D260S/CA, L & XL - Bar Lock® Weldable Couplers

BAR LOCK®

TECHNICAL DATA SHEET

DESCRIPTION

The D260 Bar Lock® Weldable Coupler is a Type 1 (S/CA Series) or Type 2 (L Series) mechanical splice used to connect rebar to structural steel. It consists of a thickwalled steel tube chamfered for welding to structural steel, specially designed lock shear bolts, stop pin and serrated grip rails. The D260 Weldeable Coupler is made from USA melted and rolled steel.

APPLICATION

The D260 Bar Lock® Weldable Couplers, Structural Steel Connectors (weldable half couplers), are designed to provide welded connections to structural steel members such as piles, weld plates, beams, columns, etc. and provide a means to mechanically splice rebar to the structural steel.

PRODUCT SPECIFICATION

- Rebar sizes #4 through #18 for all sizes
- D260S/CA is designed to achieve type 1 splice when used with grade 60 rebar, D260L series is designed to achieve type 2 spice when used with grade 60 rebar, D250XL is designed to achieve type 2 when used with grade 75 or 80 rebar.

FEATURES

- Quick and easy installation
- No Bar end prep
- 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

General: Mechanical lap connections shall be Bar Lock® Rebar Splices as manufactured by Dayton Superior Corporation.
Specific: 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 manufacturer's approved procedures.

TECHNICAL DATA

D260S/CA - Series Technical Data

Bar Size			Product Specifications			Bolt Specifications		
US	Metric (mm)	CN (M)	Structural Steel Connector Designation	Finished Length w/ Chamfer (in)	Coupler Outside Dia. (in)	Bolt Qty.	Head Size (in)	Nominal Shear Torque (ft-lb)
#4	[13]	[10]	#4-SCA	2.4	1.3	2	0.500	40
#5	[16]	[15]	#5-SCA	2.7	1.7	2	0.500	80
#6	[19]	[20]	#6-SCA	3.5	1.9	3	0.500	80
#7	[22]	-	#7-SCA	4.4	1.9	4	0.500	80
#8	[25]	[25]	#8-SCA	5.7	2.2	4	0.625	180
#9	[29]	[30]	#9-SCA	5.2	2.9	3	0.750	350
#10	[32]	-	#10-SCA	6.5	2.9	4	0.750	350
#11	[36]	[35]	#11-SCA	7.8	3.1	5	0.750	350
#14	[43]	[45]	#14-SCA	9.0	3.5	6	0.750	475
#18	[57]	[55]	#18-SCA	14.2	4.3	10	0.750	475

D260L - Series Technical Data

Bar Size			Product Specifications			Bolt Specifications		
US	Metric (mm)	CN (M)	Structural Steel Connector Designation	Finished Length w/ Chamfer (in)	Coupler Outside Dia. (in)	Bolt Qty.	Head Size (in)	Nominal Shear Torque (ft-lb)
#4	[13]	[10]	#4-L	3.1	1.3	3	0.500	40
#5	[16]	[15]	#5-L	3.5	1.7	3	0.500	80
#6	[19]	[20]	#6-L	4.4	1.9	4	0.500	80
#7	[22]	-	#7-L	5.3	1.9	5	0.500	80
#8	[25]	[25]	#8-L	6.8	2.2	5	0.625	180
#9	[29]	[30]	#9-L	6.5	2.9	4	0.750	350
#10	[32]	-	#10-L	7.8	2.9	5	0.750	415
#11	[36]	[35]	#11-L	9.0	3.1	6	0.750	415
#14	[43]	[45]	#14-L	10.3	3.5	7	0.750	475
#18	[57]	[55]	#18-L	16.3	4.3	12	0.750	475

D260XL - Series Technical Data

Bar Size			Product Specifications			Bolt Specifications		
US	Metric (mm)	CN (M)	Structural Steel Connector Designation	Finished Length w/ Chamfer (in)	Coupler Outside Dia. (in)	Bolt Qty.	Head Size (in)	Nominal Shear Torque (ft-lb)
#4	[13]	[10]	#4-XL	5.5	1.3	6	0.500	40
#5	[16]	[15]	#5-XL	6.1	1.7	6	0.500	80
#6	[19]	[20]	#6-XL	7.0	1.9	7	0.500	80
#7	[22]	-	#7-XL	7.9	1.9	8	0.500	80
#8	[25]	[25]	#8-XL	10.0	2.2	8	0.625	180
#9	[29]	[30]	#9-XL	10.3	2.9	7	0.750	350
#10	[32]	-	#10-XL	11.5	2.9	8	0.750	415
#11	[36]	[35]	#11-XL	12.8	3.1	9	0.750	415
#14	[43]	[45]	#14-XL	15.3	3.5	11	0.750	475
#18	[57]	[55]	#18-XL	23.2	4.3	17	0.750	475

File Date: 11/16/2023

APPROVALS / COMPLIANCE

- ACI 318 Type 2 (Grade 60, Rebar)
- ICC AC-133
- State Departments of Transportation
- Army Corps of Engineers CW 03210
- AASHTO
- International Building Code (IBC)

INSTALLATION

1. Locate coupler on structural steel, using certified welder, weld coupler to structural steel.
2. Insert end of rebar into barrel of coupler until it stops against stop pin. Hold bar in place and hand tighten shear 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.
5. Tighten all bolts in a random alternating pattern until all bolt heads shear off.
6. Prior to bolt 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.
7. Bolt tightening MUST be done in a random alternating pattern similar to tightening the lug nuts on an automobile.
8. 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.

RELATED PRODUCTS

- D250 Bar Lock® Series Couplers
- D220 Bar Lock ®Transition Couplers
- D251 / D252 Bar Lock® End Anchors

HOW TO ORDER

- Specify: (1) quantity, (2) name, (3) bar size, (4) finish.
  Example: 500, D260 Bar Lock®, #5, Plain finish

  Please note that D260XL are made to order products. Please allow for lead time.

ORDERING INFORMATION

BAR LOCK® S/CA-SERIES WELDABLE COUPLERS

Product Code	Description	Weight
400178	#4 [13MM]	1.000 LB
400179	#5 [16MM]	1.231 LB
400180	#6 [19MM]	2.020 LB

BAR LOCK® L-SERIES WELDABLE COUPLERS - BLACK

Product Code	Description	Weight
143792	#18 [57MM]	48.900 LB

MANUFACTURER

Dayton Superior Corporation
1125 Byers Road
Miamisburg, OH 45342
Customer Service: 888-977-9600
Technical Services: 877-266-7732
Website: 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.