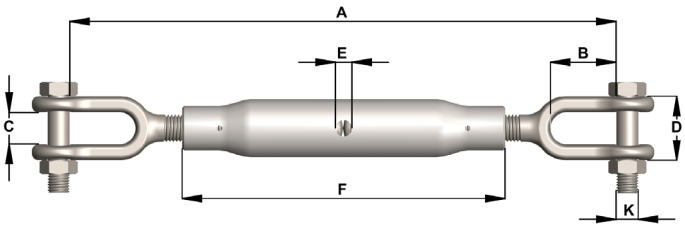
Clevis & Clevis Rigging Screws

Product Description

- AS2319-2001
- 6:1 Safety Factor
- Grades L, P & S
- Fully Tested and Certified to AS2319
- Galvanized
- Manufactured using only heat certified Australian Steel (AS1442/AS1444)

Available on Request

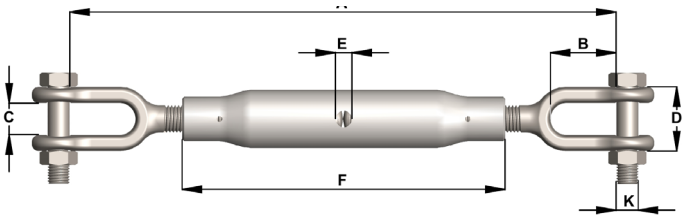
- Lock Nuts



Townley Drop Forge is both NATA Accredited (Test Lab No. 13554) and AS/NZS ISO9001 Certified (Certificate number FS 604897)..

Dimensions and Working Load Limits (WLL) Metric - Grades L , P & S

Nominal Size	A Closed	A Open	B	C	D	E	F	K	Grade L WLL	Grade P WLL	Grade S WLL
M10	265	395	30	14	30	8.5	180	10	0.3t	0.6t	0.8t
M12	340	525	36	15	35	8.5	230	10	0.5t	1t	1.2t
M16	360	535	45	20	40	9	230	12	0.75t	1.6t	2t
M20	390	555	55	22	46	10.5	230	16	1.25t	2.5t	3.2t
M24	555	740	59	30	58	13	360	20	2.5t	4t	5t
M33	628	904	80	38	75	14	380	27	5t	8t	10t
M42	690	890	93	50	110	17	405	35	7.5t	12t	16t
M48	755	989	109	54	110	18	420	42	10t	16t	20t
M64	740	960	105	70	152	22	410	56	20t	28t	36t



Dimensions and Working Load Limits (WLL) BSW – Grade L

Nominal Size	A Closed	A Open	B	C	E	F	K	Grade L WLL
1 1/4"	610	830	63	38	14	380	25	5t
1 1/2"	660	920	82	48	16	405	32	6t
1 3/4"	690	890	93	50	17	405	35	7.5t
2"	762	997	99	50	19	405	41	10t
2 1/4"	819	1029	115	60	22	405	47	15t
2 1/2"	838	1035	115	70	22	405	51	20t

Clevis & Eye Rigging Screws

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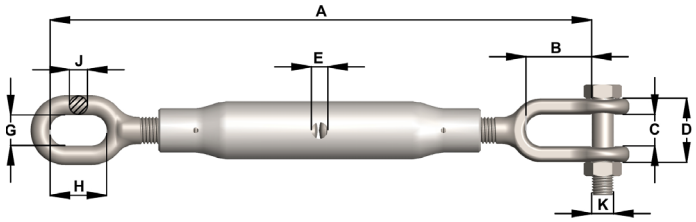
- Lock Nuts



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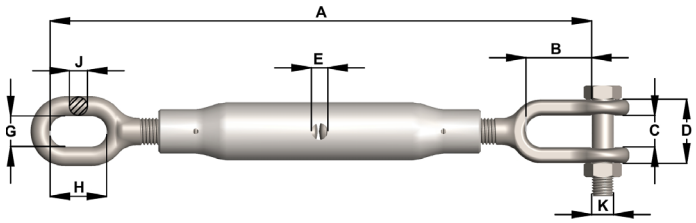
Dimensions and Working Load Limits (WLL) Metric - Grades L , P & S

Nominal Size	A Closed	A Open	B	C	D	E	F	G	H	J	K	Grade L WLL	Grade P WLL	Grade S WLL
M10	260	385	30	14	30	8.5	180	11	21	7	10	0.3t	0.6t	0.8t
M12	335	525	36	15	35	8.5	230	14	30	9	10	0.5t	1t	1.2t
M16	355	535	45	20	40	9.0	230	17	36	12	12	0.75t	1.6t	2t
M20	385	550	55	22	46	10.5	230	21	42	14	16	1.25t	2.5t	3.2t
M24	555	735	59	30	58	13.0	360	25	51	17	20	2.5t	4t	5t
M33	644	920	80	38	75	14.0	380	33	70	24	27	5t	8t	10t
M48	730	1000	109	46	110	18.0	420	44	91	38	42	N/A	16t	20t



Dimensions and Working Load Limits (WLL) BSW – Grade L

Nominal Size	A Closed	A Open	B	C	E	F	G	H	J	K	Grade L WLL
1 1/4"	603	876	63	38	14	380	35	65	22	25	5t
1 1/2"	673	952	82	48	16	405	38	75	25	32	6t
1 3/4"	705	959	93	50	17	405	41	88	32	35	7.5t
2"	743	978	99	50	19	405	44	102	38	41	10t
2 1/4"	813	1029	115	60	22	405	60	130	41	47	15t
2 1/2"	826	1029	115	70	22	405	60	130	47	51	20t

Eye & Eye Rigging Screws

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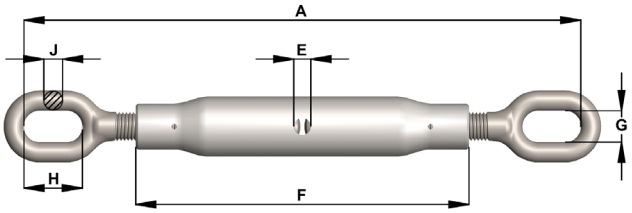
Available on Request

- Lock Nuts



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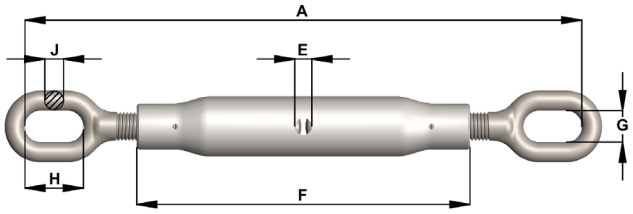
Dimensions and Working Load Limits (WLL) Metric - Grades L , P & S

Nominal Size	A Closed	A Open	E	F	G	H	J	Grade L WLL	Grade P WLL	Grade S WLL
M10	260	380	8.5	180	12	21	7	0.3t	0.6t	0.8t
M12	340	520	8.5	230	15	30	9	0.5t	1t	1.2t
M16	350	525	9.0	230	17	36	12	0.75t	1.6t	2t
M20	380	545	10.5	230	21	42	12	1.25t	2.5t	3.2t
M24	540	725	13.0	360	25	51	17	2.5t	4t	5t
M33	660	936	14.0	380	33	70	24	5t	8t	10t
M48	750	1000	18.0	420	44	91	38	N/A	16t	20t



Dimensions and Working Load Limits (WLL) BSW – Grade L

Nominal Size	A Closed	A Open	E	F	G	H	J	Grade L WLL
1 1/4"	590	837	14	380	35	65	22	5t
1 1/2"	648	927	16	405	38	75	25	6t
1 3/4"	686	946	17	405	41	88	32	7.5t
2"	717	965	19	405	44	102	38	10t
2 1/4"	813	1016	22	405	60	130	41	15t
2 1/2"	813	1016	22	405	60	130	47	20t

Care in Use

- Where components are interfaced, they should readily connect and freely articulate, to ensure that loading will be applied in tension.
- Care should be taken to ensure that rigging screws and turnbuckles are not excessively tightened beyond the specified rating in tension.
- Regular inspection is required by a competent person.
- Threads should be protected from corrosion by effective means.
- The Rigging Screw or Turnbuckle should be removed from service if it has a damaged screw thread, distorted body, distorted fitting, nicks, gouges, cracks or corrosion.

Grade

Rigging Screws and Turnbuckles manufactured in accordance with Australian Standard AS 2319 are available in various Grades L, P and S.

Proof Testing

Townley Provides mandatory NATA Test Certificates for proof testing.

Marking

Rigging Screws and Turnbuckles to AS 2319 will have the following markings:

a) Manufacturer's Identification
b) Nominal size
c) The Quality Grade i.e. Grade L
d) WLL in tonnes
e) Identification Marking to correlate the Rigging Screw or Turnbuckle to the test certificate

Locking of Threads

Where rigging screws or turnbuckles are to be used in a permanently adjusted position and where a guy is subjected to shock vibration or rope spin it is necessary to prevent the screws from unwinding. Typical methods of locking threads include locknuts, locking plates and wire.

Locknuts, fitted at the ends of the body, are a method of locking, but may not provide positive or reliable locking under all circumstances, such as due to rope spin. Care should be taken to not induce excessive torque during tightening.

Load Rating

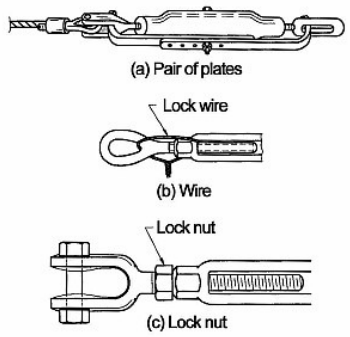
Rigging Screws and Turnbuckles in accordance with Australian Standards have a safety factor of 6:1. This safety factor helps to counter possible problems from shock, vibration, fatigue, wear, damage and corrosion. This safety factor must be maintained.

When tested to destruction, components must demonstrate ductility. This is achieved if the failed component achieves at least 15% elongation at break.

Working Load Limit (WLL)

The WLL may be de-rated for particular conditions of use. The strength of components is adversely affected by excessively elevated temperatures. Where the temperatures are likely to exceed 200°C, the following relevant reduction of WLL is advised:

Temperature °C	Temporary reduction of WLL while heated, percent
≤200	No reduction
>200 ≤300	25
>400	Do not use



Acceptable Methods of Locking