## **TUBING DRAIN SUB (BALL-TYPE)**

## **PRODUCT 20-242**

The **TechWest Ball Type Tubing Drain** is designed to open communication between the work string and annulus. It provides the means to drain or circulate through the work string when it is being pulled out of the hole or there is a need to circulate. The tubing drain incorporates a pressure balanced design to ensure the drain ports are in the closed position and remain closed until the string is ready to be pulled or circulated. The amount of pressure required to open the drain ports is easily adjustable.

## **SPECIFICATIONS**

20-242 SPECIFICATIONS								
Size		Product Number	Tool OD		Ball OD		Min ID	
in	mm	Product Number	in	mm	in	mm	in	mm
1.9	48.3	20-242-0190	2.500	63.5	0.625	15.9	0.500	12.7
2 3/8	60.3	20-242-0200	2.875	73.0	1.500	38.1	1.000	25.4
2 7/8	73.0	20-242-0250	3.688	93.7	1.750	44.5	1.500	38.1
3 1/2	88.9	20-242-0350	4.500	114.3	2.500	63.5	2.000	50.8

## **OPERATION**

To open the drain, drop a setting ball into the work string and allow sufficient time for the ball to reach the shifting sleeve seat or slowly circulate the setting ball to the shifting sleeve seat.

After the setting ball has reached the shifting sleeve seat, apply the required pressure (adjustable on surface) to shear the sleeve downward and open the bypass ports.

