KINETICS® Flexopy Isolation Pads Model NDF



Description

Model NDF Flexoply isolation pads are a laminated neoprene and cotton duck fabric isolation material developed for use in highly loaded, shock and vibration isolation applications.

Model NDF Flexoply pads utilize 64 layers per inch (2.6 layers per mm) thickness of laminated neoprene and duck, which allows absorption of shock and vibration by movement of the neoprene in and out of the fabric layers.

The result is allowable loading of up to 10,000 PSI (703 kg per sq. cm) for intermittent loading, and allowable shock loading up to 2,000 PSI (140 kg per sq. cm) for maximum life.

Standard Model NDF Flexoply pads are available in thicknesses as tabulated on the reverse side of this sheet and in sizes and shapes required for each application.

Model NDF Flexoply pads are molded to a Shore A 90 ± 5 durometer, have an application temperature range of -35°F to +200°F (-37°C to 93°C), damping characteristic of 14% of critical, and conform to MIL-C-882B Class 1 Specifications. They are resist- ant to water, brine, fungus and bacterial growth, and produce only a slight swelling in SAE 30 oil.

Special coatings are available for Model NDF Flexoply pads to resist oil saturation.

Application

Kinetics Model NDF Flexoply isolation pads are recommended for noise, shock and vibration appli- cations requiring a pad-type isolator, for intermittent static unit loading of the isolation pads ranging from 50 up to 10,000 PSI (3.5 to 703 kg per sq. cm) or shock loads up to 2,000 PSI (140 kg per sq. cm).

Typical INDUSTRIAL applications of Model NDF Flexoply noise, shock and high frequency vibration isolation pads include use with ball mills, broaching machines, crane rails, crushers, die casters, forging hammers, general foundry equipment, general steel mill machinery, large punch presses, and similar heavy machinery.

Typical NON-INDUSTRIAL applications include use with other Kinetics products to absorb shock and reduce noise from pile drivers, and to support loadbearing walls and building foundations to reduce transmitted noise, shock and vibration through a building structure.

| | Model NDF Flexoply | Plies of | | Load/D | eflection | in inche | s/micron | s |
|------------------|-----------------------|--------------|------------|--------------|----------------|----------------|-------------------|--------------|
| | Thickness | Fabric | 50 PSI | 100 PSI | 200 PSI | 500 PSI | 1000 PSI | 2000 PSI |
| English Units | 15/64" | 14 | 0.003 | 0.005 | 0.008 | 0.014 | 0.022 | 0.033 |
| | 11/32" | 21 | 0.005 | 0.007 | 0.012 | 0.021 | 0.032 | 0.048 |
| | 1/2" | 31 | 0.006 | 0.010 | 0.017 | 0.031 | 0.047 | 0.007 |
| | 5/8" | 39 | 0.008 | 0.013 | 0.021 | 0.038 | 0.058 | 0.088 |
| | 3/4" | 48 | 0.010 | 0.015 | 0.025 | 0.046 | 0.070 | 0.105 |
| | 1" | 64 | 0.011 | 0.021 | 0.034 | 0.061 | 0.093 | 0.140 |
| Metric Units | 6mm | 14 | 76 | 127 | 203 | 356 | 559 | 838 |
| | 9mm | 21 | 127 | 178 | 305 | 533 | 813 | 1219 |
| | 13mm | 31 | 152 | 254 | 432 | 787 | 1194 | 1778 |
| | 16mm | 39 | 203 | 330 | 533 | 965 | 1473 | 2235 |
| | 19mm | 48 | 254 | 381 | 635 | 1168 | 1778 | 2667 |
| | 25mm | 64 | 279 | 533 | 864 | 1549 | 2362 | 3556 |
| | Thickness great | ar than 1" (| 25 mm) are | provided thr | wah the utili- | ration of mult | tiple lavers of t | thinner nade |





Specifications

Model NDF Flexoply isolation pads shall be laminations of neoprene and duck. Each 1" (25 mm) thick pad shall be molded using 64 piles of frictioned duck, to a Shore A 90 \pm 5 durometer.

Flexoply pads shall achieve deflection under load by movement of neoprene into fabric pores, rather than relying on neoprene flow or bulge in compression, and shall be capable of supporting up to 10,000 PSI (703 kg per sq. cm) intermittent loading with a minimum 98% return to original unloaded thickness. For maximum life, pads shall be capable of supporting repeated shock loads up to 2,000 PSI (140 kg per sq. cm). Flexoply pads shall have bearing surface area and thicknesses as recommended by the isolator manufacturer for each specific application.

Flexoply pads shall have a minimum operating temperature range of from -35°F to +200°F (-37°C to 93°C), a damping characteristic of 14% of critical, and shall conform to all MIL-C-882B, Class 1 Specification requirements. Flexoply isolation pads shall be resistant to water, brine, fungus and bacterial growth and shall produce only slight swelling in SAE 30 oil.

Flexoply pads shall be Model NDF, by Kinetics Noise Control, Inc.



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