

| Item # | Brand/Model | Sample #/Batch # | Thickness | | | | | Deflection | | | | | Comp. Loss % | Gauge Loss @ | | | | Hysteresis | | Elastic Energy (EE) Nmm | Damping Capacity (DC) % | Test Time s | | | | | | | |
|--------|-------------|------------------|-----------|------|-------|-------|------|------------|------|------|------|------|--------------|--------------|-----|------|------|------------|--------|-------------------------|-------------------------|-------------|---------|---------|------|------|-----------------|------|-------|
| | | | D0 | D04 | D4k/2 | D5k/2 | D1k | D4k | D5k | D1 | D4 | D5 | | Df1 | Df5 | Dfp1 | Dfp5 | 1st Cycle | 160kPa | | | | 1060kPa | 2060kPa | Wk/2 | Wk | Energy (HE) Nmm | | |
| 1 | M/I | PD8 | 1,92 | 1,85 | 1,83 | 1,69 | 1,73 | 1,70 | 1,61 | 1,64 | 1,54 | 1,53 | 1,53 | 379 | 297 | 19,7 | 16,3 | 21,5 | 76 | 82,6 | 92 | 58 | 11 | 37 | 27 | 30,1 | 186,2 | 16,2 | 171,9 |
| 2 | M/II | PD13 | 1,93 | 1,86 | 1,84 | 1,68 | 1,73 | 1,69 | 1,60 | 1,63 | 1,52 | 1,51 | 1,51 | 413 | 333 | 21,4 | 18,1 | 19,2 | 72 | 79,5 | 91 | 65 | 12 | 45 | 31 | 37,2 | 209,9 | 17,7 | 191,6 |
| 3 | M/III | PD11 | 1,91 | 1,85 | 1,83 | 1,68 | 1,73 | 1,68 | 1,59 | 1,63 | 1,51 | 1,50 | 1,50 | 398 | 333 | 20,8 | 18,2 | 16,4 | 63 | 79,0 | 79 | 49 | 14 | 50 | 35 | 41,8 | 216,9 | 19,3 | 190,1 |
| 4 | M/IV | PD18 | 1,94 | 1,88 | 1,86 | 1,73 | 1,77 | 1,75 | 1,64 | 1,68 | 1,56 | 1,55 | 1,54 | 380 | 319 | 19,6 | 17,1 | 16,0 | 61 | 80,1 | 76 | 77 | 15 | 45 | 36 | 38,3 | 212,7 | 18,0 | 181,7 |
| 5 | M/V | PD19 | 1,95 | 1,88 | 1,86 | 1,71 | 1,76 | 1,74 | 1,63 | 1,67 | 1,56 | 1,54 | 1,54 | 392 | 316 | 20,1 | 17,0 | 19,3 | 72 | 80,4 | 90 | 70 | 14 | 45 | 36 | 37,3 | 204,5 | 18,2 | 182,2 |

LEGEND

Test Details

Standard: ISO 12636 section 4.4

Equipment: Lloyd LR 10K Plus
Speed: 1 mm/min
Test Time: (D5-D0) s
Default Time W : 50"

Thickness

D0; D01; D04: @ 60kPa
D4k/2; D5k/2: @ 560kPa
D1k; D4k; D5k: @ 1060kPa
D1; D4, D5: @ 2060kPa

Deflection (@ 2060kPa)

Df1 = (D0 - D1) mm
Df5 = (D04 - D5) mm
Dfp1 = $[(D0 - D1) / D0] * 100$ %
Dfp5 = $[(D04 - D5) / D04] * 100$ %

Default Extension W : 0,50"

Compressive Loss

Deflection reduction from the 1st to the 5th compression cycles.
CL = $[(Df1-Df5) / Df1] * 100$ %

Gauge Loss @

60kPa: 1stCycle: (D0 - D01) μm
1st%: 1stCycle/Full Test %
Full Test: (D0 - D04) μm
1060kPa: (D1k - D5k) μm
2060kPa: (D1 - D5) μm

Hysteresis

Values valid for a specific stress cycle
W(window): Gauge variation due to stress history
Wk/2: Gauge variation@560kPa (D5k/2-D4k/2) μm
Wk: Gauge variation@1060kPa (D5k-D4k) μm
HE: Heat generated in one cycle (D5-D4) Nmm
EE: Elastic deformation energy (D5-D04) Nmm
DC: Damping Capacity $[(D5-D4)/(D5-D04)] * 100$ %





