

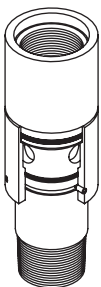


TYPE “S” Tubing Drain

The Type “S” Hydraulic Tubing Drain is used to create a drain port for produced fluid from the bottom of the tubing string. This allows the operator to avoid pulling a wet string in the case of an oversize tubing pump or a stuck pump.

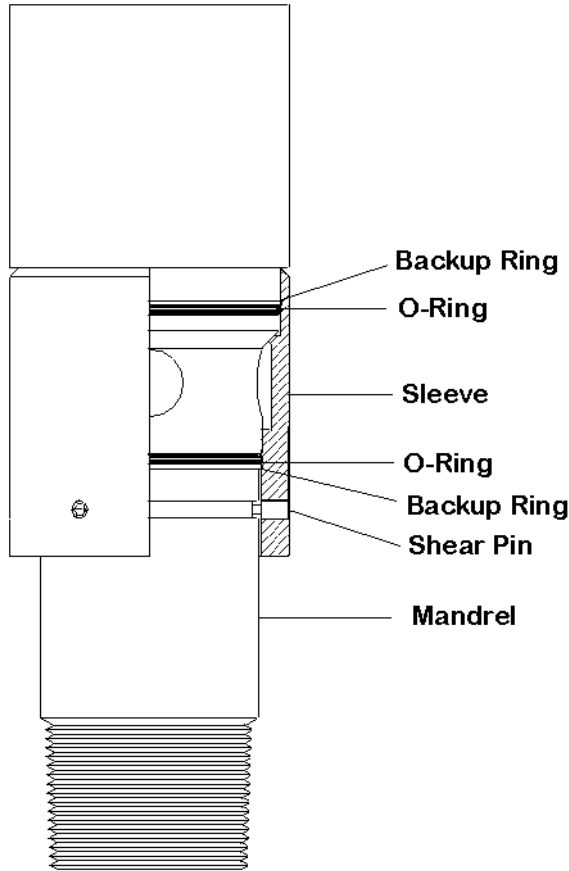
The tubing drain is installed in the tubing string near the bottom with the pin down and box up. The sleeve that covers the drain ports is held in place with up to six shear pins that can be added or removed to adjust the amount of pressure required to open the drain. Seals and back-up rings are used to maintain a fluid seal while the sleeve is intact. Enough shear pins should be used to withstand the weight of the fluid column plus a safety factor to avoid accidental release.

When the drain needs to be blown you merely pump enough pressure plus fluid weight to overcome the shear pins. The sleeve will be forced downward as the shear pins release until it comes to rest against the lower tubing collar. The drain ports are now opened to equalize the produced fluid with the annulus. The tubing can now be pulled and the seals and shear pins replaced and the drain reused.



The Type “S” Tubing Drain should be installed box up x pin down at the desired depth in the tubing string. For hydrostatic head at the drain, and determination of the proper drain setting, multiply .433 psi/ft. X drain depth and add a 1,000 psi safety factor. The pressure is equal to or should slightly exceed that value when installing shear pins. For assistance call us toll free.

TYPE "S" Tubing Drain



<i>Parts List:</i>	<i>Tubing Size;</i>		
	2-3/8"	2-7/8"	3-1/2"
Description:			
Assembly Number:	TD20S	TD25S	TD30S
Sleeve	TD20SL	TD25SL	TD30SL
Back-Up Ring: (2-Required)			
Upper	TDTR233	TDTR237	TDTR242
Lower	TDTR229	TDTR233	TDTR238
O-Ring: (2-Required)			
Upper	TDN233	TDN237	TDN242
Lower	TDN229	TDN233	TDN238
Shear Pins; Up to 6 Req'd			
Stainless Steel	TDSCREW	TDSCREW	TDSCREW
Mandrel:	TD20M	TD25M	TD30M

For hydrostatic head at the drain, and determination of proper drain setting, multiply .433 psi/ft x drain depth and add a 1,000 psi safety factor. The shear rating should equal or exceed this number.

<i>Tubing OD</i>	<i>Shear Screw Quantity</i>					
	1	2	3	4	5	6
	Shear Rating (psi)					
2-3/8	1000	2000	3000	4000	5000	6000
2-7/8	900	1800	2700	3600	4500	5400
3-1/2	750	1500	2250	3000	3750	4500

