

The Austlift logo, featuring a stylized 'A' icon followed by the word 'AUSTLIFT' and a registered trademark symbol.

AUSTLIFT®

EYE BOLTS & EYE NUTS

LIFTING YOUR BUSINESS TO A HIGHER LEVEL

AUSTRALIAN LIFTING CENTRE PTY LTD

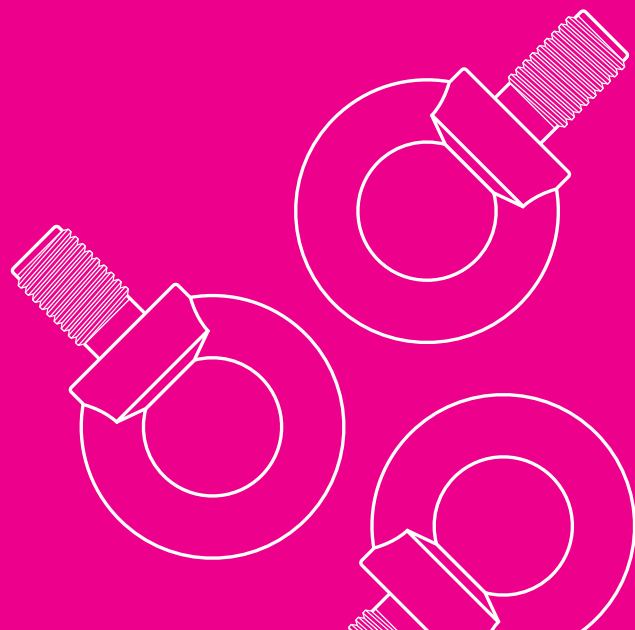
1300 100 120

www.austlift.com.au



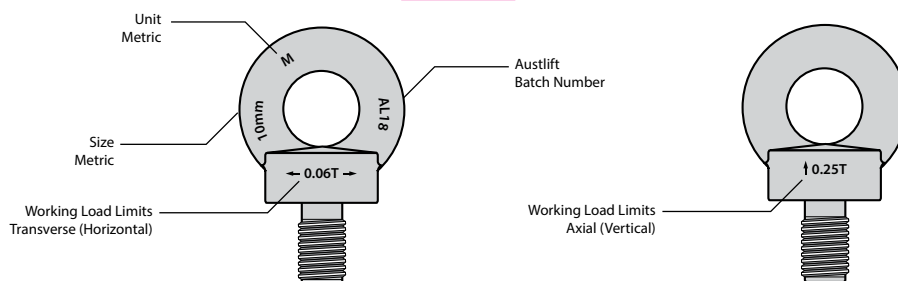
Eye Bolts & Eye Nuts

| | |
|---|-----|
| Inspection Before Use | 139 |
| Warning | 140 |
| Care and Use | 140 |
| Eye Nut (DIN 582) | 141 |
| Eye Bolt (DIN 580) | 141 |
| Working Load Limit for DIN Eye Bolt/Nut | 142 |
| Eye Bolt (AS2317/BS4278) | 143 |
| Eye Bolt (AS2317/BS529) | 143 |
| Working Load Limit for AS/BS Eye Bolt | 144 |
| Eye Bow Nut | 145 |
| Stubby Eye Bolt & Working Load Limit | 146 |
| Oblong Eye Bolt & Working Load Limit | 147 |
| Mega Eye Bolt & Working Load Limit | 148 |

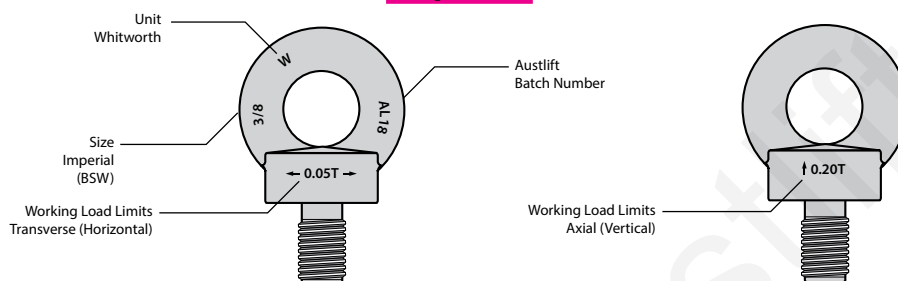


Eye Nut & Bolt Identification Marks

Metric



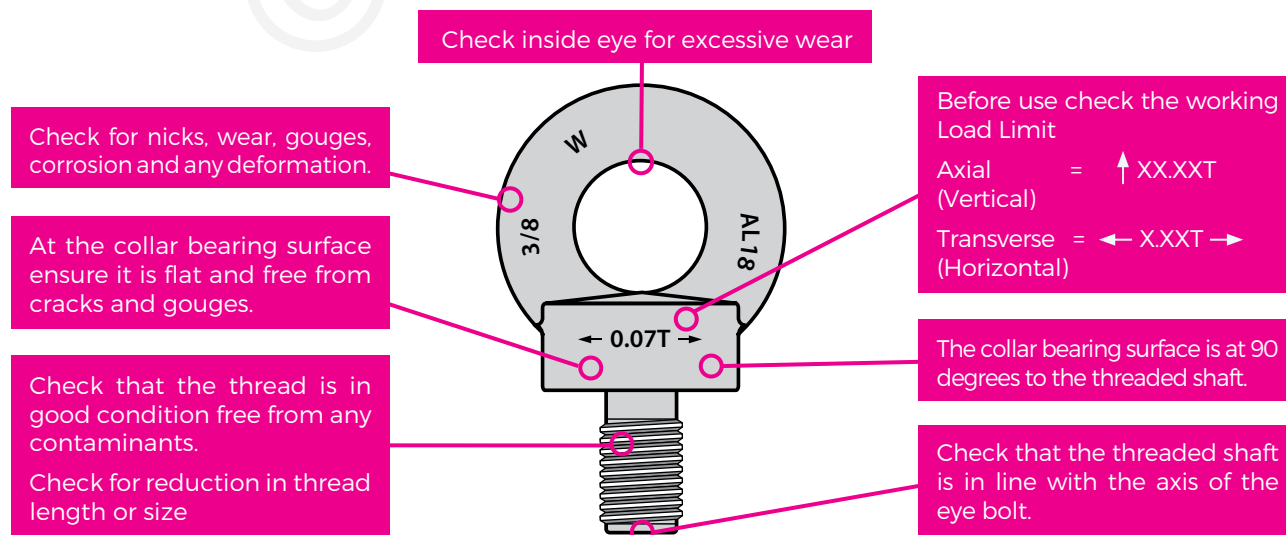
Imperial



Inspection Before Use

THE PRE-USE CHECK FOR EYE BOLTS SHOULD INCLUDE THE FOLLOWING:

1. Ensure the working load limit is marked and clearly legible.
2. Check for any signs of deformation, cracking, nicks, gouges and excessive bruising, wear or corrosion.
3. Threads should be concentric and fit neatly into a standard threaded hole or rated nut.
4. Check that the centre line of the eye is aligned with the centre line of the thread.
5. Check the threaded hole to ensure it is clean and no other foreign matter that could restrict the eye bolts from seating correctly in the hole. Particular attention should be paid to the threaded hole to ensure it is in good condition.
6. Check that the hole thread and the eye bolt thread are compatible.
7. It is important to check the surface area around the threaded hole (which the eye bolt collar will sit on) to ensure it is clean, free from deformation, cracking or any other problem that may restrict the Eye Bolt seating correctly.
8. It is not suggested to use eye bolts 12mm and under for lifting purposes, refer to relevant standards.



WARNING

- Eye bolts should always be used in accordance with Australian Standards or other relevant standards and the manufacturers recommendations.
- When eye bolts are used the load should always be tethered to prevent it from spinning during lifting operation.
- The working load limit for eye bolts is in the direct vertical lifting plane.
- Eye bolts used in multi leg assemblies must be de-rated.
- Where a single eye bolt is used, care should be taken to ensure that it remains screwed home throughout the lifting operation. If a single eye bolt is used for lifting and there is a possibility that the load will rotate or twist, a swivel should be used in the system to prevent the eye bolt unscrewing.
- Never lift with an eye bolt that is not correctly seated on its collar bearing surface. A dangerous situation is created when incorrectly seated Eye Bolts are loaded.
- Never use excessive leverage to tighten an eye bolt. Excessive tightening will cause stretching and deformation of the thread resulting in a dangerous situation.

Care and Use

Austlift eye bolts comply with DIN580, BS4278, BS529 and AS2317 and are manufactured to the highest quality. Austlift eye nuts are manufactured to DIN582. We also provide hanging loop type eye nuts.

Note: Care and use information should be taken as a general guide, as collared eye bolts are suitable for a number of broad applications.

Small Eye Bolts: We suggest that eye bolts of sizes smaller than 12mm should not be used for general lifting, staying or tensioning purposes, as high torsional stresses are easily induced in these smaller sizes by being screwed up too tightly. However, where they are used, care should be taken to not cause excessive torsional stresses while they are being fitted to a threaded hole.

Matching of Threads: Extreme care should be taken to ensure that eye bolts are not screwed into threaded holes of a different size or type of thread. Accidents may be caused by eye bolts with metric threads being screwed inadvertently into tapped holes having a BSW or UNC thread and vice versa. Apart from force fits, the thread sizes listed in the table below may be wrongly matched with the risk that the eye bolt may pull out of the threaded hole below the design load.

The possibility of mixing threads has always existed, but it has been accentuated by the change to metric threads. Where an eye bolt is removed from a threaded hole, it is recommended that the surface adjacent to the threaded hole be marked with the thread type and size and a plug be inserted into the threaded hole, or that other equally effective action be taken to reduce the possibility of mismatching threads. Where an eye bolt cannot be screwed by hand, the cause of the tight fit may be mixed threads.

Threaded Attachment: Where an eye bolt is used in an untapped hole, the thread should engage a nut with a thread length of at least the full thickness of a standard sized nut.

Where an eye bolt is used with a tapped hole in a plate the length of thread engagement should be at least the nominal diameter of the thread. Where the undercut is not sufficient to allow for an adequate engagement of the collar, a parallel washer beneath the collar should be used so that an adequate engagement is achieved.

If the nut side of the eye bolt is on a tapered surface, such as the inside flange of an RSJ beam, then a tapered washer should be used.

| INCORRECT MATCHED THREAD SIZES ARE PARTICULARLY TROUBLESOME | | | |
|---|-----------------------|-----------------|-----------------------|
| METRIC EYE BOLT | BSW AND UNC HOLE (in) | METRIC EYE BOLT | BSW AND UNC HOLE (in) |
| M6* | 1/4" | M27 | 1-1/16" |
| M8* | 5/16" | M30 | 1-1/4" |
| M10* | 3/8" | M33 | 1-5/16" |
| M12 | 1/2" | M36 | 1-1/2" |
| M14 | 9/16" | M39 | 1-9/16" |
| M16 | 5/8" | M42 | 1-3/4" |
| M20 | 3/4" | M48 | 2" |
| M22 | 7/8" | M52 | 2-1/16" |
| M24 | 1" | M56 | 2-3/16" |

Where an eye bolt cannot be screwed by hand, the cause of the tight fit may be mixed threads. *Please refer to note's small eye bolts above.

Tightening of Eye Bolts: Eye bolts should be screwed fully down to the face of the lifted load; however, excessive tightening of the eye bolt should be avoided. It should not be possible to enter a 0.04 mm feeler gauge at any position between the collar of an eye bolt and its seating. Where this condition is not achieved, any non-axial loading may overstress the screw thread.

Alignment of the Eye: Where correct alignment of the eye of an eye bolt is required but not accomplished at the first fitting, it should be achieved by the following methods: (a) Fitting a shim washer of steel under the collar. A shim washer should not be less in diameter than the diameter of the collar, and the thickness should be between 50% and 100% of the pitch of the threaded shank. (b) Machining the underside of the collar. The amount of material machined from the collar should not exceed 50% of the pitch of the thread on the shank of the eye bolt.

Continuous Slings: A continuous sling should not be used with pairs of eye bolts. Where a continuous sling is used with a pair of eye bolts, the load applied to the eye bolts is considerably increased by the tension in the horizontal portion of the sling and this may overstress the eye bolts. Whenever lifting with eye bolts in pairs supported by slings, always use rigging assemblies with individual sling lengths.

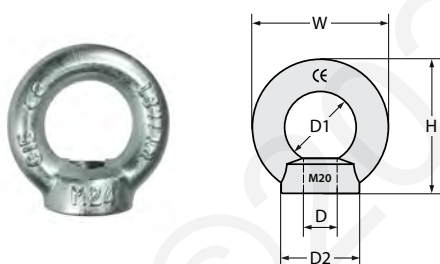
Loading Not Aligned with Threaded End: Where the centre-line of loading is not in line with the axis of the threaded end of the eye bolt, including where a two-leg sling is connected to a pair of eye bolts to support a load, the following apply: (a) The diameter of the boss of the tapped hole, into which the eye bolt is screwed, should be no less than the diameter of the collar of the eye bolt. (b) The angle between the centre-line of the loading on the eye of the eye bolt and the plane containing the eye of the eye bolt should not exceed 5°, unless an adequate reduction is made to the WLL.

Where the perpendicular loading is applied (sometimes called 'trunnion lifting'), the eye of the eye bolt should be aligned in the vertical plane.

Where two pairs of eye bolts are fitted to a single item, lifting should be effected by means of two two-leg slings and a spreader bar to ensure the load is distributed evenly across the eye bolts. This arrangement also allows the load to be readily applied to each eye bolt in the plane of the eye.

DIN EYE NUTS & EYE BOLTS

Eye Nut (DIN 582)



Eye Nut DIN 582 are generally used as a removable lifting point where a rated nut can be utilised. Also can be used as a termination for chain, wire rope and other assemblies where required.

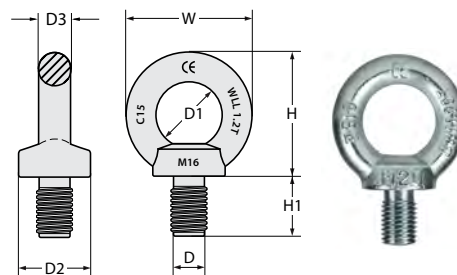
- Made from Grade 4 carbon steel with zinc plated finish, manufactured with a standard larger eye. Only available in metric thread sizes.
- Conforms to DIN 582, marked with working load limit in tonne, nominal size in millimetre, quality grade, batch numbered and supplier identification.
- Proof tested to 2 x working load limit and minimum breaking force of 6 x working load limit.
- Test certificates are available upon request.

| SIZE (mm) | CODE | PITCH (mm) | WLL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | |
|-----------|--------|------------|---------|----------|-----------------|-----|-----|------|-----|
| | | | | | D | D1 | D2 | H | W |
| M6 | 602006 | 1.00 | 0.07 | 0.055 | 6 | 20 | 20 | 36 | 36 |
| M8 | 602008 | 1.25 | 0.14 | 0.06 | 8 | 20 | 20 | 36 | 36 |
| M10 | 602010 | 1.50 | 0.23 | 0.1 | 10 | 25 | 25 | 45 | 45 |
| M12 | 602012 | 1.75 | 0.34 | 0.19 | 12 | 30 | 30 | 53 | 54 |
| M16 | 602016 | 2.00 | 0.70 | 0.31 | 16 | 35 | 35 | 62 | 63 |
| M20 | 602020 | 2.50 | 1.20 | 0.45 | 20 | 40 | 40 | 71 | 72 |
| M22 | 602022 | 2.50 | 1.50 | 0.68 | 22 | 45 | 45 | 80.5 | 81 |
| M24 | 602024 | 3.00 | 1.80 | 0.72 | 24 | 50 | 50 | 90 | 90 |
| M27 | 602027 | 3.00 | 2.50 | 1.16 | 27 | 50 | 50 | 97 | 90 |
| M30 | 602030 | 3.50 | 3.60 | 1.7 | 30 | 65 | 65 | 109 | 108 |
| M36 | 602036 | 4.00 | 5.10 | 2.0 | 36 | 75 | 75 | 128 | 126 |
| M42 | 602042 | 4.50 | 7.00 | 3.0 | 42 | 85 | 85 | 147 | 144 |
| M48 | 602048 | 5.00 | 8.60 | 5.1 | 48 | 100 | 100 | 168 | 168 |

Eye Bolt (DIN 580)

Eye bolts DIN580 are generally used as a removable lifting point where a rated female thread or nut can be utilised also can be used as a termination for chain, wire rope and other assemblies where required.

- Made from Grade 4 carbon steel with zinc plated finish, manufactured with a standard larger eye. Only available in metric thread sizes.
- Conforms to DIN580 and DIN582 marked with working load limit in tonne, nominal size in millimetre, quality grade, batch numbered and supplier identification.
- Proof tested to 2 x working load limit and minimum breaking force of 6 x working load limit.
- Test certificates are available upon request.



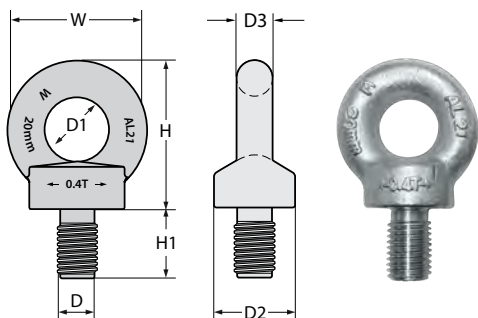
| SIZE (mm) | CODE | PITCH (mm) | WLL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | | | |
|-----------|--------|------------|---------|----------|-----------------|-----|------|----|-----|----|-----|
| | | | | | D | D1 | D2 | D3 | H | H1 | W |
| *M6 | 601006 | 1.00 | 0.09 | 0.055 | 6 | 20 | 20 | 8 | 36 | 13 | 36 |
| M8 | 601008 | 1.25 | 0.14 | 0.06 | 8 | 20 | 20 | 8 | 36 | 13 | 36 |
| M10 | 601010 | 1.50 | 0.23 | 0.1 | 10 | 25 | 25 | 10 | 45 | 17 | 45 |
| M12 | 601012 | 1.75 | 0.34 | 0.19 | 12 | 30 | 30 | 12 | 53 | 20 | 54 |
| M16 | 601016 | 2.00 | 0.70 | 0.31 | 16 | 35 | 35 | 14 | 62 | 27 | 63 |
| M20 | 601020 | 2.50 | 1.20 | 0.45 | 20 | 40 | 40 | 16 | 71 | 30 | 72 |
| *M22 | 601022 | 2.50 | 1.50 | 0.68 | 22 | 40 | 40 | 16 | 71 | 30 | 72 |
| M24 | 601024 | 3.00 | 1.80 | 0.72 | 24 | 50 | 50 | 20 | 90 | 36 | 90 |
| *M27 | 601027 | 3.00 | 2.50 | 1.16 | 27 | 54 | 61.4 | 22 | 99 | 40 | 98 |
| M30 | 601030 | 3.50 | 3.60 | 1.6 | 30 | 60 | 65 | 24 | 109 | 45 | 108 |
| M36 | 601036 | 4.00 | 5.10 | 2.8 | 36 | 70 | 75 | 28 | 128 | 54 | 126 |
| M42 | 601042 | 4.50 | 7.00 | 4.2 | 42 | 80 | 85 | 32 | 147 | 63 | 144 |
| M48 | 601048 | 5.00 | 8.60 | 6.36 | 48 | 90 | 100 | 38 | 168 | 68 | 166 |
| M56 | 601056 | 5.50 | 11.5 | 8.9 | 56 | 100 | 110 | 42 | 187 | 78 | 184 |

* = Products marked are manufactured according to AUSTLIFT specifications

WORKING LOAD LIMIT FOR METRIC DIN STANDARD EYE BOLTS & EYE NUTS (T)

| SIZE | SINGLE EYE BOLT/NUTS | | PAIR OF EYE BOLTS/NUTS | | | |
|------|----------------------|------------|------------------------|----------------------------|----------------------------|----------------------------|
| | AXIAL | TRANSVERSE | TRANSVERSE | MAXIMUM INCLUDED ANGLE 30° | MAXIMUM INCLUDED ANGLE 60° | MAXIMUM INCLUDED ANGLE 90° |
| | | | | | | |
| M6 | 0.09/0.07 | 0.018 | 0.035 | 0.088 | 0.056 | 0.035 |
| M8 | 0.14 | 0.035 | 0.07 | 0.176 | 0.112 | 0.07 |
| M10 | 0.23 | 0.058 | 0.115 | 0.29 | 0.184 | 0.115 |
| M12 | 0.34 | 0.085 | 0.17 | 0.428 | 0.272 | 0.17 |
| M16 | 0.70 | 0.175 | 0.35 | 0.882 | 0.56 | 0.35 |
| M20 | 1.20 | 0.3 | 0.6 | 1.512 | 0.96 | 0.6 |
| M22 | 1.50 | 0.375 | 0.75 | 1.89 | 1.2 | 0.75 |
| M24 | 1.80 | 0.45 | 0.9 | 2.268 | 1.44 | 0.9 |
| M27 | 2.50 | 0.625 | 1.25 | 3.15 | 2.0 | 1.25 |
| M30 | 3.60 | 0.9 | 1.8 | 4.536 | 2.88 | 1.8 |
| M36 | 5.10 | 1.275 | 2.55 | 6.426 | 4.08 | 2.55 |
| M42 | 7.00 | 1.75 | 3.5 | 8.82 | 5.6 | 3.5 |
| M48 | 8.60 | 2.15 | 4.3 | 10.836 | 6.88 | 4.3 |
| M56 | 11.50 | 2.875 | 5.75 | 14.49 | 9.2 | 5.75 |

AUSTRALIAN STANDARD EYE BOLTS



AS
2317

Certified

Carbon
Steel

MBF
x6 WLL

Proof loaded
x2 WLL

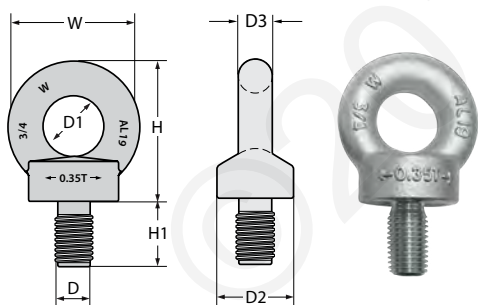
Eye Bolt - AS 2317.1:2018 / BS4278 (with Metric Sizing)

AS 2317.1 / BS4278 eye bolts are generally used as a removable lifting point where a rated female thread or nut can be utilised also can be used as a termination for chain, wire rope and other assemblies where required.

- Made from Grade 4 carbon steel following steel specifications of AS 2017.1:2018 / BS970 with zinc plated finish, manufactured with a smaller eye than DIN type.
- Conforms to AS2317.1:2018, marked with manufacturers identification, axial and transverse working load limit on the collar with direction indication arrows in tonne, thread type, nominal size, and batch numbered.
- Proof tested to 2 x working load limit and minimum breaking force of 6 x working load limit.
- Test certificates are supplied upon request.

| SIZE (mm) | CODE | | PITCH (mm) | SWL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | | |
|--------------|--------|---------|---------------|------------|-------------|-----------------|----|----|-------|----|-----|
| | ZINC | BLACK | | | | D | D1 | D2 | H | H1 | W |
| M8 | 603008 | | 1.25 | 0.15 | 0.06 | 8 | 13 | 20 | 31 | 16 | 28 |
| M10 | 603010 | 603010B | 1.50 | 0.25 | 0.07 | 10 | 14 | 22 | 35.5 | 18 | 29 |
| M12 | 603012 | 603012B | 1.75 | 0.40 | 0.127 | 12 | 15 | 22 | 40.5 | 18 | 41 |
| M16 | 603016 | 603016B | 2.00 | 0.80 | 0.258 | 16 | 20 | 29 | 53 | 23 | 54 |
| M20 | 603020 | 603020B | 2.50 | 1.60 | 0.44 | 20 | 27 | 40 | 68 | 32 | 64 |
| M24 | 603024 | | 3.00 | 2.50 | 1.04 | 24 | 35 | 52 | 87.5 | 40 | 83 |
| M30 | 603030 | | 3.50 | 4.00 | 1.975 | 30 | 44 | 65 | 109.5 | 51 | 103 |

* B=Black Color available



AS
2317

Certified

Carbon
Steel

MBF
x6 WLL

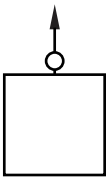
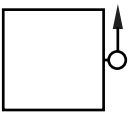
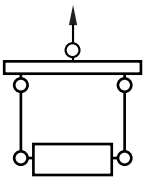
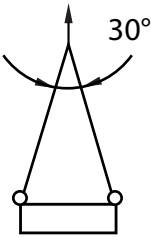
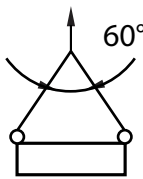
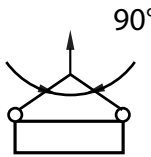
Proof loaded
x2 WLL

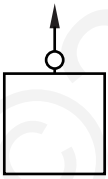
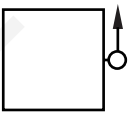
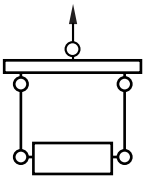
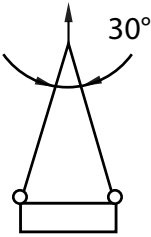
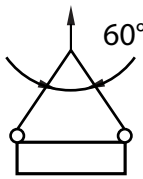
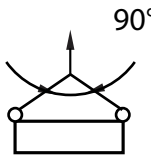
Eye Bolt - AS 2317.1:2018 / BS529 (with Imperial Whitworth Sizing)

BS529 eye bolts are generally used as a removable lifting point where a rated female thread or nut can be utilized, also can be used as a termination for chain, wire rope and other assemblies where required.

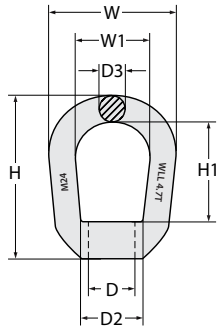
- Made from Grade 4 carbon steel following steel specifications of AS 2017.1:2018 / BS970 with zinc plated finish, manufactured with a smaller eye than DIN type.
- Conforms to AS2317.1:2018, marked with manufacturers identification, axial and transverse working load limit on the collar with direction indication arrows in tonne, thread type, nominal size, and batch numbered.
- Proof tested to 2 x working load limit and minimum breaking force of 6 x working load limit.
- Test certificates are supplied upon request.

| CODE | SIZE (in) | PITCH (in) | SWL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | | |
|--------|--------------|---------------|------------|-------------|-----------------|----|----|-----|----|-----|
| | | | | | D | D1 | D2 | H | H1 | W |
| 604005 | 3/8" | 0.0625 | 0.3 | 0.07 | 10 | 14 | 22 | 35 | 18 | 32 |
| 604010 | 1/2" | 0.0833 | 0.5 | 0.16 | 12 | 19 | 28 | 45 | 23 | 42 |
| 604015 | 5/8" | 0.0909 | 0.9 | 0.313 | 16 | 24 | 36 | 59 | 30 | 53 |
| 604020 | 3/4" | 0.1 | 1.4 | 0.525 | 20 | 28 | 44 | 69 | 37 | 62 |
| 604025 | 7/8" | 0.125 | 2.0 | 0.825 | 22 | 33 | 50 | 81 | 42 | 72 |
| 604030 | 1" | 0.1429 | 2.8 | 1.25 | 24 | 37 | 58 | 91 | 47 | 82 |
| 604035 | 1 1/4" | 0.1429 | 4.6 | 2.03 | 32 | 48 | 72 | 115 | 62 | 104 |

| WORKING LOAD LIMIT FOR IMPERIAL AS/BS EYE BOLTS & EYE NUTS (T) | | | | | | |
|--|---|---|---|--|---|---|
| IMPERIAL | SINGLE EYE BOLT | | PAIR OF EYE BOLTS | | | |
| | AXIAL | TRANSVERSE | TRANSVERSE | MAXIMUM INCLUDED ANGLE 30° | MAXIMUM INCLUDED ANGLE 60° | MAXIMUM INCLUDED ANGLE 90° |
| |  |  |  |  |  |  |
| LOADING FACTOR | 1 | 0.25 | 0.5 | 1.25 | 0.8 | 0.5 |
| 3/8" | 0.3 | 0.075 | 0.15 | 0.375 | 0.24 | 0.15 |
| 1/2" | 0.5 | 0.125 | 0.25 | 0.625 | 0.4 | 0.25 |
| 5/8" | 0.9 | 0.225 | 0.45 | 1.125 | 0.72 | 0.45 |
| 3/4" | 1.4 | 0.35 | 0.7 | 1.75 | 1.12 | 0.7 |
| 7/8" | 2.0 | 0.5 | 1.0 | 2.5 | 1.6 | 1.0 |
| 1" | 2.8 | 0.7 | 1.4 | 3.5 | 2.24 | 1.4 |
| 1-1/8" | 3.6 | 0.9 | 1.8 | 4.5 | 2.88 | 1.8 |
| 1-1/4" | 4.6 | 1.15 | 2.3 | 5.75 | 3.68 | 2.3 |

| WORKING LOAD LIMIT FOR METRIC AS/BS EYE BOLTS & EYE NUTS (T) | | | | | | |
|--|---|---|---|--|---|---|
| METRIC | SINGLE EYE BOLT | | PAIR OF EYE BOLTS | | | |
| | AXIAL | TRANSVERSE | TRANSVERSE | MAXIMUM INCLUDED ANGLE 30° | MAXIMUM INCLUDED ANGLE 60° | MAXIMUM INCLUDED ANGLE 90° |
| |  |  |  |  |  |  |
| LOADING FACTOR | 1 | 0.25 | 0.5 | 1.25 | 0.8 | 0.5 |
| M10 | 0.25 | 0.06 | 0.12 | 0.31 | 0.2 | 0.12 |
| M12 | 0.4 | 0.1 | 0.2 | 0.5 | 0.32 | 0.2 |
| M16 | 0.8 | 0.2 | 0.4 | 1.0 | 0.64 | 0.4 |
| M20 | 1.6 | 0.4 | 0.8 | 2.0 | 1.28 | 0.8 |
| M22 | 2.0 | 0.5 | 1.0 | 2.5 | 1.6 | 1.0 |
| M24 | 2.5 | 0.62 | 1.25 | 3.1 | 2.0 | 1.25 |
| M30 | 4.0 | 1.0 | 2.0 | 5.0 | 3.2 | 2.0 |
| M33 | 5.0 | 1.25 | 2.5 | 6.3 | 4.0 | 2.5 |
| M36 | 6.3 | 1.57 | 3.1 | 7.9 | 5.0 | 3.1 |
| M39 | 7.0 | 1.75 | 3.5 | 8.8 | 5.6 | 3.5 |
| M42 | 8.0 | 2.0 | 4.0 | 10.0 | 6.4 | 4.0 |
| M48 | 10.0 | 2.5 | 5.0 | 12.6 | 8.0 | 5.0 |
| M56 | 15.0 | 3.7 | 7.5 | 18.9 | 12.0 | 7.5 |

ASME EYE BOW NUT



Eye Bow Nut (M24)

Bow nut in accordance with requirements of ASME B30.26, used as a removable hanging eye nut where a rated male thread or bolt can be utilised commonly used in the mining industry.

- Made from C15 carbon steel and tempered with zinc plated finish, manufactured with a bow shape, available in metric thread sizes only.
- Marked with working load limit in tonne, nominal size in millimetre, batch numbered and supplier identification.
- Proof tested to 2 x working load limit and minimum breaking force of 5 x working load limit.

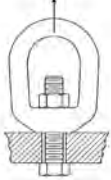


| SIZE (mm) | CODE | WLL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | | | |
|-----------|--------|---------|----------|-----------------|----|----|-----|----|----|----|
| | | | | D | D2 | D3 | H | H1 | W | W1 |
| M24 | 602035 | 4.7 | 1.18 | 24 | 46 | 21 | 125 | 75 | 98 | 53 |



WARNING

In-line loading only



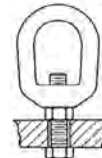
INSTRUCTIONS



Through hole
no nut



Through hole
top nut



Through hole
bottom nut

SWIVEL EYE BOLTS, G80 SERIES

Design

- Low carbon alloy material.
- Large eye size for utilized applications.
- Integrated ball bearing for swiveling under load.
- Marked with WLL, bolt size, batch, and Austlift or AL.

Testing

- Proof tested at 2.5 x WLL with ball bearing installed.
- Destructive tested at 4 x WLL with ball bearing installed.
- All tested at 45 degree angles off axle line.
- Fatigue tested at 1.5 x WLL, minimum 20,000 times, in axle direction.
- Low temperature and cryogenic tested, at -20°C, minimum 25J.
- Magnetic crack tested on each eyebolt.
- Visual tested after assembled.
- Testing certificates available upon request.

Manufacturing

- Forged.
- Heat treated.
- Powder coated finishing.

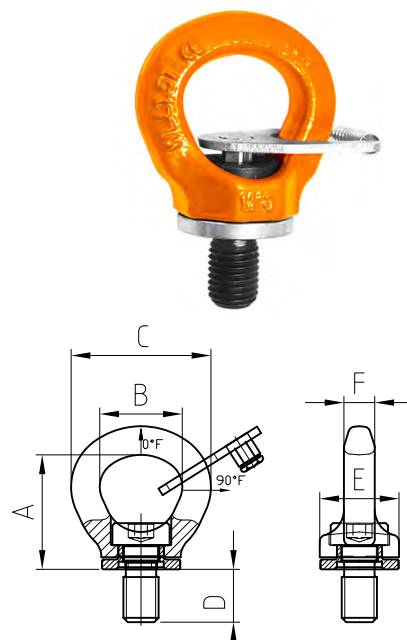
Stubby Eye Bolt


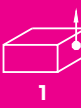









| SIZE (mm) | CODE | WLL (T) | | Wt. (kg) | DIMENSIONS (mm) | | | | | |
|-----------|--------|---------|------|----------|-----------------|------|------|------|----|----|
| | | 0° | 90° | | A | B | C | D | E | F |
| M8 | 605008 | 0.8 | 0.3 | 0.12 | 38 | 26 | 45.3 | 11.5 | 25 | 8 |
| M10 | 605010 | 1 | 0.4 | 0.15 | 38 | 26 | 45.3 | 14 | 25 | 8 |
| M12 | 605012 | 2 | 0.75 | 0.2 | 43.5 | 32 | 54 | 17 | 33 | 10 |
| M16 | 605016 | 4 | 1.5 | 0.29 | 52 | 37.5 | 63.5 | 24 | 36 | 14 |
| M20 | 605020 | 6 | 2.3 | 0.55 | 63 | 44.5 | 78.5 | 30 | 45 | 17 |

WARNING

- Swivel ring bolt should be tightened by spanner with torque wrench.
- These ring bolts are not designed for permanent rotating continuously.
- Not suitable for turning under full load at 90° in side loading position.



| METRIC | WORKING LOAD LIMIT FOR STUBBY EYE BOLT (T) | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|
| LOADING METHOD |  |  |  |  |  |  |  |  |  |
| | 1 | 1 | 2 | 2 | 2 | 3 or 4 | 3 or 4 | 3 or 4 | 3 or 4 |
| INCLINATION | 0° | 90° | 0° | 90° | SYMMETRIC | | | | ASYMMETRIC |
| | | | | | 0°-45° | 45°-60° | 0°-45° | 45°-60° | |
| LOAD FACTOR | 2.6 | 1.0 | 5.2 | 2.0 | 1.4 | 1.0 | 2.1 | 1.5 | 1.0 |
| M8 | 0.8 | 0.3 | 1.6 | 0.6 | 0.42 | 0.3 | 0.63 | 0.45 | 0.3 |
| M10 | 1.0 | 0.4 | 2 | 0.8 | 0.56 | 0.4 | 0.84 | 0.6 | 0.4 |
| M12 | 2.0 | 0.75 | 4 | 1.5 | 1.0 | 0.75 | 1.58 | 1.1 | 0.75 |
| M16 | 4.0 | 1.5 | 8.0 | 3.0 | 2.1 | 1.5 | 3.15 | 2.2 | 1.5 |
| M20 | 6.0 | 2.3 | 12.0 | 4.6 | 3.2 | 2.3 | 4.83 | 3.4 | 2.3 |

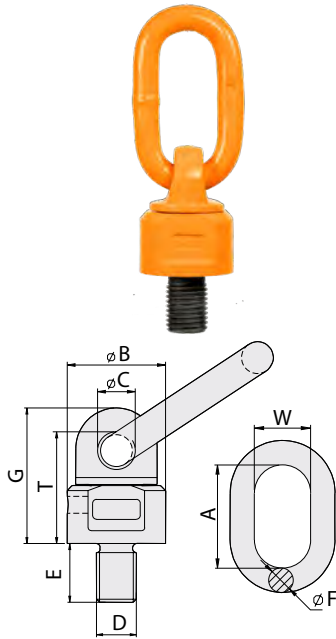
Oblong Eye Bolt

AS/NZS
2317

EN
818-4

Proof loaded
WLL
x1.25

Safety Factor
4-1



| SIZE (mm) | CODE | WLL (T) | | Wt. (kg) | DIMENSIONS (mm) | | | | | | | |
|--------------|--------|---------|------|-------------|-----------------|------|------|----|----|------|----|------|
| | | 0° | 90° | | A | B | C | E | F | G | W | T |
| 8 | 605108 | 0.6 | 0.3 | 0.41 | 55 | 36 | 15 | 13 | 13 | 51 | 30 | 41 |
| 10 | 605110 | 0.9 | 0.45 | 0.43 | 55 | 36 | 15 | 18 | 13 | 51 | 30 | 41 |
| 12 | 605112 | 1.0 | 0.5 | 0.44 | 55 | 36 | 15 | 18 | 13 | 51 | 30 | 41 |
| 16 | 605116 | 2.0 | 1.12 | 0.46 | 55 | 36 | 15 | 20 | 13 | 52 | 30 | 42 |
| 20 | 605120 | 4.0 | 2.0 | 0.96 | 70 | 49.5 | 19 | 30 | 16 | 68 | 35 | 56 |
| 24 | 605124 | 6.3 | 3.15 | 1.45 | 85 | 57 | 22 | 30 | 18 | 78 | 40 | 65.5 |
| 30 | 605130 | 10.6 | 5.3 | 2.17 | 85 | 66 | 23.5 | 35 | 20 | 96.5 | 40 | 80.5 |
| 36 | 605136 | 11.8 | 8.0 | 3.6 | 115 | 80 | 27 | 50 | 22 | 109 | 50 | 89.5 |

| METRIC | WORKING LOAD LIMIT FOR OBLONG EYE BOLT (T) | | | | | | | | |
|----------------|--|------|------|------|-----------|---------|--------|---------|------------|
| LOADING METHOD | | | | | | | | | |
| INCLINATION | 0° | 90° | 0° | 90° | SYMMETRIC | | | | ASYMMETRIC |
| | | | | | 0°-45° | 45°-60° | 0°-45° | 45°-60° | |
| LOAD FACTOR | 2.0 | 1.0 | 4.0 | 2.0 | 1.4 | 1.0 | 2.1 | 1.5 | 1.0 |
| M8 | 0.6 | 0.3 | 1.2 | 0.6 | 0.42 | 0.3 | 0.63 | 0.45 | 0.3 |
| M10 | 1.0 | 0.5 | 2.0 | 1.0 | 0.7 | 0.5 | 1.05 | 0.75 | 0.5 |
| M12 | 1.0 | 0.5 | 2.0 | 1.0 | 0.7 | 0.5 | 1.05 | 0.75 | 0.5 |
| M16 | 2.24 | 1.12 | 4.48 | 2.24 | 1.57 | 1.12 | 2.35 | 1.68 | 1.12 |
| M20 | 4.0 | 2.0 | 8.0 | 4.0 | 2.8 | 2.0 | 4.2 | 3.0 | 2.0 |
| M24 | 6.3 | 3.15 | 12.6 | 6.3 | 4.41 | 3.15 | 6.62 | 4.73 | 3.15 |
| M30 | 10.6 | 5.3 | 21.2 | 10.6 | 7.42 | 5.3 | 11.13 | 7.95 | 5.3 |
| LOAD FACTOR | 1.6 | 1.0 | 3.2 | 2.0 | 1.4 | 1.0 | 2.1 | 1.5 | 1.0 |
| M36 | 12.8 | 8.0 | 25.6 | 16.0 | 11.2 | 8.0 | 16.8 | 12.0 | 8.0 |

Mega Eye Bolt

AS/NZS
2317

EN
818-4

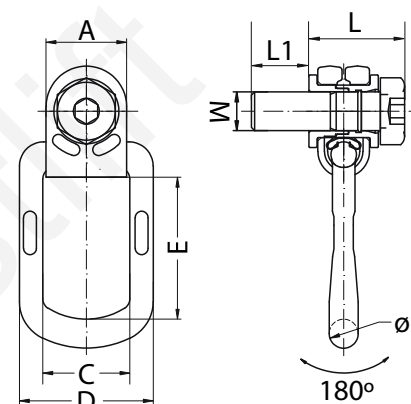
Certified

Proof loaded
WLL
x1.25

Safety Factor
4-1

| SHORT THREAD | | | | | | | | | | | |
|--------------|--------|---------|----------|-----------------|----|----|-----|------|----|------|------|
| SIZE (mm) | CODE | WLL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | | | | |
| | | | | Ø | A | C | D | E | M | L1 | L |
| M8 | 605208 | 0.3 | 0.36 | 14 | 30 | 35 | 55 | 52.5 | 8 | 10.4 | 35.6 |
| M10 | 605210 | 0.63 | 0.38 | 14 | 30 | 35 | 55 | 52.5 | 10 | 16 | 36 |
| M12 | 605212 | 1 | 0.71 | 18 | 36 | 40 | 68 | 54 | 12 | 18 | 44 |
| M14 | 605214 | 1.22 | 0.72 | 18 | 36 | 40 | 68 | 54 | 14 | 21 | 45 |
| M16 | 605216 | 1.5 | 0.74 | 18 | 36 | 40 | 68 | 54 | 16 | 24 | 46 |
| M18 | 605218 | 2 | 1.16 | 16 | 50 | 54 | 83 | 80 | 18 | 26 | 57 |
| M20 | 605220 | 2.5 | 1.21 | 16 | 50 | 54 | 83 | 80 | 20 | 30 | 58 |
| M24 | 605224 | 4 | 1.37 | 18 | 50 | 54 | 83 | 94 | 24 | 35 | 60 |
| M27 | 605227 | 4 | 4.18 | 27 | 68 | 73 | 119 | 106 | 27 | 38 | 82 |
| M30 | 605230 | 5 | 4.40 | 27 | 68 | 73 | 119 | 106 | 30 | 48 | 84 |

| LONG THREAD | | | | | | | | | | | |
|-------------|--------|---------|----------|-----------------|----|----|-----|------|----|-----|------|
| SIZE (mm) | CODE | WLL (T) | Wt. (kg) | DIMENSIONS (mm) | | | | | | | |
| | | | | Ø | A | C | D | E | M | L1 | L |
| M8 | 605508 | 0.3 | 0.39 | 14 | 30 | 35 | 55 | 52.5 | 8 | 76 | 35.6 |
| M10 | 605510 | 0.63 | 0.43 | 14 | 30 | 35 | 55 | 52.5 | 10 | 96 | 36 |
| M12 | 605512 | 1 | 0.8 | 18 | 36 | 40 | 68 | 54 | 12 | 114 | 44 |
| M14 | 605514 | 1.22 | 0.86 | 18 | 36 | 40 | 68 | 54 | 14 | 140 | 45 |
| M16 | 605516 | 1.5 | 0.92 | 18 | 36 | 40 | 68 | 54 | 16 | 194 | 46 |
| M18 | 605518 | 2 | 1.47 | 16 | 50 | 54 | 83 | 80 | 18 | 180 | 57 |
| M20 | 605520 | 2.5 | 1.49 | 16 | 50 | 54 | 83 | 80 | 20 | 187 | 58 |
| M24 | 605524 | 4 | 1.89 | 18 | 50 | 54 | 83 | 94 | 24 | 222 | 60 |
| M27 | 605527 | 4 | 5.22 | 27 | 68 | 73 | 119 | 106 | 27 | 270 | 82 |
| M30 | 605530 | 5 | 5.35 | 27 | 68 | 73 | 119 | 106 | 30 | 279 | 84 |



NOTES:

- Long thread eye bolts can be cut to suit jobs.
- When cutting the bolts, a **cold cutting** method must be used.
- DO NOT use Oxy-Acetylene Cutting.**
- The length after cutting must not be less than 1.5 times that of its diameter.

| METRIC | WORKING LOAD LIMIT FOR MEGA EYE BOLT (T) | | | | | | | | |
|----------------|--|---------|--------|---------|-----------|---------|--------|---------|------------|
| LOADING METHOD | | | | | | | | | |
| | 1 | 1 | 2 | 2 | 2 | 2 | 3 or 4 | 3 or 4 | 3 or 4 |
| INCLINATION | 0° | 90° | 0° | 90° | SYMMETRIC | | | | ASYMMETRIC |
| | 0°-45° | 45°-60° | 0°-45° | 45°-60° | 0°-45° | 45°-60° | 0°-45° | 45°-60° | |
| LOAD FACTOR | 1.0 | 1.0 | 2.0 | 2.0 | 1.4 | 1.0 | 2.1 | 1.5 | 1.0 |
| M8 | 0.3 | 0.3 | 0.6 | 0.6 | 0.42 | 0.3 | 0.63 | 0.45 | 0.3 |
| M10 | 0.63 | 0.63 | 1.26 | 1.26 | 0.88 | 0.63 | 1.32 | 0.95 | 0.63 |
| M12 | 1.0 | 1.0 | 2.0 | 2.0 | 1.4 | 1.0 | 2.1 | 1.5 | 1.0 |
| M14 | 1.2 | 1.2 | 2.4 | 2.4 | 1.68 | 1.2 | 2.52 | 1.8 | 1.2 |
| M16 | 1.5 | 1.5 | 3.0 | 3.0 | 2.1 | 1.5 | 3.15 | 2.25 | 1.5 |
| M18 | 2.0 | 2.0 | 4.0 | 4.0 | 2.8 | 2.0 | 4.2 | 3.0 | 2.0 |
| M20 | 2.5 | 2.5 | 5.0 | 5.0 | 3.5 | 2.5 | 5.25 | 3.75 | 2.5 |
| M24 | 4.0 | 4.0 | 8.0 | 8.0 | 5.6 | 4.0 | 8.4 | 6.0 | 4.0 |
| M27 | 4.0 | 4.0 | 8.0 | 8.0 | 5.6 | 4.0 | 8.4 | 6.0 | 4.0 |
| M30 | 5.0 | 5.0 | 10.0 | 10.0 | 7.0 | 5.0 | 10.5 | 7.5 | 5.0 |