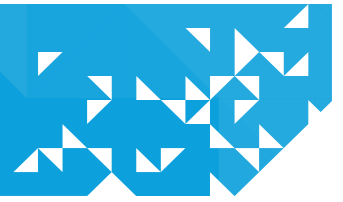


700 Series - Hinged, Welded, Imperial and Dual Contact Bow Centralizer



709 HINGED, WELDED, IMPERIAL BOW CENTRALIZER WITH TURBO FINS AND SET SCREWS

The hinged 709 adds both spot-welded turbo fins and evenly spaced integral set screws to the design of the 700 Series. Because of the greater holding force supplied by the set screws, a stop collar is not required with this centralizer.

- Hinged design with more aggressive bow profile on each end
- Hinged design allows for easy installation around casing coupling or stop collar
- Improved turbulence in annulus with utilization of turbo fins
- Centralizers are designed and tested for specified casing and hole size combinations. Any attempt to run through smaller restrictions may cause excessive starting force and/or damage.
- Set screws recommended to be used on casing grades of P110 or below
- Install by evenly tightening set screws in a “star pattern” to prevent collar deformation, then torque set screws in the leading end collar to a maximum of 25ft. -lbs.
- Stocked in standard casing/ hole size combinations
- Specify casing, hole and restriction sizes when ordering



710 SLIP ON, WELDED, IMPERIAL BOW SPRING CENTRALIZER

The 710 Centralizer is our slip-on version of the imperial bow design. It consists of two slip-on, three-inch creased steel collars with straight bow springs that are welded onto the outside of the end collars. It provides the casing/liner a smooth bearing surface when run between two stop collars or over a slip-on stop collar. This centralizer is better suited for pipe rotation.



711 SLIP ON, WELDED, IMPERIAL BOW SPRING CENTRALIZER WITH SET SCREWS

- Used in most types of well designs
- Recommended for deviated and directional well designs
- API Spec. 10D rated
- Slip-on design with more aggressive bow profile on each end
- Slip-on end collars have enhanced mechanical integrity
- Centralizers are designed and tested for specified casing and hole size combinations. Any attempt to run through smaller restrictions may cause excessive starting force and/or damage.
- Stocked in standard casing/ hole size combinations
- Specify casing, hole and restriction sizes when ordering
- Special casing/ hole size configurations are available upon request



Casing Sizes:	4-1/2" to 20"
Collar Material:	A569/ A1011
Bow Spring Material:	AISI 4130



This centralizer consists of straight dual contact bow springs that are welded onto the hinged end collars. Normally run between two stop collars, the 780 Series' double bow design is optimized for small-clearance situations.

780C HINGED, WELDED, DUAL CONTACT BOW CENTRALIZER

A similar version of the 780 Series, the 780C is normally run over a stop collar or coupling. It retains the hinged design for quick installation in the field.



788 SLIP ON, WELDED, DUAL CONTACT BOW CENTRALIZER

The 788 is our dual contact bow centralizer in a slip-on configuration, which allows the casing/liner to maintain a smooth bearing surface. It features two slip-on, three-inch creased steel collars with straight dual contact bow springs that are welded onto the outside of the end collars. The 788 may be run between two stop collars or over a slip-on type stop collar.

