

Lift it up, Tie it down, Pull it around

Load Binders



WARNING



Never exceed the working load limit (WLL) of any load binder. The loading of any load binder beyond its WLL can result in severe personal injury or death. The load binder design factor is based on destructive, laboratory controlled testing conditions, which will not be exactly duplicated during actual loading conditions. **NEVER** use load binder for lifting or hoisting applications. **NEVER** use load binder while standing on the load. **NEVER** repair or reshape a load binder by welding, heating or bending as this may affect the lashing capacity. **NEVER** side load the load binder, since load binders are suitable for in-line use only. **NEVER** use handle extensions, always hand tighten only.

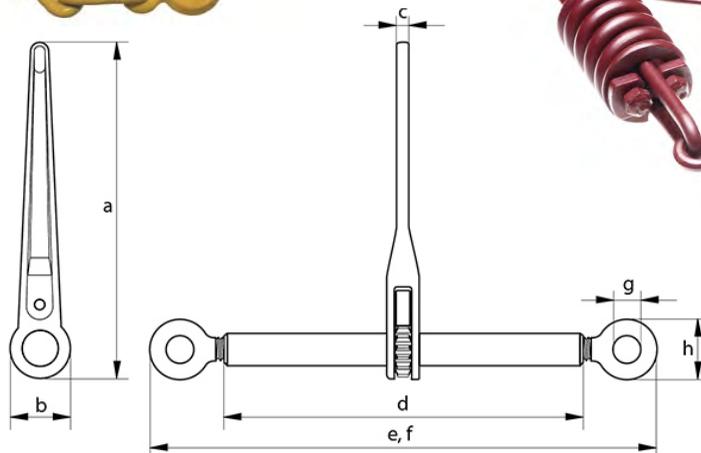


TYPES OF BINDERS

Lever Binders: A mechanical lever device designed to tighten chain for securing a load. This device is such that it stores kinetic energy in the handle.



Low Energy Release Lever Binders: A mechanical lever device designed to tighten chain for securing a load. This device is such that it stores kinetic energy in the body of the binder, such as a cam, so that the handle does not store and release kinetic energy.



Ratchet Binders: A mechanical device designed to tighten chain for securing a load. Due to having a gear, pawl, handle, and end fittings that screw in or out, it does not store as much energy in the handle as a lever binder does.



Compression Binder: A metal or rubber spring device that is used with a lever or ratchet binder to maintain tightness of chain. Specifically recommended when transporting equipment with tires which can compress due to bumps in the road resulting in the chain becoming slack and thus the potential for disengagement.



Sling Protection
Web Slings
Round Slings
Synthetic Chain Slings
Wire Rope Slings
Chain Slings
Shackles & Turnbuckles
Hooks & Links
Lifting Points
Hoists & Blocks
Lifting Devices
Pipe & Hose Restraints
Tie Down Assemblies
Transport Chains
Towing & Recovery
Rope & Cordage

RECOMMENDED OPERATING PRACTICES

Proper Selection:

- All users must be trained in proper tie down selection, use and inspection, cautions to personnel, environmental effects, all applicable standards, regulations and tie down practices.
- Select a binder having suitable characteristics for the specific load and the securement required. In order to achieve the required assembly working load limit (WLL), the hook, chain, load binder and the anchor point must be evaluated. The component with the lowest "WLL" shall be used to determine the assembly WLL for the entire tie down assembly.
- If the WLL or grade identifier of any of the three tie-down assembly components (excluding anchor points) is worn off, illegible, or missing, that product shall be removed from service.

Use and Care

- Binders shall not be loaded in excess of the WLL as provided by the manufacturer.
- Handle extensions (cheater bars) should not be used on any binders. Binders develop approximate WLL tension with hand effort.
- Before operating any binder the user shall secure their footing on the ground to prevent slipping or falling. In adverse weather conditions, including freezing temperatures, additional caution should be exercised.
- Binders should be matched with the equivalent grade of chain. Using the wrong grade of binder or chain may reduce the assembly WLL of the securement system.
- Lever binders shall always be released using an open hand with all body parts completely out of the path that the handle travels.
- Binders should be periodically checked and adjusted during transit to maintain proper tension. See 393.9 in FMCSA regulations.
- Binders designed for load securement are not approved for overhead lifting applications. Products for lifting require certification.
- Handle extensions (cheater bars) shall not be used on any binders.
- Regulations require each tie down to be attached and secured in a manner that prevents it from becoming loose, unfastened, opened, or released while vehicle is in transit. Latches, chain wrap and/or other means should be used to secure binders and chain.

Environmental Considerations

- Binders are subject to dirt, mud, snow, ice, road salt, cleaning solutions, etc. Binders should be periodically inspected, cleaned, and lubricated as needed to insure proper operation.
- Binders not in use should be stored in a clean, dry location.
- If binders have mud, snow, ice, etc in the gear or pivot points, drop forged binders may be struck with a hammer to break loose and remove any foreign material. Care should be taken with binders manufactured with cast parts as striking with a hammer, especially in sub-freezing temperatures, may cause breakage.

Inspection

- Type of Inspection
- Initial Inspection shall be made before a binder is placed into service to insure the binder is being used for the application and that it matches the chain grade being used.
- Each time a binder is used it shall be inspected.

Removal from Service

A binder shall be removed from service if any of the following conditions exist (and as per any and all CVSA removal from service criteria):

- Hooks are worn, bent, distorted, twisted, stretched or cracked (ref. ASME B30.10)
- Links are bent, gouged, distorted, stretched, cracked or worn ((see wear allowances per manufacturer, also specifications for wear on chain (links) and hooks can be found in ASME B30.9 section 9-1.9.4, (Table 6) and the NACM Welded Steel Chain Specifications Table XVI. These and all manufacturer's specifications shall be followed.
- No welding on any component is allowed with the exception of the initial factory production welds on the components during assembly.
- Clevis on pivot is worn, bent, distorted, or cracked.
- Pawl does not engage.
- Gear is worn, chipped, or cracked.
- Markings are missing, incomplete, illegible, or incorrect.
- Excessive rust.
- End fitting threads are worn, bent, distorted or will not turn.
- Bent or deformed handle.
- Swivel sockets and or ball worn or deformed.

