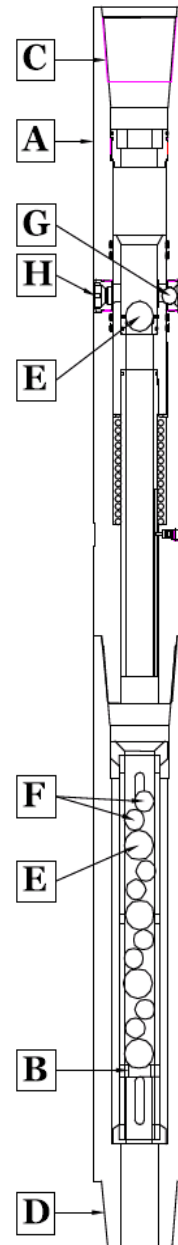


**9 1/2" PBL BALL LOCK BYPASS SYSTEM
TECHNICAL SHEET**



SERIAL #
 A - TOOL O.D.
 B - TOOL I.D.
 FLOW AREA THROUGH TOOL
 C - BOX CONNECTION
 D - PIN CONNECTION
 E - ACTIVATION BALL/# TO ACTIVATE
 DIAMETER
 MATERIAL
 SHEARING PRESSURE
 F - DEACTIVATION BALL/# TO DEACT.
 DIAMETER
 MATERIAL
 G - LOCKING BALL/# TO LOCK OPEN
 DIAMETER
 MATERIAL
 SHEARING PRESSURE
 H - SIZE OF PORT
 NUMBER OF PORTS
 TFA WHEN TOOL IS OPEN
 NUMBER OF CYCLES
 OVERALL LENGTH
 WEIGHT
 TENSILE STRENGTH
 TORSIONAL STRENGTH
 MAX. MAKE UP TORQUE
 OPTIMUM MAKE UP TORQUE
 MIN. MAKE UP TORQUE

	9.50"
	1.50"
	4.6 Sq.In.
	7 5/8 Reg
	7 5/8 Reg
	1
	2 1/2"
	Ertalyte
	As Desired
	2
	1 3/4"
	Steel
	1
	1 3/8"
	Ertalyte
	As Desired
	1.35"
	2
	2.863 Sq.In
	5
	8 - 10 Ft
	1,600 Lbs
	6,000,000 Lbs
	565,000 Ft/Lbs
	81,290 Ft/Lbs
	80,413 Ft/Lbs
	79,536 Ft/Lbs



NOTES

- * **NO THRU DRIFT WHEN BALLS ARE IN TOOL**
- * Tool is rated to operate in temp up to 420 degrees F
- * 2.27" ID to allow 2.25" Reamer Ball to pass through before activation
- * Standard ID = 1.50"