

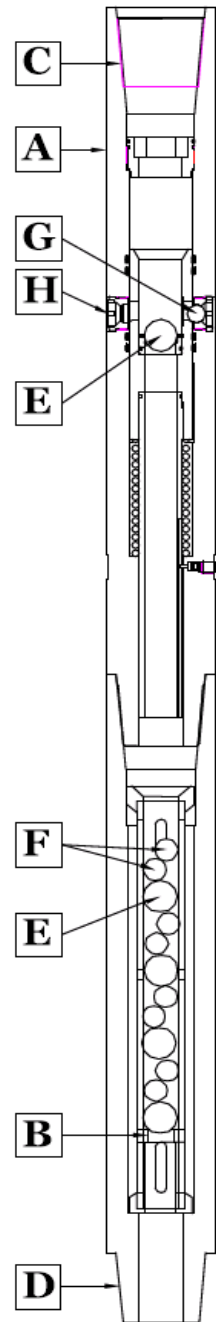


9 1/2" O.D.
EXT. CAGE

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

SERIAL #
A - TOOL O.D.
B - TOOL I.D.
FLOW AREA THROUGH TOOL (E)
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
MAX. FLOW CLOSED
MAX. / MIN. FLOW OPEN (ACTIVATED)
NUMBER OF CYCLES
OVERALL LENGTH
WEIGHT
TENSILE STRENGTH MAIN BODY
TENSILE STRENGTH CONNECTION
TORSIONAL STRENGTH MAIN BODY
TORSIONAL STRENGTH CONNECTION
MAKE UP TORQUE

	9.50"
	2.27"
	4.6 SQ.IN.
	7 5/8 REG
	7 5/8 REG
	1
	2 1/2" / Ertalyte
	2
	1 3/4" / Steel
	1
	1 3/8" / Ertalyte
	1.35"
	2
	2.863 SQ.IN
	1500 GPM
	2000 GPM / 200 GPM
	10 **
	10 - 11 FT
	1,800 LBS
	6,000,000 LBS
	1,718,834 LBS
	565,000 FT/LBS
	155,759 FT/LBS
	81,290 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"
 ** 10 Complete Ball Cycles or 5 Complete Dart Cycles w/ Extended Cage