

## Delta Stim<sup>®</sup> Initiator Valve

Designed for Selective Multi-Zone Fracturing or Acidizing through the Completion

The Delta Stim<sup>®</sup> Initiator valve is designed to enable an interventionless stimulation treatment when used in conjunction with Delta Stim sleeves in Halliburton's Delta Stim<sup>®</sup> completion service. The Delta Stim Initiator (DSI) valve operates as the toe-opening sleeve and is activated using absolute tubing/casing pressure that exceeds a predetermined shear pinned value.

The DSI valve utilizes an air-chambered sleeve that operates solely off absolute tubing pressure. Prior to running the completion, the valve is pinned according to opening requirements dictated by hydrostatics of the well, other tubing pressure-operated tools, and casing pressure ratings. Opening the valve's internal sleeve allows flow to be diverted through ports in the outer case. Once opened, the valve can be used for stimulation of the first zone and/or as the flow path to pump the first ball down to the first Delta Stim sleeve.

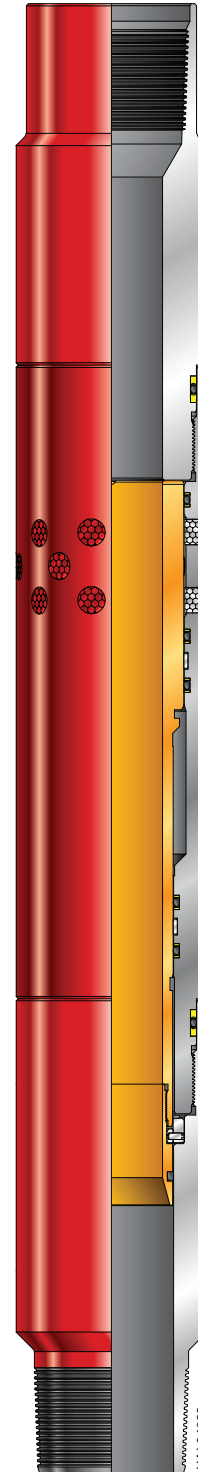
After stimulation, clean up is assisted by flowing all lower zones simultaneously. The DSI valve has been successfully run in cemented applications in both horizontal and vertical wells.

### Features

- Interventionless completion
- Tubing/casing internal pressure activation
- Available with 10,000 psi and 15,000 psi differential ratings or 15,000 psi and 20,000 psi absolute pressure ratings (HPHT)
- Positive locking engagement when sleeve is opened
- Available in standard service and CO<sub>2</sub> (S13Cr)

### Benefits

- Allows for interventionless opening of completion string toe eliminating perforating requirement
- Provides flow path to pump first frac stage and displace first stage ball on depth



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**Delta Stim® Initiator Specifications**

Casing Size in.	Tool OD in. (mm)	Tool ID in. (mm)	Minimum Open Hole Size in. (mm)	Maximum Temperature °F (°C)	Maximum Absolute Pressure psi (kPa)	Maximum Differential Pressure psi (kPa)	Maximum Pump Rate (bpm)
4-1/2	5.60 (142.24)	3.00 (76.20)	5.875 (149.23)	350 (177)	15,000 (103.421)	10,000 (68.948)	100
4-1/2 HPHT	5.75 (146.15)	3.00 (76.20)	6.00 (152.40)	400 (204)	20,000 (137.880)	15,000 (103.410)	100
4-1/2 S13Cr	5.60 (142.24)	3.00 (76.20)	5.875 (149.23)	350 (177)	15,000 (103.421)	10,000 (68.948)	100
5-1/2	6.50 (165.10)	4.00 (101.60)	6.875 (174.63)	350 (177)	15,000 (103.421)	10,000 (68.948)	100

**Delta Stim® Initiator**

Size in.	Part Number	Threads
4-1/2	101848510	Blank
4-1/2	101848509	8 Rd
4-1/2	101903184	VAM Top HC
4-1/2	101912703	Blank
4-1/2	101900450	Blank
4-1/2 HPHT	101900455	8 Rd
5-1/2	101848512	Blank
5-1/2	101848511	8 Rd
5-1/2	101903175	BTC

**Delta Stim® Initiator Shear Pin**

Initiator Size	Pin Part Number	OD Size in. (mm)	Length in. (mm)	Number of Pins Available
4-1/2	100008025	0.189 (4.80)	0.385 (9.78)	40
5-1/2				36

**For more information on how the Delta Stim® Initiator sleeve can help you with selective multi-zone operations, contact your Halliburton representative or email [service.tools@halliburton.com](mailto:service.tools@halliburton.com).**

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Completion Tools