

TUF-LOK[®] **COUPLINGS**

Ring Grip Pipe Couplings

**Series 688
& 698**



Ring Grip Tube Couplings

Series 788





Zinc Plated Coupling



Stainless Steel Coupling

Features

- **Self-aligning**
- **Installs quickly**
- **High end pull**
- **High pressure rated**
- **Full vacuum rated**
- **Reusable**
- **Absorbs vibration**
- **Rigid**
- **Usable on thin or thick wall tube**
- **Low cost**
- **Externally leakproof**
- **Self grounding**
- **Smooth internal connection**
- **Every coupling a union**

Self-Aligning and Self-Grounded

The Tuf-Lok® ring grip coupling is a rugged, heavy duty, self-aligning and self-grounded coupling with a high end pull for almost any application where pipe or tube ends need to be connected.

The Tuf-Lok coupling installs quickly, reducing installation costs. Reinstallation is also fast and easy. This makes it ideal for applications where assembly and disassembly are required. Also, with the Tuf-Lok ring grip coupling, the pipe or tube ends do not require machining or grooving and never become marred or damaged when making a connection.

Strong and Rugged

The extremely high end pull capability is proof that the Tuf-Lok ring grip coupling is one of the strongest and most rugged available. This toughness is important for many applications, including those with high dynamic loads or applications where the structural integrity is extremely important. Even vibration and excessive pipe or tube movement can be accommodated by the Tuf-Lok coupling.

Special Gasket Design

A special design feature built into the gasket of the Tuf-Lok ring grip coupling allows it to accommodate both high pressure and full vacuum pressure conditions. Even high external pressure conditions are accommodated, so the Tuf-Lok coupling is leakproof from the outside as well as the inside. The leakproof connection is maintained even when the Tuf-Lok coupling is completely submerged under water, a feature not always achievable with other couplings.

Cost Saving Feature

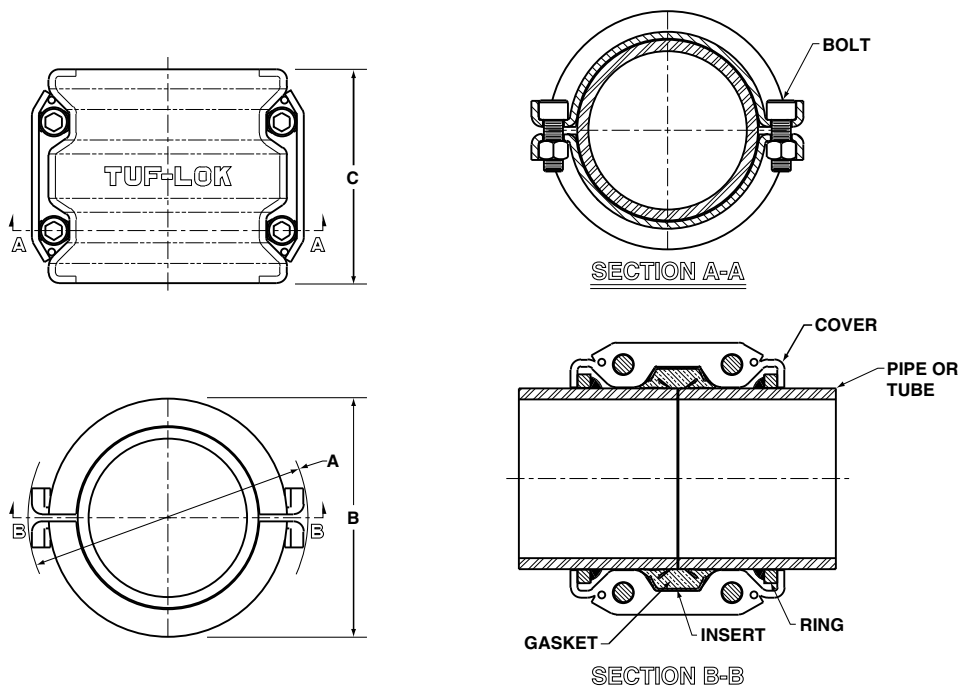
A special cost saving feature of the Tuf-Lok ring grip coupling is that it can be installed on just about any kind of metal pipe or tube irrespective of the wall thickness. It can also be used on mild steel, stainless steel, aluminum and most other thick or thin wall pipe or tube.

Options

- **Covers**
 - **Zinc plated**
 - **Stainless steel**
- **Rings**
 - **Mild steel**
 - **Stainless steel**
 - **Aluminum**
- **Gaskets***
 - **Black EPDM**
 - **White Buna-N**
 - **White Silicone**
 - **Fluoroelastomer**
 - **Others**

* see following page for gasket usage and temperature ratings.

Dimensions & Specifications



Gasket Usage and Temperature Ratings:

Black EPDM

Tuf-Lok coupling standard gasket, rated to 230° F (110° C)

White Buna-N

Tuf-Lok coupling standard food grade gasket, rated to 180° F (82° C)

White Silicone

Tuf-Lok coupling standard high temperature gasket (also food grade), rated to 350° F (176° C)

Tuf-Lok Ring Grip Pipe Coupling Series 688 and 698

Nominal Pipe Size Inches (mm)	Outside Pipe Diameter Inches (mm)	Series Number	Maximum Working Pressure* PSIG (barg)	Maximum End Load* Pounds (N)	Dimensions - Inches (mm)			Approximate Weight, Ea. Pounds (kg)
					A	B	C	
2 (50)	2.375 (60)	688	150 (10.34)	4,600 (20,461)	4.26 (108)	3.45 (88)	4.14 (105)	2.3 (1.0)
3 (80)	3.500 (89)	688	150 (10.34)	6,300 (28,024)	5.38 (137)	4.57 (116)	4.14 (105)	2.9 (1.3)
4 (100)	4.500 (114)	688	150 (10.34)	7,600 (33,806)	6.37 (162)	5.57 (141)	4.14 (105)	3.6 (1.6)
5 (125)	5.563 (141)	688	150 (10.34)	9,000 (40,034)	7.42 (188)	6.63 (168)	4.14 (105)	4.3 (1.9)
6 (150)	6.625 (168)	688	150 (10.34)	10,100 (44,927)	8.49 (216)	7.69 (195)	4.14 (105)	4.9 (2.2)
8 (200)	8.625 (219)	688	130 (8.96)	12,400 (55,158)	10.49 (266)	9.70 (246)	4.14 (105)	6.4 (2.9)
8 (200)	8.625 (219)	698	150 (10.34)	18,000 (80,067)	12.88 (327)	9.95 (253)	6.60 (168)	14.5 (6.6)
10 (250)	10.750 (273)	698	150 (10.34)	22,100 (98,306)	15.15 (385)	12.22 (310)	6.70 (170)	22.0 (10.0)

Tuf-Lok Ring Grip Tube Coupling Series 788

Tube Outside Diameter Inches (mm)	Maximum Working Pressure* PSIG (barg)	Maximum End Load* Pounds (N)	Dimensions - Inches (mm)			Approximate Weight, Ea. Pounds (kg)
			A	B	C	
2.00 (51)	150 (10.34)	4,600 (20,461)	3.82 (97)	3.08 (78)	4.11 (104)	2.3 (1.0)
3.00 (76)	150 (10.34)	6,300 (28,024)	4.82 (122)	4.08 (104)	4.11 (104)	2.8 (1.3)
4.00 (102)	150 (10.34)	7,600 (33,806)	5.82 (148)	5.08 (129)	4.11 (104)	3.4 (1.5)
5.00 (127)	150 (10.34)	9,000 (40,034)	6.80 (173)	6.10 (155)	4.11 (104)	4.0 (1.8)
6.00 (152)	150 (10.34)	10,100 (44,927)	7.80 (198)	7.10 (180)	4.11 (104)	4.6 (2.1)

* Working pressure and end load are total, including equivalent loads based on proper coupling assembly.

Easy Assembly

The Tuf-Lok ring grip coupling can be installed on any pipe or tube having the same outside diameter. After welding the metal rings onto each pipe or tube end as shown, the Tuf-Lok coupling is ready to be installed.

Steps 1 through 4 of the assembly shown below can be performed in the shop or in the field. No special tools are required for assembly.

The Parts



How It's Assembled



Step 1 - A Tuf-Lok coupling ring is placed over each square cut, deburred pipe or tube end.



Step 2 - The Tuf-Lok coupling rings are held in place using the nylon ring gauges provided, ensuring correct welding position.



Step 3 - The coupling ring is tack welded in place between the ring gauges.



Step 4 - The nylon ring gauges are removed and the ring is continuously welded on the pipe or tube end side only. The weld does not need to be air tight.



Step 5 - A simple soap solution is used to lubricate the Tuf-Lok gasket for ease of installation.



Step 6 - The Tuf-Lok rubber gasket is positioned on one pipe or tube end.



Step 7 - Both pipe or tube ends are butted together and the rubber gasket is centered.



Step 8 - The Tuf-Lok cover slips over the rings and against the rubber gasket.



Step 9 - Bonded metal tabs on the Tuf-Lok gasket are positioned between cover halves.



Step 10 - With both metal Tuf-Lok covers positioned over the welded rings, the covers are evenly tightened.

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*Specifications subject to change without notice.
U.S. Patent #6,502,865 - Foreign patents pending.*

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Bulletin 150402-3 (dm)