

VescoPolycap - Typical Properties

Polyamide with exceptional strength and wear resistance.

| | METRIC | IMPERIAL |
|--|-----------------------------|------------------------------|
| Tensile strength (dry) | 75 MPa | 10,900 psi |
| Tensile strength (wet - 9%) | 20 MPa | 2,900 psi |
| Flexural modulus (dry) | 2.5 GPa | 363,000 psi |
| Flexural modulus (wet - 9%) | 0.5 GPa | 73,000 psi |
| Max water absorption | 9% | |
| Coefficient of thermal expansion | 9×10^{-5} mm/mm °C | 5×10^{-5} in/in. °F |
| Intermittent temperature rating | 100°C | 210°F |
| Design loading (dry applications) | 20 MPa | 2,900 psi |
| Design loading (wet and humid applications) | 10 MPa | 1,500 psi |
| PV limit | 3 MPa m/min | 17,000 psi.in/min |

Moisture Absorption: Gradually absorbs water from the air or when immersed which leads to swelling of up to 3%.

Clearances: Substantial clearances are advised for nylon bushes, from 2% to 5% of the wall thickness, with a minimum of 0.2mm.

Press fit: 0.1mm plus 0.1% of the bush diameter.

Machining tolerance: 0.3% of all dimensions.

Nylon will expand by 1% for every 3% mass increase in moisture absorption.

The above data should be taken for indicative purposes. Physical properties may be altered to some extent by processing conditions.