



# BOW SPRING CENTRALIZER

## Single Piece, Hinged & Slip-On Types

Bow spring centralizer is designed for primary cementing, applied in vertical, deviated and horizontal wells where low starting force as high restoring force.

It is used to keep casing in the center of wellbore and reduce friction between casing and well bore.

Bow spring centralizer consists of several metal strips shaped like a hunting bow and attached to a tool or to the outside of casing. It is a critical step in quality cementing as the lack of proper centralization can lead to severe cementing problems including lack of zonal isolation and improper casing support.



### Categories ▼

#### Slip-on Single Piece Bow Spring Centralizer

- › It is used to position the casing in the center of the wellbore in vertical deviated and horizontal wells.
- › It can reduce the effect of channeling by reducing pipe movement before cement sets in and improving the cement flow for more uniform cement thickness in the well bore.
- › Special high strength steel which imparts excellent hardness and spring action ensuring an unmatched ability to come back to its original shape after undergoing rigorous stress loads conditions.
- › It is formed from single sheet of special steel resulting in no weld between bows and end collars, increasing the robustness and ability to withstand higher lateral and side loads during casing running.
- › Zero weak points, such as hinges, welds or mechanical interlocks.
- › Available in 4-1/2" to 20" sizes and special sizes are also available.



#### Hinged Non-Welded Bow Spring Centralizer

- › It consists of bows, end collar with hinges and hinge pins. The formed bows are attached the end collar using rivets onto the hinged end collars. And the centralizers use hinged pins to secure the end collars together around the casing.
- › The hinged designs is convenient for assemble and storage. When assembled, just place the two assembled halves on the pipe and insert the pins in the end collar hinge. Unassembled centralizers are packed and stored in compact package, which can reduce transporting and storage space and costs.
- › Hinged non-welded bow spring casing centralizer is a simple, low cost spring design which can performs well in both vertical and slightly deviated wells as the bow springs are slightly larger than the wellbore.
- › Combines the highest restoring force with the lowest starting force at all bow heights.
- › The bows are heat treated in special furnace to ensure centralizers to provide the best centralization as well as help in faster running of casing.
- › The bows angles are available in a range to accommodate any well profiles.
- › Available in single bow or double bow design.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



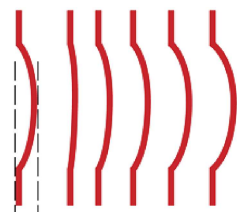
Single bow hinged non-welded centralizer



Double bow hinged non-welded centralizer



Pipe OD



Height 1 2 3 4 5

Adjustable bow heights



**MORE CHOICES.....**

More products can be purchased  
Online at [www.drinol.com](http://www.drinol.com)



### Hinged Non-Welded Positive Casing Centralizer

- › Hinged design for easy transporting, storing and installing.
- › Use hinged pins to secure the hinged end collars together around the casing.
- › Straight formed positive bars are attached onto the hinged end collar with rivets.
- › Easy installation and normally run over a stop collar or coupling.
- › U-profile design instead of spring bows can ensure maximum fluid passage and reduce frictional drag force in deviated hole conditions.
- › Almost 100% standoff when run inside a cased hole.
- › Flat U profile is fitted in self locking retaining lips for firm and positive hold.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



### Hinged Welded Bow Spring Centralizer

- › It has more restoring force than non-welded centralizers.
- › The bow springs are strongly welded to the end collar under required temperature and condition with extra low hydrogen coated electrodes.
- › Hinged design is easy to transport, store and installation.
- › End collars are designed with a reinforcing rib stamped into the end collar to give maximum structural toughness.
- › Bow spring heights can be adjustable.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



### Slip-On Welded Bow Spring Centralizer

- › It is composed of welded bow springs and seamless end collars.
- › Slip on centralizers are designed with roll formed peripheral ridges to provide extra rigidity.
- › It is directly installed on the pipe by slipping on and can be provided with stop collars with set screws.
- › Adjustable bow heights for optimum starting and restoring force.
- › Powder coating or painting to prevent from rust and corrosion in well bore.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



### Slip-On Welded Positive Casing Centralizer

- › Specially designed with flat bottom U profile with different depths permit maximum fluid passage.
- › Bow springs are strongly welded to seamless end collars under required temperature conditions with correct grade electrode.
- › Provide 100% standoff (concentricity) when run inside a case hole.
- › Just install onto the casing by slipping on the centralizer.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.

## Specifications ▼

Size (inch)	Bow Quantity	Outside Diameter	Inner Diameter	Overall Length
4-1/2" x 6"	4	160	116	450/575
4-1/2" x 6-1/4"	4	167	116	450/575
4-1/2" x 7-7/8"	4	210	116	450/575
4-1/2" x 8-1/2"	4	230	116	450/575
5" x 6"	4	160	128	450/540
6" x 6-3/4"	4	180	128	450/575
5" x 7-7/8"	4	210	128	450/575
5-1/2" x 7-7/8"	5	210	140	450/575
5-1/2" x 8-1/2"	5	216/245	140	450/575
5-1/2" x 8-3/4"	5	222/250	140	450/575
5-1/2" x 9-7/8"	5	251/264	140	450/575
5-1/2" x 9-1/2"	5	242/264	140	450/575
7" x 8-1/2"	6	216/230	179	450/575
7" x 8-3/4"	6	222/233	179	450/575
7" x 9-1/2"	6	242/264	179	450/575
7" x 9-7/8"	6	251/264	179	550/650
9-5/8" x 12-1/4"	8	346	245	550/650
9-5/8" x 13-3/8"	8	346/352	245	550/650
9-5/8" x 12-13/16"	8	378	245	550/650
10-3/4" x 14-3/4"	9	405	275	550/650
10-3/4" x 15-1/2"	9	374	275	550/650
13-3/8" x 17-1/2"	10	440/466	342	550/650
13-5/8" x 17-1/2"	12	440/466	342	550/650
20" x 26"	12	696	510	550/610/650



**MORE CHOICES.....**

More products can be purchased  
Online at [www.drinol.com](http://www.drinol.com)