

ASME PVRC Section VIII.(Pressure Vessel Research Council) for common gasket materials.

SPECIFICATIONS

Please Note:

1.The ASME VIII system is empirically based and there is no test method to derive 'm' and 'y' value for new materials.

2.These values represent our best estimate but in no way warranty is given or implied in respect of their use.

Avis de non-responsabilité :

Comme il n'existe actuellement aucun test standard dans l'industrie pour déterminer les constantes m et y des joints, de nombreux fabricants de joints ont développé des procédures de test individuelles basées sur la méthode de test ASTM F596. Il n'existe pas non plus d'alternative approuvée par l'ASME au code qui exige l'utilisation de ces constantes.

| Compressed fibre materials | THK (in.) | THK (mm) | m | Y (Mpa) | Y (psi) |
|-------------------------------------|------------------|-----------------|----------|----------------|----------------|
| Top-Sil -ML1 | 0.062" | 2 | 3.5 | 15 | 2175 |
| Klingersil C -4324 | 0.031" | 1 | 2.7 | 15 | 2175 |
| | 0.062" | 2 | 3 | 15 | 2175 |
| | 0.118" | 3 | 3.3 | 15 | 2175 |
| Klingersil C -4401 | 0.031" | 1 | 3.2 | 20 | 2900 |
| | 0.062" | 2 | 3.5 | 20 | 2900 |
| | 0.118" | 3 | 3.9 | 20 | 2900 |
| Klingersil C -4409 | 0.031" | 1 | 3.2 | 30 | 4351 |
| | 0.062" | 2 | 3.5 | 30 | 4351 |
| Klingersil C -4430 | 0.031" | 1 | 4.5 | 25 | 3625 |
| | 0.062" | 2 | 5 | 25 | 3625 |
| | 0.118" | 3 | 5.5 | 25 | 3625 |
| Klingersil C -4439 | 0.031" | 1 | 4.5 | 30 | 4351 |
| | 0.062" | 2 | 5 | 30 | 4351 |
| Klingersil C -4500 | 0.031" | 1 | 3.5 | 25 | 3625 |
| | 0.062" | 2 | 4 | 25 | 3625 |
| | 0.118" | 3 | 4.5 | 25 | 3625 |
| Klingersil C -4509 | 0.031" | 1 | 3.5 | 30 | 4351 |
| | 0.062" | 2 | 4 | 30 | 4351 |
| Klingersil C -8200 | 0.031" | 1 | 3.5 | 22.5 | 3263 |
| | 0.062" | 2 | 4 | 22.5 | 3263 |
| | 0.118" | 3 | 4.5 | 22.5 | 3263 |
| Graphite Laminates | | | | | |
| SLS | All | All | 2 | 6 | 870 |
| PSM | 0.059" | 1.5 | 3 | 18 | 2610 |
| | 0.062" | 2 | 2.5 | 10 | 1450 |
| | 0.118" | 3 | 2 | 6 | 870 |
| Klinger TopCHEM and SoftCHEM | | | | | |
| TopCHEM 2000 | 0.062" | 2 | 3.5 | 10 | 1450 |
| | 0.118" | 3 | 5 | 12 | 1750 |
| TopCHEM 2003 | 0.062" | 2 | 2.8 | 5 | 725 |
| TopCHEM 2005 | 0.062" | 2 | 3.5 | 10 | 1450 |
| SoftCHEM | All | All | 2 | 5 | 725 |
| Milam PSS | All | All | 3 | 30 | 4400 |
| Virgin PTFE | 0.8 | 0.8 | 2 | 11 | 1600 |
| | 0.027" | 1.6 | 2.75 | 25.5 | 3700 |
| | 0.125" | 3.2 | 3.5 | 44.8 | 6500 |
| PTFE Envelope | All | All | 2.75 | 25.5 | 3700 |

ASME VIII m And Y Values for Semi-Metallic and Metallic Gasket Types

SPECIFICATIONS

| | THK | m | Y (Mpa) | Y (psi) |
|--------------------|-----|---|---------|---------|
| Maxiprofile | All | 2 | 17.2 | 2500 |

| | | | | |
|---------------------------|-----|---|------|-------|
| SWG - Spiral Wound | All | 3 | 68.9 | 10000 |
|---------------------------|-----|---|------|-------|

| | | | | |
|-------------------|-----|---|------|------|
| Corrugated | All | 3 | 34.5 | 5000 |
|-------------------|-----|---|------|------|

| Metal Clad / Metal Jacket | | | | |
|----------------------------------|--|------|------|------|
| Aluminium | | 3.25 | 37.9 | 5500 |
| Copper/Brass | | 3.5 | 44.8 | 6500 |
| Iron/Soft Steel | | 3.75 | 52.4 | 7600 |
| Monel | | 3.5 | 55.2 | 8000 |
| 4-6% Chrome | | 3.75 | 62 | 9000 |
| Stainless Steel | | 3.75 | 62 | 9000 |

| Solid Flat Metal | | | | |
|-------------------------|--|------|-------|-------|
| Soft Aluminium | | 4 | 60.7 | 8800 |
| Soft Copper/Brass | | 4.75 | 89.6 | 13000 |
| Iron/Soft Steel | | 5.5 | 124.1 | 18000 |
| Monel or 4-6% Chrome | | 6 | 150.3 | 21800 |
| Stainless Steel | | 6.5 | 179.3 | 26000 |

| Grooved Metal | | | | |
|----------------------|--|------|------|-------|
| Soft Aluminium | | 3.25 | 37.9 | 5500 |
| Soft Copper/Brass | | 3.5 | 44.8 | 6500 |
| Iron/Soft Steel | | 3.75 | 52.4 | 7600 |
| Monel or 4-6% Chrome | | 3.75 | 62 | 900 |
| Stainless Steel | | 4.25 | 69.6 | 10100 |

| Ring Joint | | | | |
|----------------------|--|-----|-------|-------|
| Iron/Soft Steel | | 5.5 | 124.1 | 18000 |
| Monel or 4-6% Chrome | | 6 | 150.3 | 21800 |
| Stainless Steel | | 6.5 | 179.3 | 26000 |

| Elastomers | | | | |
|--|--|------|------|------|
| Elastomers with lower hardness at 75 Shore | | 0.50 | 0.00 | 0.00 |
| Elastomers with higher hardness or equal to 75 Shore | | 1.00 | 1.38 | 200 |
| Elastomers with fabric inserts | | 1.25 | 2.76 | 400 |

- The M and Y of rubber does not vary with thickness (N/A)
 - The maximum pressure a gasket can withstand varies with the material.
 Please refer to the manufacturer's specifications.

Please Note:
 For those materials not listed in ANSI B16.5

1. The ASME VIII system is empirically based and there is no test method to derive 'm' and 'y' value for new materials.

2. These values represent our best estimate but in no way warranty is given or implied in respect of their use.