

CASING CENTRALIZER

Spring Casing Centralizer

PPGL provides various non-welded bow spring centralizers, which are designed and manufactured as per API Spec 10D. The popular styles available are non-welded single bow spring centralizer, and double-bow spring centralizer with high reliable quality, which can be used to replace Weatherford centralizer.

Spring Centralizer Characters:

Super-strengthen spring steel, Model processing, no rivet, no welding 3-section structure for easy transport. Starting and resetting force conform to API standard. Easy for installation.



**Single Bow
Centralizer**



**Double Bow
Centralizer**

Non-welded Bow Spring Centralizers

Technical specifications of Non-welded Bow Spring Centralizer

| Centralizer Spec. (in) | 20 | 18-5/8 | 16 | 14 | 13-3/8 | 12-3/4 | 10-3/4 | 9-5/8 | 7-5/8 | 7 | 6-5/8 | 5-1/2 | 5 | 4-1/2 |
|------------------------|------------|------------|------------|-----|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| Casing Size (in) | 20 | 18-5/8 | 16 | 14 | 13-3/8 | 12-3/4 | 10-3/4 | 9-5/8 | 7-5/8 | 7 | 6-5/8 | 5-1/2 | 5 | 4-1/2 |
| Open Hole Size (in) | 24 26 | 22 24 | 20 22 | 18 | 17-1/2 | 17-1/2 | 12-1/4 | 12-1/4 | 9-7/8 | 8-1/2 | 8-1/2 | 8-1/2 | 6-1/2 | 6 |
| Max. O.D. (mm) | 650 714 | 590 680 | 550 613 | 484 | 470 | 466 | 370 | 375 | 273 | 252 | 245 | 256 | 190 | 181 |

Rigid Casing Centralizers

As one useful cement tool, rigid casing centralizer enables casing run easily in wellbore with its shape of stream-lined. There are two kinds of Rigid Centralizer available: spiral blade rigid centralizer and straight blade centralizer.

The material for both kinds of centralizers can be cast steel or cast aluminum.



Rigid Centralizer

Technical specifications of Rigid Centralizers

| Rigid Centralizers Specification (in) | 13-3/8 | 10-3/4 | 9-5/8 | 7-5/8 | 7 | 5-1/2 | 5 | 4-1/2 | 4 |
|--|---------------|---------------|--------------|--------------|----------|--------------|----------|--------------|----------|
| I.D. (mm) | 343 | 276 | 247 | 197 | 180 | 143 | 130 | 117 | 104 |
| Max. O.D. (mm) | 400 | 308 | 308 | 243 | 212 | 213 | 151 | 148 | 118 |
| Height (mm) | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 100 | 80 |

PPG