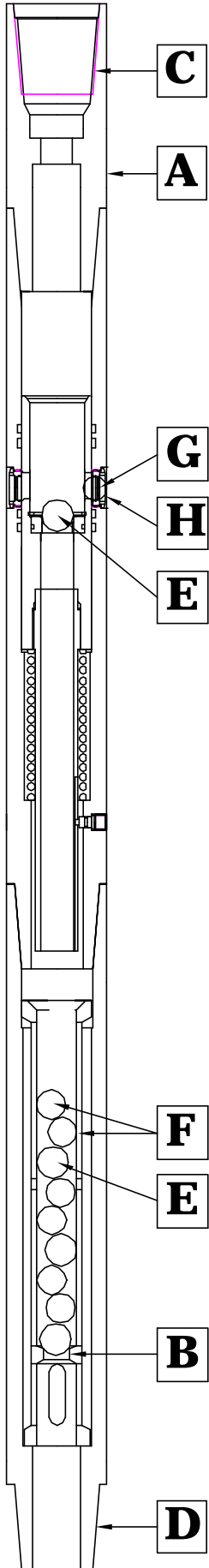


**2 1/4" PBL BALL LOCK BYPASS SYSTEM  
TECHNICAL SHEET**



|                                  |       |                         |
|----------------------------------|-------|-------------------------|
| SERIAL #                         | _____ | *                       |
| A-TOOL O.D.                      | _____ | 2.25"                   |
| B-TOOL I.D. (DRIFT)              | _____ | 5/16"                   |
| FLOW AREA THROUGH TOOL           | _____ | 0.17 sq/in              |
| C-BOX CONNECTION                 | _____ | 1 1/2 AMMT              |
| D-PIN CONNECTION                 | _____ | 1 1/2 AMMT              |
| E-ACTIVATION BALL/# TO ACTIVATE: | _____ | <b>1</b>                |
| DIAMETER                         | _____ | 1/2"                    |
| MATERIAL                         | _____ | <b>Torlon</b>           |
| SHEARING PRESSURE                | _____ | <b>As Desired</b>       |
| F-DEACTIVATION BALL/# TO DEACT.: | _____ | <b>2</b>                |
| DIAMETER                         | _____ | 3/8"                    |
| MATERIAL                         | _____ | <b>Steel</b>            |
| G-LOCKING BALL/# TO LOCK OPEN:   | _____ | <b>1</b>                |
| DIAMETER                         | _____ | 5/16"                   |
| MATERIAL                         | _____ | <b>Torlon</b>           |
| SHEARING PRESSURE                | _____ | <b>75% of act shear</b> |
| H-SIZE OF PORT                   | _____ | <b>0.3"</b>             |
| NUMBER OF PORTS                  | _____ | <b>2</b>                |
| TFA WHEN TOOL IS OPEN            | _____ | <b>0.14 sq/in</b>       |
| NUMBER OF CYCLES                 | _____ | <b>5</b>                |
| OVERALL LENGTH                   | _____ | <b>2.5 - 3 ft</b>       |
| WEIGHT                           | _____ | <b>lbs</b>              |
| TENSILE STRENGTH                 | _____ | <b>lbs</b>              |
| TORSIONAL STRENGTH               | _____ | <b>ft/lbs</b>           |
| MAKE UP TORQUE                   | _____ | <b>ft/lbs</b>           |

**NOTES:**

**NO DRIFT WHEN BALLS ARE IN TOOL.**

**\* Tool is rated to operate in temp. up to 420 degrees Fahrenheit.**

\*

**PRELIMINARY**

