

Bullivants

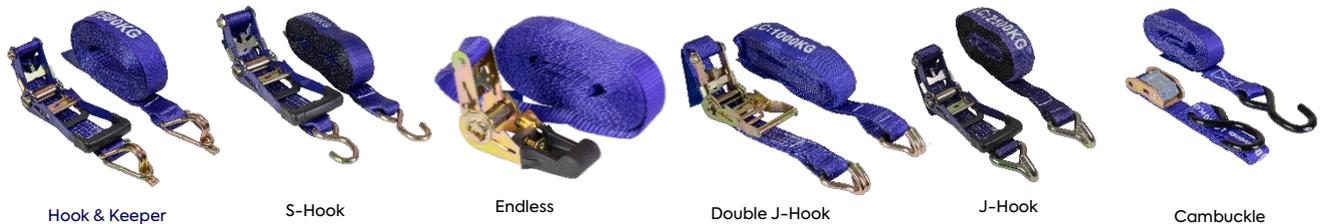
Tie-Down Restraint



Tie-Down Restraints use friction to hold a load, which stops the load from moving forwards, sideways or backwards. To ensure reliability, durability and compliance, all webbing material and components are tested and marked with all requirements as specified by Australian Standards.

Main Features:

- Versatile load restraints for diverse applications
- Suitable for use in the transport industry
- Complies with AS/NZS 4380:2001



Hook & Keeper

S-Hook

Endless

Double J-Hook

J-Hook

Cambuckle

Specifications:

| Bullivants Mfr No. | Lashing Capacity kg | Length m | Description | Weight kg |
|----------------------|---------------------|----------|---------------------------------|-----------|
| WCA-025-0250-030-SH | 250 | 3.0 | Cambuckle with S-Hooks each end | 0.42 |
| WRA-025-0250-040-JH | 250 | 4.0 | J-Hooks each end | 0.44 |
| WRA-025-0250-040-SH | 250 | 4.0 | S-Hooks each end | 0.53 |
| WRA-025-0400-040-SH | 400 | 4.0 | S-Hooks each end | 0.54 |
| WRA-025-0500-018-EL | 500 | 1.8 | Endless type | 0.26 |
| WRA-025-0500-040-EL | 500 | 4.0 | Endless type | 0.33 |
| WRA-050-0500-060-SH | 500 | 6.0 | S-Hooks each end | 2.11 |
| WRA-036-0600-016-SH | 600 | 1.6 | S-Hooks each end | 0.86 |
| WRA-036-0600-060-SH | 600 | 6.0 | S-Hooks each end | 1.14 |
| WRA-025-0700-040-EL | 700 | 4.0 | Endless Type | 0.33 |
| WRA-025-0400-050-EL | 400 | 5.0 | Endless Type | 0.37 |
| WRA-035-1000-060-DJH | 1000 | 6.0 | Double J Hooks each end | 1.07 |
| WRA-036-1000-060-HK | 1000 | 6.0 | Hook & Keeper each end | 1.26 |
| WRA-036-2000-022-EL | 2000 | 2.2 | Endless type | 0.56 |
| WRA-050-2000-040-HK | 2000 | 4.0 | Hook & Keeper each end | 2.30 |
| WRA-050-2000-090-JH | 2000 | 9.0 | Double J-Hooks each end | 3.02 |
| WRA-050-2500-060-HK | 2500 | 6.0 | Hook & Keeper each end | 2.52 |
| WRA-050-2500-090-JH | 2500 | 9.0 | J-Hooks each end | 3.08 |
| WRA-050-2500-090-HK | 2500 | 9.0 | Hook & Keeper each end | 2.68 |
| WRA-075-5000-090-HK | 5000 | 9.0 | Hook & Keeper each end | 7.05 |

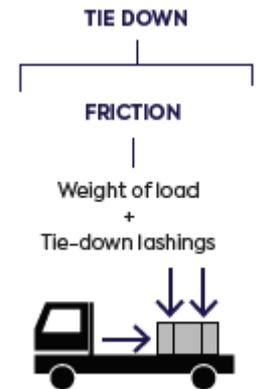
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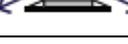
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Technical Data:

To maintain the friction force during transportation the load must be tensioned correctly and always remain in contact with the vehicle. The tension applied to the load is impacted by the angle at which the lashing is applied. The greater the angle, the less the clamping force. The clamping force is very small when the lashing is near horizontal and more lashings may be required. For example, a single strap at 90 degrees is equivalent to four straps at 15 degrees. The type of surface the load sits on may also impact the tension – a slippery surface provides less friction; however, rubber or other friction surfaces can reduce required lashings.



| TIE-DOWN ANGLE EFFECT | | | |
|---|---------------|-----------------------|------------------------|
| | APPROX. ANGLE | TIE-DOWN ANGLE AFFECT | TIE-DOWN EFFECTIVENESS |
|  | 90° | 1.00 | 100% |
|  | 60° | 0.85 | 85% |
|  | 45° | 0.70 | 70% |
|  | 30° | 0.50 | 50% |
|  | 15° | 0.25 | 25% |

Replacement Load Strap

- 50mm wide replacement
- 2500kg lashing capacity



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|----------------------|---------------------|----------|---|-----------|
| WRLS-050-2500-090-HK | 2500 | 9.0 | Replacement strap for 2500kgs x 50mm ratchet assembly | 1.46 |
| WRLS-050-2500-090-HS | 2500 | 9.0 | Replacement strap for truck winches | 1.49 |