

## F-2 with 0.5” Pull-stub Piston Conversion Table (psi)

Burst Pressure (BP) to Pull-Off Strength conversion table  
For **F-2 Piston** using **0.5 inch O.D. Pull-stub** and in units of **psi**

### PULL-OFF TENSILE STRENGTH (POTS) (psi)

BP (psig)	0	1	2	3	4	5	6	7	8	9
<b>10</b>	96.6	106.4	116.1	125.9	135.6	145.4	155.1	164.9	174.6	184.4
<b>20</b>	194.1	203.9	213.6	223.4	233.1	242.9	252.6	262.4	272.1	281.9
<b>30</b>	291.6	301.4	311.1	320.9	330.6	340.4	350.1	359.9	369.6	379.4
<b>40</b>	389.1	398.9	408.6	418.4	428.1	437.9	447.6	457.4	467.1	476.9
<b>50</b>	486.6	496.4	506.1	515.9	525.6	535.4	545.1	554.9	564.6	574.4
<b>60</b>	584.1	593.9	603.6	613.4	623.1	632.9	642.6	652.4	662.1	671.9
<b>70</b>	681.6	691.4	701.1	710.9	720.6	730.4	740.1	749.9	759.6	769.4
<b>80</b>	779.1	788.9	798.6	808.4	818.1	827.9	837.6	847.4	857.1	866.9
<b>90</b>	876.6	886.4	896.1	905.9	915.6	925.4	935.1	944.9	954.6	964.4
<b>100</b>	974.1									

Formula used to generate piston conversion table:

$$\text{POTS} = \frac{(\text{BP} \times \text{Ag}) - \text{C}}{\text{Aps}}$$

Where:

POTS = Pull-Off Tensile Strength (psi)

BP = Burst Pressure (psi)

**Ag** = Contact Area between gasket, reaction plate = **1.914 in<sup>2</sup>** for F-2 Piston

**C** = Piston Constant = **0.175 lbs** +/- 1.5% for F-2 Piston

**Aps** = Area of Pull-stub = **0.1963 in<sup>2</sup>** for 0.5” Pull-stub

**EXAMPLE:** A test is performed using an F-2 piston & 0.5” Pull-stub. When separation occurs, the piston Pressure Gauge on the control module indicates a burst pressure of 55 psi. First, locate the row that corresponds to 50 psig to reference the “tens” place (under **BP** in the table above.) Then find the 5 column to reference the “ones” place. The Pull-Off Tensile Strength associated with this test is **535.4 psi**.