

## Free Point Indicator (FPI)

The Free Point tool measures torque and stretch to accurately locate where drillpipe, tubing, or casing is stuck or partially stuck.

### Description

The Free Point Indicator is an electromechanical assembly designed to accurately measure torque or stretch in harsh conditions. The basic Free Point tool assembly consists of bow spring or magnet, upper and lower anchors, and a sensor section to determine stuck point. Additional components that must be run with the Free Point tool assembly are: sinker bars to overcome the holding ability of the anchors, a collar locator (CCL) to determine depth and a slack joint to relieve weight above the tool assembly when at the correct depth for making a measurement.

### Features

- A wide range of tools are available for operations inside large diameter casings and small diameter pipe sizes and restrictions
- Most Sondex\* Free Point tools can be run simultaneously with explosive string shot assemblies
- Tool options available to 30,000 psi (206.8 MPa) operations on all types of wireline, including nickel (sour service) wireline

### Specifications

Temperature rating	500°F (260°C)			
Pressure rating	1 5/8 in. HP 30,000 psi (206.8 MPa)			
Diameter	1 1/16 in. (17.5 mm)	1 in. (25.4 mm)	1 3/8 in. (35 mm)	1 5/8 in. (41.3 mm)
Length	118 in. (2,997 mm)	137.5 in. (3,493 mm)	136.75 in. (3,473 mm)	133.5 in. (3,391 mm)
Weight	9 lb (4.1 kg)	20.5 lb (9.3 kg)	38 lb (17.3 kg)	50 lb (22.7 kg)
Minimum pipe diameter	1 in. (25.4 mm)	1 1/2 in. (38.1 mm)	1 3/4 in. (44.5 mm)	1 3/4 in. (44.5 mm)
Maximum pipe diameter	5.625 in. (142.9 mm)			
Number of arms	3		4	
Distance between clamps	52 in. (1,321 mm)			

