

▼ FTR-Series, Foundation Bolt Tensioners Round



- **FTR-Series Foundation Bolt Tensioners provide fast, accurate and easy tightening of external or internal-ring wind tower foundations**
- **Standard models are available for 75, 150 ksi and metric style Williams, Dyson and Macalloy® bar types**
- **Long-stroke options accelerate process with single-pull tensioning.**

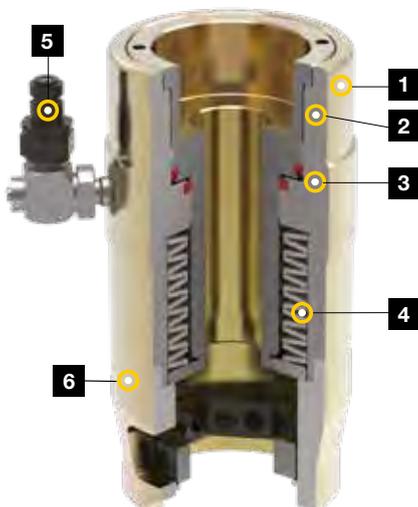
High Precision, Low Maintenance



FTR-Series Foundation Bolt Tensioners

FTR-Series Foundation Bolt Tensioners are designed specifically for tensioning wind tower foundation bolts. These tensioners provide the speed and precision required by this critical application. Potential thread fit problems are eliminated through the use of existing rebar hex nuts as a reaction point.

The FTR-Series includes long-stroke models, which provide greater speed and ease of use by enabling applications to be completed in a single pull.



1. **Corrosion protection:** Zinc coating provides best-in-class corrosion resistance.
2. **Over-stroke indicator:** Extends life by helping to prevent over-stroking of cylinder.
3. **Long-life seals:** For maximum durability and extended service life intervals.
4. **Auto-retract piston:** Simplifies use and improves speed of operation.
5. **Quick-disconnect coupler:** For safe, simple hydraulic connection. Optional 360° swivel available for additional hose positioning flexibility.
6. **Interchangeable bridge:** For optimal application fit.

▼ *FTR-Series Foundation Bolt Tensioner. Manual wrench (not included) required to apply up to 30 Nm of torque during installation of models that feature run down gears.*



Foundation Bolt Tensioners

▼ This is how a FTR-Series Foundation Bolt Tensioner model number is built up:



1 Product Type

FTR = Foundation Tensioner, Round

2 Bar Grade

75 = 75 ksi
150 = 150 ksi
 (or metric designation)

3 Bar Size Designation

Example
14 = No. 14 bar size

4 Maximum Stroke

Example:
20 = 20 mm max. stroke

5 Fitting Type

SW = Includes swivel manifold with single male fitting
 single male fitting

6 Run Down Gear

G = Includes Nut Run Down Gear
 * available in select models

FTR Series



Maximum Load Capacity:

2736 kN

Maximum Operating Pressure ¹⁾:

1500 bar

¹⁾ Max. pressure varies, see specifications table for details.



Tensioning Pumps

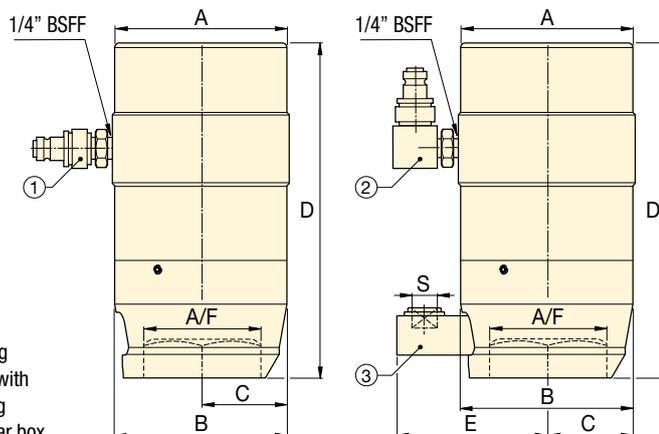
Electric, pneumatic and manual high-pressure tensioning pumps are available for use with Enerpac hydraulic tensioners.



Hoses and Fittings

High-pressure hoses and fittings for use with Enerpac tensioning systems are available.

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- ① Single male fitting
- ② Swivel manifold with single male fitting
- ③ Nut run down gear box

FTR...S

FTR...SWG

▼ SPECIFICATION TABLE

Bar Grade	Bolt Diameter		Bar Size Designation	Model Number with single male fitting	Nut Size A/F	Max. Pressure	Hydraulic Pressure Area	Max. Load Capacity	Stroke	Dimensions (mm)					Minimum Bolt Potrusion	
	(mm)	(inch)								A	B	C	D	E		(kg)
75 ksi	35	1.38	#10	FTR751010S	51	1200	3134	376,1	10,0	99	88,5	44,3	163	–	5,8	200
	35	1.38	#10	FTR751025S	51	1200	3123	374,8	25,0	115	102	42	220	–	10,9	250
	38	1.50	#11	FTR751110S	57	1500	3134	470,1	10,0	99	98	38	178	–	5,5	220
	38	1.50	#11	FTR751125SG	57	1500	3123	468,5	25,0	115	102	51	226	96	11,5	260
	48	1.88	#14	FTR751420S	70	1170	6093	712,9	20,0	132	132	66	268	–	18,2	315
150 ksi	37	1.44	1.25	FTR15012510S	57	1170	5383	629,8	10,0	111	110	40	178	–	8,2	220
	40	1.56	1.37	FTR15013810S	64	1500	5383	807,5	10,0	111	110	38	178	–	8,1	225
	70	2.75	2.50	FTR15025025S	108	1500	18.238	2736,0	25,4	215	212	86	348	–	58,0	450
10.9	36	1.42	36	FTR1093610SG	60	1500	3820	573,0	10,0	102	99	40	176	95	8,6	195

Gear box square drive dimension S = 1/2 inch.