

Digital Free Point Tool

Titan Division | Instruments

Hunting's Digital Free Point Tool accurately determines the stuck point in pipe, tubing, or a casing string. The real-time data allows the operator to make rapid and informed decisions in determining the next steps to recover the stuck downhole assembly.

The Hall sensor picks up movements in the assembly associated with tension, compression, or torque measurements and converts that to an AC signal. This signal is then processed at the surface by the Digital Free Point Panel or SDS Warrior 8 System.



FEATURES

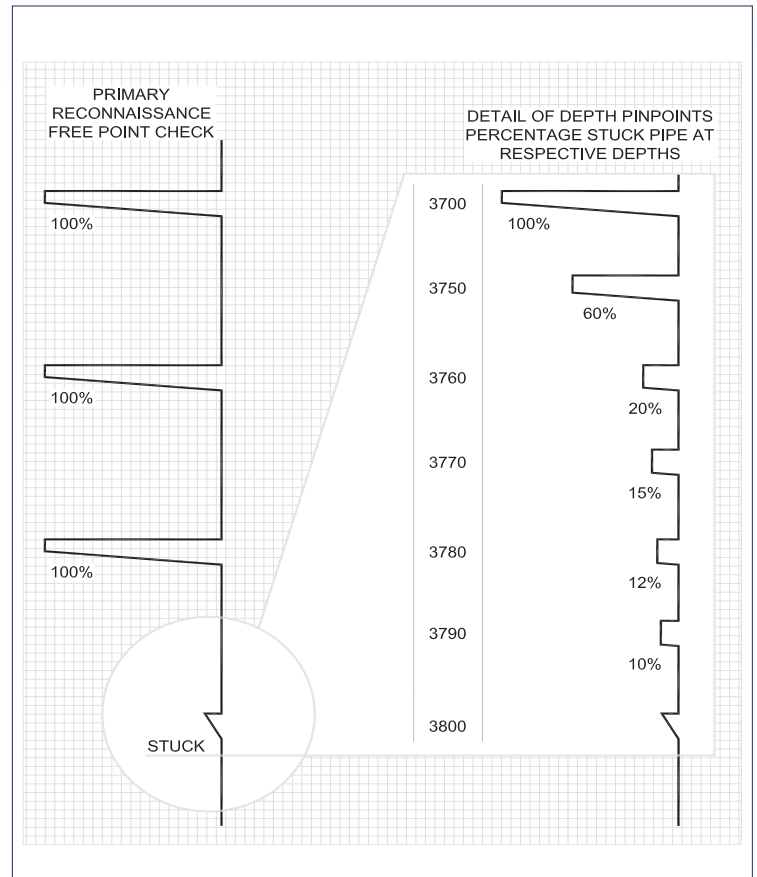
- Rated to 350°F operations
- Tension, compression and torque measurements
- Solid-state electronic motor control
- Open/Close reported by system
- Six anchor sizes available
- Temperature stable Hall sensor
- Ability to shoot below tool via ControlFire® Sub or EBFire® Sub*

BENEFITS

- Real-time data assists in optimizing pipe recovery methods
- Accurate depth determination of stuck assembly
- Controlled electronics protect damage to gear and drive assemblies
- Open and close of motor section controlled by Digital Freepoint Panel or Warrior Panel



The Digital Free Point Panel (8140-000-700). Sold separately.



Example illustrating how the location of stuck pipe can be determined by the Digital Free Point Tool.

*Survivability of the Tool cannot be guaranteed when firing ballistics below the Digital Free Point Tool. Subs are sold separately.

SPECIFICATIONS

	Part Number	
	1-7/16 in (37 mm)	1-9/16 in (40 mm)
Tool With Panel	8140-14352MHXXX-XX-00-H	8140-15652MHXXX-XX-00-H
Tool Without Panel	8140-14352MHXXX-XX-00	8140-15652MHXXX-XX-00
ControlFire Sub	8140-143-600-1	8140-156-600-1
EBFire Sub	8140-143-600	8140-156-600
MEASUREMENTS		
Vertical Resolution (in)[mm]	4.03 [1.23]	4.03 [1.23]
Logging Speed CCL (ft/min)[m/min]	60 [18.3]	60 [18.3]
Mud Type • Weight	No limitations	No limitations
ENVIRONMENTAL		
Temperature rating (°F)[°C]	350 [177]	350 [177]
Pressure Rating (psi)[MPa]	15,000 [103]	18,000 [124]
MECHANICAL		
Outside Diameter (in)[mm]	1.43 [36.5]	1.56 [39.7]
Tool Length (ft)[m]	9.0 [2.74]	9.0 [2.74]
Tool Length with ControlFire or EBFire Sub (ft)[m]	10.0 [3.05]	10.0 [3.05]
Weight (lb)[kg]	45 [20]	50 [23]
Fishing Strength (lbf)[kN]	22,000 [98]	22,000 [98]
Min. • Max. Pipe I.D. (in)[mm]	1.77 [45] • 11.27 [287]	1.90 [48] • 11.27 [287]
Tool Top Connection	1-3/16" GO Box	1-3/16" GO Box
Tool Bottom Connection	Bull Plug	Bull Plug
Bottom Connection with ControlFire or EBFire Sub (ft)[m]	1-3/16" GO Box	1-3/16" GO Box
ELECTRICAL		
Operating Voltage & Current Operating Anchors Operating Sensors	130 VDC @ 150±20 mA 40 VDC @ 150±10 mA	130 VDC @ 150±20 mA 40 VDC @ 150±10 mA
Output Signal (Peak to Peak)	1.0 V variable frequency	1.0 V variable frequency
Cable Type	Single conductor	Single conductor
Stretch/Torque Sensor	Magnetic Hall flux gap	Magnetic Hall flux gap

ANCHOR SELECTION CHART

LEG PART NUMBER	Closed Diameter (in)[mm]	Open Diameter (in)[mm]
8140-143-016-1	1.43 [37]†	2.74 [70] @ 45°
8140-143-016-2	1.43 [37]†	4.17 [106] @ 45°
8140-143-016-3	1.43 [40]†	5.56 [141] @ 45°
8140-143-016-5	4.10 [104]	6.43 [163] @ 30°
8140-143-016-6	5.86 [149]	8.40 [213] @ 30° 9.17 [233] @ 45°
8140-143-016-7	7.38 [187]	10.52 [267] @ 30° 11.27 [286] @ 45°

† 1.56 in (40 mm) for 18,000 psi (124 MPa) version

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Distribution
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