

Flapper Investigation Tool

Avoids costly and unnecessary fishing operations by confirming safety valve flapper position

Applications

- Determine safety valve flapper position

Features and Benefits

- Failsafe close feature verifies a safety valve is safe to run wireline operations
- Suitable for various safety valve sizes/types
- Simple operation eliminates the need for specialist personnel

Tool Description

The Weatherford flapper investigation tool (FIT) is designed to determine the status of the flapper in a safety valve. The modular design allows the length and nipple profile to be changed to suit alternative safety valves with little effort.

The FIT is deployed on wireline and landed against the safety valve nipple no-go. The tool is then slowly lifted. If an overpull is achieved, this verifies that the flapper is not housed as it should be and could lead to a potential fishing event should the toolstring be deployed below this point.

If no overpull is achieved, this verifies the flow tube is fully stroked, the flapper is contained as designed, and intervention can safely take place.

After determining flapper status, the FIT must be activated by downward jarring against the nipple no-go which closes the catch area, providing a continuous flush OD and allowing retrieval to the surface.

A brass impression plate on the bottom sub of the tool collects extra information about an open flapper.



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Specifications

Configurations

Nominal size	4.50 (114.3 mm)	5.50 (139.7 mm)
Nipple size*	3.813 (96.850 mm)	4.312 (109.524 mm)
Nipple profile*	X, AF, EOF, QN	AF, QN, DB, RQ
No-Go to flapper recess length	46, 66, 108, 114, 122, 130, 189 in. (1.1, 1.6, 2.7, 2.8, 3.0, 3.3, 4.8 m)	55, 82, 105, 156 in. (1.3, 2.0, 2.6, 3.9 m)

*Nipple profiles and lengths available upon request

