## **VALOR 1** Bow Spring Centralizer



## **Product**

Varel Energy Solutions VALOR 1 bow spring centralizer is a one-piece at-gauge semi-rigid bow. Manufactured from spring steel to allow with zero starting and running force to reach target depth in the first attempt. With upto 3X API restoring force, the VALOR 1 provides excellent stand-off for even cement displacement around the pipe.

## **Features**

- Non-welded, robust one-piece design
- · Suitable for rotation due to axial rigidity
- · High restoring forces exceeds industry standards
- Spring steel flexible design significantly reduce running forces and allows easy passage through wellbore obstructions
- · Gauge hole OD offering maximum standoff
- Suitable for onshore installation reducing rig time costs and HSE exposure

## **Options**

- Centralizer placement / T&D analysis available
- · Dedicated engineering support team
- Size range from 2-7/8 inch to 30 inch