



# Weatherford®

Thru-Tubing Intervention

## *FH One-Trip Cement Retainer*

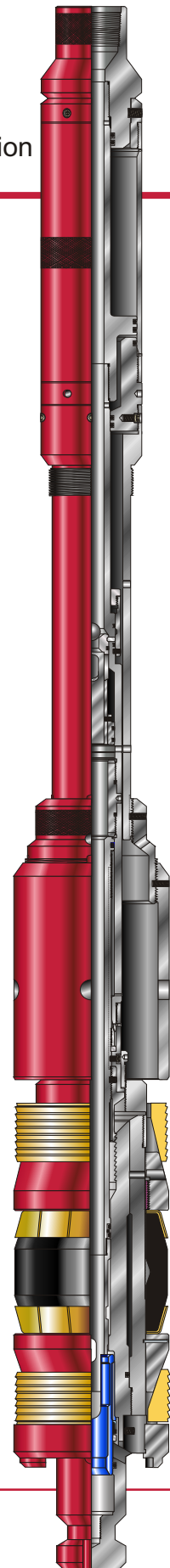
The FH one-trip retainer system uses an FH cement retainer and an FH one-trip setting tool. This system allows the cement retainer to be set hydraulically and squeezed through in one trip. The FH cement retainer can be tested before cementing. The FH cement retainer features slide-valve bottom, dart-valve bottom, or ball-check options. The FH cement retainer with the dart valve or ball-check bottom can be run on electric line where accurate depth correlation is critical, and the stinger can be run on a separate trip to perform the squeeze.

### *Applications*

- Applications in which it is advantageous to set and squeeze the cement retainer in the same run
- Deviated wells in which conditions are not suitable for rotating or for wireline-set cement retainers
- Monobore applications in which the FH cement retainer will be set in the production tubing or liner

### *Features, Advantages and Benefits*

- The FH hydraulic setting tool enables running, setting, and squeezing in a single trip.
- A slide valve available for 2 3/8- through 3 1/2-in. tubing or casing provides a positive seal to prevent the potential expense of a cement U-tube after squeeze operations.
- The slide valve holds pressure above and below for cement placement above the retainer, which improves millability.





## *FH One-Trip Cement Retainer*

### *Specifications*

Cement Retainer					Setting Tool		
Casing		Setting Range		Tool Maximum OD (in./mm)	Casing		Tool Maximum OD (in./mm)
OD (in.)	Weight (lb/ft)	Minimum (in./mm)	Maximum (in./mm)		OD (in.)	Weight (lb/ft)	
2-3/8	3.3 to 5.9	1.867 47.42	2.107 53.52	1.750 44.45	2-3/8	3.3 to 5.9	1.750 44.45
2-7/8	6.4 to 6.5	2.280 57.91	2.563 65.10	2.187 55.55	2-7/8	6.4 to 6.5	2.187 55.55
3-1/2	5.7 to 10.2	2.867 72.82	3.258 82.75	2.750 69.85	3-1/2	5.7 to 10.2	2.750 69.85
4-1/2	9.5 to 16.6	3.826 97.18	4.090 103.89	3.593 91.26	4-1/2	9.5 to 16.6	3.593 91.26
5	11.5 to 18.0	4.154 105.51	4.560 115.82	3.937 100.00	5	11.5 to 18.0	3.937 100.00
5-1/2	13.0 to 23.0	4.580 116.33	5.044 128.12	4.312 109.53	5-1/2	13.0 to 23.0	4.312 109.53
6-5/8	17.0 to 34.0	5.595 142.11	6.135 155.83	5.375 136.53	6-5/8	17.0 to 34.0	5.375 136.53
7	32.0 to 38.0	5.595 142.11	6.135 155.83	5.375 136.53	7	32.0 to 38.0	5.375 136.53
7	17.0 to 35.0	6.004 152.50	6.538 166.07	5.687 144.45	7	17.0 to 35.0	5.687 144.45
7-5/8	20.0 to 39.0	6.625 168.28	7.263 184.48	6.312 160.33	7-5/8	20.0 to 39.0	6.312 160.33
8-5/8	24.0 to 49.0	7.511 190.78	8.248 209.50	7.125 180.98	8-5/8	24.0 to 49.0	7.125 180.98
9-5/8	29.3 to 53.5	8.435 214.25	9.093 230.96	8.125 206.38	9-5/8	29.3 to 53.5	8.125 206.38