Stinger Shifting Tool

Enable reliable, single-trip tool actuations

The Stinger shifting tool uses bidirectional key sets to enable single-trip opening and closing of downhole valves and sleeves. Because the key sets are bidirectional they do not require modifications to shift tools open and closed, helping operators to reduce downhole trips, accelerate operations, and minimize OPEX.

As the Stinger tool is run in hole, spring-loaded keys collapse through restrictions and then fully expand to engage the targeted valve or sleeve profile. After the downhole tool has been shifted open or closed, the Stinger tool's keys automatically release from the profile. If the keys do not retract, a shear facility, which can be field-adjusted up to a 40,000 lb (18 144 kg) shear threshold, can collapse the keys back into the Stinger tool body to ensure reliable retrieval.

The Stinger tool comes standard with an Otis B or CM profile and it can be configured with various key sets that fit common tool profiles and sizes. It can also be configured with unidirectional keys for selective shifting operations. Custom key sets can also be ordered if needed.

For added flexibility the Stinger tool can be run on tubing or wireline, and its large through bore enables fluid circulation through the tool, making it ideal for use on washstrings. A wireline entry guide is provided as the standard bottom connection.

The Stinger tool can be used to mechanically actuate a wide range of Baker Hughes, a GE company (BHGE) tools. When wellbore restrictions do not permit the use of traditional mechanical shifting tools, the BHGE High-expansion

Applications

Mechanical opening and closing of valves and sleeves using tubing or wireline

Features and benefits

- Bidirectional key sets
  - Shift tools open and closed without requiring a second trip to modify keys
  - Reduce rig time and OPEX
- Shear facility for shifting keys
  - Ensures reliable tool retrieval if keys do not retract when de-activated
  - Enables shear threshold adjustments up to 40,000 lb at the rig for added operational flexibility
  - Provides positive surface indication of shear versus shift downhole events
- Large through bore
  - Permits fluid circulation through the tool
  - Allows use with washstrings
  - Minimizes potential for key retraction when performing shifting operations in fluid loss situations
- Optimized design with fewer parts
  - Reduces tool complexity
- Large tool outside diameter
  - Minimizes centralization issues
  - Ensures reliable key engagement

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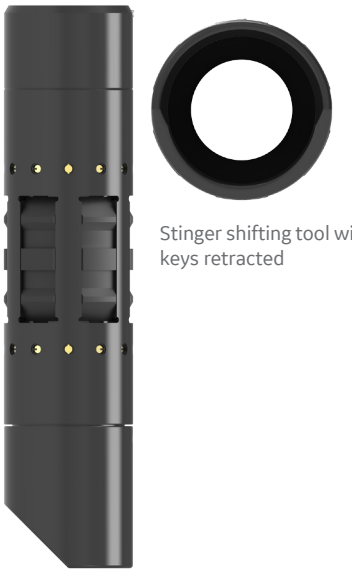
Shifting Tool, or HEST, is an ideal solution because it enables the same, single-trip open and close operations as the Stinger tool.

Contact your local BHGE representative today to learn more about how the Stinger shifting tool enables efficient and reliable shifting operations.



Stinger shifting tool with keys retracted

Stinger shifting tool with keys expanded

Stinger Shifting Tool Specifications							
Parameter	**2.312 in.**	**2.812 in.**	**3.312 in.**	**3.812 in.**	**4.562 in.**	**4.562 in. SP**	**4.750 in.**
Maximum OD	2.19 in. (55.6 mm)	2.67 in. (68 mm)	3.12 in. (79 mm)	3.69 in. (93.7 mm)	4.25 in. (108 mm)	4.52 in. (115 mm)	4.62 in. (117.4 mm)
Minimum ID	0.71 in. (18 mm)	1.65 in. (42 mm)	1.96 in. (50 mm)	1.97 in. (50.00 mm)	2.36 in. (60 mm)	2.75 in. (70 mm)	3 in. (77.4 mm)
Shear rating (brass)	(2x) 5,660 lb (25 kN) – (12x) 33,960 lb (151 kN) shear screws						
Shear rating (steel)	(2x) 6,710 lb (30 kN) – (12x) 40,260 lb (179 kN) shear screws						
Top connection	1.500 in. 8TPI Stub Acme Box	2.375 in. 8TPI Stub Acme Box	2.500 in. 8TPI Stub Acme Box	3.000 in. 8TPI Stub Acme Box	3.500 in. 8TPI Stub Acme Box	3.500 in. 8TPI Stub Acme Box	4.000 in. 8TPI Stub Acme Box
Bottom connection	Wireline entry half-muleshoe						

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