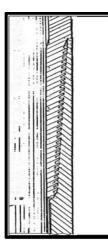


## SPECIAL FEATURES

Hook thread prevents jump out and hoop loading caused by tension loads. The elimination of hoop loading improves pressure seal under both tension and compression loading of the joint.

If you want a FLUSH-FLUSH O.D. JOINT, this is the best joint for you. It is economical, dependable, and fast running.



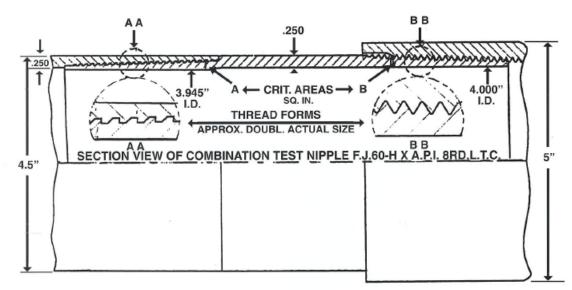
4 1/2"	13.04 lbs/ft	FJ-HS	J55	N80	P110
PIPE BODY DI	MENSIONS				
Nominal Pipe Body O.D. (in)			-	4.500	4.500
Nominal Pipe Body I.D. (in)			-	3.920	3.920
Nominal Wall Thickness (in)			-	0.29	0.29
Nominal Weight (Ibs/ft)			-	13.50	13.50
Plain End Weight (lbs/ft)			-	13.04	13.04
Drift I.D. (in)			-	3.795	3.795
PIPE BODY PERFORMANCE DATA					
Minimum Pipe Body Yield Strength (lbs)			-	307,000	422,000
Minimum Collapse Pressure (psi)			-	8,540	10,690
Minimum Interal Yield Pressure (psi)			-	9,030	12,420
CONNECTION DIMENSIONS AND PERF. DATA					
Connection O.D. (in)			-	4.500	4.500
Pin Connection I.D. (in)			-	3.92	3.92
Make-up Loss (in)			-	2.875	2.875
Critical Area (sq in)			-	2.224	2.224
Joint Efficiency (%)		-	58	58	
Reference Minimum Parting Load (lbs)			-	222,000	278,000
Reference String Length (ft)			-	10,032	13,324
Collapse Pressure Rating (psi)			-	8,540	10,690
Internal Pressure Rating (psi)			-	9,030	12,420
Minimum Final Torque (ft/lbs)			-	1,500	1,500
Maximum Final Torques (ft/lbs)			-	3,100	3,100

The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by Woolley Tool Inc. and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest Woolley Tool, Inc. technical information, please contact at 903-984-3553 or email at TechnicalSupport@woolleytool.com.

## WOOLLEY FLUSH JOINT LINER TECHNICAL DATA



SKETCH TO ILLUSTRATE THE SET UP FOR TENSILE TESTING, PARTING LOAD CAPACITY OF WOOLLEY F.J.60-H FLUSH JOINT THREAD VS. A.P.I., 8RD, L.T.C. THREADS CUT ON OPPOSITE ENDS OF EACH J OR K-55 4 1/2" O.D., 11.60# CASING TEST NIPPLE



Repeated tests with above setup established two things. the A.P.I. 8rd thread always jumped out at approximately 160,000# tension, leaving the flush joint F.J.60-H undamaged and not tested near to its limit.

The setup was then changed to F.J.60-H thread on both ends of the same test nipples in order to determine parting load of the flush joint thread.

On this setup we had repeated parting loads of 196,000# with one test going to 220,000#.

On all tests to ultimate tensile on the F.J.60-H flush joint, there were no jump outs. All pins parted in critical root of the last effective pin thread.

All tension testing started at 100,000#, then increased in tensile steps of 15,000# with Hydrotest to 6,000 psi betwen tensile steps. There were no leaks prior to parting.