

PORTED RELIEF SUB

Single Ball Drop Circulation Tool



HAMDEEN

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Description

Hamdeen's ported relief sub is used to obtain increased downhole flow capacity to provide improved annular velocities. During normal operations the flow ports are isolated and flow is maintained to the drill bit only. To activate the drop-ball shears pins thereby shifting a piston allowing additional flow rate to the annular ports. The tool facilitates flow splitting by retaining a percentage of flow to the bit once the ports are opened.

Features

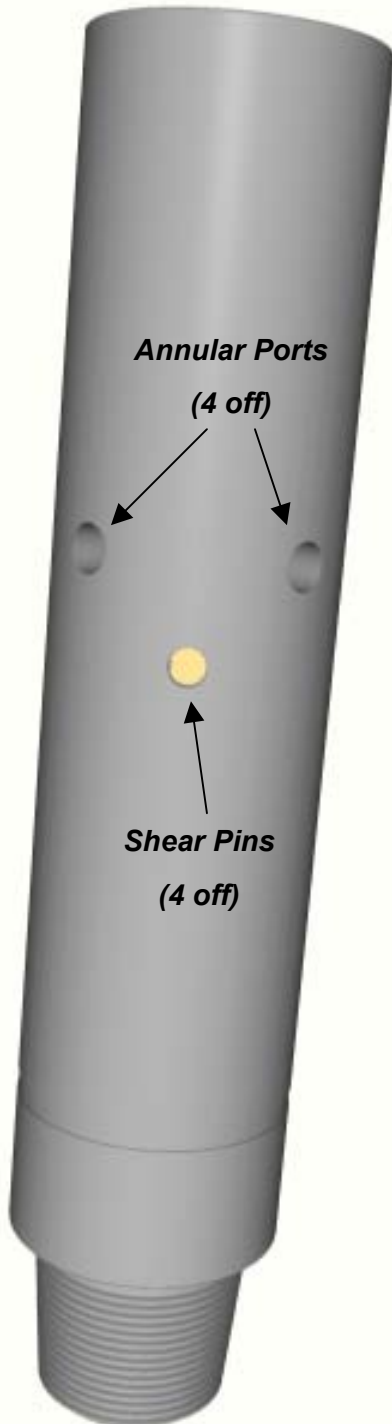
- Increased flow area after activation for improved annular velocities
- Simple, robust design for reliable operation
- Percentage of flow retained to drill bit to keep BHA lubricated
- Standard end connections for ease of handling

Benefits

- Improved hole cleaning prior to pulling out of hole
- Saves rig time by increasing pump rates
- Quicker pipe drainage when pulling out of hole
- Complements other Hamdeen wellbore cleaning tools

Typical Specification

	CASING SIZE		
	4-1/2" & 5-1/2"	7"	9-5/8"
Max Body OD (in)	3-1/2	4-3/4	6-3/4
Overall Length (in)	30	36	28
End Connections (Pin x Box)	2-7/8"	3-1/2" IF	4-1/2" IF
Through Bore (in)	3/4	1-5/8	2
Ball Diameter (in)	7/8	1-3/4	2-1/8
Maximum Number of Shear Pins	3	4	4



Tool for 9-5/8"
Casing Shown