



User Manual

www.doughty-engineering.co.uk

Doughty Clamps/Couplers



Original Instructions

Revision 2 06/10/15



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The Doughty Coupler collection is a range of aluminium clamps/couplers designed specifically to attach to round tubes or truss chords and suspend equipment and luminaries in the theatre, film, TV and photographic industries.

Doughty clamps/couplers are available in the following specifications:

Pt No	Tube Dia	Width	Max Load	Finish	Hole/Fixings Supplied	Weight
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Standard Doughty Clamps

T57000	48-51mm	50mm	750Kg	Polished	Ø12mm	0.63Kg
T57010	48-51mm	50mm	750Kg	Black	Ø12mm	0.63Kg
T57120	48-51mm	50mm	750Kg	Polished	Easy Grip Handle	1.06Kg
T57121	48-51mm	50mm	750Kg	Black	Easy Grip Handle	1.06Kg
T57200	48-51mm	50mm	750Kg	Polished	M12x50 Bolt / Wing Nut	0.71Kg
T57201	48-51mm	50mm	750Kg	Black	M12x50 Bolt / Wing Nut	0.71Kg

Slimline Doughty Clamps

T57001	48-51mm	30mm	750Kg	Polished	Ø12mm	0.41Kg
T57011	48-51mm	30mm	750Kg	Black	Ø12mm	0.41Kg
T58010	48-51mm	30mm	750Kg	Polished	M12x50 Bolt / Wing Nut	0.50Kg
T58011	48-51mm	30mm	750Kg	Black	M12x50 Bolt / Wing Nut	0.50Kg

Low Profile Doughty Clamps

T58600	48-51mm	30mm	500Kg	Polished	M12x50 Bolt / Wing Nut	0.57Kg
T58601	48-51mm	30mm	500Kg	Black	M12x50 Bolt / Wing Nut	0.57Kg

Lightweight Clamps

T58100	48-51mm	50mm	500Kg	Polished	Ø12mm	0.34Kg
T58101	48-51mm	50mm	500Kg	Black	Ø12mm	0.34Kg
T58105	48-51mm	50mm	500Kg	Polished	M12x50 Bolt / Wing Nut	0.42Kg
T58106	48-51mm	50mm	500Kg	Black	M12x50 Bolt / Wing Nut	0.42Kg

Slimline Lightweight Clamps

T58080	48-51mm	30mm	300Kg	Polished	Ø12mm	0.24Kg
T58081	48-51mm	30mm	300Kg	Black	Ø12mm	0.24Kg
T58085	48-51mm	30mm	300Kg	Polished	M12x50 Bolt / Wing Nut	0.32Kg
T58086	48-51mm	30mm	300Kg	Black	M12x50 Bolt / Wing Nut	0.32Kg

Pt No	Tube Dia	Width	Max Load	Finish	Hole/Fixings Supplied	Weight
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Super Lightweight Clamps

T58122	48-51mm	30mm	75Kg	Polished	M10x30 Bolt / Wing Nut	0.18Kg
T5812201	48-51mm	30mm	75Kg	Black	M10x30 Bolt / Wing Nut	0.18Kg

Atom Clamps

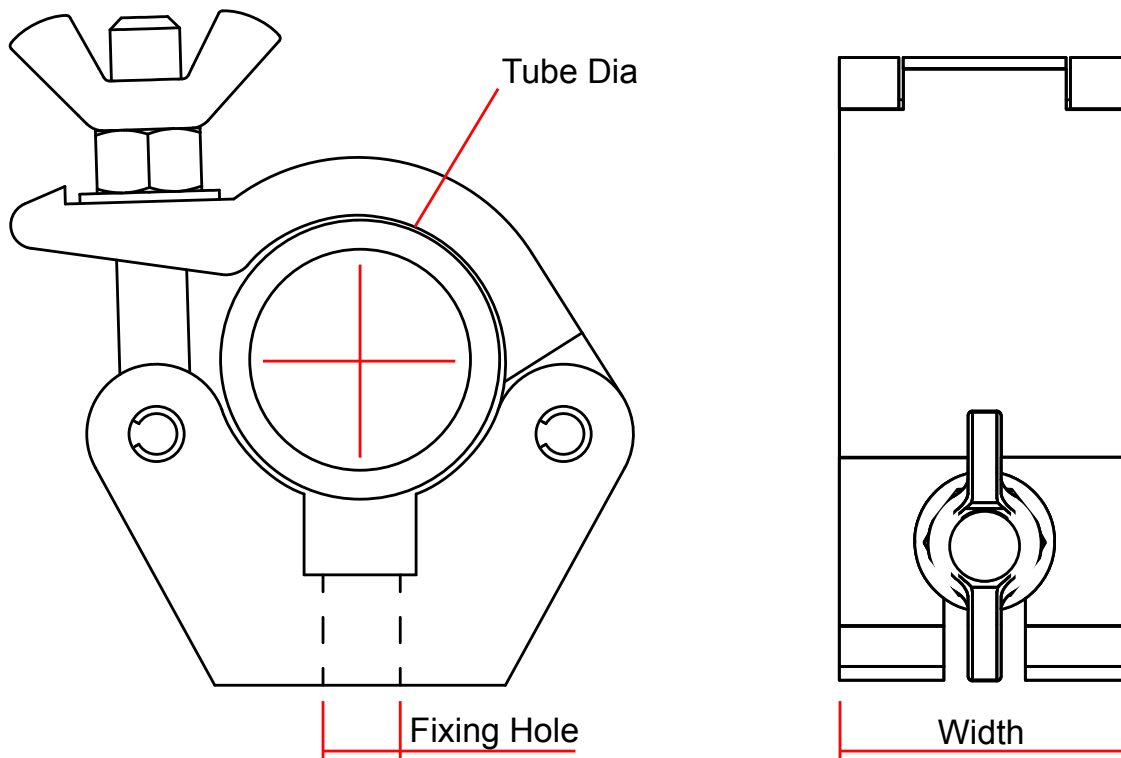
T58870	25mm	21mm	100Kg	Polished	Ø6mm	0.04Kg
T5887001	25mm	21mm	100Kg	Black	Ø6mm	0.04Kg
T58887	25mm	21mm	100Kg	Polished	M6x30 Bolt / Wing Nut	0.04Kg
T5888701	25mm	21mm	100Kg	Black	M6x30 Bolt / Wing Nut	0.04Kg
T58800	32mm	30mm	100Kg	Polished	Ø6mm	0.08Kg
T58801	32mm	30mm	100Kg	Black	Ø6mm	0.08Kg
T58830	32mm	30mm	100Kg	Polished	M6x30 Bolt / Wing Nut	0.08Kg
T5883001	32mm	30mm	100Kg	Black	M6x30 Bolt / Wing Nut	0.08Kg
T58900	35mm	30mm	100Kg	Polished	Ø10mm	0.09Kg
T5890001	35mm	30mm	100Kg	Black	Ø10mm	0.09Kg
T58927	35mm	30mm	100Kg	Polished	M10x30 Bolt / Wing Nut	0.09Kg
T5892701	35mm	30mm	100Kg	Black	M10x30 Bolt / Wing Nut	0.09Kg
T58970	38mm	30mm	100Kg	Polished	Ø10mm	0.09Kg
T5897001	38mm	30mm	100Kg	Black	Ø10mm	0.09Kg
T58997	38mm	30mm	100Kg	Polished	M10x30 Bolt / Wing Nut	0.09Kg
T5899701	38mm	30mm	100Kg	Black	M10x30 Bolt / Wing Nut	0.09Kg

Mammoth Clamps

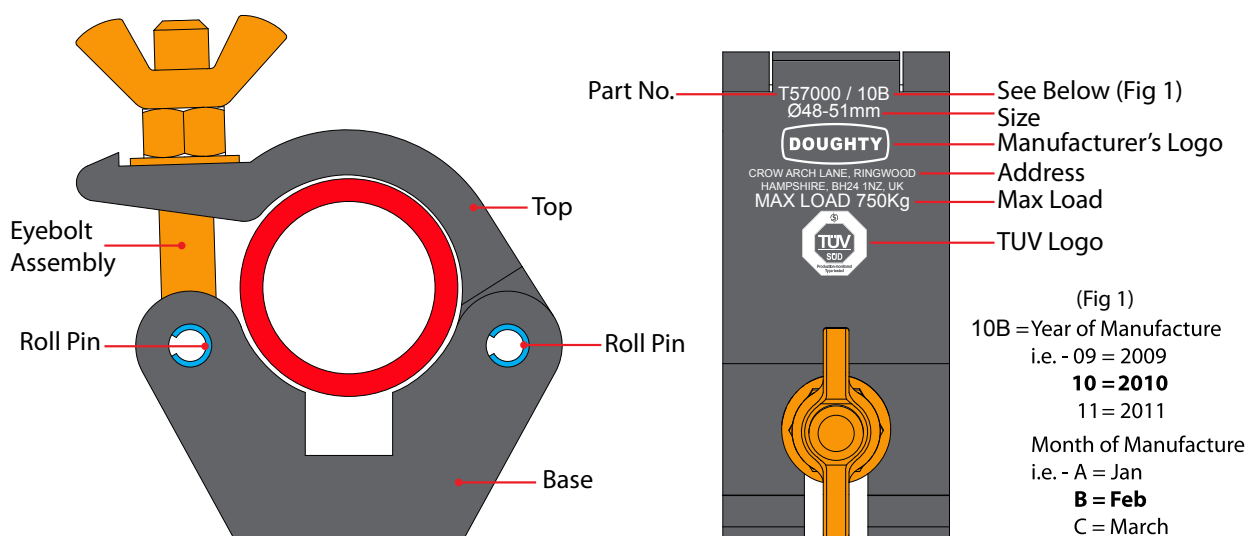
T57400	60-63mm	50mm	500Kg	Polished	Ø12mm	0.41Kg
T57401	60-63mm	50mm	500Kg	Black	Ø12mm	0.41Kg
T57410	60-63mm	50mm	500Kg	Polished	M12x50 Bolt / Wing Nut	0.49Kg
T57411	60-63mm	50mm	500Kg	Black	M12x50 Bolt / Wing Nut	0.49Kg

Slimline Mammoth Clamps

T57405	60-63mm	30mm	300Kg	Polished	Ø12mm	0.41Kg
T57406	60-63mm	30mm	300Kg	Black	Ø12mm	0.41Kg
T57415	60-63mm	30mm	300Kg	Polished	M12x50 Bolt / Wing Nut	0.49Kg
T57416	60-63mm	30mm	300Kg	Black	M12x50 Bolt / Wing Nut	0.49Kg



Typical Clamp / Coupler Example



Operation

Doughty clamps/couplers must only be installed/used by qualified/competent personnel.

All clamps/couplers should be visually inspected before each use. In the event of any damage the clamp/coupler should be taken out of service and returned to an 'Approved Doughty Service Agent' for inspection. (See our Dealer Locator on our web site for a comprehensive list of Authorised Service Agents).

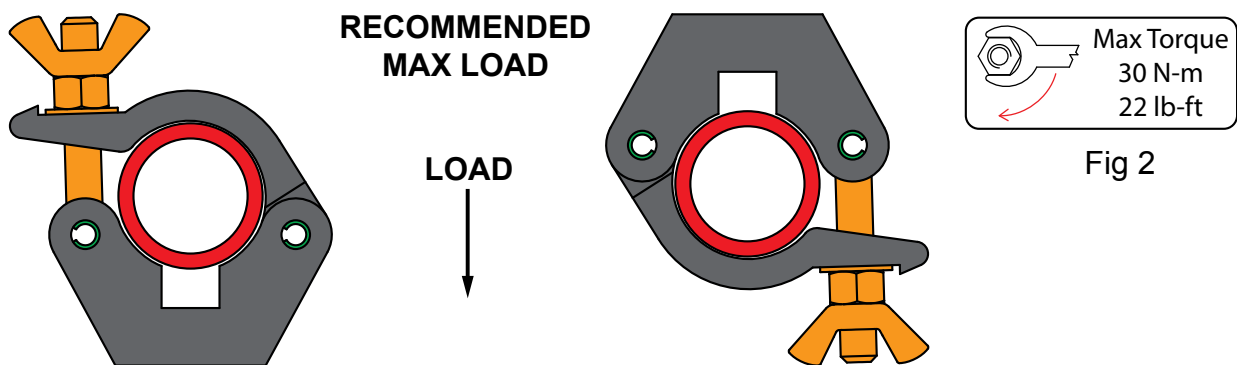
When installing Doughty clamps/couplers care must be taken not to exceed the recommended tightening torque (Fig 2). Failure to do this may result in the tube/truss being damaged or the coupler being damaged. Clamps/couplers fitted with a Doughty knob or wing nut should be tightened by hand only.

When installing/using Doughty clamps/couplers you must wear appropriate personal protection equipment suitable for the environment you are working in.

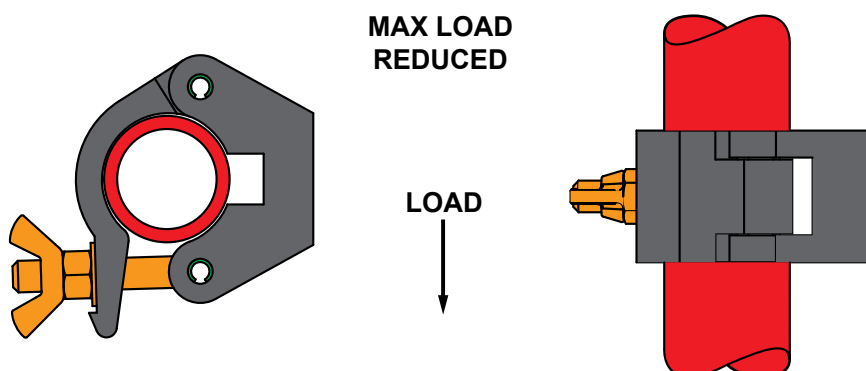
Never exceed the Max Load as indicated on the clamp/coupler and in this Manual or Max Load as instructed by your installer, as the installation conditions may alter the Max Load that may applied to the clamp/coupler.

When used in conjunction with any other accessories, care must be taken to ensure the Max Load of any component is not exceeded.

IMPORTANT - ALWAYS USE A SECONDARY SAFETY



THE FOLLOWING APPLICATIONS WILL RESULT IN THE RECOMMENDED MAX LOAD BEING REDUCED DEPENDANT ON THE TUBE SURFACE FINISH & TORQUE SETTINGS APPLIED. PROOF LOADING ON INSTALLATIONS IS RECOMMENDED.



Maintenance

- Maintenance must only be carried out by approved personnel.
- Approved personnel must make regular checks of the product.
- If you see any damage including cracks, deformation or missing parts, the product must be removed from service and returned to an Approved Service Agent for evaluation/repair.
- A full list of Approved Service Agents can be found on our website - www.doughty-engineering.co.uk.
- Approved personnel must carry out a visual and a function test before every usage.
- Approved personnel must carry out more detailed inspection and testing of the product on a regular basis depending on the usage of the product.
- Written records should be kept from the date the product is put into operation.



Warning

- The installer/operator must read and understand the Instruction Manual before using the equipment.
- Operators must be adequately instructed and fully understand the safe use of the equipment before use.
- Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard, could render this equipment unsafe and the manufacturer cannot accept any responsibility in this respect.

Do's and Don'ts

Do ensure the clamp/coupler is only used by a competent person

Do ensure the clamp/coupler is kept in a clean operational condition

Do check the condition of the clamp/coupler regularly

Do use an Authorised Service Agent only for maintenance and repair

Do use a secondary safety

Do Not lift loads which exceed the Max Load of the weakest component in the assembly

Do Not attempt to lift loads which are greater than the Max Load of the clamp/coupler

Do Not lift people

Do Not lift loads above people

Do Not lift loads with any personnel in the lifting zone



Doughty Engineering Ltd

Crow Arch Lane

Ringwood, Hampshire, BH24 1NZ

Tel: +44 (0) 1425 478961 Fax: +44 (0) 1425 474481

email: sales@doughty-engineering.co.uk

Web: www.doughty-engineering.co.uk

Note: Whilst every effort has been made to ensure that the information contained within this manual is correct, Doughty Engineering does not accept any liability for errors or omissions. Specifications and technical data are intended for guidance purposes only and may vary.