

## DIFFERENCES BETWEEN P-40HT, P-41HT, P-43HT, P-66HT, P-66.1, AND P-69HT

PROPERTIES	<b>P- 40HT</b> M 34 (623-33-1) RT-49	<b>P- 41HT</b> M 33 (623-31-1) RT-56	<b>P- 43HT</b> M 35 (623-43) RT-79	<b>P- 66HT</b> M-25 (623-24) RT-71	<b>P- 66.1</b> M-43 (623-24) RT-71.1	<b>P- 69HT</b> M-42 (623-44) RT-81
Material Description	PEEK	PEEK	PEEK	PEEK with Carbon Fiber	PEEK with Carbon Fiber	PEEK with Carbon Fiber and PTFE
Fabrication Process	Compression-molded	Screw-extruded	Injection-molded	Injection-molded	Extruded	Injection-molded
Tensile strength @ break (PSI) per ASTM D 638	14,100 min (991kg/cm <sup>2</sup> )	12,000 Min (844kg/cm <sup>2</sup> )	13,000 Min (913kg/cm <sup>2</sup> )	15,000 Min (1,055kg/cm <sup>2</sup> )	19,000 Min (1,336kg/cm <sup>2</sup> )	19,000 Min (1,336kg/cm <sup>2</sup> )
Elongation @ break per ASTM D 638	10% Min	15% Min	40% Min	1% Min	2% Min	3 % Min
Application	Backup Ring	Seal / Backup Ring	Seal / Backup Ring	Backup Ring	Backup Ring	Backup Ring
FDA Status	Compliant	Compliant	Compliant	Not Compliant	Not Compliant	Not Compliant
<b>SIZES</b>						
Available Configuration	Short Tubes <sup>1</sup> (Dimensions in Inches)	Long Rods (Dimensions in Inches)	Short Tubes <sup>1</sup> (Dimensions in Inches)	Short Tubes <sup>1</sup> (Dimensions in Inches)	Rods Only (Dimensions in Inches)	Short Rods and Tubes <sup>1</sup> (Dimensions in Inches)
Available Diameters: <sup>2</sup>	From To	From To	From To	From To	From To	From To
Rods	Not available in rods (use P-41 when 1<OD) Use for backup rings only	0.25 to 2" OD	Not available in rods	Not available in rods	Available in rods 0.394 to 3.152" OD	Available in rods 0.625 to 2.0 inc. OD
Tubes	1.5 OD to 15.0 OD Use for backup rings only	Not available in tubes	Greater than 2.0 to 8.0 OD	4.0 OD to 8.0 OD	Not available in tubes	1.5 to 8.0

It is essential that the customer run evaluation testing under actual service conditions with a sufficient safety factor to determine if the proposed, supplied, or purchased, Bal Seal Engineering products are suitable for the intended purpose and to confirm expected results. Bal Seal Engineering makes no warranty, express or implied, regarding Bal Seal Engineering products or of the information contained herein, including but not limited to, warranties of merchantability, performance, and fitness for a particular use or purpose. Bal Seal Engineering shall not be liable for any loss or damage of any kind or nature that may result from the use of, reference to, or reliance on, the information contained herein, including, but not limited to, consequential, special (including loss of profits) direct, indirect, incidental, or similar damages, even if Bal Seal Engineering has been advised of the possibility of such damages.. M-26 Rev. B (623-25 and 623-64) 04-13-10