Equalising Balldrop Sub (EBS)



Description

The EBS serves as a temporary barrier when assembled to an appropriate Packer. It has the capability to hold 345 bars (5000 psi) differential pressure in both directions if a plug or valve is mounted below it. It's tested and qualified in accordance with the ISO 14310:2008 international standard up to validation grade Vo at 4-100 °C and 345 bar (5000 psi) differential pressure.

Application

The EBS will stay closed until a ball has been dropped and the pressure from above is increased. When the differential pressure reaches a predetermined level, it will open permanently. The number of shear screws installed in the EBS determines the differential opening pressure.



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Benefits

- Can also open when run with a closed valve underneath.
- Adaptable to different available packers by using an interface.
- Allows a temporary barrier when run.
- Capability to hold 345 bars differential pressure in both directions.
- Serves as an ISO Vo approved temporary barrier when assembled with an appropriate packer.
- Opens at a predetermined differential pressure level after a ball is dropped, enabling remote equalization and production / injection.

Technical Specifications

4.2" EBS	Imperial	Metric
OD	4.21"	107 mm
ID	0.984"	25 mm
MUL (EBS only)	49.92"	1,268 mm
Max Temperature ⁽¹⁾	302 °F	150 °C
Max. Hydrostatic Pressure at Setting Depth	580 psi	40 bar
Max Differential Pressure	5000 psi	345 bar
Max Absolute Pressure	5800 psi	400 bar
Weight	136.9 lb	62.1 kg
Ball Size	1" / 1.5" / 2"	
Min Flow Area ⁽²⁾	3.96 in ²	

 $^{^{(1)}\,}$ ISO 14310 : Vo qualified 4-100 $^{\circ}\text{C}$ forces.



⁽²⁾ After opened with two shear screws.