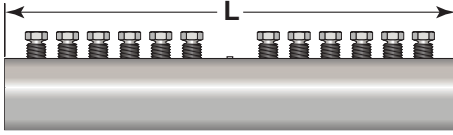


**ZAP SCREWLOK® TYPE 2 SERIES**  
**UNCOATED & EPOXY**

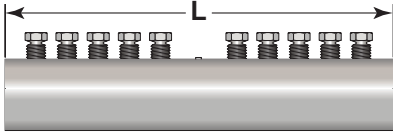


| REBAR<br>SIZE<br>mm [CAN] | ZAP TYPE 2*<br>PRODUCT CODE |        | COUPLER<br>WEIGHT<br>(kg) | DIMENSIONS (mm) |     |     |     |     | NUMBER<br>SCREWS<br>PER BAR | AVERAGE<br>SCREW<br>TORQUE<br>(Nm) | MIN. IMPACT<br>WRENCH<br>RATING<br>(Nm) |
|---------------------------|-----------------------------|--------|---------------------------|-----------------|-----|-----|-----|-----|-----------------------------|------------------------------------|---|
|                           | BLACK                       | EPOXY  |                           | LENGTH<br>'L'   | 'A' | 'B' | 'C' | 'X' |                             |                                    |   |
| 10                        | 03ZBA                       | 03ZEA  | 0.71                      | 127             | 21  | 16  | 11  | 29  | 2                           | 80                                 | 350                                     |
| 12 [10M]                  | 04ZBA                       | 04ZEA  | 0.99                      | 178             | 27  | 17  | 13  | 35  | 3                           |                                    |   |
| 16 [15M]                  | 05ZBA                       | 05ZEA  | 1.53                      | 229             | 29  | 19  | 16  | 41  | 4                           |                                    |   |
| 20 [20M]                  | 06ZBA                       | 06ZEA  | 2.12                      | 279             | 30  | 21  | 17  | 44  | 5                           | 140                                | 700                                     |
| 22                        | 07ZBA                       | 07ZEA  | 3.47                      | 330             | 32  | 27  | 21  | 52  | 5                           |                                    |   |
| 25 [25M]                  | 08ZBA                       | 08ZEA  | 4.99                      | 387             | 33  | 27  | 22  | 57  | 6                           |                                    |   |
| 28 [30M]                  | 09ZBA                       | 09ZEA  | 7.98                      | 425             | 41  | 32  | 27  | 67  | 6                           | 290                                | 1000                                    |
| 32                        | 10ZBA                       | 10ZEA  | 9.75                      | 486             | 43  | 37  | 29  | 70  | 7                           |                                    |   |
| 36 [35M]                  | 11ZBA                       | 11ZEA  | 11.6                      | 546             | 46  | 38  | 32  | 75  | 8                           |                                    |   |
| 38                        | 12ZBA                       | 12ZEA  | 13.9                      | 391             | 51  | 46  | 37  | 87  | 8                           | 470                                | 1400                                    |
| 40                        | 13ZBA                       | 13ZEA  | 13.9                      | 391             | 52  | 44  | 38  | 87  | 8                           |                                    |   |
| 43 [45M]                  | 14ZBA2                      | 14ZEA2 | 16.9                      | 457             | 59  | 44  | 38  | 95  | 10                          |                                    |   |
| 50                        | 16ZBA                       | 16ZEA  | 23.8                      | 603             | 61  | 52  | 43  | 100 | 16                          |                                    |   |
| 57 [55M]                  | 18ZBA                       | 18ZEA  | 35.8                      | 749             | 64  | 60  | 48  | 114 | 21                          |                                    |   |

\* GALVANIZED COUPLER ALSO AVAILABLE - SUBSTITUTE 'ZGA' FOR 'ZBA' IN PART CODE.

ALL DIMENSIONS ARE APPROXIMATE

**ZAP SCREWLOK® SL SERIES**  
**UNCOATED & EPOXY**

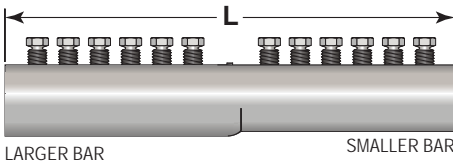


| REBAR<br>SIZE<br>mm [CAN] | ZAP SL*<br>PRODUCT CODE |        | COUPLER<br>WEIGHT<br>(kg) | DIMENSIONS (mm) |     |     |     |     | NUMBER<br>SCREWS<br>PER BAR | AVERAGE<br>SCREW<br>TORQUE<br>(Nm) | MIN. IMPACT<br>WRENCH<br>RATING<br>(Nm) |
|---------------------------|-------------------------|--------|---------------------------|-----------------|-----|-----|-----|-----|-----------------------------|------------------------------------|---|
|                           | BLACK                   | EPOXY  |                           | LENGTH<br>'L'   | 'A' | 'B' | 'C' | 'X' |                             |                                    |   |
| 12 [10M]                  | 04SZBA                  | 04SZE  | 0.69                      | 127             | 27  | 17  | 13  | 35  | 2                           | 80                                 | 350                                     |
| 16 [15M]                  | 05SZBA                  | 05SZE  | 1.17                      | 178             | 29  | 19  | 16  | 41  | 3                           |                                    |   |
| 20 [20M]                  | 06SZBA                  | 06SZE  | 1.71                      | 229             | 30  | 21  | 17  | 44  | 4                           |                                    |   |
| 22                        | 07SZBA                  | 07SZE  | 2.84                      | 273             | 32  | 27  | 21  | 52  | 4                           | 140                                | 700                                     |
| 25 [25M]                  | 08SZBA                  | 08SZE  | 4.19                      | 330             | 33  | 27  | 22  | 57  | 5                           |                                    |   |
| 28 [30M]                  | 09SZBA                  | 09SZE  | 6.48                      | 352             | 41  | 32  | 27  | 67  | 4                           |                                    |   |
| 32                        | 10SZBA                  | 10SZE  | 8.30                      | 419             | 43  | 37  | 29  | 70  | 5                           | 290                                | 1000                                    |
| 36 [35M]                  | 11SZBA                  | 11SZE  | 10.2                      | 486             | 46  | 38  | 32  | 75  | 6                           |                                    |   |
| 38                        | 12SZBA                  | 12SZE  | 11.2                      | 318             | 51  | 46  | 37  | 87  | 6                           |                                    |   |
| 40                        | 13SZBA                  | 13SZE  | 11.2                      | 318             | 52  | 44  | 38  | 87  | 6                           | 470                                | 1400                                    |
| 43 [45M]                  | 14SZBA1                 | 14SZE1 | 14.5                      | 391             | 59  | 44  | 38  | 95  | 8                           |                                    |   |
| 57 [55M]                  | 18SZBA                  | 18SZE  | 28.6                      | 597             | 64  | 60  | 48  | 114 | 16                          |                                    |   |

\* GALVANIZED COUPLER ALSO AVAILABLE - SUBSTITUTE 'SZGA' FOR 'SZBA' IN PART CODE.

ALL DIMENSIONS ARE APPROXIMATE

**ZAP SCREWLOK® TRANSITIONS**

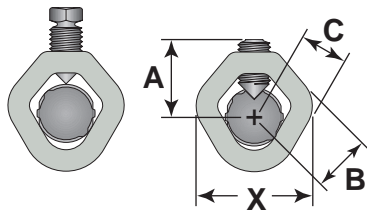


| REBAR<br>SIZE<br>(mm/mm)                  | ZAP PRODUCT<br>CODE<br>TRANSITION*                       | COUPLER<br>WEIGHT<br>(kg) | DIMENSIONS (mm) |     |     |     |     | NUMBER<br>SCREWS<br>PER BAR | AVERAGE<br>SCREW<br>TORQUE<br>(Nm) | MIN. IMPACT<br>WRENCH<br>RATING<br>(Nm) |
|---|--|---------------------------|-----------------|-----|-----|-----|-----|-----------------------------|------------------------------------|---|
|   |  |                           | LENGTH<br>'L'   | 'A' | 'B' | 'C' | 'X' |                             |                                    |   |
| 16/12                                     | 05/04ZBA   | 1.17                      | 178             | 29  | 19  | 16  | 41  | 3                           | 80                                 | 350                                     |
| 20/12<br>20/16                            | 06/04ZBA<br>06/05ZBA                                     | 1.71                      | 229             | 30  | 24  | 17  | 44  | 4                           |                                    |   |
| 22/16<br>22/20                            | 07/05ZBA<br>07/06ZBA                                     | 2.84                      | 273             | 32  | 27  | 21  | 52  | 4                           | 140                                | 700                                     |
| 25/16<br>25/20<br>25/22                   | 08/05ZBA<br>08/06ZBA<br>08/07ZBA                         | 4.19                      | 330             | 33  | 27  | 22  | 57  | 5                           |                                    |   |
| 28/20<br>28/22<br>28/25                   | 09/06ZBA<br>09/07ZBA<br>09/08ZBA                         | 6.49                      | 352             | 41  | 32  | 27  | 67  | 4                           |                                    |   |
| 32/22<br>32/25<br>32/28                   | 10/07ZBA<br>10/08ZBA<br>10/09ZBA                         | 8.3                       | 419             | 43  | 37  | 29  | 70  | 5                           | 290                                | 1000                                    |
| 36/22<br>36/25<br>36/28                   | 11/07ZBA<br>11/08ZBA<br>11/09ZBA                         | 8.3                       | 419             | 46  | 38  | 32  | 70  | 5                           |                                    |   |
| 36/32                                     | 11/10ZBA   | 10.2                      | 486             | 46  | 38  | 32  | 75  | 6                           |                                    |   |
| 38/32<br>40/32<br>43/28<br>43/32<br>43/36 | 12/10ZBA<br>13/10ZBA<br>14/09ZBA<br>14/10ZBA<br>14/11ZBA | 15.6                      | 391             | 59  | 44  | 38  | 95  | 8                           | 470                                | 1400                                    |
| 57/36<br>57/43                            | 18/11ZBA<br>18/14ZBA                                     | 25.2                      | 471             | 63  | 57  | 46  | 111 | 12                          |                                    |   |

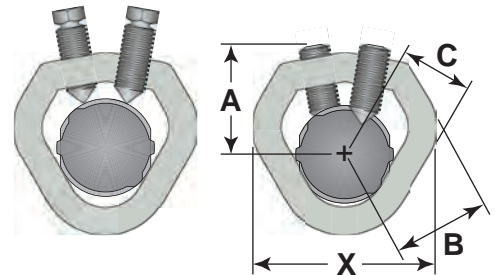
\* EPOXY & GALVANIZED TRANS. ALSO AVAILABLE - SUBSTITUTE 'ZEA' OR 'ZGA' FOR 'ZBA' IN PART CODE.

ALL DIMENSIONS ARE APPROXIMATE

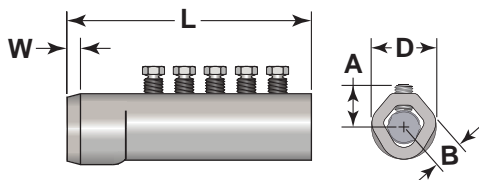
**SINGLE ROW  
ZAP SCREWLOK®  
(SIZES Ø 10 – 36)  
BEFORE AND  
AFTER ASSEMBLY**



**DOUBLE ROW  
ZAP SCREWLOK®  
(SIZES Ø 38 – 57)  
BEFORE AND  
AFTER ASSEMBLY**



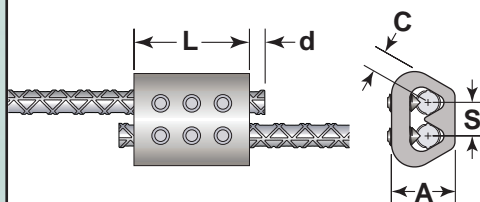
**ZAP STRUCTURAL CONNECTOR**



| REBAR<br>SIZE<br>mm [CAN] | ZAP PRODUCT<br>CODE<br><b>STR. CONNECTOR</b> | COUPLER<br>WEIGHT<br>(kg) | DIMENSIONS (mm) |     |     |             |     | NUMBER<br>SCREWS<br>PER BAR | AVERAGE<br>SCREW<br>TORQUE<br>(Nm) | MIN. IMPACT<br>WRENCH<br>RATING<br>(Nm) |
|---------------------------|--|---------------------------|-----------------|-----|-----|-------------|-----|-----------------------------|------------------------------------|---|
|                           |  |                           | LENGTH<br>'L'   | 'A' | 'B' | DIA.<br>'D' | 'W' |                             |                                    |   |
| 12 [10M]                  | 04SZSC                                       | 0.43                      | 78              | 27  | 17  | 37          | 5   | 2                           | 80                                 | 350                                     |
| 16 [15M]                  | 05SZSC                                       | 0.69                      | 105             | 29  | 19  | 41          | 6   | 3                           |                                    |   |
| 20 [20M]                  | 06SZSC                                       | 1.03                      | 137             | 30  | 24  | 46          | 6   | 4                           |                                    |   |
| 22                        | 07SZSC                                       | 1.66                      | 162             | 32  | 27  | 52          | 10  | 4                           | 140                                | 700                                     |
| 25 [25M]                  | 08SZSC                                       | 2.51                      | 200             | 33  | 27  | 59          | 10  | 5                           |                                    |   |
| 28 [30M]                  | 09SZSC                                       | 3.71                      | 203             | 41  | 32  | 67          | 11  | 4                           | 290                                | 1000                                    |
| 32                        | 10SZSC                                       | 4.71                      | 241             | 43  | 37  | 71          | 13  | 5                           |                                    |   |
| 36 [35M]                  | 11SZSC                                       | 5.86                      | 283             | 46  | 38  | 75          | 14  | 6                           |                                    |   |
| 43 [45M]                  | 14SZSC                                       | 8.96                      | 248             | 59  | 44  | 95          | 17  | 8                           | 270                                | 1400                                    |
| 57 [55M]                  | 18SZSC                                       | 18.1                      | 392             | 64  | 57  | 114         | 22  | 16                          |                                    |   |

ALL DIMENSIONS ARE APPROXIMATE

**DOUBLE BARREL ZAP SCREWLOK® UNCOATED & EPOXY**

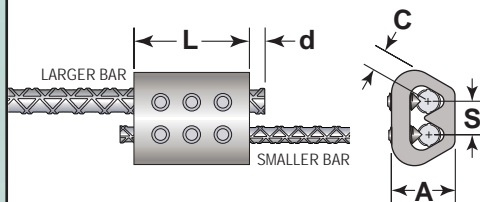


| REBAR<br>SIZE<br>mm [CAN] | DOUBLE BARREL<br>PRODUCT CODE * |         | COUPLER<br>WEIGHT<br>(kg) | DIMENSIONS (mm) |     |     |     |     | NUMBER<br>SCREWS<br>PER BAR | AVERAGE<br>SCREW<br>TORQUE<br>(Nm) | MIN. IMPACT<br>WRENCH<br>RATING<br>(Nm) |
|---------------------------|---------------------------------|---------|---------------------------|-----------------|-----|-----|-----|-----|-----------------------------|------------------------------------|---|
|                           | BLACK                           | EPOXY   |                           | LENGTH<br>'L'   | 'A' | 'C' | 'S' | 'd' |                             |                                    |   |
| 10                        | 03DBZA                          | 03DBZEA | 0.64                      | 54              | 29  | 10  | 24  | 10  | 2                           | 80                                 | 350                                     |
| 12 [10M]                  | 04DBZA                          | 04DBZEA | 0.63                      | 54              | 27  | 13  | 24  | 13  | 2                           |                                    |   |
| 16 [15M]                  | 05DBZA                          | 05DBZEA | 0.98                      | 76              | 29  | 16  | 24  | 16  | 3                           |                                    |   |
| 20 [20M]                  | 06DBZA                          | 06DBZEA | 1.39                      | 98              | 30  | 19  | 24  | 19  | 4                           |                                    |   |
| 22                        | 07DBZA                          | 07DBZEA | 3.07                      | 137             | 33  | 22  | 35  | 22  | 4                           | 140                                | 700                                     |
| 25 [25M]                  | 08DBZA                          | 08DBZEA | 4.62                      | 165             | 44  | 25  | 29  | 25  | 5                           |                                    |   |

\* GALVANIZED COUPLER ALSO AVAILABLE - SUBSTITUTE 'DBZGA' FOR 'DBZBA' IN PART CODE.

ALL DIMENSIONS ARE APPROXIMATE

**DOUBLE BARREL ZAP TRANSITIONS UNCOATED & EPOXY**



| REBAR<br>SIZE<br>(mm/mm) | DOUBLE BARREL<br>PRODUCT CODE *<br><br>TRANSITION | COUPLER<br>WEIGHT<br>(kg) | DIMENSIONS (mm) |     |     |     |     | NUMBER<br>SCREWS<br>PER BAR | AVERAGE<br>SCREW<br>TORQUE<br>(Nm) | MIN. IMPACT<br>WRENCH<br>RATING<br>(Nm) |
|--------------------------|---|---------------------------|-----------------|-----|-----|-----|-----|-----------------------------|------------------------------------|---|
|                          |   |                           | LENGTH<br>'L'   | 'A' | 'C' | 'S' | 'd' |                             |                                    |   |
| 12/10                    | 04/03DBZA   | 0.64                      | 54              | 27  | 13  | 24  | 13  | 2                           | 80                                 | 350                                     |
| 16/12                    | 05/04DBZA   | 1.00                      | 76              | 29  | 16  | 24  | 16  | 3                           |                                    |   |
| 20/12                    | 06/04DBZA   | 1.41                      | 98              | 30  | 19  | 24  | 19  | 4                           |                                    |   |
| 20/16                    | 06/05DBZA   |                           |                 |     |     |     |     |                             |                                    |   |
| 22/16                    | 07/05DBZA   | 3.11                      | 137             | 33  | 22  | 35  | 22  | 4                           | 140                                | 700                                     |
| 22/20                    | 07/06DBZA   |                           |                 |     |     |     |     |                             |                                    |   |
| 25/22                    | 08/07DBZA   | 4.67                      | 165             | 44  | 25  | 29  | 25  | 5                           |                                    |   |

\* EPOXY & GALVANIZED TRANS. ALSO AVAILABLE - SUBSTITUTE 'DBZEA' OR 'DBZGA' FOR 'DBZA' IN PART CODE.

ALL DIMENSIONS ARE APPROXIMATE

**ZAP SCREWLOK® MECHANICAL SPLICES AND CONNECTORS FOR REINFORCING BARS**

ZAP SCREWLOK® mechanical splices and connectors are compatible with reinforcing bars that comply with ASTM A615, ASTM A706, ASTM A996, or equal, and consist of smooth, shaped, steel sleeves with converging sides. A series of cone-pointed hex-head screws are arranged along the longitudinal axis in one or two rows. In the case of butt splices, reinforcing bars are inserted from each end to a center stop. No special bar-end preparation is required, so ends can be sheared, sawed, or flame-cut. When a splice is required between fixed points, the center pin can be knocked out completely allowing the coupler sleeve to be slipped entirely onto one bar and subsequently repositioned over both bar ends being spliced.

During mechanical splice assembly, the specially designed screws are tightened until they embed into the rebar surface whereupon the heads twist off at a prescribed tightening torque. Forces from the screws cause rebar deformations to interlock within the coupler wedge. The DUAL mechanical action results in a full positive connection for transferring tension or compression forces from bar-to-bar. Screws can be tightened using suitable impact wrenches. Linear alignment is preserved across the splice by using reinforcing bars with straight ends and securing the continuation bar in the desired position at the time of assembly.

Mechanical butt splices and connectors are available for reinforcing bar sizes Ø10 through 57 mm, and mechanical lap splices are available for bar sizes Ø10 through 25 mm, per the above Dimensions and Data charts. Transition splices are used to connect reinforcement bars of different sizes or different types, such as square bar or threaded rod.

Epoxy-coated reinforcing bars that comply with ASTM A775 can be spliced by means of epoxy coated Zap Screwlok® couplers without shielding or removing the epoxy coating from the bar. Zinc-coated (galvanized) bars per ASTM A767 or A1094 can be mechanically spliced by means of galvanized Zap Screwlok® couplers.

ZAP SCREWLOK® is an engineered mechanical splice system whose strength is independent of the concrete which surrounds it, thereby providing true structural continuity. Applications include new construction, field repairs, splicing of column steel, beam reinforcement, concrete piles and deck steel, and splicing of older types of reinforcing bars. The Zap Screwlok® system is commonly used for rehab / retrofit projects, strengthening and upgrading concrete elements, extending deck steel to widen bridges, highway patch and repair projects, and splicing bars across closure pours. Zap Screwlok® Type 2 splices can be used for mechanically splicing reinforcement in members resisting earthquake induced forces. Benefits include a field installed splice with easy visual inspection, no specialized equipment, minimal clearance requirements, a positive rebar center-stop and no rebar end preparation.

Field splicing of reinforcing bars by the Zap Screwlok® method is most popular because of the systems simplicity, cost effectiveness and adaptability. Instructions provided with Zap Screwlok® splices and connectors, or available at [www.barsplice.com](http://www.barsplice.com), explain step-by-step installation and safety information.

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