

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

| | <u>P-40HT</u> | P-41HT | <u>P-43HT</u> | <u>P-66HT</u> | P-66.1 | <u>P-69HT</u> |
|---|--|--|---|---|--|---|
| PROPERTIES | M 34 (623-33-1) RT-49 | M 33 (623-31-1) RT-56 | M 35 (623-43) RT-79 | M-25 (623-24) RT-71 | M-43 (623-24) RT-71.1 | 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 ²) | 12,000 Min (844kg/cm ²) | 13,000 Min (913kg/cm ²) | 15,000 Min (1,055kg/cm ²) | 19,000 Min (1,336kg/cm ²) | 19,000 Min (1,336kg/cm ²) |
| 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 |
| SIZES | | | | | | |
| Available Configuration | ShortTubes ¹ (Dimensions in Inches) | Long Rods (Dimensions in Inches) | Short Tubes ¹ (Dimensions in Inches) | Short Tubes ¹ (Dimensions in Inches) | Rods Only (Dimensions in Inches) | Short Rods and Tubes ¹ |
| Available Diameters: ² | 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</od) | 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