34 | 37.1 | 43.7 |
| 1/4-5/16 | 7 - 8 | 2 | 1098062 | .45 | 49.0 | 67.8 |
| 3/8 | 10 | 3.15 | 1098084 | .68 | 57.7 | 77.2 |
| 1/2 | 13 | 5.3 | 1098095 | 1.47 | 75.9 | 99.5 |
| 5/8 | 16 | 8 | 1098106 | 2.54 | 84.6 | 120 |

* Ultimate Load is 4 times the Working Load Limit

Chain & Accessories

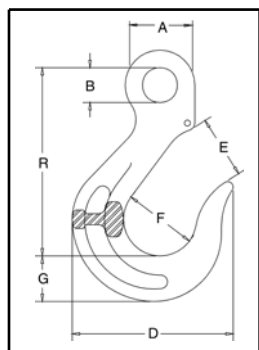
Grade 80 Alloy Fittings



A-327



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.
- S-4088 Latch Kit fits hooks.



A-327 Eye Sling Hook

| Chain Size (mm) | A-327 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | Replacement Latch Stock No. |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|------|------|-----------------------------|
| | | | | A | B | D | E | F | G | R | |
| 7 | 1003764 | 1.59 | .36 | 34.0 | 14.2 | 88.0 | 33.0 | 44.5 | 22.6 | 94.5 | 1090250 |
| 10 | 1003773 | 3.22 | .95 | 46.5 | 19.1 | 116 | 35.6 | 56.5 | 31.8 | 120 | 1090251 |
| 13 | 1003782 | 5.45 | 1.68 | 57.0 | 23.9 | 140 | 44.5 | 63.5 | 39.4 | 144 | 1090252 |
| 16 | 1003791 | 8.21 | 2.90 | 70.5 | 28.4 | 165 | 51.0 | 73.0 | 47.8 | 167 | 1090253 |
| 19 | 1003808 | 12.84 | 4.45 | 83.0 | 32.5 | 187 | 54.5 | 83.0 | 55.0 | 193 | 1090254 |
| 22 | 1003817 | 15.51 | 7.00 | 94.5 | 36.6 | 215 | 63.5 | 92.0 | 62.5 | 217 | 1090255 |

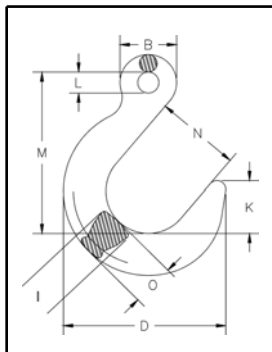
* Ultimate Load is 4 times the Working Load Limit.



A-329



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Working Load Limit with certification.



A-329 Eye Foundry Hook

| Chain Size (mm) | A-329 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|-----|------|------|------|-----|------|------|
| | | | | B | D | I | K | L | M | N | O |
| 7 | 1026179 | 1.59 | 1.09 | 39.6 | 121 | 25.4 | 39.6 | 16.0 | 121 | 63.5 | 31.2 |
| 10 | 1026197 | 3.22 | 2.04 | 50.8 | 145 | 32.3 | 47.8 | 19.1 | 146 | 76.0 | 38.1 |
| 13 | 1026213 | 5.45 | 3.22 | 63.5 | 171 | 38.1 | 56.5 | 25.4 | 175 | 89.0 | 44.5 |
| 16 | 1026231 | 8.21 | 5.53 | 76.2 | 198 | 46.0 | 67.0 | 31.8 | 205 | 102 | 51.5 |
| 19 | 1026259 | 12.84 | 8.75 | 88.9 | 232 | 56.0 | 89.0 | 38.1 | 235 | 114 | 65.0 |
| 22 | 1026277 | 15.51 | 11.9 | 102 | 256 | 57.0 | 86.0 | 44.5 | 264 | 127 | 70.5 |

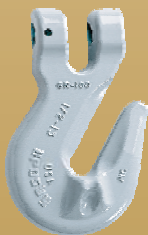
* Ultimate Load is 4 times the Working Load Limit.

INTRODUCING

Spectrum 10[®] Grade 100 Chain Fittings

Crosby 8/10[™]

*SETTING THE STANDARD
FOR PREMIUM CHAIN FITTINGS*



- ✓ Can be used with either Grade 100 or Grade 80 chain.
 - Meets the requirements of the Grade 100 specification.
 - Meets the performance, dimensional and functionality requirements of Grade 8 (80) specification ASTM A952 and EN1677.
- ✓ Forged Alloy Steel - Quenched & Tempered
- ✓ Individually Proof Tested with Certification.
- ✓ *Fatigue Rated* at 1-1/2 times the Working Load Limit at 20,000 cycles.
- ✓ Size for size, *20% to 25% more capacity* than Grade 80 fittings.
- ✓ "Look for the Platinum color"

theCrosby group, inc.

Fatigue Rated



QUIC-CHECK[®]



"When buying Crosby, you're buying more than product, you're buying Quality."

Grade 100 Alloy Chain

GENERAL INFORMATION

WORKING LOAD LIMIT

The "Working Load Limit" is the maximum load in tons which should ever be applied to chain, when the chain is new or "in as new" condition, and when the load is uniformly applied in direct tension to a straight length of chain.

PROOF TEST

The "Proof Test" is a term designating the tensile test applied to new chain for the sole purpose of detecting injurious defects in the material or manufacture. It is the load which the chain has withstood under a test in which the load has been applied in direct tension to a straight length of chain.

ANSI / ASME B30.9c-1997

Paragraph 9-1.4.2 "Mechanically assembled slings shall be comprised entirely of proof tested components." Paragraph 9-1.4.2c "If untested components are employed, the sling shall be proof tested per Para. 9-1.4.1 prior to initial use."

MINIMUM ULTIMATE LOAD

The "Minimum Ultimate Load" is the minimum load at which new chain will break when tested by applying direct tension to

a straight length of chain at a uniform rate of speed in a testing machine.

ATTACHMENTS

Any attachments, such as hooks or links, should have a rated "Working Load Limit" at least equal to the chain with which it is used.

CAUTION

Only Crosby Alloy chain, Spectrum 8[®] or Spectrum 10[®], (Grade 80 or Grade 100) should be used for overhead lifting applications.

It must be recognized that certain factors in the usage of chain and attachments can be abusive and lessen the load that the chain or attachments can withstand. Some examples are twisting of the chain; disfigurement; deterioration by straining, usage, weathering and corrosion; rapid application of load or jerking, applying excessive loads; and sharp corners cutting action.

Due to the crushing effect Grab Hooks have upon chain, the design factor of all chain assemblies must be reduced by 20% for Grab Hook applications.

CHAIN INSPECTION

INSPECTION AND REMOVAL FROM SERVICE PER ANSI B30.9

FREQUENT INSPECTION

Normal Service - Monthly
Severe Service - Daily to Monthly

Check chain and attachments for wear, nicks, cracks, breaks, gouges, stretch, bend, weld splatter, discoloration from excessive temperature, and throat openings of hooks.

- Chain links and attachments should hinge freely to adjacent links.
- Latches on hooks, if present, should hinge freely and seat properly without evidence of permanent distortion.

PERIODIC INSPECTION - INSPECTION RECORDS REQUIRED

Normal Service - Yearly
Severe Service - Monthly

This inspection shall include everything in a frequent inspection plus each link and end attachment shall be examined individually, taking care to expose inner link surfaces of the chain and chain attachments.

- Worn links should not exceed values given in table 1 or recommended by the manufacturer.
- Sharp transverse nicks and gouges should be rounded out by grinding and the depth of the grinding should not exceed values in Table 1.
- Hooks should be inspected in accordance with ANSI B30.10.
- If present, latches on hooks should seat properly, rotate freely, and show no permanent distortion.
- Chains use OSHA and ASME regulations and safety information.

See: OSHA 1926.2 (a) 4 and 1910.184
ASME B30.9 Slings
ASME B30.10 Hooks

| Normal Chain or Coupling Link Cross Section | | Maximum Allowable Wear Diameter (mm) |
|---|------|--------------------------------------|
| (in.) | (mm) | |
| — | 6 | .79 |
| 1/4 - 9/32 | 7 | .94 |
| 5/16 | 8 | 1.05 |
| 3/8 | 10 | 1.32 |
| 1/2 | 13 | 1.75 |
| 5/8 | 16 | 2.13 |
| 3/4 | 19 | 2.67 |
| 7/8 | 22 | 2.95 |
| 1 | 25 | 3.48 |
| 1 1/4 | 32 | 4.29 |

REFER TO ANSI B30.9

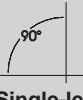
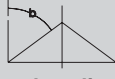

| Temperature of Chain | | Reduction* of Working Load Limit WHILE AT Temperature | Reduction of Working Load Limit AFTER EXPOSURE to Temperatures** |
|----------------------|-----------|---|--|
| (F°) | (C°) | | |
| Below 400 | Below 204 | None | None |
| 400 | 204 | 15% | None |
| 500 | 260 | 25% | 5% |
| 600 | 316 | 30% | 15% |
| 700 | 371 | 40% | 20% |
| 800 | 427 | 50% | 25% |

* Crosby does not recommend the use of Alloy Chain at temperatures above 800° F.**

** When chain is used at room temperature after being heated to temperatures shown in the first column.

Grade 100 Alloy Chain

WORKING LOAD LIMIT — 4 TO 1 DESIGN FACTOR

| Nominal size of sling | |  Single-leg slings |  Two leg slings | |  Three-and four-leg slings | | Choke hitch |
|-----------------------|----------|--|---|----------------------------------|--|----------------------------------|-------------|
| | | | $0^\circ < \beta \leq 45^\circ$ | $45^\circ < \beta \leq 60^\circ$ | $0^\circ < \beta \leq 45^\circ$ | $45^\circ < \beta \leq 60^\circ$ | |
| (in.) | mm | t | t | t | t | t | t |
| — 1/4 | 6 7 | 1.4 2 | 2 2.8 | 1.4 2 | 3 4.2 | 2.12 3 | 1.12 1.6 |
| 5/16 3/8 | 8 10 | 2.5 4 | 3.55 5.6 | 2.5 4 | 5.3 8.4 | 3.75 6 | 2.1 3.2 |
| 1/2 5/8 | 13 16 | 6.7 10 | 9.5 14 | 6.7 10 | 14 21.2 | 10 15 | 5.45 8.2 |

TO MAKE YOUR CROSBY GRADE 100 ALLOY CHAIN SLING

Follow these simple steps in making a sling assembly:

Determine the maximum load to be lifted by the sling assembly.

Choose the type of sling assembly suited for the shape of the load and the size of the sling assembly for the load to be lifted. The decision must take into account the angle of the sling legs in multileg slings.

Determine the overall reach for bearing point of master link to bearing point on hook.

Select components, assemble chain and components. Affix sling identification tag to sling. The tag is available from your Crosby Distributor. The tag should be stamped with size chain, reach, type sling, Working Load Limit at a specific angle of lift, and some identifying number for record keeping.

If measurement comes in the link, cut the following link. For two leg type count the links and use an even number for clevis hooks and an odd number for eye hooks. This will position hooks in the same plane. In multileg slings always use the same number of links in each leg.

CAUTION

Derate chain in accordance with working load limit chart shown above.

A chain grab hook application will result in 20% reduction of chain capacity. If a grab hook is used to make a choker hitch, no reduction to chain capacity is necessary.

Care should be taken to observe these derated applications or chain may fracture or permanently stretch at loads less than the advertised chain ultimate strength and proof load respectively.

Grade 100 Alloy Chain

GRADE 100 ALLOY CHAIN



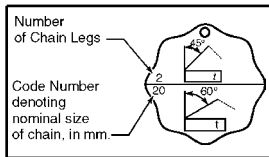
- Alloy Steel
- Heat Treated
- Finish - Self Colored.
- Permanently embossed with manufacturer's marking and 10 (Grade).

Grade 100 Chain For overhead lifting applications

| Chain Size | | Meters Per Drum | Dimensions (mm) | Working Load Limit (t)* | Weight Per Meter (kg) |
|------------|------|--------------------|--------------------|----------------------------------|--------------------------------|
| (in.) | (mm) | | | | |
| - | 6 | 200 | 6 x 18 | 1.40 | .80 |
| 1/4 | 7 | 200 | 7 x 21 | 2.00 | 1.05 |
| 5/16 | 8 | 200 | 8 x 24 | 2.50 | 1.25 |
| 3/8 | 10 | 200 | 10 x 30 | 4.00 | 2.20 |
| 1/2 | 13 | 100 | 13 x 39 | 6.70 | 3.80 |
| 5/8 | 16 | 100 | 16 x 48 | 10.0 | 5.70 |

* Proof loaded at 2-1/2 times Working Load Limit. Minimum Ultimate Load is 4 times the Working Load Limit.

SLING ID TAG



Sling ID Tag Kit

- Octagonal metal sling tag.
- Prestamped - easy to add sling length, Working Load Limit, name, etc.
- Front side is shown - reverse is blank.
- Available with or without welded attached ring.
- Attaching ring size is 5mm x 50mm.
- Available completely blank for wire rope sling applications.
- Gold painted.

| ID Tag Stock No. With Ring | ID Tag Stock No. Without Ring | Application |
|----------------------------------|-------------------------------------|---------------------------------|
| 1152445 | 1200829 | For single leg sling 90° |
| 1152444 | 1200830 | For multi-leg sling : 45° / 60° |

Grade 100 Chain Sling Components

“Proof Tested” Parts needed to make Self Assembled Slings

Key to Selecting Proper Components

To locate proper size Crosby chain fittings for required chain size, use the following steps.

1. Locate proper table (below) for type of sling being assembled (Single, Double, Triple or Quad Leg).
2. Determine size of chain required from the Working Load Limit table on page 181.
3. Locate proper chain size in the “Grade 100 Chain Size” column in the proper table below.
4. Follow the row across until desired style of fitting is found. The size shown indicates the proper size Crosby chain fitting to be used.



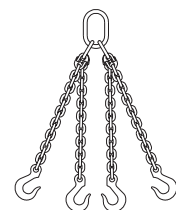
Single Leg Sling



Double Leg Sling



Triple Leg Sling



Quad Leg Sling

All grade 100 fittings shown below can also be attached to Grade 80 Chain. NOTE: This will require the slings rated capacity to be no greater than the load rating of Grade 80 chain (or the weakest component).

SINGLE LEG SLING

| Grade 100 Chain Size | | | | | | | | | |
|----------------------|------|-------------------------------|-----------------------------|---------------------------------|--------------------------------------|---|----------------------------------|-------------------------------------|-----------------------------------|
| (in.) | (mm) | Master Link A-1342 (in. - mm) | Master Link Assembly A-1345 | Chain Coupler S-1325 (in. - mm) | SHUR-LOC® Eye Hook S-1316 (in. - mm) | SHUR-LOC® Clevis hook S-1317 (in. - mm) | Eye Sling Hook S-1320 (in. - mm) | Clevis Sling Hook A-1339 (in. - mm) | Chain Shortener S-1311 (in. - mm) |
| — | 6 | 1/4-5/16-7-8 | — | 6 | 6 | 6 | 6 | 6 | 6 |
| 1/4 (9/32) | 7 | 1/4-5/16-7-8 | — | 1/4 - 7 | 1/4-5/16 - 7-8 | 1/4 - 7 | 1/4-5/16 - 7-8 | 1/4 - 7 | 1/4 - 7 |
| 5/16 | 8 | 1/4-5/16-7-8 | — | 5/16 - 8 | 1/4-5/16 - 7-8 | 5/16 - 8 | 1/4-5/16 - 7-8 | 5/16 - 8 | 5/16 - 8 |
| 3/8 | 10 | 3/8 - 10 | — | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 |
| 1/2 | 13 | 1/2 - 13 | — | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 |
| 5/8 | 16 | 5/8 - 16 | — | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 |

Chain & Accessories

DOUBLE LEG SLING

| Grade 100 Chain Size | | Master Link A-1342 | Master Link Assembly A-1345 | Chain Coupler S-1325 | SHUR-LOC® Eye Hook S-1316 | SHUR-LOC® Clevis hook S-1317 | Eye Sling Hook S-1320 | Clevis Sling Hook A-1339 | Chain Shortener S-1311 |
|----------------------|------|-------------------------------|-----------------------------|---------------------------------|--------------------------------------|---|----------------------------------|-------------------------------------|-----------------------------------|
| (in.) | (mm) | Master Link A-1342 (in. - mm) | Master Link Assembly A-1345 | Chain Coupler S-1325 (in. - mm) | SHUR-LOC® Eye Hook S-1316 (in. - mm) | SHUR-LOC® Clevis hook S-1317 (in. - mm) | Eye Sling Hook S-1320 (in. - mm) | Clevis Sling Hook A-1339 (in. - mm) | Chain Shortener S-1311 (in. - mm) |
| — | 6 | 1/4-5/16-7-8 | — | 6 | 6 | 6 | 6 | 6 | 6 |
| 1/4 (9/32) | 7 | 3/8 - 10 | — | 1/4 - 7 | 1/4-5/16 - 7-8 | 1/4 - 7 | 1/4-5/16 - 7-8 | 1/4 - 7 | 1/4 - 7 |
| 5/16 | 8 | 3/8 - 10 | — | 5/16 - 8 | 1/4-5/16 - 7-8 | 5/16 - 8 | 1/4-5/16 - 7-8 | 5/16 - 8 | 5/16 - 8 |
| 3/8 | 10 | 1/2 - 13 | — | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 |
| 1/2 | 13 | 5/8 - 16 | — | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 |

TRIPLE AND QUAD LEG SLINGS

| Grade 100 Chain Size | | Master Link A-1342 | Master Link Assembly A-1345 | Chain Coupler S-1325 | SHUR-LOC® Eye Hook S-1316 | SHUR-LOC® Clevis hook S-1317 | Eye Sling Hook S-1320 | Clevis Sling Hook A-1339 | Chain Shortener S-1311 |
|----------------------|------|--------------------|--|---------------------------------|--------------------------------------|---|----------------------------------|-------------------------------------|-----------------------------------|
| (in.) | (mm) | Master Link A-1342 | Master Link Assembly A-1345 (in. - mm) | Chain Coupler S-1325 (in. - mm) | SHUR-LOC® Eye Hook S-1316 (in. - mm) | SHUR-LOC® Clevis hook S-1317 (in. - mm) | Eye Sling Hook S-1320 (in. - mm) | Clevis Sling Hook A-1339 (in. - mm) | Chain Shortener S-1311 (in. - mm) |
| — | 6 | — | 1/4-5/16 - 7-8 | 6 | 6 | 6 | 6 | 6 | 6 |
| 1/4 (9/32) | 7 | — | 3/8 - 10 | 1/4 - 7 | 1/4-5/16 - 7-8 | 1/4 - 7 | 1/4-5/16 - 7-8 | 1/4 - 7 | 1/4 - 7 |
| 5/16 | 8 | — | 3/8 - 10 | 5/16 - 8 | 1/4-5/16 - 7-8 | 5/16 - 8 | 1/4-5/16 - 7-8 | 5/16 - 8 | 5/16 - 8 |
| 3/8 | 10 | — | 1/2 - 13 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 | 3/8 - 10 |
| 1/2 | 13 | — | 5/8 - 16 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 | 1/2 - 13 |
| 5/8 | 16 | — | 3/4 - 20 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 | 5/8 - 16 |

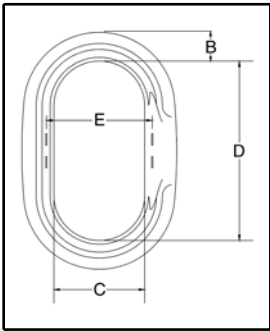
Grade 100 Alloy Master Links



A-1342



- Alloy Steel - Quenched and Tempered.
- Individually proof tested to values shown with certification.
- Proof test certification shipped with each link.
- All sizes are drop forged.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."



A-1342 Master Link

| A-1342 Size | | A-1342 Stock No. | Working Load Limit (t)* | Proof Load (t) | Weight Each (kg) | Dimensions (mm) | | | |
|-------------|-------|------------------|-------------------------|----------------|------------------|-----------------|------|-----|------|
| (in.) | (mm) | | | | | B | C | D | E |
| 1/4 - 5/16 | 7 - 8 | 1014904 | 2.6 | 5.8 | .59 | 19.1 | 68.5 | 121 | 79.5 |
| 3/8 | 10 | 1014913 | 4.5 | 10.3 | 1.14 | 24.4 | 76.0 | 152 | 89.0 |
| 1/2 | 13 | 1014922 | 6.9 | 16.0 | 2.15 | 31.0 | 108 | 178 | 121 |
| 5/8 | 16 | 1014931 | 11.8 | 27.3 | 4.35 | 39.1 | 127 | 229 | 146 |
| 3/4 | 20 | 1014940 | 17.75 | 41.0 | 7.55 | 49.5 | 140 | 254 | 165 |

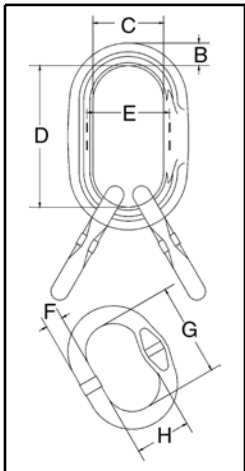
* Minimum Ultimate Load is 4 times the Working Load Limit based on single leg sling.



A-1345



- Alloy Steel - Quenched and Tempered.
- Individually proof tested to values shown with certification.
- Proof test certification shipped with each link.
- All sizes are drop forged.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."



A-1345 Master Link Assembly

| A-1345 Size | | A-1345 Stock No. | Grade 100 Chain Size | | Working Load Limit (t)* | Proof Load (t) | Weight Each (kg) | Dimensions (mm) | | | | | | | |
|-------------|-------|------------------|----------------------|-------|-------------------------|----------------|------------------|-----------------|------|-----|------|------|------|------|--|
| (in.) | (mm) | | (in.) | (mm) | | | | B | C | D | E | F | G | H | |
| 1/4 - 5/16 | 7 - 8 | 1014003 | - | 6 | 3.75 | 8.7 | 1.22 | 19.1 | 68.5 | 121 | 79.5 | 14.2 | 85.0 | 45.0 | |
| 3/8 | 10 | 1014012 | 1/4 - 5/16 | 7 - 8 | 6.7 | 15.5 | 2.59 | 24.4 | 76.2 | 152 | 89.0 | 19.1 | 100 | 60.0 | |
| 1/2 | 13 | 1014021 | 3/8 | 10 | 10.4 | 24.0 | 3.90 | 31.0 | 108 | 178 | 121 | 25.4 | 160 | 90.0 | |
| 5/8 | 16 | 1014030 | 1/2 | 13 | 17.7 | 40.9 | 8.98 | 39.1 | 127 | 229 | 146 | 31.8 | 180 | 100 | |
| 3/4 | 20 | 1014038 | 5/8 | 16 | 26.6 | 61.5 | 13.9 | 49.5 | 140 | 254 | 165 | 35.1 | 205 | 115 | |

* Minimum Ultimate Load is 4 times the Working Load Limit based on single leg sling.

Crosby® Grade 100 Eye Hooks



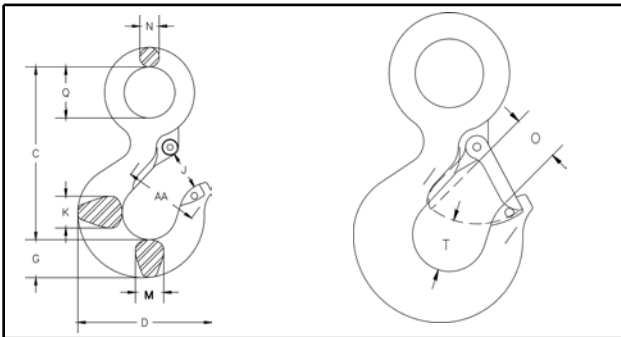
Fatigue Rated

SEE APPLICATION AND WARNING INFORMATION
On Pages 112-113

S-1320



- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby & U.S.A. in raised letters.
- Meets ASTM A-952 standards for Grade 100 chain fittings.
- Suitable for use with Grade 100 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component. Per ANSI B30.9-1.
- Forged Alloy Steel - Quenched and Tempered.
- Individually proof tested to values shown with certification.
- Proof test certification shipped with each link.
- Engineered Flat for use with S-1325A coupler link.
- **QUIC-CHECK®** Hoist hooks incorporate two types of strategically placed markings forged into the product which address two (2) **QUIC-CHECK®** features : Deformation Indicators and Angle Indicators.
- Fatigue rated to 20,000 cycles at 1.1/2 times the working load limit.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."
- Low profile hook tip.
- New integrated latch (S-4320) meets the world standard for lifting.
 - Heavy duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
 - When secured with the proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.550(g) for personnel lifting.



S-1320 Eye Hoist Hook

| Grade 100 Alloy Chain Size | | Working Load Limit (t)* | Hook ID Code | S-1320 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | Replacement Latch Stock No. | |
|----------------------------|-------|-------------------------|--------------|------------------|------------------|-----------------|------|------|------|------|------|------|------|------|------|-----------------------------|---------|
| (in.) | (mm) | | | | | C | D | G | J | K | M | N | O | Q | T | | AA |
| - | 6 | 1.4 | DA | 1025802 | .27 | 85.0 | 72.5 | 18.5 | 22.9 | 16.0 | 406 | 9.15 | 22.6 | 19.1 | 22.1 | 38.1 | 1096325 |
| 1/4-5/16 | 7 - 8 | 2.6 | GA | 1025811 | .65 | 108 | 91.2 | 25.4 | 25.1 | 22.4 | 568 | 12.7 | 25.4 | 28.7 | 26.2 | 51.0 | 1096421 |
| 3/8 | 10 | 4.0 | HA | 1025820 | .93 | 123 | 101 | 28.7 | 29.2 | 23.9 | 606 | 14.2 | 27.7 | 32.8 | 29.5 | 51.0 | 1096468 |
| 1/2 | 13 | 6.8 | IA | 1025839 | 1.95 | 147 | 123 | 36.6 | 38.6 | 33.3 | 845 | 17.5 | 34.5 | 39.6 | 38.9 | 63.5 | 1096515 |
| 5/8 | 16 | 10.3 | JA | 1025848 | 3.76 | 187 | 159 | 46.0 | 44.5 | 42.2 | 1071 | 23.1 | 40.9 | 51.5 | 49.8 | 76.0 | 1096562 |

* Ultimate Load is 4 times the Working Load Limit.

Chain & Accessories

Crosby® Grade 100 Clevis Hooks

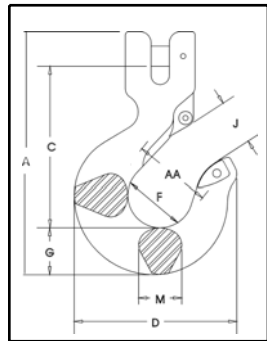


Fatigue Rated

A-1339



- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby & U.S.A. in raised letters.
- Meets ASTM A-952 standard for Grade 100 chain fittings.
- Suitable for use with Grade 100 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component. Per ANSI B30.9-1.
- Forged Alloy Steel- Quenched and Tempered.
- **QUIC-CHECK®** Hoist hooks incorporate two types of strategically placed markings forged into the product which address two (2) **QUIC-CHECK®** features : Deformation Indicators and Angle Indicators.
- Fatigue rated to 20,000 cycles at 1.1/2 times the working load limit.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."
- Individually proof tested to values shown with certification.
- New integrated latch (S-4320) meets the world standard for lifting.
 - Heavy duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
 - When secured with the proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.550(g) for personnel lifting.



A-1339 Clevis Sling Hook

| Chain Size | | Working Load Limit (t)* | Hook ID Code | A-1339 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | Replacement Latch Stock No. |
|------------|------|-------------------------|--------------|------------------|------------------|-----------------|------|------|------|------|-----------------------------|
| (in.) | (mm) | | | | | C | D | G | J | AA | |
| - | 6 | 1.4 | DA | 1048982 | .27 | 75.0 | 72.5 | 18.5 | 23.6 | 38.1 | 1096325 |
| 1/4 | 7 | 1.9 | HA | 1048991 | .43 | 101 | 98.0 | 26.2 | 30.2 | 51.0 | 1096468 |
| 5/16 | 8 | 2.6 | HA | 1049000 | .43 | 101 | 98.0 | 26.2 | 30.2 | 51.0 | 1096468 |
| 3/8 | 10 | 4.0 | JA | 1049009 | .97 | 120 | 111 | 30.2 | 38.9 | 63.5 | 1096515 |
| 1/2 | 13 | 6.8 | JA | 1049018 | 1.97 | 150 | 142 | 36.6 | 45.2 | 76.0 | 1096562 |
| 5/8 | 16 | 10.3 | KA | 1049027 | 3.37 | 177 | 172 | 47.8 | 61.0 | 102 | 1096609 |

* Ultimate Load is 4 times the Working Load Limit.

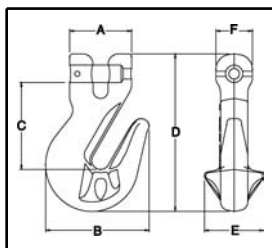


Fatigue Rated

A-1338



- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby & U.S.A. in raised letters.
- Innovative cradle design allows for 100% efficiency of Grade 100 chain.
- Meets ASTM A-952 standard for Grade 100 chain fittings.
- Suitable for use with Grade 100 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component. Per ANSI B30.9-1.
- Forged Alloy Steel- Quenched and Tempered.
- Individually proof tested to values shown with certification.
- Fatigue rated to 20,000 cycles at 1.1/2 times the working load limit.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."



A-1338 Cradle Grab Hook

| Chain Size | | Working Load Limit (t)* | A-1338 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | |
|------------|------|-------------------------|------------------|------------------|-----------------|------|------|------|------|------|
| (in.) | (mm) | | | | A | B | C | D | E | F |
| 1/4 | 7 | 1.9 | 1049417 | .48 | 43.7 | 64.5 | 55.9 | 98.5 | 38.1 | 22.4 |
| 5/16 | 8 | 2.6 | 1049426 | .48 | 43.7 | 64.5 | 55.4 | 98.5 | 38.1 | 22.4 |
| 3/8 | 10 | 4.0 | 1049435 | .79 | 47.0 | 78.5 | 65.5 | 119 | 46.5 | 27.7 |
| 1/2 | 13 | 6.8 | 1049444 | 1.62 | 60.7 | 97.3 | 83.3 | 149 | 57.2 | 36.1 |
| 5/8 | 16 | 10.3 | 1049453 | 2.90 | 67.8 | 115 | 97.8 | 179 | 74.7 | 44.5 |

* Ultimate Load is 4 times the Working Load Limit.

Crosby® Grade 100 SHUR-LOC® Hooks



Fatigue Rated

SEE APPLICATION AND WARNING INFORMATION
On Pages 208-209

S-1316



- Positive Lock Latch is Self-Locking when hook is loaded.
- Meets ASTM A-952 standard for Grade 100 chain fittings.
- Forged Alloy Steel - Quenched and Tempered.
- Individually Proof Tested to 2-1/2 times the Working Load Limit with certification.
- The SHUR-LOC® hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.550 (g) (4) (iv) (B).
- Eye style is designed with "Engineered Flat" to connect to S-1325 chain coupler.
- Fatigue rated to 20,000 cycles at 1.1/2 times the working load limit.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."

S-1317

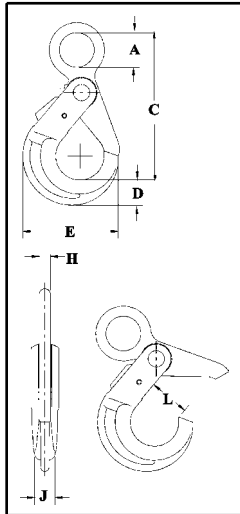


SHUR-LOC® Hook Series with Positive Locking Latch

S-1316 Eye Hook

| Chain Size | | Working Load Limit (t)* | S-1316 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | |
|------------|------|-------------------------|------------------|------------------|-----------------|-----|------|------|------|------|
| (in.) | (mm) | | | | A | C | D | E | J | L |
| - | 6 | 1.4 | 1022896 | .39 | 20.1 | 100 | 20.1 | 66.0 | 16.0 | 29.0 |
| 1/4-5/16 | 7-8 | 2.5 | 1022914 | .82 | 24.9 | 135 | 27.9 | 89.0 | 20.6 | 37.1 |
| 3/8 | 10 | 4 | 1022923 | 1.47 | 33.0 | 167 | 29.7 | 112 | 23.9 | 47.5 |
| 1/2 | 13 | 6.7 | 1022932 | 2.70 | 46.0 | 209 | 42.4 | 138 | 29.5 | 53.5 |
| 5/8 | 16 | 10 | 1022941 | 5.78 | 56.0 | 256 | 52.0 | 167 | 38.1 | 63.0 |

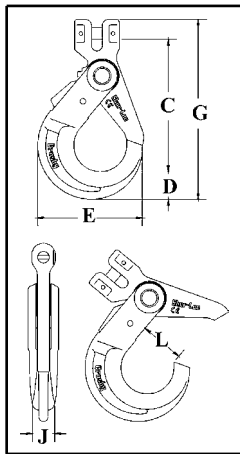
* Minimum Ultimate Load is 4 times the Working Load Limit.



S-1317 Clevis Hook

| Chain Size | | Working Load Limit (t)* | S-1317 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | |
|------------|------|-------------------------|------------------|------------------|-----------------|------|------|-----|------|------|
| (in.) | (mm) | | | | C | D | E | G | J | L |
| - | 6 | 1.4 | 1028991 | .35 | 87.0 | 20.1 | 66.0 | 121 | 16.0 | 28.7 |
| 1/4 | 7 | 2 | 1029000 | .81 | 114 | 27.9 | 89.0 | 159 | 20.6 | 35.1 |
| 5/16 | 8 | 2.5 | 1029009 | .81 | 114 | 27.9 | 89.0 | 159 | 20.6 | 35.1 |
| 3/8 | 10 | 4 | 1029018 | 1.45 | 140 | 29.7 | 112 | 192 | 24.1 | 44.5 |
| 1/2 | 13 | 6.7 | 1029027 | 3.06 | 170 | 42.4 | 138 | 242 | 29.5 | 53.5 |
| 5/8 | 16 | 10 | 1029036 | 5.42 | 208 | 52.0 | 167 | 295 | 38.1 | 63.0 |

* Minimum Ultimate Load is 4 times the Working Load Limit.



Chain & Accessories

Crosby® Grade 100 Chain Fittings

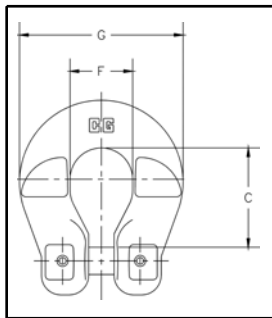


Fatigue Rated®

S-1325



- Designed to connect Grade 100 chain fittings produced with "Engineered Flat" to Grade 100 chain.
- Meets ASTM A-952 standard for Grade 100 chain fittings.
- Forged Alloy Steel- Quenched and Tempered.
- Individually Proof Tested to 2-1/2 times the Working Load Limit with certification.
- Locking system that provides for simple assembly and disassembly - no special tools required.
- Fatigue rated to 20,000 cycles at 1.1/2 times the working load limit.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."



S-1325 Grade 100 Chain Coupler

| Chain Size | | S-1325 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | |
|------------|------|------------------|-------------------------|------------------|-----------------|------|------|
| (in.) | (mm) | | | | C | F | G |
| - | 6 | 1098496 | 1.4 | .11 | 26.2 | 19.3 | 44.7 |
| 1/4 | 7 | 1098500 | 2 | .23 | 35.8 | 22.4 | 59.0 |
| 5/16 | 8 | 1098504 | 2.5 | .23 | 35.6 | 22.4 | 59.0 |
| 3/8 | 10 | 1098508 | 4 | .34 | 46.7 | 30.0 | 69.0 |
| 1/2 | 13 | 1098512 | 6.7 | .75 | 55.6 | 38.1 | 94.5 |
| 5/8 | 16 | 1098516 | 10 | .86 | 71.4 | 49.8 | 112 |

* Minimum Ultimate Load is 4 times the Working Load Limit.

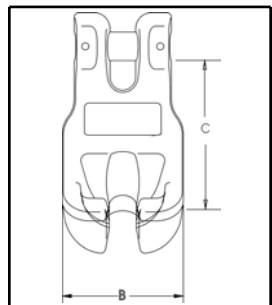


Fatigue Rated®

S-1311



- Alloy Steel - Quenched and Tempered.
- Individually Proof Tested to 2-1/2 times the Working Load Limit with certification.
- Meets ASTM A-952 standard for Grade 100 chain fittings.
- Provided with spring designed to retain chain.
- Fatigue Rated
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."



S-1311 Grade 100 Chain Shortener Link

| Chain Size | | S-1311 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | |
|------------|------|------------------|-------------------------|------------------|-----------------|------|
| (in.) | (mm) | | | | B | C |
| - | 6 | 1017797 | 1.4 | .34 | 37.1 | 43.7 |
| 1/4 | 7 | 1017806 | 2 | .45 | 49.0 | 67.8 |
| 5/16 | 8 | 1017815 | 2.5 | .45 | 49.0 | 67.8 |
| 3/8 | 10 | 1017824 | 4 | .68 | 57.7 | 77.2 |
| 1/2 | 13 | 1017833 | 6.7 | 1.47 | 75.9 | 99.5 |
| 5/8 | 16 | 1017842 | 10 | 2.54 | 84.6 | 120 |

* Minimum Ultimate Load is 4 times the Working Load Limit.

Chain

ENGINEERING SPECIFICATIONS

| Crosby Proof Coil — Spectrum 3 [®] Chain | | | | | | |
|---|--------------------|----------------------|----------------------------|---------------------------|-------------------------------|---------------------------|
| Trade Size (mm) | Size Material (mm) | Working Load Limit t | Maximum Inside Length (mm) | Minimum Inside Width (mm) | Maximum Length 100 links (mm) | Weight Per 30 Meters (kg) |
| 5 | 5.50 | .34 | 24.9 | 7.62 | 2489 | 17.7 |
| 7 | 7.00 | .59 | 31.5 | 9.65 | 3150 | 29.5 |
| 8 | 8.00 | .87 | 32.8 | 11.2 | 3277 | 45.4 |
| 10 | 10.0 | 1.21 | 35.1 | 14.0 | 3505 | 65 |
| 13 | 13.0 | 2.04 | 45.5 | 18.3 | 4547 | 113 |
| 16 | 16.0 | 3.13 | 55.9 | 20.1 | 5588 | 190 |
| 19 | 20.0 | 4.81 | 69.9 | 25.0 | 6985 | 294 |

SPECTRUM 3[®]

| Crosby High Test — Spectrum 4 [®] Chain | | | | | | |
|--|--------------------|----------------------|----------------------------|---------------------------|-------------------------------|---------------------------|
| Trade Size (mm) | Size Material (mm) | Working Load Limit t | Maximum Inside Length (mm) | Minimum Inside Width (mm) | Maximum Length 100 links (mm) | Weight Per 30 Meters (kg) |
| 7 | 7.00 | 1.18 | 31.5 | 9.65 | 3150 | 31.8 |
| 8 | 8.00 | 1.77 | 32.8 | 11.2 | 3277 | 48.1 |
| 10 | 10.0 | 2.45 | 35.1 | 14.0 | 3505 | 70 |
| 11 | 11.9 | 3.27 | 35.6 | 16.5 | 3560 | 93 |
| 13 | 13.0 | 4.18 | 45.5 | 18.3 | 4547 | 121 |
| 16 | 16.0 | 5.22 | 55.9 | 20.1 | 5588 | 182 |
| 19 | 20.0 | 7.35 | 70.1 | 24.9 | 7010 | 257 |

SPECTRUM 4[®]

Chain & Accessories

| Crosby Transport — Spectrum 7 [®] Chain | | | | | | |
|--|--------------------|----------------------|----------------------------|---------------------------|-------------------------------|---------------------------|
| Trade Size (mm) | Size Material (mm) | Working Load Limit t | Maximum Inside Length (mm) | Minimum Inside Width (mm) | Maximum Length 100 links (mm) | Weight Per 30 Meters (kg) |
| 7 | 7.00 | 1.44 | 31.5 | 9.65 | 3150 | 36.7 |
| 8 | 8.70 | 2.14 | 33.5 | 12.2 | 3353 | 44.5 |
| 10 | 10.0 | 3.00 | 35.1 | 14.0 | 3505 | 64 |
| 11 | 11.9 | 3.98 | 41.7 | 16.5 | 4166 | 98 |
| 13 | 13.0 | 5.13 | 45.5 | 18.3 | 4547 | 112 |

SPECTRUM 7[®]

| Crosby Alloy — Spectrum 8 [®] Chain | | | | | | |
|--|--------------------|----------------------|----------------------------|---------------------------|-------------------------------|---------------------------|
| Trade Size (mm) | Size Material (mm) | Working Load Limit t | Maximum Inside Length (mm) | Minimum Inside Width (mm) | Maximum Length 100 links (mm) | Weight Per 30 Meters (kg) |
| 7 | 7.00 | 1.59 | 22.9 | 8.64 | 2286 | 32.7 |
| 8 | 8.70 | 2.04 | 25.4 | 12.2 | 2540 | 49.0 |
| 10 | 10.0 | 3.22 | 31.8 | 12.5 | 3175 | 67 |
| 13 | 13.0 | 5.45 | 41.7 | 16.3 | 4166 | 110 |
| 16 | 16.0 | 8.21 | 51.3 | 20.1 | 5131 | 159 |
| 19 | 20.0 | 12.84 | 64.0 | 24.9 | 6401 | 265 |
| 22 | 22.0 | 15.51 | 70.4 | 27.4 | 7036 | 320 |

SPECTRUM 8[®]

Proof Coil Chain

SPECTRUM 3® DRUM



- Carbon Steel.
- Standard Container - fiber drum.
- Finish - Self colored and galvanized.
- Minimum Ultimate load is 4 times the Working Load Limit.
- Permanently embossed with CG®(Crosby Group) and 3 (Grade).

SPECTRUM 3® Proof Coil Chain

| Chain Size (mm) | Working Load Limit (t) | Meters Per Drum | Weight Per 30 m (kg) | Drum Stock No. S.C. | Drum Stock No. Galv. |
|-----------------|------------------------|-----------------|----------------------|---------------------|----------------------|
| 5 | .36 | 244 | 17.7 | 275151 | 276150 |
| 6 | .59 | 244 | 29.5 | 275259 | 276258 |
| 8 | .86 | 168 | 45.4 | 275357 | 276356 |
| 10 | 1.20 | 122 | 65.5 | 275455 | 276454 |
| 13 | 2.04 | 61 | 113 | 275552 | 276551 |
| 16 | 3.13 | 46 | 191 | 275650 | 276659 |
| 19 | 4.81 | 30 | 294 | 275758 | 276757 |

* Proof Loaded at 2 times the Working Load Limit.

SPECTRUM 3® PAIL



Proof Coil Chain - SPECTRUM 3® 100 Pound Pail

| Chain Size (mm) | Weight Per Pail (kg) | Meters Per Pail | Stock No. S.C. | Stock No. Galv. |
|-----------------|----------------------|-----------------|----------------|-----------------|
| 5 | 44.5 | 76 | 275115 | 276114 |
| 6 | 41.7 | 43 | 275213 | 276212 |
| 8 | 41.3 | 28 | 275311 | 276310 |
| 10 | 41.3 | 19 | 275419 | 276418 |

* Spectrum 3® Proof Coil Chain is not recommended for overhead lifting. For these applications, Spectrum 8® or grade 80 alloy chain should be used. See page 162.

High Test Chain

SPECTRUM 4® DRUM



- Carbon Steel.
- Standard Container - fiber drum.
- Finish - Self Colored.
- Minimum Ultimate load is 3 times the Working Load Limit.
- Permanently embossed with CG® (Crosby Group) and 4 (Grade).

SPECTRUM 4® High Test Chain

| Chain Size (mm) | Working Load Limit (t) | Meters Per Drum | Weight Per 30 m (kg) | Drum Stock No. S.C. | 1/2 Drum Stock No. S.C. |
|-----------------|------------------------|-----------------|----------------------|---------------------|-------------------------|
| 6 | 1.18 | 244 | 31.8 | 272788 | 272895 |
| 8 | 1.77 | 168 | 48.1 | 272797 | 272902 |
| 10 | 2.45 | 122 | 69.9 | 272804 | 272911 |
| 11 | 3.27 | 91 | 94.8 | 272813 | 272920 |
| 13 | 4.17 | 61 | 121 | 272822 | 272939 |
| 16 | 5.21 | 46 | 182 | 272831 | 272948 |
| 19 | 9.16 | 30 | 257 | 272840 | 272957 |

SPECTRUM 4® PAIL



High Test Chain - SPECTRUM 4® 100 Pound Pail

| Chain Size (mm)* | Weight Per Pail (kg) | Meters Per Pail | Stock No. S.C. |
|------------------|----------------------|-----------------|----------------|
| 6 | 42.2 | 41 | 273000 |
| 8 | 43.1 | 27 | 273019 |
| 10 | 44.5 | 20 | 273028 |

* Spectrum 4® High Test Chain is not recommended for overhead lifting. For these applications, Spectrum 8® or grade 80 Alloy chain should be used. See page 162.

Transport Chain

SPECTRUM 7® DRUM



- High Tensile Carbon Steel.
- Standard container - fiber drum.
- Finish - Self Colored.
- Minimum Ultimate load is 4 times the Working Load Limit.
- Permanently embossed with CG®(Crosby Group) and 7 (Grade).

SPECTRUM 7® High Tensile Transport Chain

| Chain Size (mm) | Working Load Limit (t)* | Meters Per Drum | Weight Per 30 m (kg) | Drum Stock No. S.C. | 1/2 Drum Stock No. S.C. |
|-----------------|-------------------------|-----------------|----------------------|---------------------|-------------------------|
| 6 | 1.43 | 244 | 36.7 | 273153 | 273260 |
| 8 | 2.13 | 168 | 44.5 | 273162 | 273279 |
| 10 | 3.00 | 122 | 64.0 | 273171 | 273288 |
| 11 | 3.97 | 91 | 98.0 | 273180 | 273297 |
| 13 | 5.13 | 61 | 112 | 273199 | 273304 |

* Proof Loaded at 2 times the Working Load Limit.

SPECTRUM 7® PAIL



High Tensile Transport Chain - SPECTRUM 7® 100 Pound Pail

| Chain Size (mm)* | Weight Per Pail (kg) | Meters Per Pail | Stock No. S.C. |
|------------------|----------------------|-----------------|----------------|
| 6 | 49.4 | 41 | 273377 |
| 8 | 39.9 | 27 | 273386 |
| 10 | 44.5 | 20 | 273395 |

*

Spectrum 7® High Tensile Transport chain is not recommended for overhead lifting. For these applications, Spectrum 8® or grade 80 alloy chain should be used. See page 162.

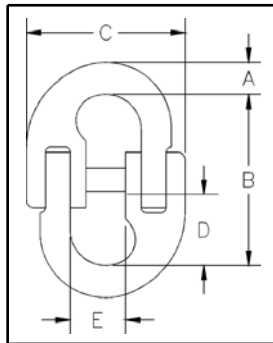
Crosby® Connecting Links



A-336



- Forged Alloy Steel - Quenched and Tempered.
- Individually Proof Tested.
- Easy to assemble - see instructions on page 210



LOK-A-LOY® 6 Connecting Link

| Chain Size (in.) | A-336 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | Diameter of Hole to Accept Link |
|------------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|---------------------------------|
| | | | | A | B | C | D | E | |
| 6-7 | 1014397 | 1.47 | .11 | 7.85 | 52.5 | 42.9 | 19.8 | 19.8 | 12.7 |
| 8-10 | 1014413 | 3.00 | .27 | 11.4 | 69.0 | 58.5 | 26.9 | 27.7 | 16.8 |
| 13 | 1014431 | 5.10 | .54 | 14.7 | 85.0 | 80.5 | 32.5 | 35.8 | 22.4 |
| 16 | 1014459 | 7.48 | 1.10 | 19.8 | 99.5 | 100 | 39.6 | 42.9 | 26.9 |
| 19 | 1014477 | 11.20 | 1.76 | 22.6 | 123 | 113 | 50.0 | 51.0 | 30.2 |
| 22 | 1014495 | 13.04 | 2.75 | 25.4 | 148 | 135 | 60.5 | 64.0 | 35.1 |
| 26 | 1014510 | 17.58 | 3.19 | 27.4 | 165 | 154 | 72.0 | 65.0 | 37.3 |
| 32 | 1014538 | 26.00 | 6.00 | 35.1 | 215 | 194 | 96.0 | 96.0 | 44.0 |

* Ultimate Load is 4 times the Working Load Limit.

The WLL of the A-336 are less than Grade 80 chain ratings. When using in Grade 80 chain slings, ANSI B30.9c requires that the Working Load Limit of a sling must not exceed the lowest Working Load Limit of the components in the system.

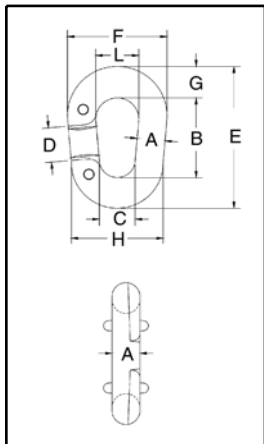
Crosby® Connecting Links



G-334 / S-334



- Forged Steel - Quenched and Tempered.
- Has larger inside dimensions making it easier to attach hooks or other fittings to the chain.
- An exclusive Crosby product.
- After making connections, rivets must be peened.



Pear Shape "Missing Link"® Replacement Links

| Chain Size (mm) | Stock No. | | Working Load Limit (t)* | Weight Per 100 (kg) | Dimensions (mm) | | | | | | | | |
|-----------------|-------------|------------|-------------------------|---------------------|-----------------|------|------|------|------|------|------|------|------|
| | G-334 Galv. | S-334 S.C. | | | A | B | C | D | E | F | G | H | L |
| 10 | 1013432 | 1013441 | .84 | 11.3 | 10.4 | 51.0 | 14.2 | 20.6 | 74.5 | 41.4 | 11.9 | 35.1 | 20.6 |
| 13 | 1013450 | 1013469 | 1.50 | 22.7 | 12.7 | 63.5 | 17.5 | 25.4 | 92.0 | 51.0 | 14.2 | 42.9 | 25.4 |
| 16 | 1013478 | 1013487 | 2.27 | 34.0 | 16.0 | 70.0 | 20.6 | 26.9 | 102 | 60.5 | 16.0 | 52.5 | 28.7 |
| 19 | 1013496 | 1013502 | 3.22 | 56.7 | 19.1 | 79.5 | 25.4 | 28.7 | 121 | 70.0 | 20.6 | 63.5 | 31.8 |
| 22 | 1013511 | 1013520 | 4.35 | 90.7 | 22.4 | 93.5 | 31.8 | 35.1 | 141 | 82.5 | 23.9 | 76.0 | 38.1 |

* Ultimate Load is 4 times the Working Load Limit.

Not Suitable for use with Grade 80 chain and chain slings used in overhead lifting.

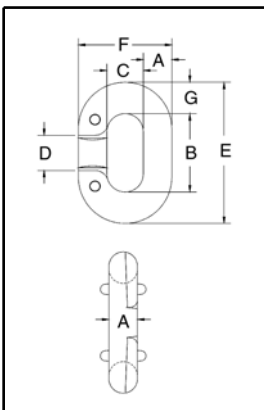


G-335 / S-335



- Forged Steel - Quenched and Tempered.
- Integral rivets join the two halves.
- After making connections, rivets must be peened.

Meets or exceeds the performance requirements of Federal Specifications RRC-271D, Type II, except for those provisions required of the contractor.



"Missing Link"® Replacement Links

| Chain Size (mm) | Stock No. | | Working Load Limit (t)* | Links Per Box | Weight Per 100 (kg) | Dimensions (mm) | | | | | | |
|-----------------|-------------|------------|-------------------------|---------------|---------------------|-----------------|------|------|------|------|------|------|
| | G-335 Galv. | S-335 S.C. | | | | A | B | C | D | E | F | G |
| **5 | 1013094 | 1013101 | .36 | 20 | 1.13 | 6.35 | 17.5 | 8.65 | 8.65 | 30.2 | 19.8 | 7.10 |
| **7 | 1013110 | 1013129 | .60 | 10 | 2.83 | 7.10 | 22.4 | 11.2 | 11.2 | 38.1 | 25.4 | 7.85 |
| **8 | 1013138 | 1013147 | .89 | 10 | 5.67 | 8.65 | 23.9 | 11.9 | 11.9 | 42.9 | 29.5 | 9.65 |
| 10 | 1013156 | 1013165 | 1.25 | 10 | 9.07 | 10.4 | 28.7 | 14.2 | 14.2 | 52.5 | 35.1 | 11.9 |
| 11 | 1013174 | 1013183 | 1.65 | 10 | 12.5 | 11.9 | 32.5 | 15.0 | 15.0 | 59.5 | 38.9 | 13.5 |
| 13 | 1013192 | 1013209 | 2.15 | 10 | 17.0 | 13.5 | 37.3 | 16.8 | 16.8 | 67.5 | 43.7 | 15.0 |
| 16 | 1013236 | 1013245 | 3.30 | 10 | 32.9 | 16.8 | 46.0 | 19.8 | 20.6 | 84.0 | 53.0 | 19.1 |
| 19 | 1013254 | 1013263 | 4.65 | 10 | 55.5 | 19.8 | 54.0 | 23.9 | 26.9 | 98.5 | 63.5 | 22.4 |
| 22 | 1013272 | 1013281 | 5.45 | Bulk | 79.5 | 23.1 | 63.5 | 28.7 | 28.7 | 114 | 74.5 | 25.4 |
| †26 | 1013290 | 1013307 | 7.00 | Bulk | 113 | 26.2 | 70.0 | 31.8 | 31.8 | 127 | 84.0 | 28.7 |

* Ultimate Load is 4 times the Working Load Limit.

** Rivets Only - No interlocking lugs.

† Has reinforced rivet holes. All sizes have countersunk rivet holes.

Not Suitable for use with Grade 80 chain and chain slings used in overhead lifting.

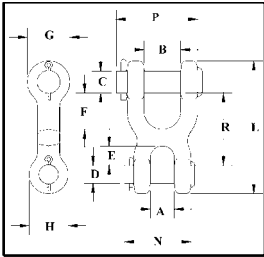
Crosby® Connecting Links



S-247



- Designed for linking all popular sizes of Crosby Spectrum 3® and Spectrum 4® chain to rings, end links, eye hooks, pad eyes, tractor eyebolts, etc.
- All pins Alloy Steel - Quenched and Tempered.
- Body is forged and heat treated carbon steel.
- Features quick and easy assembly.



S-247 Double Clevis Link

| Chain Size (mm) | S-247 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | A | B | C | D | E | F | G | H | L | N | P | R |
| 7 | 1013021 | 1.18 | .17 | 12.7 | 19.1 | 12.7 | 7.85 | 9.65 | 19.1 | 25.4 | 20.6 | 71.5 | 35.1 | 42.2 | 38.1 |
| 8-10 | 1013049 | 2.45 | .37 | 14.2 | 25.4 | 16.0 | 11.2 | 11.9 | 25.4 | 30.2 | 25.4 | 89.5 | 44.5 | 57.0 | 48.5 |
| 11 | 1013067 | 3.27 | .57 | 17.5 | 28.7 | 17.5 | 14.2 | 15.0 | 27.7 | 33.3 | 30.2 | 103 | 51.0 | 63.5 | 55.5 |
| 13 | 1013085 | 4.17 | .71 | 20.6 | 31.8 | 19.1 | 16.0 | 16.8 | 31.8 | 36.6 | 33.3 | 115 | 57.0 | 70.0 | 62.5 |

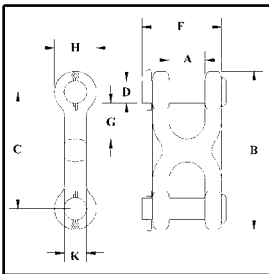
* Ultimate Load is 4 times the Working Load Limit.



S-249



- Available in three popular sizes.
- Body is forged and heat treated carbon steel.
- All pins Alloy Steel - Quenched and Tempered.
- Features quick and easy assembly.
- Twin Clevis design provides a variety of uses and can be used with Crosby Spectrum 3®, Spectrum 4® and Spectrum 7® chain.



S-249
Twin Clevis Link

| Chain Size (mm) | S-249 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|------|------|------|
| | | | | A | B | C | D | F | G | H | K |
| 7-8 | 1012861 | 2.13 | .14 | 11.9 | 63.5 | 39.6 | 9.65 | 33.3 | 10.9 | 23.9 | 12.7 |
| 10 | 1012889 | 3.00 | .20 | 13.5 | 71.5 | 46.0 | 11.2 | 38.9 | 12.7 | 25.4 | 14.2 |
| 11-13 | 1012905 | 5.10 | .44 | 16.5 | 92.0 | 58.5 | 14.2 | 48.5 | 16.0 | 33.3 | 20.6 |

* Ultimate Load is 4 times the Working Load Limit.

Not Suitable for use with Grade 80 chain and chain slings used in overhead lifting.

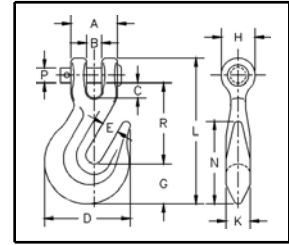
Crosby® Grab Hooks



H-330 / A-330



- Forged Steel - Quenched and Tempered.
- Features quick and easy assembly.
- H-330 designed for Crosby Spectrum 4® chain.
- A-330 designed for Crosby Spectrum 7® chain.
- Design factor is 4:1.



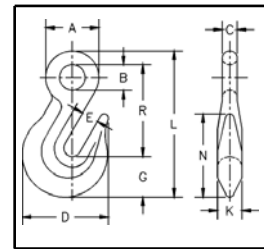
| Chain Size (mm) | Stock No. | | Working Load Limit (t) | | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | | |
|-----------------|--------------|--------------|------------------------|-------------|------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|
| | H-330 Carbon | A-330 Alloy* | H-330 Carbon | A-330 Alloy | | A | B | C | D | E | G | H | K | L | N | P | R |
| 7 | 1027105 | 1027249* | 1.18 | 1.59 | .16 | 25.4 | 8.15 | 7.85 | 46.0 | 8.65 | 22.4 | 18.3 | 11.9 | 77.5 | 44.5 | 7.85 | 41.7 |
| 8 | 1027123 | 1027267* | 1.77 | 2.04 | .29 | 30.2 | 9.90 | 9.15 | 54.0 | 11.2 | 24.6 | 23.1 | 15.0 | 93.0 | 52.5 | 9.65 | 61.5 |
| 10 | 1027141 | 1027285* | 2.45 | 3.22 | .45 | 35.1 | 11.4 | 11.4 | 64.5 | 12.7 | 29.7 | 25.4 | 18.3 | 109 | 59.5 | 11.2 | 61.0 |
| 11 | 1027169 | 1027301 | 3.27 | 4.54 | .59 | 42.2 | 16.8 | 15.7 | 78.5 | 14.2 | 33.3 | 28.7 | 17.5 | 125 | 67.5 | 14.2 | 70.0 |
| 13 | 1027187 | 1027329* | 4.17 | 5.44 | .95 | 47.8 | 14.5 | 17.8 | 90.5 | 16.8 | 38.9 | 31.8 | 19.8 | 145 | 75.5 | 16.0 | 81.0 |
| 16 | 1027203 | 1027347 | 5.90 | 7.16 | 1.91 | 58.0 | 23.1 | 21.3 | 112 | 19.8 | 45.2 | 39.6 | 27.7 | 179 | 109 | 19.1 | 104 |
| 19 | 1027221 | 1027365 | 9.16 | 11.2 | 2.95 | 66.5 | 23.9 | 23.9 | 133 | 23.9 | 54.0 | 47.8 | 33.3 | 207 | 129 | 22.4 | 118 |

* Is suitable for use with Grade 80 chain in over head lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component per ANSI B30.9c. We recommend the use of the A-338.

H-323 / A-323



- Forged Steel - Quenched and Tempered.
- Design Factor is 4:1.
- H-323 designed for Crosby Spectrum 4® chain.
- A-323 designed for Crosby Spectrum 7® chain.



H-323 A-323 Eye Grab Hooks

| Chain Size (mm) | Stock No. | | Working Load Limit (t)* | | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | |
|-----------------|--------------|-------------|-------------------------|-------|------------------|-----------------|------|------|------|------|------|------|------|------|------|--|
| | H-323 Carbon | A-323 Alloy | H-323 | A-323 | | A | B | C | D | E | G | K | L | N | R | |
| 7 | 1026204 | 1026384* | 1.18 | 1.59 | .13 | 27.7 | 13.5 | 7.85 | 46.0 | 8.65 | 22.4 | 11.9 | 77.5 | 44.5 | 47.8 | |
| 8 | 1026222 | 1026400* | 1.77 | 2.04 | .20 | 33.3 | 15.7 | 9.65 | 54.0 | 11.2 | 24.6 | 15.0 | 91.0 | 52.5 | 58.0 | |
| 10 | 1026240 | 1026428* | 2.45 | 3.22 | .36 | 39.6 | 19.1 | 11.2 | 64.5 | 12.7 | 29.7 | 18.3 | 109 | 59.5 | 68.5 | |
| 13 | 1026286 | 1026464* | 4.17 | 5.44 | .79 | 49.3 | 22.4 | 13.5 | 90.5 | 16.8 | 38.9 | 19.8 | 138 | 75.5 | 86.0 | |
| 16 | 1026302 | 1026482 | 5.90 | 7.16 | 1.47 | 60.5 | 26.9 | 16.8 | 112 | 19.8 | 48.0 | 25.4 | 169 | 96.0 | 104 | |
| 19 | 1026320 | 1026507 | 9.16 | 11.2 | 2.69 | 73.0 | 35.1 | 19.1 | 133 | 23.9 | 54.0 | 33.3 | 205 | 129 | 131 | |

* Is suitable for use with Grade 80 chain in over head lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component per ANSI B30.9c. Crosby recommends the use of the A-328.

BL-GRB



Bullard Alloy Grab Hook with Latch

| Hook Type | Chain Size (mm) | BL-GRB Stock No. | Working Load Limit (t)* | Weight Each (kg) |
|-----------|-----------------|------------------|-------------------------|------------------|
| GRAB HOOK | 7 | 1051904 | 1.60 | .23 |

* Ultimate Load is 4 times the Working Load Limit.

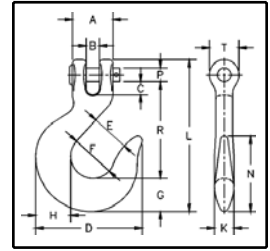
Crosby® Slip Hooks



H-331 / A-331



- Forged Carbon Steel or Forged Alloy Steel - Quenched and Tempered.
- All pins are Alloy Steel - Quenched and Tempered.
- **Not Suitable for use with Grade 80 chain and chain slings used in overhead lifting. For slings or lifting chains, Grade 80 or 100 alloy components are recommended.**



H-331 / A-331 Clevis Slip Hooks

| Chain Size (mm) | Stock No. | | Working Load Limit (t)* | | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | | | | |
|-----------------|--------------|-------------|-------------------------|-------------|------------------|-----------------|------|------|------|------|------|------|------|------|-----|------|------|------|------|
| | H-331 Carbon | A-331 Alloy | H-331 Carbon | A-331 Alloy | | A | B | C | D | E | F | G | H | K | L | N | P | R | T |
| 7 | 1027383 | 1027524 | .89 | 1.25 | .25 | 26.9 | 8.15 | 7.35 | 70.0 | 23.9 | 30.2 | 20.6 | 22.4 | 12.7 | 100 | 54.0 | 8.65 | 65.5 | 18.3 |
| 8 | 1027409 | 1027542 | 1.30 | 1.95 | .36 | 31.0 | 10.9 | 8.65 | 77.5 | 26.9 | 31.8 | 23.9 | 25.4 | 14.2 | 115 | 57.0 | 11.2 | 73.0 | 24.6 |
| 10 | 1027427 | 1027560 | 1.81 | 2.38 | .55 | 35.1 | 11.4 | 11.2 | 92.0 | 33.3 | 38.1 | 28.7 | 30.2 | 16.8 | 131 | 65.0 | 11.9 | 82.5 | 26.9 |
| 11 | 1027445 | 1027588 | 2.27 | 3.18 | .93 | 43.9 | 15.0 | 15.2 | 110 | 39.6 | 46.0 | 35.1 | 36.6 | 20.6 | 152 | 77.5 | 14.2 | 94.0 | 30.2 |
| 13 | 1027463 | 1027604 | 2.95 | 4.08 | 1.25 | 47.8 | 14.5 | 13.5 | 122 | 42.9 | 49.3 | 39.6 | 41.4 | 23.1 | 166 | 87.5 | 16.0 | 102 | 33.3 |
| 16 | 1027481 | 1027622 | 4.20 | 6.12 | 2.15 | 58.5 | 18.0 | 18.0 | 143 | 51.0 | 60.5 | 46.0 | 49.3 | 27.7 | 200 | 102 | 19.1 | 125 | 39.6 |
| 19 | - | 1027640 | - | 8.73 | 5.12 | 81.0 | 30.0 | 32.8 | 187 | 63.5 | 76.2 | 60.5 | 63.5 | 36.6 | 255 | 129 | 25.4 | 155 | 53.0 |

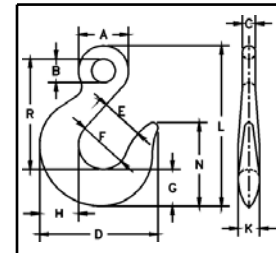
* Ultimate Load is 4 times the Working Load Limit.



H-324



- Forged Carbon Steel - Quenched and Tempered.



H-324 Eye Slip Hooks

| Chain Size (mm) | H-324 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|-------|------|------|------|------|------|------|------|------|
| | | | | A | B | C | D | E | F | G | H | K | L | N | R |
| 7 | 1026749 | .89 | .18 | 26.9 | 12.7 | 7.10 | 70.0 | 23.9 | 30.2 | 20.6 | 22.4 | 12.7 | 93.0 | 54.0 | 65.0 |
| 8 | 1026767 | 1.30 | .29 | 31.8 | 16.0 | 8.65 | 77.5 | 26.9 | 31.8 | 23.9 | 25.4 | 14.2 | 107 | 57.0 | 75.0 |
| 10 | 1026785 | 1.81 | .50 | 38.9 | 18.3 | 10.4 | 92.0 | 33.3 | 38.1 | 28.7 | 30.2 | 16.8 | 124 | 65.0 | 85.5 |
| 11 | 1026801 | 2.27 | .71 | 42.9 | 20.6 | 11.2 | 110.2 | 39.6 | 46.0 | 35.1 | 36.6 | 20.6 | 145 | 77.5 | 98.5 |
| 13 | 1026829 | 2.95 | .95 | 49.3 | 23.9 | 12.7 | 122.2 | 42.9 | 49.3 | 39.6 | 41.4 | 23.1 | 161 | 87.5 | 109 |
| 16 | 1026847 | 4.20 | 1.77 | 60.5 | 28.7 | 16.0 | 143.0 | 51.0 | 60.5 | 46.0 | 49.3 | 27.7 | 195 | 102 | 133 |
| 19 | 1026865 | 5.67 | 3.14 | 73.0 | 35.1 | 19.1 | 171.5 | 54.0 | 70.0 | 55.5 | 58.5 | 33.3 | 222 | 121 | 147 |


* Ultimate Load is 4 times the Working Load Limit.

Not Suitable for use with Grade 80 chain and chain slings used in overhead lifting. For slings or lifting chains, Grade 80 or 100 alloy components are recommended.

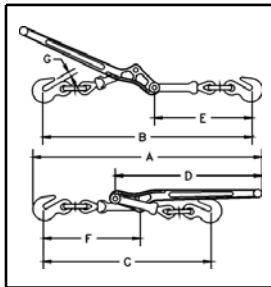
Lebus® Load Binders



Load Rated™

 **SEE APPLICATION AND WARNING INFORMATION**
On Page 207

L-150



L-150

Standard Lever Type Load Binders

- Extra heavy construction at leverage point to prevent spreading. Heel of binder toggles away from load, permitting easy release.
- Ball and socket swivel joints at hook assemblies permit a straight line pull.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

| Model | Stock No. | Std. Pkg. | Min-Max Chain Size (mm) | Working Load Limit (t) | Proof Load (kN)* | Ultimate Load (t) | Weight Each (kg) | Handle Length (mm) | Take Up (mm) | Dimensions (mm) | | | | | | |
|-------|-----------|-----------|-------------------------|------------------------|------------------|-------------------|------------------|--------------------|--------------|-----------------|-----|-----|-----|-----|-----|------|
| | | | | | | | | | | A | B | C | D | E | F | G |
| 7-1 | 1048128 | 4 | 8 - 10 | 2.45 | 48 | 8.63 | 3.18 | 406 | 114 | 613 | 562 | 454 | 406 | 264 | 264 | 127 |
| A-1 | 1048146 | 4 | 10 - 13 | 4.17 | 82 | 15.0 | 5.66 | 475 | 114 | 730 | 654 | 540 | 475 | 313 | 314 | 16.0 |
| C-1 | 1048164 | 4 | 13 - 16 | 5.90 | 116 | 20.9 | 8.93 | 533 | 121 | 794 | 756 | 635 | 533 | 372 | 349 | 18.3 |

* Binders shown with Proof Loads have been individually proof tested to these values shown, prior to shipment.

Lebus® Load Binders

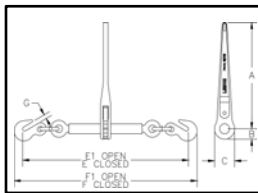
Load Rated

SEE APPLICATION AND WARNING INFORMATION
On Page 207

L-140



- Utilizes standard Crosby A-323 Alloy Eye Grab Hooks.
- New design "one piece" forged handle.
- Continuous take-up feature, infinite adjustment, gets the last half link of chain.
- One piece assembly, no bolts or nuts to loosen.
- Ratchet spring rust proofed.
- All load bearing or holding parts forged.
- Easy operating positive ratchet.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.



L-140 Standard Ratchet Type Load Binders

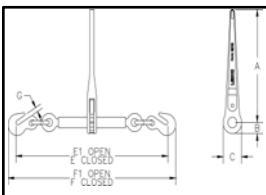
| Model | Stock No. | Min-Max Chain Size (mm) | Working Load Limit (t)* | Proof Load (kN) | Weight Each (kg) | Handle Length (mm) | Barrel Length (mm) | Take Up (mm) | Dimensions (mm) | | | | | | | |
|-------|-----------|-------------------------|-------------------------|-----------------|------------------|--------------------|--------------------|--------------|-----------------|------|------|-----|-----|-----|-----|------|
| | | | | | | | | | A | B | C | E | E1 | F | F1 | G |
| R-7 | 1048404 | 8 - 10 | 3.00 | 59 | 5.09 | 356 | 254 | 203 | 356 | 35.1 | 70.0 | 583 | 786 | 638 | 842 | 12.7 |
| R-A | 1048422 | 10 - 13 | 4.17 | 82 | 5.82 | 356 | 254 | 203 | 356 | 35.1 | 70.0 | 641 | 845 | 702 | 905 | 16.0 |
| R-C | 1048440 | 13 - 16 | 5.90 | 116 | 6.60 | 356 | 254 | 203 | 356 | 35.1 | 70.0 | 670 | 873 | 748 | 951 | 18.3 |

* Ultimate Load is 3 times the Working Load Limit.

L-140/R-7QL



- Utilizes standard Crosby A-323 Alloy Eye Grab Hooks.
- New design "one piece" forged handle.
- Continuous take-up feature, infinite adjustment, gets the last half of chain.
- One piece assembly, no bolts or nuts to loosen.
- Ratch spring rust proofed.
- All load bearings or holding parts forged.
- Easy operating positive ratchet.



R-7QL QUIC-LINK Ratchet Load Binder

| Model | R-7QL Stock No. | Min-Max Chain Size (mm) | Working Load Limit (t)* | Proof Load (kN) | Weight Each (kg) | Handle Length (mm) | Barrel Length (mm) | Take Up (mm) | Dimensions (mm) | | | | | | | |
|-------|-----------------|-------------------------|-------------------------|-----------------|------------------|--------------------|--------------------|--------------|-----------------|------|------|-----|-----|-----|-----|------|
| | | | | | | | | | A | B | C | E | E1 | F | F1 | G |
| R-7QL | 1048413 | 8 - 10 | 3.00 | 59 | 5.56 | 356 | 254 | 203 | 356 | 35.1 | 70.0 | 630 | 833 | 686 | 889 | 12.7 |

* Ultimate Load is 3 times the Working Load Limit.

Binders shown with proof loads have been individually proof tested to these values shown, prior to shipment.

Lebus® Load Binders



Load Rated



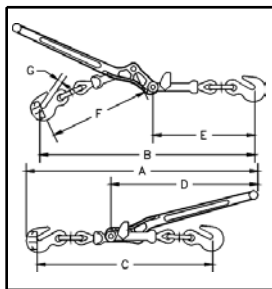
SEE APPLICATION AND WARNING INFORMATION

On Page 207

L-150 A-1W



- Used as a come-a-long for short take-up on chain.
- Forged steel - Quenched and Tempered.
- Binder toggles away from the load.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

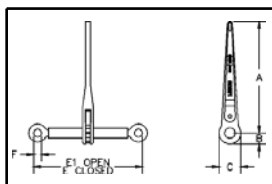


A-1W Walking Load Binder

| Model | Stock No. | Chain Size (mm) | Working Load Limit (t) | Proof Load (kN) * | Ultimate Load (t) | Weight Each (kg) | Handle Length (mm) | Dimensions (mm) | | | | | | |
|-------|-----------|-----------------|------------------------|-------------------|-------------------|------------------|--------------------|-----------------|-----|-----|-----|-----|-----|------|
| | | | | | | | | A | B | C | D | E | F | G |
| A-1W | 1048388 | 13 only | 4.17 | 82 | 15.0 | 5.94 | 475 | 730 | 654 | 540 | 475 | 313 | 314 | 16.0 |

* Binders shown with proof loads have been individually proof tested to these values shown, prior to shipment.

L-140 R-10



R-10 Binder without Links and Hooks

- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

| Model | R-10 Stock No. | Chain Size (mm) | Working Load Limit (t) * | Weight Each (kg) | Handle Length (mm) | Barrel Length (mm) | Take Up (mm) | Dimensions (mm) | | | | | |
|-------|----------------|-----------------|--------------------------|------------------|--------------------|--------------------|--------------|-----------------|------|------|-----|-----|------|
| | | | | | | | | A | B | C | E | E1 | F |
| R-10 | 1048468 | 16 | 5.90 | 3.65 | 356 | 254 | 203 | 356 | 35.1 | 70.0 | 356 | 559 | 25.4 |

* Ultimate Load is 3 times the Working Load Limit.

Lebus® Load Binders



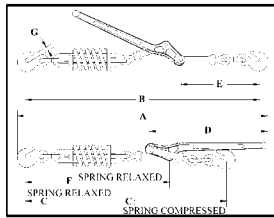
Load Rated

SEE APPLICATION AND WARNING INFORMATION
On Page 207

7-12 & A-12



- Forged steel - Quenched and Tempered.
- Spring cushion for load protection, cushions shock and sway.
- Binder toggles away from the load.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.



L-150 Snubbing Load Binders

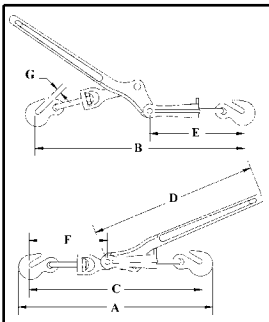
| Model | Stock No. | Min-Max Chain Size (mm) | Working Load Limit (t) | Ultimate Load (t) | Weight Each (kg) | Handle Length (mm) | Take Up (mm) | Compression Strength of Spring (kg) | Dimensions (mm) | | | | | | | |
|-------|-----------|-------------------------|------------------------|-------------------|------------------|--------------------|--------------|-------------------------------------|-----------------|-----|-----|-----|-----|-----|-----|------|
| | | | | | | | | | A | B | C | C1 | D | E | F | G |
| 7-12 | 1048280 | 8 - 10 | 2.45 | 7.27 | 5.10 | 406 | 108 | 1040 | 832 | 781 | 711 | 673 | 406 | 264 | 483 | 12.7 |
| A-12 | 1048306 | 10 - 13 | 4.17 | 9.09 | 8.48 | 470 | 114 | 1500 | 945 | 864 | 749 | 773 | 475 | 313 | 530 | 16.0 |

L-130



L-130 Midget Load Binder

- Forged handle, hooks and swivel link.
- Steel swivels and clevis.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.



| Model | L-130 Stock No. | Min-Max Chain Size (mm) | Working Load Limit (t) | Ultimate Load (t) | Weight Each (kg) | Take Up (mm) | Dimensions (mm) | | | | | | |
|-------|-----------------|-------------------------|------------------------|-------------------|------------------|--------------|-----------------|-----|-----|-----|-----|-----|------|
| | | | | | | | A | B | C | D | E | F | G |
| W-1 | 1048100 | 5 - 6 | .66 | 2.31 | 1.17 | 61.0 | 410 | 346 | 279 | 286 | 159 | 167 | 8.65 |

Chain & Accessories

Boomer Chains

C-186



C-186

Spectrum 4® High Test Boomer Chains

- Ends fitted with Crosby H-330 Quenched and Tempered carbon steel clevis grab hook.
- Finish - Self Colored.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

| Chain Size (mm) | C-186 Stock No. | Working Load Limit (kg) | Standard Length (m) | Weight Each (kg) |
|-----------------|-----------------|-------------------------|---------------------|------------------|
| 6 | 278988 | 1180 | 6.10 | 7.3 |
| 8 | 278997 | 1770 | 6.10 | 11.3 |
| 10 | 279004 | 2450 | 6.10 | 15.4 |
| 11 | 279013 | 3270 | 6.10 | 20.4 |
| 13 | 279022 | 4170 | 6.10 | 27.2 |
| 16 | 279031 | 5900 | 6.10 | 40.8 |

C-187



C-187

Spectrum 7® Transport Boomer Chains

- Ends fitted with Crosby A-330 Quenched and Tempered alloy clevis grab hook.
- Finish - Self Colored.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

| Chain Size (mm) | C-187 Stock No. | Working Load Limit (kg) | Standard Length (m) | Weight Each (kg) |
|-----------------|-----------------|-------------------------|---------------------|------------------|
| 6 | 279576 | 1430 | 6.10 | 7.3 |
| 8 | 279585 | 2130 | 6.10 | 11.3 |
| 10 | 279594 | 3000 | 6.10 | 15.4 |
| 11 | 279601 | 3970 | 6.10 | 20.4 |
| 13 | 279610 | 5130 | 6.10 | 27.2 |

Boomer Chains and Fittings

C-188



C-188 Spectrum 8® Alloy Boomer Chains

- Heat treated alloy steel.
- Ends fitted with Crosby A-330 Quenched and Tempered alloy clevis grab hook.
- Finish - Self Colored.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

| Chain Size (mm) | C-188 Stock No. | Working Load Limit (kg) | Standard Length (m) | Weight Each (kg) |
|-----------------|-----------------|-------------------------|---------------------|------------------|
| 10 | 279889 | 3200 | 6.10 | 13.7 |
| 13 | 279898 | 5400 | 6.10 | 24.5 |

L-180



L-180 Winchline Tail Chains

- Hooks are Forged - Quenched and Tempered.
- Spectrum 4® High Test Carbon Steel from 5/16" thru 5/8" (8mm thru 16mm).
- Spectrum 8® Alloy Steel from 3/4" thru 1-1/8" (19mm thru 29mm).
- Individually Proof Tested.
- Meets or exceeds DOT and CVSA Cargo securement Guidelines, August 1993.

| Wire Rope Diameter (mm)* | L-180 Stock No. | Working Load Limit (kg) † | Length (mm) | No. of Links | Weight Each (kg) |
|--------------------------|-----------------|---------------------------|-------------|--------------|------------------|
| 8 - 10 | 1091473 | 2450 | 457 | 11 | 1.36 |
| 13 - 16 | 1091482 | 5900 | 457 | 7 | 2.81 |
| 19 - 22 | 1091511 | 15510 | 610 | 8 | 8.25 |
| 25 - 29 | 1091516 | 21640 | 457 | 5 | 9.60 |
| 25 - 29 | 1091525 | 21640 | 610 | 7 | 10.6 |

* Recommended for IPS or XIP (EIP), RRL, FC or IWRC wire rope.

† Ultimate lload is 3.5 times the Working Load Limit.

Boomer Chains and Fittings



SEE APPLICATION AND WARNING INFORMATION

For O-318 : Pages 208-209

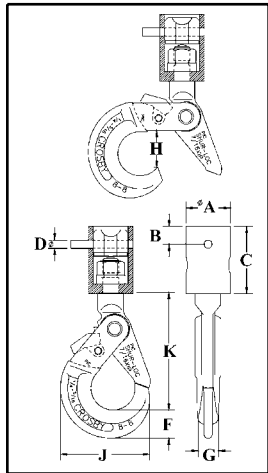
For O-319 : Pages 112-113

O-318



- A product Identification Code (PIC) for material traceability, the size, and the name Crosby or "CG" is forged or stamped onto each hook and swivel assembly (chain nest).
- Fits 1/4" thru 9/16" (6mm thru 14mm) hoist chain.
- Available in Working Load Limits of 1.7, 2.3, and 4.2 Tons (1.5, 2.1, 3.8 tonnes).
- Hooks are forged alloy steel - Quenched and Tempered.
- Chain connecting pin is alloy
- Fitted with ball bearings and is designed to swivel under load.
- Entire assembly is zinc plated.
- Repair kit available consisting of bearing, nut and pin.
- O-318 Hooks utilize Crosby SHUR-LOC® "Positive Locking" hooks. Latch is Self-Locking when hook is loaded.
- O-319 Hooks utilize Crosby standard 319 Shanks Hooks with the registered QUIC-CHECK® marking.
- Replacement latch kits are available. Replacement Hooks for Chain Hoists

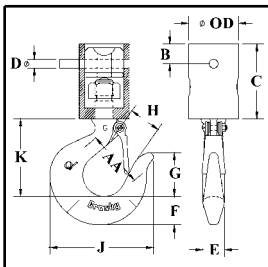
O-319



O-318 Chain Nest Hooks

| Chain Size (mm) | O-318 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|------|------|------|-----|
| | | | | A | B | C | D | F | G | H | J | K |
| 6 - 7 | 1098409 | 1.5 | 1.59 | 44.5 | 17.8 | 66.5 | 9.65 | 27.9 | 20.6 | 37.1 | 89.0 | 117 |
| 8 - 10 | 1098427 | 2.1 | 2.72 | 54.0 | 17.8 | 81.0 | 12.7 | 29.2 | 23.9 | 47.5 | 110 | 144 |
| 10 - 11 | 1098445 | 3.8 | 6.24 | 76.0 | 25.4 | 111 | 14.2 | 42.2 | 29.5 | 53.5 | 138 | 179 |
| 13 - 14 | 1098463 | 3.8 | 6.24 | 76.0 | 25.4 | 111 | 19.1 | 42.2 | 29.5 | 53.5 | 138 | 179 |

* Ultimate Load is 4 times the Working Load Limit.



O-319 Chain Nest Hooks

| Chain Size (mm) | O-319 Stock No. | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | |
|-----------------|-----------------|-------------------------|------------------|-----------------|------|------|------|------|------|------|------|------|------|------|
| | | | | OD | AA | B | C | D | E | F | G | H | J | K |
| 6 - 7 | 1098312 | 1.5 | 1.16 | 44.5 | 51.0 | 17.8 | 66.5 | 9.65 | 19.1 | 25.4 | 38.9 | 25.4 | 92.0 | 68.5 |
| 8 - 10 | 1098334 | 2.1 | 1.81 | 54.0 | 51.0 | 17.8 | 81.0 | 12.7 | 21.3 | 28.4 | 43.7 | 28.4 | 104 | 77.5 |
| 10 - 11 | 1098356 | 3.8 | 4.54 | 76.0 | 63.5 | 25.4 | 111 | 14.2 | 28.4 | 36.6 | 54.0 | 34.0 | 123 | 96.0 |
| 13 - 14 | 1098378 | 3.8 | 4.54 | 76.0 | 63.5 | 25.4 | 111 | 19.1 | 28.4 | 36.6 | 54.0 | 34.0 | 123 | 96.0 |

* Ultimate Load is 4 times the Working Load Limit.

Replacement Hooks for Chain Hoists



SEE APPLICATION AND WARNING INFORMATION
On Pages 114-115

LINK CHAIN NEST



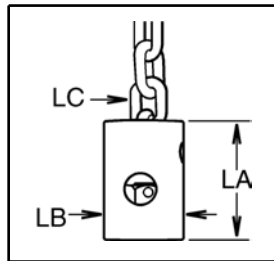
- A Product Identification Code (PIC) for material traceability, the size, and the name Crosby or "CG" is forged or stamped onto each hook and swivel assembly (chain nest).
- Fits 1/4" thru 9/16" (6mm thru 14mm) hoist chain.
- Available in Working Load Limits of 1.7, 2.3, and 4.2 Tons (1.5, 2.1, 3.8 tonnes).
- Hooks are forged alloy steel - Quenched and Tempered.
- Hooks utilize Crosby standard 319 Shank Hooks with the registered QUIC-CHECK® marking (See page 84 for details).

ROLLER CHAIN NEST



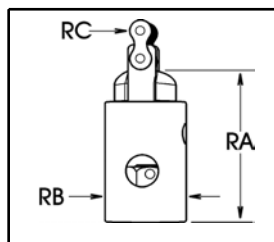
- BL-S --with self-closing gate.
- BL-R--with manual-closing gate.
- Attachment with ball-bearing swivel and full-floating connector.

- BL-O--with self-closing gate
- BL-P --with manual-closing gate
- With ball-bearing swivel; attaches to chain by alloy pin.



| Hook Size | BL-O Stock No. | BL-P Stock No. | Gate Type | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | |
|------------|----------------|----------------|-----------|-------------------------|------------------|-----------------|------|---------|
| | | | | | | LA | LB | LC |
| 4:1/4-9/32 | 1051409 | 1051508 | PIN-LOK | 1.5 | 1.13 | 66.8 | 44.5 | 6 - 7 |
| 5:5/16-3/8 | 1051442 | 1051541 | ROLLOX | 2.1 | 2.04 | 81.0 | 54.1 | 8 - 10 |
| 7:3/8-7/16 | 1051464 | 1051563 | ROLLOX | 3.8 | 5.00 | 111 | 76.2 | 10 - 14 |
| 7:1/2-9/16 | 1051486 | 1051585 | ROLLOX | 3.8 | 5.00 | 111 | 76.2 | 10 - 14 |

* Ultimate Load is 4 times the Working Load Limit.



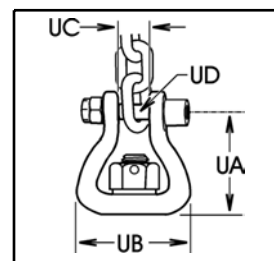
| Hook Size | BL-S Stock No. | BL-R Stock No. | Gate Type | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | |
|-----------|----------------|----------------|-----------|-------------------------|------------------|-----------------|------|----|
| | | | | | | RA | RB | RC |
| 4 :# 50 | 1051310 | 1051200 | PIN-LOK | 0.68 | 1.32 | 88.9 | 44.5 | 16 |
| 5 :# 60 | 1051321 | 1051211 | ROLLOX | 1.13 | 2.36 | 111 | 54.1 | 19 |
| 6 :# 60 | 1051332 | 1051222 | ROLLOX | 1.13 | 2.81 | 111 | 52.3 | 19 |

* Ultimate Load is 4 times the Working Load Limit.

OPEN SWIVEL BAIL



- BL-E --with self-closing gate.
- BL-G --with manual-closing gate.
- Open swivel bail for attachment to link chain.



| Hook Size | BL-E Stock No. | BL-G Stock No. | Gate Type | Working Load Limit (t)* | Weight Each (kg) | Dimensions (mm) | | | |
|-----------|----------------|----------------|-----------|-------------------------|------------------|-----------------|------|------|----|
| | | | | | | UA | UB | UC | UD |
| 3 | 1051607 | 1051706 | PIN-LOK | 1.3 | .82 | 54.1 | 59.7 | 13.5 | 10 |
| 4 | 1051618 | 1051717 | PIN-LOK | 1.5 | .95 | 54.1 | 59.7 | 13.5 | 10 |
| 5 | 1051629 | 1051728 | ROLLOX | 2.1 | 1.45 | 66.8 | 66.8 | 16.5 | 13 |

* Ultimate Load is 4 times the Working Load Limit.

Job Tough® Hoists / Trolleys



JT-2000 HAND HOIST



JOB TOUGH® HOISTS

- Tough, durable protective covers.
- Load chain is zinc plated alloy steel.
- A factory installed Overload Limiting Device.
- Top and bottom hooks are genuine Crosby, forged steel - Quenched & Tempered.
- Each hook is protected with a yellow chromate finish that increases corrosion resistance.
- Hooks incorporate Crosby's patented QUIC-CHECK® markings. Deformation Indicators and Angle Indicators are forged into each hook.
- A variety of "Genuine" Crosby replacement hooks are available.
- All hooks furnished with a heavy duty stamped latch that interlocks with hook tip. Latch utilizes high cycle, long life spring. Replacement kit available.
- Job Tough® "JT-2500" trolleys available to fit all sizes.
- Made in U.S.A.

| JOB TOUGH® JT-2000 Hand Hoists | | | | Optional Chain Nest Hook Assemblies | | |
|--------------------------------|----------------------|--------------------|------------------|-------------------------------------|----------------|-----------------|
| JT-2000 Stock No. | Standard Lift Range* | Hoist Capacity (t) | Weight Each (kg) | QUIC-CHECK® Hooks | | SHUR-LOC® Hooks |
| | | | | O-319 Stock No. | BL-O Stock No. | O-318 Stock No. |
| 1007000 | 2.45 m | 0.4 | 15.9 | 1098312 | 1051420 | 1098409 |
| 1007019 | 2.45 m | 0.9 | 16.8 | 1098312 | 1051420 | 1098409 |
| 1007028 | 2.45 m | 1.8 | 27.2 | 1098334 | 1051442 | 1098427 |
| 1007037 | 2.45 m | 2.7 | 44.0 | - | - | - |
| 1007046 | 2.45 m | 3.6 | 44.0 | - | - | - |
| 1007055 | 2.45 m | 4.5 | 57.6 | - | - | - |
| 1007064 | 2.45 m | 5.4 | 57.6 | - | - | - |

* Optional Length Available.

JT-2500 TROLLEY




JOB TOUGH® JT-2500 Trolleys

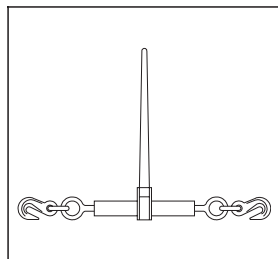
| JT-2500 Stock No. | Capacity (t) | Operating Beam Flang Type | Operating Beam Flange Width Range (mm) | Weight Each (kg) |
|-------------------|--------------|---------------------------|--|------------------|
| 1008003 | 0.4 - 0.9 | Sloped/Flat | 76.0 - 143 | 19.5 |
| 1008012 | 0.4 - 0.9 | Sloped/Flat | 108 - 168 | 20.0 |
| 1008021 | 1.35 - 1.8 | Sloped/Flat | 82.5 - 178 | 23.1 |
| 1008030 | 1.35 - 1.8 | Sloped/Flat | 127 - 219 | 24.0 |
| 1008049 | 2.7 - 3.6 | Sloped | 102 - 165 | 45.3 |
| 1008058 | 2.7 - 3.6 | Flat | 102 - 165 | 45.3 |
| 1008085 | 2.7 - 3.6 | Sloped | 165 - 229 | 47.6 |
| 1008094 | 2.7 - 3.6 | Flat | 165 - 229 | 47.6 |
| 1008067 | 4.5 - 5.4 | Sloped | 117 - 181 | 79.4 |
| 1008071 | 4.5 - 5.4 | Flat | 117 - 181 | 79.4 |
| 1008076 | 4.5 - 5.4 | Sloped | 184 - 248 | 82.1 |
| 1008110 | 4.5 - 5.4 | Flat | 184 - 248 | 82.1 |

LOAD BINDER

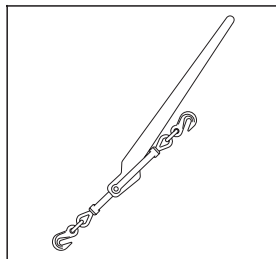
WARNINGS AND APPLICATION INSTRUCTIONS


WARNING

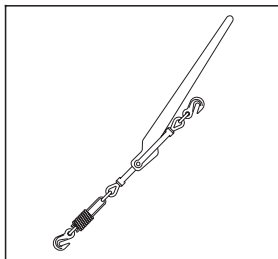
- Failure to use this load binder properly may result in serious injury or even death to you or others.
- Do not operate load binder while standing on the load.
- Move handle with caution. It may whip - Keep body clear.
- Keep yourself out of the path of the moving handle and any loose chain laying on the handle.
- You must be familiar with state and federal regulations regarding size and number of chain systems required for securing loads on trucks.
- Always consider the safety of nearby workers as well as yourself when using load binder.
- While under tension, load binder must not bear against an object, as this will cause side load.
- Do not throw these instructions away. Keep them close at hand and share them with any others who use this load binder.
- Do not use handle extender - see instructions.
- Do not attempt to close or open the binder with more than one person.



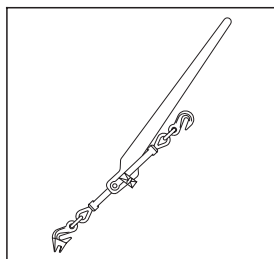
Ratchet Type



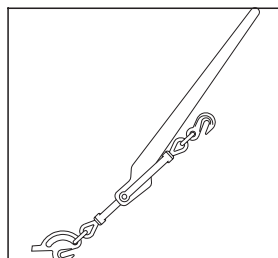
Lever Type



Lever Snubbing Type



Lever Walking Type



Lever Releasing Type

Mechanical Advantage

Lever Type Binder = 25 : 1
Ratchet Type Binder = 50 : 1

Example: 100 kg of effort applied to the binder results in the following force on the binder.

Lever Type:
2500 (100 kg x 25) kg of force

Ratchet Type:
5000 (100 kg x 50) kg of force

Instructions - Lever Type Load Binders



- Hook load binder to chain so you can operate it while standing on the ground. Position load binder so its handle can be pulled downward to tighten chain (see photo). **Be aware of ice, snow, rain, oil, etc. that can affect your footing. Make certain your footing is secure.**
- The Crosby Group, Inc. specifically recommends AGAINST the use of a handle extender (cheater pipe). If sufficient leverage cannot be obtained using the lever type load binder by itself, a ratchet type binder should be used.
- If the above recommendation is disregarded and a cheater pipe is used, it must closely fit the handle and must slide down the handle until the handle projections are contacted. The pipe should be secured to the handle, for example, by a pin, so that the pipe cannot fly off the handle if you loose control and let go. The increased leverage, by using a cheater pipe, can cause deformation and failure of the chain and load binder.
- During and after tightening chain, check load binder handle position. **Be sure** it is in the locked position and that its bottom side touches the chain link.
- Chain tension may decrease due to load shifting during transport. To be sure the load binder remains in proper position: Secure handle to chain by wrapping the loose end of chain around the handle and the tight chain, or tie handle to chain with soft wire.
- When releasing load binder, remember there is a great deal of energy in the stretched chain. This will cause the load binder handle to move very quickly with great force when it is unlatched. **Move handle with caution. It may whip - Keep body clear.**
- **Never use a cheater pipe or handle extender to release handle.** Use a steel bar and pry under the handle and **stay out of the path of handle** as it moves upward.
- If you release the handle by hand, use an open hand under the handle and push upward. **Do not close your hand around the handle. Always keep yourself out of the path of the moving handle.**

Instructions - Ratchet Load Binders

- Position ratchet binder so it can be operated from the ground.
- **Make sure your footing is secure.**

Maintenance of All Load Binders.

- Routinely check load binders for wear, bending, cracks, nicks, or gouges. **If bending or cracks are present - Do not use load binder.**
- Routinely lubricate pivot and swivel points of Lever Binders, and pawl part and screw threads of Ratchet Binders to extend product life and reduce friction wear.

CROSBY SHUR-LOC[®] HOOK

WARNINGS AND APPLICATION INSTRUCTIONS



Important Safety Information - Read and Follow

- A visual periodic inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel in compliance with the schedule in ANSI B30.10.
- For hooks used in frequent load cycles or pulsating load, the hook and threads should be periodically inspected by Magnetic Particle or Dye Penetrant. (Note: Some disassembly may be required.)
- Never use a hook whose throat opening has been increased, or whose tip has been bent or twisted.
- Never use a hook that is worn beyond the limits shown in Figure 1.
- Remove from service any hook with a crack, nick, or gouge. Hooks with a crack, nick, or gouge shall be repaired by grinding lengthwise, following the contour of the hook, provided that the reduced dimension is within the limits shown in Figure 1.
- Never repair, alter, rework, or reshape a hook by welding, heating, burning, or bending.
- Never side load, back load or tip load a hook. Side loading, back loading and tip loading are conditions that damage and reduce the capacity of the hook. (See Figure 2).

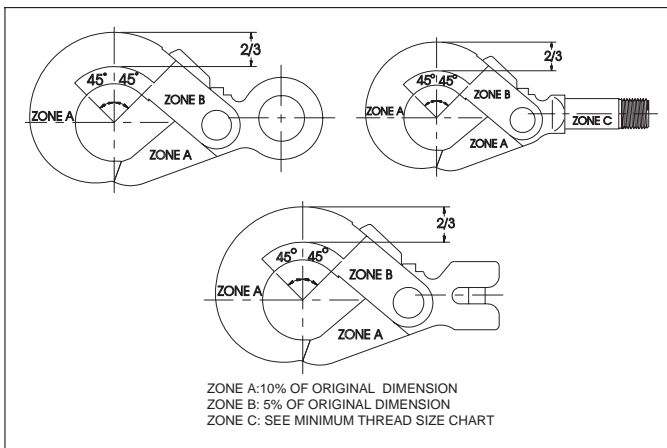


Figure 1

WARNING

- Loads may disengage from hook if proper procedures are not followed.
- A falling load may cause serious injury or death.
- Never use hook unless hook and latch are fully closed and locked.
- Keep body parts clear of pinch point between hook tip and hook latch when closing.
- Do not use hook tip for lifting.
- Shank threads may corrode and/or strip and drop the load.
- Remove nut securement to inspect or to replace S-326A bearing washers (2).
- Never apply more force than the hook's assigned Working Load Limit (WLL) rating.
- See OSHA Rule 1926.550 (g) for personnel hoisting by cranes or derricks. A Crosby 316A, 317A, 318A, 326A, 1316A, or 1317A hook may be used for lifting personnel.
- Use only genuine Crosby parts as replacements.
- Read and understand these instructions before using hook.

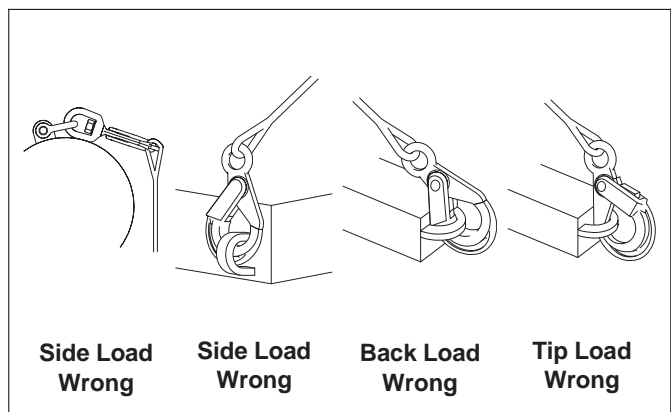
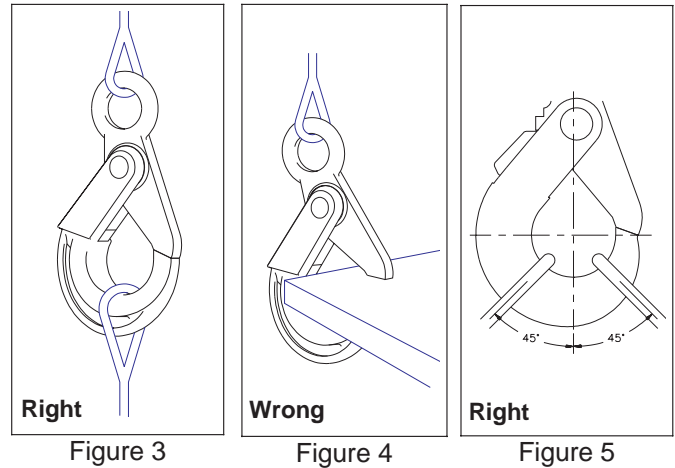


Figure 2

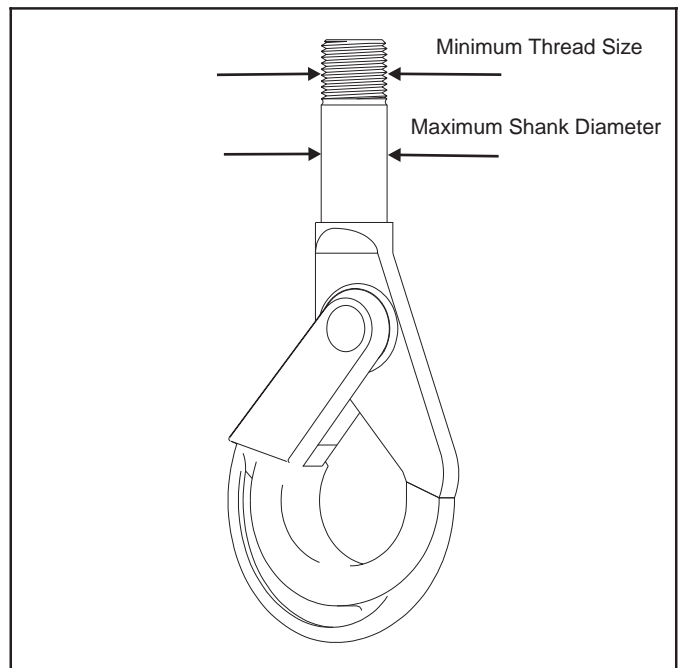
- Efficiency of synthetic sling material may be reduced when used in eye or bowl of hook.
- Always make sure the hook supports the load. (See Figure 3).
- Do not use hook tip for lifting (See Figure 4).
- When placing two (2) sling legs in hook, make sure the angle from vertical to the leg nearest the hook tip is not greater than 45 degrees, and the included angle between the legs does not exceed 90 degrees* (See Figure 5).
- See ANSI/ASME B30.10 "Hooks" for additional information.

* For two legged slings with angles greater than 90°, use an intermediate link such as a master link or bolt type shackle to collect the legs of the slings. The intermediate link can then be placed over the hook to provide an in-line load on the hook. This approach must also be used when using slings with three or more legs.



Important Basic Machining and Thread Information Read and Follow

- Wrong thread and/or shank size can cause stripping and loss of load.
- The maximum diameter is the largest diameter, after cleanup, that could be expected after allowing for straightness, pits, etc.
- All threads must be Class 2 or better.
- The minimum thread length engaged in the nut should not be less than one (1) thread diameter.
- Hook shanks are not intended to be swaged on wire rope or rod.
- Hook shanks are not intended to be drilled and internally threaded.
- Crosby cannot assume responsibility for, (A) the quality of machining, (B) the type of application, or (C) the means of attachment to the power source or load.
- Consult the Crosby Hook Identification & Working Load Limit Chart (See below) for the minimum thread size for assigned Working Load Limits (WLL).†
- Remove from service any Hook which has threads corroded more than 20% of the nut engaged length.



Crosby Hook Identification & Working Load Limit Chart†

| S-1316 & S-1317 Only Grade 100 Chain | | | S-316A, S-317A, S-318A, S-326A | | | | | S-318A Only | |
|---|------|--|--------------------------------|------|--|------------------------------|--------------------------------------|--------------------------------------|---------------------------|
| | | | Grade 80 Chain | | Wire Rope XIP Mechanical Splice | | | | |
| Chain Size | | Working Load Limit (t) ** 4:1 | Chain Size | | Working Load Limit (t) ** 4:1 | Wire Rope Size (mm) | Working Load Limit* (t) 5:1 | Maximum Shank Diameter (mm) | Minimum Thread Size |
| (in.) | (mm) | | (in.) | (mm) | | | | | |
| — | 6 | 1.4 | — | 6 | 1.12 | 8 | .91 | 18.3 | 1/2-13 UNC |
| 1/4 | 7 | 2 | 1/4-5/16 | 7-8 | 2 | 11 | 1.7 | 23.9 | 5/8-11 UNC |
| 5/16 | 8 | 2.5 | — | — | — | — | — | — | — |
| 3/8 | 10 | 4 | 3/8 | 10 | 3.15 | 13 | 2.3 | 26.9 | 3/4-10 UNC |
| 1/2 | 13 | 6.7 | 1/2 | 13 | 5.3 | 16 | 3.5 | 30.2 | 1" -8 UNC |
| 5/8 | 16 | 10 | 5/8 | 16 | 8 | 22 | 6.9 | 35.1 | 1 1/4" - 7 UNC |

* Ultimate Load is 5 times the Working Load Limit based on XIP Wire Rope.

** Ultimate Load is 4 times the Working Load Limit based on Grade 80 or Grade 100 Chain.

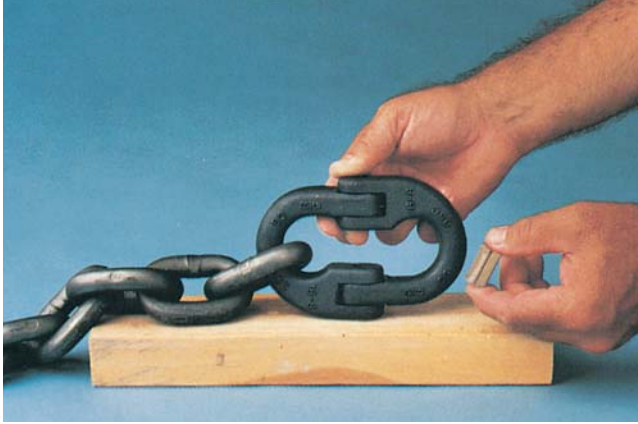
† Working Load Limit - The maximum mass or force which the product is authorized to support in general service when the pull is applied in-line, unless noted otherwise, with respect to the centerline of the product. This term is used interchangeably with the following terms:

1. WLL, 2. Rated Load Value, 3. SWL, 4. Safe Working Load, 5. Resultant Safe Working Load.

General Information

HOW TO ASSEMBLE A LOK-A-LOY® 8 CONNECTING LINK

Crosby Spectrum 8 Chain Slings are easy to assemble; the only tool required is a hammer



1. Place the locking sleeve between the assembled half link forgings.

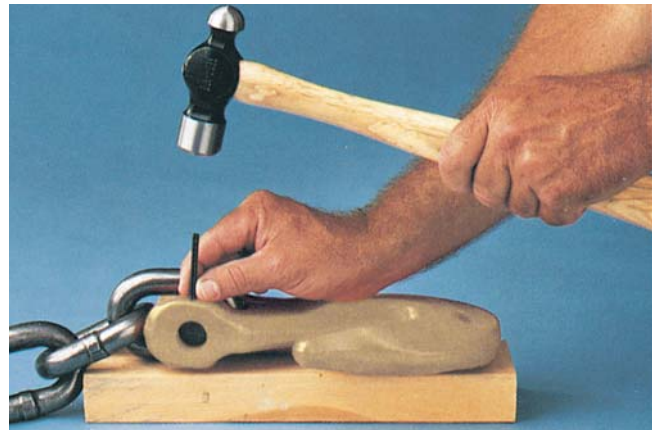


2. Drive the pin through the assembled link ends and sleeve until the end of the pin is flush with the outside of the connecting link halves.

HOW TO ASSEMBLE A CROSBY CLEVIS TYPE HOOK



1. Place chain link into clevis slot of hook. Insert pin fully into the clevis ears.

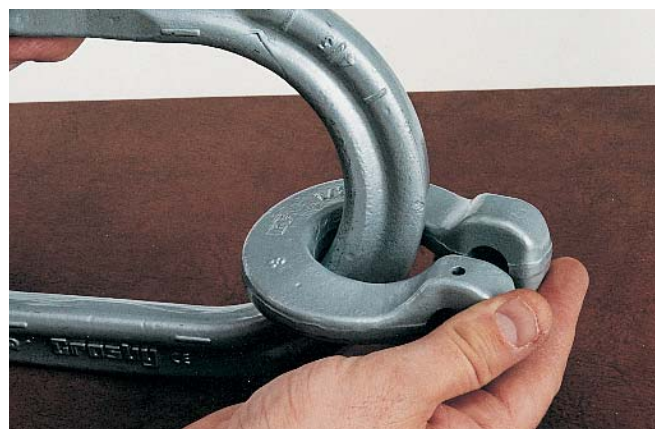


2. Place the hook on its side and using a hammer, drive the locking pin into the clevis ear until it is flush with the outside surface.

HOW TO ASSEMBLE AN S-325/S-1325 COUPLER LINK



1. Slide Coupler Link over Engineered Flat of Master Link



2. Rotate Coupler Link so that clevis fitting is to the outside of Master Link and attach to chain sling.