

BPS-iS Maxx

Toe Initiation Sub

Integrated Seat

BPS™ -iS Maxx is a toe initiation valve with an integrated seat and ball isolation mechanism. It allows the casing string to be pressure-tested to pressures above the toe-valve initiation pressure. After flow is initiated, a ball is dropped, lands on the seat, and isolates the nozzle section. This operation allows pressure-testing of the casing. Post testing, the ball dissolves and passes through the seat enabling flow to resume. Once activated, the high flow area of the BPS-iS Maxx allows for greater injection rates to support plug-and-perf or frac sleeve operations.

The BPS-iS Maxx uses the same field-proven technology used in our standard BPS-iS but with approximately 3 times greater flow area than our standard BPS-iS. Larger flow areas mean less risk in plugging from debris left in the casing after cementing operations and reduces friction pressures through the injection ports. The BPS-iS Maxx is an integrated part of the production casing or liner and can be used in both cemented and uncemented applications.



Features and benefits

- Toe valve with an integrated ball/seat isolation mechanism
- No moving parts
- Large port ID
- Millable seat
- High flow area through ports
- Full ID after optional seat mill out
- Dissolvable pressure test ball
- Manufactured to match casing size, weight, material, and thread type
- Customized rupture discs for desired opening pressure and flow area
- Tool activated with applied pressure at surface
- Decouples casing pressure test and flow initiation operation
- No costly intervention for activation or re-establishment of flow
- Increased flow rate for increased zone penetration and less friction
- Simple integrated design with no complex operations sequencing
- Can be run as part of a variety of multistage fracturing systems
- Significant cost and time savings compared to traditional toe perforation methods

Applications

- Wells that require 100% casing pressure integrity testing
- Areas where stimulation pressures can not exceed test pressures
- Cemented or open hole multistage completions
- Toe frac initiation for plug-and-perf applications
- High temperature applications up to 450°F (232°C)

BPS iS Maxx - Toe Initiation Sub with Integrated Seat Specifications

Technical data

Sizes	Casing size in. (mm)	Length in. (mm)	OD in. (mm)	ID in. (mm)	Maximum pressure	Number of ports	Flow area per port in. ² (cm ²)
450	4.500 (114.30)	18.000 (457.20)	5.750 (146.05)	As per casing weight	Limited by casing pressure	Up to 25	0.44 (2.84)
450 (Slim Hole)	4.500 (114.30)	25.120 (638.05)	5.250 (133.35)	3.410 (86.61)	Limited by casing pressure	Up to 25	0.44 (2.84)
500	5.000 (127.00)	18.800 (477.52)	5.900 (149.86)	As per casing weight	Limited by casing pressure	Up to 25	0.44 (2.84)
500 (Slim Hole)	5.000 (127.00)	25.300 (642.62)	5.600 (142.24)	3.925 (99.69)	Limited by casing pressure	Up to 25	0.44 (2.84)
550	5.500 (139.70)	20.000 (508.00)	7.000 (177.80)	As per casing weight	Limited by casing pressure	Up to 24	0.44 (2.84)
550 (Slim Hole)	5.500 (139.70)	22.500 (571.50)	6.375 (161.93)	As per casing weight	Limited by casing pressure	Up to 24	0.44 (2.84)
600	6.000 (152.40)	26.900 (682.65)	7.000 (177.80)	4.670 (118.62)	Limited by casing pressure	Up to 24	0.44 (2.84)
663	6.625 (168.28)	26.000 (660.40)	8.100 (205.74)	As per casing weight	Limited by casing pressure	Up to 24	0.44 (2.84)

¹ Premium threading will affect overall length. Standard Material: 4140-415, P110, 125 KSI MYS.