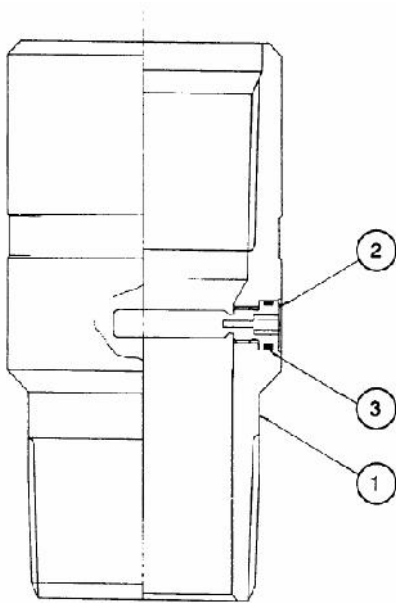


PRESSURE EQUALISING SUB



APPLICATION

The pressure equalizing sub is used in those situations where a high differential exists between tubing and annulus pressures. It is installed above a mechanical production valve in order to reduce shocks on the valve when its sleeve is moved into the open position.

OPERATION

A drop bar passing through the sub will break the shear pins (normally 2 per sub), allowing communication between tubing and annulus. Pressure will bleed off through the small holes in the break plugs.

ASSEMBLY

The sub is delivered pre-assembled. Check the condition of the break plug O-rings and O-ring seats before making up to the completion string. Subs are available in a choice of sizes and threads.

<u>Item</u>	<u>Description</u>
1	Sub Body
2	Break Plug (x2)
3	O-Ring

SPECIFICATIONS	2-3/8"	2-7/8"	3-1/2"
Thread	8rd EUE or as specified		
Min ID (in)	1.99	2.26	2.99
Max OD (in)	4.5	3.25	3.75
Flow Area (sq. in)	0.02	0.02	0.02
Max Torque (ft-lb)	1,700	2,800	3,040
Max Ext. Press. (psi)	15,000	14,000	13,000
Max Int. Press. (psi)	12,000	12,000	12,000
Max Tensile Load (lb)	136,000	190,000	272,000