

One Piece Bow Spring Centralizers



The Forum One Piece Bow Spring Centralizer is non-weld uni-body bow-type centralizer. These Centralizers are made from a single piece of alloy steel tube that is precision-cut with a laser to form the end collars and bow springs as one unitary body. The bows are then expanded to the desired outside diameter with advanced tooling. Finally, the entire unit is heat treated to maximize the restoring force of the bows as well as provide strength to the whole unit. Optionally it can be coated with various coatings to provide friction reduction, corrosion prevention or protection for hanger seal areas.

- The strongest bow-type centralizer available today.
- Manufactured from tubular steel with closer tolerances that allow for running in tighter annular spaces (close-tolerance wellbores).
- More stand-off than solid-body centralizers in conventional and bi-center wellbores (where the open-hole ID drilled below a casing string is larger than the casing ID).
- As the bow OD is typically the same or only slightly larger than the wellbore ID, drag forces are considerably lower than conventional bow-type centralizers, yet restoring forces are higher.
- Greater flow-by area than most bow-type or solid-body centralizers.
- Easily coated with low-friction polymers to reduce friction factor in extending reach horizontal casing installations, or to prevent erosion due to plating of expensive casing alloys when installed in a corrosive environment. Also coatings can prevent damage to sensitive areas such as hanger seal ID's, etc.
- Radially curved bows decrease friction and reduce the chance of drag or damage when passing through milled-casing windows.
- Set screws can be integrated into the lower end collar to provide anchoring without the need for a separate stop collar.

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Size	ID (in)	Bow OD (in)	Overall Length (in)	# of Bows	Hole Size (in)	Starting Force (lbs)	Running Force (lbs)	Restoring Force (lbs)	API Min. Restoring (lbs)	Collar Joint	Part Number
4-1/2"	4.625	6.000	13.0	4	6.000	<50	<50	1000	464	Tig Weld	044CENT1PC060
4-1/2"	4.625	6.750	13.0	4	6.750	<50	<50	1250	464	Tig Weld	044CENT1PC066
4-1/2"	4.625	8.500	13.0	4	8.500	<50	<50	1500	464	Tig Weld	044CENT1PC084
5-1/2"	5.625	7.875	13.0	4	7.875	<50	<50	1650	620	Tig Weld	054CENT1PC077
5-1/2"	5.625	8.500	13.0	4	8.500	<50	<50	2000	620	Tig Weld	054CENT1PC084
5-1/2"	5.625	8.750	13.0	4	8.750	<50	<50	2150	620	Tig Weld	054CENT1PC086
7"	7.125	8.500	13.0	6	8.500	<50	<50	1650	1040	Tig Weld	070CENT1PC084
7"	7.125	8.750	13.0	6	8.750	<50	<50	2000	1040	Tig Weld	070CENT1PC086
9-5/8"	9.750	12.250	13.0	6	12.250	<50	<50	2500	1600	Tig Weld	095CENT1PC122
9-7/8"	10.000	12.250	13.0	6	12.250	<50	<50	2140	n/a	Tig Weld	097CENT1PC122
13-3/8"	13.563	17.500	15.0	8	17.500	<50	<50	2550	1220	Tig Weld	133CENT1PC174
13-5/8"	13.750	17.500	15.0	8	17.500	<50	<50	2550	n/a	Tig Weld	135CENT1PC174