

LENTON LOCK S SERIES

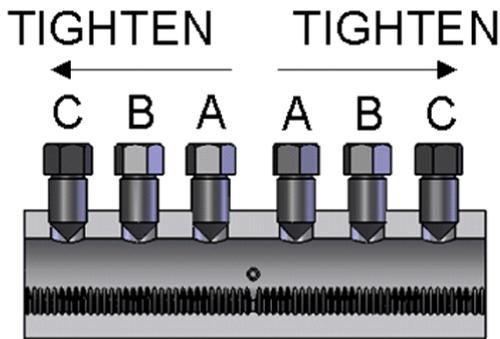


Figure 1 Assembly cross section

Rebar Size	Maximum Rebar Shear Lip Diameter (A)	
	in	mm
10 or 12 (#4)	0.57	14.5
14 or 16 (#5)	0.73	18.5
18 or 20 (#6)	0.93	23.5
22 (#7)	1.08	27.5
25 (#8)	1.16	29.4
28 or 30 (#9)	1.32	33.5
32 (#10)	1.48	37.5
34 or 36 (#11)	1.67	42.5
38 or 40	1.83	46.5
43 (#14)	2.07	52.5
57 (#18)	2.62	66.5

Figure 2 Maximum shear lip

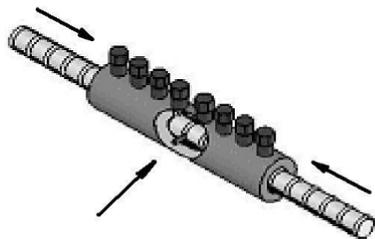


Figure 3 Solid contact between bar and stop pin as shown.

*When using an air impact wrench it is recommended to use a wrench with double the torque rating identified. Impact sockets should always be used when using an impact wrench. Additionally, check the air pressure and air flow requirements prior to installation. Refer to complete installation instructions provided with the product or available at erico.pentair.com prior to commencing installation.

- WARNING:
1. Pentair products shall be installed and used only as indicated in Pentair product instruction sheets and training materials. Instruction sheets are available at www.erico.pentair.com and from your Pentair customer service representative.
 2. Pentair products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
 3. All instructions must be completely followed to ensure proper and safe installation and performance.
 4. Improper installation, misuse, misapplication or other failure to completely follow Pentair's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.

The customer is responsible for:

- a. Conformance to all governing codes.
- b. The integrity of structures to which the products are attached, including their capability of safely accepting the loads imposed, as evaluated by a qualified engineer.
- c. Using appropriate industry standard hardware as noted above.

SAFETY INSTRUCTIONS:
All governing codes and regulations and those required by the job site must be observed.
Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

Step 1: Read all instructions and procedures before commencing splicing. Ensure the LENTON LOCK coupler is sized properly for the bars being spliced and per project plans. Product should arrive with bolts configured as shown in Figure 1. One round point bolt will be on each end of sizes 43(#14) and 57(#18).

Step 2: Ensure the rebar is free of any excessive dirt, concrete slurry, rust, etc. which may affect product performance. Ensure maximum rebar lip does not exceed limits set in Figure 2. Excessive shear lip interferes with rebar installation.

Step 3: Insert rebar into LENTON LOCK coupler until contact is made with the center stop pin as shown in Figure 3. Rebar must be flush against center stop pin.

Step 4 for coupler sizes 12(#4) – 36(#11):
Tighten bolts, beginning in the center of the coupler and working to the outside (A to C), until bolt heads shear off. A standard wrench, impact wrench or nut runner may be utilized to tighten the bolts.

To avoid bolts from vibrating loose, it is suggested that each bolt be pre-torqued (Approximately <50% is recommended torque) prior to applying final bolt torque.

Table 1. Torque values for coupler sizes 12(#4) through 36(#11)

Pre-Torque is not required for these sizes

Rebar Designation				Coupler	Socket Size		Average Torque to Shear Bolts		Number of Bolts
In-lb	Metric	Canada	Soft Metric		in	mm	ft-lb	N-m	
-	10	-	10	LL12S1	1/2	13	150	205	4
#4	12	10 M	13	LL12S1	1/2	13	150	205	4
-	14	-	-	LL16S1	1/2	13	150	205	4
#5	16	15 M	16	LL16S1	1/2	13	150	205	4
-	18	-	-	LL20S1	1/2	13	150	205	6
#6	20	20 M	19	LL20S1	1/2	13	150	205	6
#7	22	-	22	LL22S1	5/8	16	250	340	6
#8	25	25 M	25	LL25S1	5/8	16	350	475	6
#9	28	30 M	29	LL28S1	5/8	16	350	475	8
-	30	-	-	LL28S1	5/8	16	350	475	8
#10	32	-	32	LL32S1	13/16	21	550	750	6
-	34	-	-	LL36S1	13/16	21	550	750	8
#11	36	35 M	36	LL36S1	13/16	21	550	750	8

Alternate Step 4:

For sizes 43 (#14) and 57 (#18) a two-step torque sequence is required.

Using a nut runner, pre-torque the bolts beginning in the center of the coupler and working to the outside (A to C) using pre-torque values in table 2. Then go back to bolt A and finish tightening the bolts, once again beginning in the center of the coupler and working to the outside (A to C), until bolt heads shear off. A nut runner must be utilized for the final tightening of the bolts.

Table 2. Alternate Step 4: Two-step torque sequence for coupler sizes 43(#14) and 57(#18)

Pre-Torque the bolts to the specified torque before final tightening.

Rebar Designation				Coupler	Socket Size		Pre Torque All Bolts		Average Torque to Shear Bolts		Number of Bolts
In-lb	Metric	Canada	Soft Metric		in	mm	ft-lb	N-m	ft-lb	N-m	
#14	43	45M	43	LL43S1	13/16	21	500	680	660	900	12
#18	57	55M	57	LL57S1	1	25	750	1020	960	1300	14

If bolt head does not shear, the installer should verify the appropriate torque was met (see Table 2). If a minimum cover must be maintained, the head can be cut off after the proper torque has been applied.

If during installation the bolt strips, as defined by a loss of resistance to the applied torque, stop the installation immediately. Remove the un-sheared damaged bolt. Contact Pentair for LENTON Technical Support

Repeat procedure for other end of the sleeve.

Transition Splices: LENTON LOCK is designed for use as a one-step transition/reducer splice on all type of rebar. Contact Pentair for details.

Closure Pour Splices: Refer to instruction sheet PDF113 for details. Additional copies of instructions and application information are available at erico.pentair.com