

## TECHNICAL DATA SHEET

### DESCRIPTION

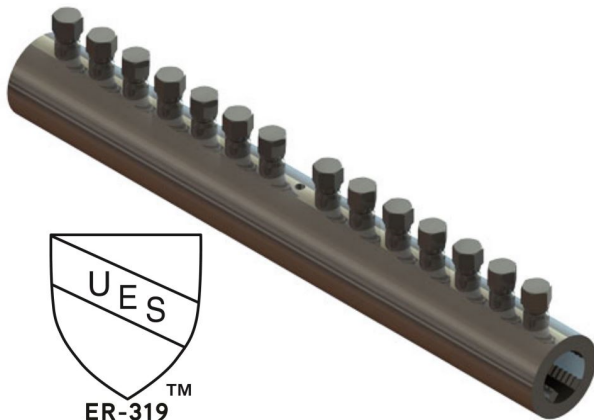
The D250XL Bar Lock Coupler is a Type 2 rebar coupler used to connect two pieces of rebar. It consists of a thick walled tube, specially designed lock shear bolts, serrated grip rails, and a center stop pin. The D250XL is made from USA melted and rolled steel.

### APPLICATION

The D250XL Bar Lock Coupler is used to provide a continuous path of mechanical reinforcing from two pieces of the same diameter rebar.

### PRODUCT SPECIFICATION

- Rebar sizes #4 (13mm) through #18 (57mm)
- Available in plain, epoxy coated, or galvanized finish
- Designed to splice Grade 75/80 rebar



### FEATURES

- Quick and easy installation
- No bar end preparation
- Installation at the job site
- Used in tension, compression, and seismic applications

### BENEFITS

- Saves time and money
- No fabrication required
- One product for all applications

### HOW TO SPECIFY

Specific:

Mechanical connections shall be Bar Lock<sup>®</sup> Rebar Splices as manufactured by Dayton Superior Corp.

Generic:

The mechanical connection shall meet building code requirements of developing in tension and compression as required by \_\_\_\_\_ (insert name here). The mechanical connection shall be made from lock shear bolt couplers with serrated gripping rails manufactured from high quality steel. All couplers shall be installed per the manufacturer's approved procedures.

### TECHNICAL DATA

| Coupler Designation | Bar Size |             |        | Barrel Stamp Identifi. | Product Spec.      |              |              | Bolt Spec. |                 |                              |
|---------------------|----------|-------------|--------|------------------------|--------------------|--------------|--------------|------------|-----------------|------------------------------|
|                     | US       | Metric (mm) | CN (M) |                        | Outside Dia. (in.) | Length (in.) | Weight (lbs) | Bolt Qty.  | Head Size (in.) | Nominal Shear Torque (ft-lb) |
| 3 XL                | #3       | [10]        | --     | 3 XL...                | 1.3                | 8.7          | 2.4          | 10         | 0.500           | 40                           |
| 4 XL                | #4       | [13]        | [10]   | 4 XL...                | 1.3                | 10.2         | 2.9          | 12         | 0.500           | 40                           |
| 5 XL                | #5       | [16]        | [15]   | 5 XL...                | 1.7                | 11.5         | 5.0          | 12         | 0.500           | 80                           |
| 6 XL                | #6       | [19]        | [20]   | 6 XL...                | 1.9                | 13.2         | 6.9          | 14         | 0.500           | 80                           |
| 7 XL                | #7       | [22]        | --     | 7 XL...                | 1.9                | 15.0         | 7.8          | 16         | 0.500           | 80                           |
| 8 XL                | #8       | [25]        | [25]   | 8 XL...                | 2.4                | 18.7         | 13.2         | 16         | 0.500           | 180                          |
| 9 XL                | #9       | [29]        | [30]   | 9 XL...                | 2.9                | 19.1         | 24.2         | 14         | 0.625           | 350                          |
| 10 XL               | #10      | [32]        | --     | 10 XL...               | 2.9                | 21.6         | 27.2         | 16         | 0.750           | 350                          |
| 11 XL               | #11      | [36]        | [35]   | 11 XL...               | 3.1                | 24.1         | 33.4         | 18         | 0.750           | 415                          |
| 14 XL               | #14      | [43]        | [45]   | 14 XL...               | 3.5                | 29.1         | 46.0         | 22         | 0.750           | 475                          |
| 18 XL               | #18      | [57]        | [55]   | 18 XL...               | 4.3                | 44.8         | 98.0         | 34         | 0.750           | 475                          |

### APPROVALS / COMPLIANCE

- ACI 318 Type 2
- State Departments of Transportation
- AASHTO
- International Building Code (IBC)
- ICC UES Listed (ER-319)

### INSTALLATION

1. Insert end of the first bar halfway into the coupler to the center pin. Hold bar in place and hand-tighten all bolts.
2. Insert end of the second bar halfway into the coupler to the center pin. Hold bar in place and hand-tighten all bolts.
3. In a random alternating pattern, tighten all bolts to approximately 50% of the specified bolt torque value.
4. In a random alternating pattern, tighten all bolts to approximately 75% of the specified bolt torque value.

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5. Tighten all bolts in a random alternating pattern until all bolt heads shear off.

### Notes:

A. Prior to tightening, the serrated rails **MUST** remain aligned in the same position as they were manufactured. If they are damaged or knocked out of alignment while positioning, installation **MUST** cease, and a new coupler used.

B. Bolt tightening **MUST** be done in a random alternating pattern similar to tightening the lug nuts on an automobile wheel. The torque percentages are just approximations, the main intent is to torque the bolt heads off in 3 passes.

C. For best results on #10-18 XL Couplers it is advised to position the outermost bolts away from any ribs or deformations. When possible, rotate the rebar/coupler to minimize the rib contact.

D. A high-quality, 1" -pneumatic drive, impact wrench with at least 100 psig air flow and 185 CFM of delivered air through a no less than 0.75" hose **MUST** be used for installation for sizes #8 thru #18. Sizes #4 thru #7 may be installed with smaller impact wrenches.

## RELATED PRODUCTS

- D250SCA Bar Lock<sup>®</sup> Couplers
- D250L Bar Lock<sup>®</sup> Couplers

## HOW TO ORDER

Specify: (1) quantity, (2) name, (3) bar size, (4) finish

Example: 500, D250XL Bar Lock<sup>®</sup> Rebar Couplers, #18, Galvanized

## ORDERING INFORMATION

### BAR LOCK<sup>®</sup> XL-SERIES COUPLERS

| Product Code | Description                                          | Weight     |
|--------------|------------------------------------------------------|------------|
| 145314       | D250XL - #4 [13MM]; Black; Made in US; 100/Skid      | 2.915 LB   |
| 145324       | D250XL - #4 [13MM]; Epoxy; Made in US; 100/Skid      | 2.915 LB   |
| 145147       | D250XL - #4 [13MM]; Galvanized; Made in US; 100/Skid | 2.915 LB   |
| 145315       | D250XL - #5 [16MM]; Black; Made in US; 100/Skid      | 5.000 LB   |
| 145325       | D250XL - #5 [16MM]; Epoxy; Made in US; 100/Skid      | 5.000 LB   |
| 145148       | D250XL - #5 [16MM]; Galvanized; Made in US; 100/Skid | 5.000 LB   |
| 145316       | D250XL - #6 [19MM]; Black; Made in US; 100/Skid      | 6.941 LB   |
| 145326       | D250XL - #6 [19MM]; Epoxy; Made in US; 100/Skid      | 6.941 LB   |
| 145149       | D250XL - #6 [19MM]; Galvanized; Made in US; 100/Skid | 6.941 LB   |
| 145317       | D250XL - #7 [22MM]; Black; Made in US; 100/Skid      | 7.861 LB   |
| 145327       | D250XL - #7 [22MM]; Epoxy; Made in US; 100/Skid      | 7.861 LB   |
| 145318       | D250XL - #8 [25MM]; Black; Made in US; 60/Cartron    | 13.132 LB  |
| 145328       | D250XL - #8 [25MM]; Epoxy; Made in US; 60/Skid       | 13.132 LB  |
| 145151       | D250XL - #8 [25MM]; Galvanized; Made in US; 60/Skid  | 13.132 LB  |
| 145319       | D250XL - #9 [29MM]; Black; Made in US; 40/Skid       | 24.116 LB  |
| 145329       | D250XL - #9 [29MM]; Epoxy; Made in US; 40/Skid       | 24.116 LB  |
| 145152       | D250XL - #9 [29MM]; Galvanized; Made in US; 40/Skid  | 24.116 LB  |
| 145320       | D250XL - #10 [32MM]; Black; Made in US; 70/Skid      | 27.126 LB  |
| 145330       | D250XL - #10 [32MM]; Epoxy; Made in US; 70/Skid      | 27.126 LB  |
| 145153       | D250XL - #10 [32MM]; Galvanized; Made in US; 70/Skid | 27.126 LB  |
| 145321       | D250XL - #11 [36MM]; Black; Made in US; 60/Skid      | 33.357 LB  |
| 145331       | D250XL - #11 [36MM]; Epoxy; Made in US; 60/Skid      | 33.357 LB  |
| 145154       | D250XL - #11 [36MM]; Galvanized; Made in US; 60/Skid | 33.357 LB  |
| 145322       | D250XL - #14 [43MM]; Black; Made in US; 50/Cartron   | 45.898 LB  |
| 145332       | D250XL - #14 [43MM]; Epoxy; Made in US; 50/Skid      | 45.898 LB  |
| 145155       | D250XL - #14 [43MM]; Galvanized; Made in US; 50/Skid | 45.898 LB  |
| 145323       | D250XL - #18 [57MM]; Black; Made in US; 30/Cartron   | 100.816 LB |
| 145333       | D250XL - #18 [57MM]; Epoxy; Made in US; 30/Skid      | 100.816 LB |
| 145156       | D250XL - #18 [57MM]; Galvanized; Made in US; 30/Skid | 100.816 LB |

**TECHNICAL DATA SHEET****MANUFACTURER**

Dayton Superior Corporation  
1125 Byers Road  
Miamisburg, OH 45342  
Customer Service: 888-977-9600  
Technical Services: 877-266-7732  
Website: [www.daytonsuperior.com](http://www.daytonsuperior.com)

**WARRANTY (ACCESSORIES)**

Limited Warranty. Dayton warrants, for a period of 60 days from the date of shipment (three years from the date of shipment in the case of formwork, excluding any consumable Products included with such formwork), that Products and any associated application drawings and engineering services provided by Dayton ("Ancillary Services") will be free from defects in material and workmanship and, in the case of custom designed formwork, that the formwork will meet the specifications set forth in the design drawings approved by Dayton and Customer. Any claim under this warranty must be made in writing within such warranty period. If any Product and/or Ancillary Service covered by a timely claim are found to be defective, Dayton will, within a reasonable time, make any necessary repairs or corrections or, at Dayton's option, replace the Product. Unless pre-authorized by Dayton in writing, Dayton will not accept any charges for correcting defects or accept the return of any Product. This warranty will not apply to any Products that have been subjected to misuse, neglect, storage damage, misapplication, accident or any other damage caused by any person other than Dayton, or that have not been maintained in accordance with Dayton's specifications. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AS TO THE PRODUCTS AND ANCILLARY SERVICES. DAYTON MAKES NO OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. THE REMEDIES SET FORTH IN THIS SECTION ARE CUSTOMER'S EXCLUSIVE REMEDY FOR BREACH OF WARRANTY.