Burst Port System (BPS) Multi-Open/Close

The BPS™ multi-open/close (MOC) is designed for use in horizontal completions to establish injection of fluid at the toe without intervention. This feature eliminates the need for intervention using traditional tubing-conveyed perforating guns as a means of gaining access to the formation at the toe. Eliminating intervention reduces cost and risks normally associated with these operations. Once activated, the ports allow injection to support plug-and-perf or frac sleeve operations. The BPS MOC can be closed after initial opening and opened and closed multiple times using the i-Shift™ Midi shifting tool.

The BPS MOC is an integrated part of the production casing or liner and can be used in both cemented and un-cemented applications. The BPS MOC is actuated by applying pressure from the surface of the well. Multiple BPS MOC subs can be installed as a single toe port or in multiples to create a stage cluster.

Features

- Tool activated with applied pressure at surface
- Engineered rupture disks for desired opening pressure and flow area
- Field-proven i-Valve shifting profiles and seal
- Ability to be closed and opened multiple times using i-Shift Midi shifting tool.

Benefits

- Eliminates need for intervention to initiate flow at the toe of a horizontal completion
- Increased accuracy using rupture disk vs. standard shear screws
- More debris tolerant during activation
- Shiftable sleeve to Isolate zone after treatment

Applications

- Cemented and open-hole horizontal multistage completions
- Acid or proppant fracturing
- High-temperature applications, up to 450°F (232°C)
- Toe-frac initiation for plug-and-perf and other cemented installations

Technical data

BPS MOC	Casing size in. (mm)	Length in. (mm)	OD in. (mm)	ID in. (mm)	Burst rating psi (MPa)	Collapse rating psi (MPa)	Tensile rating† lbf (KN)	Number of ports	Flow area per port in² (cm²)
450	4.500 (114.30)	60.000 (1,524.00)	5.600 (142.24)	2.800 (71.12)	Determined by burst disc	14,800 (102.04)	371,000 (1,650.29)	16	0.151 (0.38)
550	5.500 (139.70)	60.176 (1,528.47)	7.870 (199.90)	4.791 (121.69)	Determined by burst disc	12,000 (82.74)	1,000,000 (4,448.22)	7	0.151 (0.38)

† Tensile rating excluding end connections
Note: Premium threading will affect overall length.
Note: Number of ports and flow port size custom design available on request