

## PCT Pressure-Controlled Tester Valve

Controls flows and shut-ins with annulus-pressure operation

### APPLICATIONS

- Downhole test operations
- Bottomhole shut-ins

### BENEFITS

- Debris tolerance improves valve reliability
- Annulus-pressure operation streamlines applications
- Superior buildup data

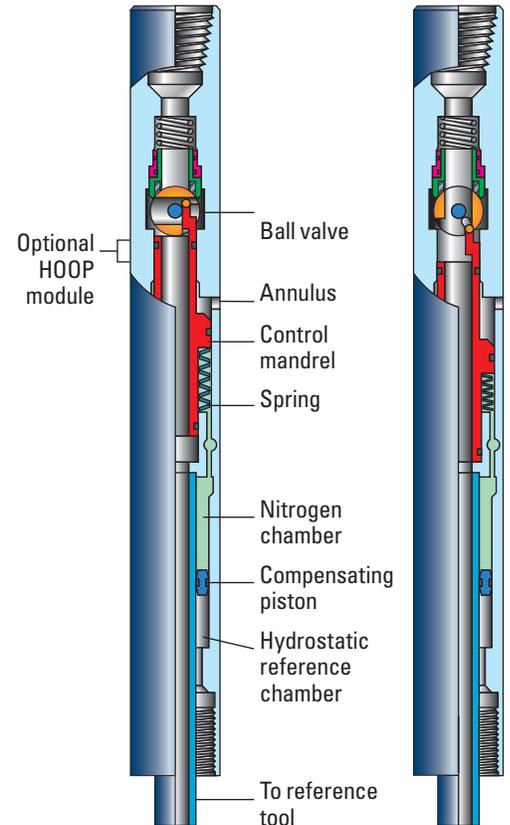
### FEATURES

- Fullbore when opened
- High closing force
- Unlimited number of open and close cycles

The PCT\* pressure-controlled tester valve, operated by annulus pressure, is the main downhole valve used to control flows and shut-ins. The tool is normally run in conjunction with a PORT\* pressure operated reference tool, which will trap a hydrostatic reference pressure in the PCT valve and prevents high precharge of nitrogen at the surface.

The hold-open module (HOOP) enhances the versatility of the PCT valve. With this module, the ball valve can be held open when the annulus pressure is bled off. This allows wireline to be either run through the ball with the annulus pressure bled off or circulated through the ball valve when the packer is not set.

Operating pressures for the PCT valve vary with depth but are usually between 1,000 and 1,500 psi [7 and 10 MPa] applied annulus pressure.



PCT valves closed to shut in the formation (left) and open to flow or treat the formation (right).

### Specifications

Model	PCT-FFB	PCT-FEA/FEB	PCT-GAA/GAB
Max. OD, in [mm]	5 [127]	5 [127]	3.125 [79]
Tool ID, in [mm]	2.25 [57]	2.25 [57]	1.125 [29]
Pressure ratings			
Differential across wall, psi [MPa]	17,500 [121]	15,000 [103]	15,000 [103]
Differential across ball static, psi [MPa]	15,000 [103]	15,000 [103]	15,000 [103]
Differential across ball opening (below only), psi [MPa]	7,500 [52]	7,500 [52]	7,500 [52]
Temperature rating, degF [degC]	425 [218]	425 [218]	425 [218]
Length, ft [m]	22.80 [6.95]	22.80 [6.95]	17.20 [5.24]
Weight, lbm [kg]	1,400 [635]	1,400 [635]	270 [122]
Service (NACE International MR-0175)	H <sub>2</sub> S, acid	H <sub>2</sub> S, acid	H <sub>2</sub> S, acid
Tensile strength min. yield, lbf [kN]	350,000 [1,557]	350,000 [1,557]	160,000 [712]
Connection	3½ PH-6	3½ IF or PH-6	2¾ Reg or PH-6