

## Service Tools

### CMS-AFV Acid Frac Valve

The CMS Acid-Frac System is a valve system designed for use in stimulation with prescribed fluid amounts, of several individual zones in a single run. It is normally run above a compression set packer but may also be deployed above a straddle packer system to treat a zone between the two packers. While running in the well fluid may be circulated through the tool until the packer(s) are at setting depth at which time a ball is dropped to the seat, the packer(s) are set and further set down weight is applied to open the valve. After treatment of the zone, tension is applied to close the valve and unset the packer(s) so the assembly can be moved to the next zone and the same process repeated. During the move between zones the valve remains closed so no stimulation fluid is lost from the tubing and the process can be repeated as required to allow treatment of several zones in a single trip. After the final treatment, tension closes the valve, unsets the packer(s) and applied tubing pressure then shears out the ball seat, opening the tool to allow the tubing to equalize before pulling out.

#### Features and Benefits

- Run with compression set type packer assemblies
- Activated by dropping a ball to the seat (can be circulated to seat in high angle wells)
- The valve is opened by set down weight and closed by applied tension
- No pressure required to open or close valve
- Allows for multiple zones to be isolated and treated individually in a single trip
- When preparing to pull out the ball seat is sheared open with tubing pressure
- Allows for circulation during run in

SIZE INCHES / mm	MAX OD INCHES / mm	MIN ID THROUGH BALL SEAT INCHES / mm	STANDARD THREAD CONNECTION BOX X PIN
5.000 / 127,00	3.750 / 95,25	0.875 / 22,23	2.375 EU 8 RD
7.000 / 177,80	5.390 / 136,91	1.187 / 30,15	2.875 EU 8 RD

