

## DSI-PBL.COM

## PBL® Thru-Tubing Line

The Thru-Tubing line of DSI PBL® Multiple Activation Bypass Tool was designed for work on coil tubing and stick pipe in completion, workover, and production operations.

Unlike the single-activated circulating tools commonly used today, the Thru-Tubing PBL® tools can be activated/deactivated up to 10 times in a single run. Thru-Tubing PBL® tools allow the operators to increase their annular velocity (AV) by up to 300% above the motor limits being run in the string. Time and again, these higher AVs have proven to greatly reduce the operator's completion costs.

## **INCREASED ANNULAR VELOCITY**

- Increasing hole cleaning capabilities
- Removing debris previously left in the well
- Reducing circulating times by up to 300%
- Reducing coil tubing running costs
- Reducing short trips
- Reducing chemical costs
- Reducing days

## COMPLETE ISOLATION OF THE BHA

- Eliminating costs associated with potential damage to the BHA while displacing:
- Acid
- Foam
- Nitrogen
- Fluid
- Facilitating acidizing and stimulation treatments

Tool Size (in.)	2 <sup>11</sup> / <sub>16</sub>	2 1/8	2 7/8	3 1/8	3 ½ HF
Number of Ports	3	3	3	3	3
Standard Rig Ends (Box x Pin) <sup>1</sup>	1 AMMT	1 ½ AMMT	2 <sup>3</sup> / <sub>8</sub> PAC	2 <sup>7</sup> / <sub>8</sub> HT PAC	2 <sup>3</sup> / <sub>8</sub> REG
Activation Ball Size (in.)	13/32	5/8	<sup>7</sup> /8 or 1	<sup>7</sup> /8 or 1	1
Steel Deactivation Ball Size (in.)	3/8	<sup>7</sup> / <sub>16</sub>	<sup>13</sup> / <sub>16</sub>	13/16	29/32
Number of Cycles (Std / Max)	6/10	7/10	7/10	7/10	7/10
EHD (in.)	0.40	0.58	0.87	0.97	1.0
Port Diameter (in.)	0.34	0.42	0.75	0.75	0.875
TFA When Tool is Open (in.²)	0.28	0.42	1.32	1.32	1.8
Length (in.)	36.5	38	77	74	78
Max Flow When Tool is Closed (non-autolock, BPM)	1	1.2	3 or 5	3 or 5	5
Max Flow When Tool is Open (non-autolock, BPM)	1.75	2.25	6	6	8
Increase in Flow Closed vs. Open (%)	75	87	100	100	60

<sup>&</sup>lt;sup>1</sup> Alternative Rig End Connections may be available









