

## HYDEX® 202 - Stock Shapes

### Chemical Designation

PU (Polyurethane)

### Colour

beige

### Density

1.2 g/cm<sup>3</sup>

### Main features

- high dimensional stability
- broad chemical compatibility
- good impact strength
- good mechanical properties
- easy to machine

### Target Industries

- medical technology
- chemical technology
- fixture construction
- pharmaceutical industry
- oil and gas industry
- process engineering

| Mechanical properties                 | condition           | value                |           | test method | comment |
|---------------------------------------|---------------------|----------------------|-----------|-------------|---------|
| Modulus of elasticity (tensile test)  | @ 73 °F             | 240,000              | psi       | ASTM D 638  |         |
| Tensile strength at yield             | @ 73 °F             | 9000                 | psi       | ASTM D 638  |         |
| Tensile strength at break             | @ 73 °F             | 8000                 | psi       | ASTM D 638  |         |
| Elongation at break                   | @ 73 °F             | 80                   | %         | ASTM D 638  |         |
| Flexural strength                     | @ 73 °F             | 12,000               | psi       | ASTM D 790  |         |
| Modulus of elasticity (flexural test) | @ 73 °F             | 260,000              | psi       | ASTM D 790  |         |
| Compression strength                  | @ 73 °F, 1% strain  | 1,200                | psi       | ASTM D 695  |         |
| Compression strength                  | @ 73 °F, 10% strain | 12,000               | psi       | ASTM D 695  |         |
| Compression modulus                   | @ 73 °F             | 180,000              | psi       | ASTM D 695  |         |
| Impact strength (Izod)                | @ 73 °F             | 10                   | ft-lbs/in | ASTM D 256  |         |
| Rockwell hardness                     | M Scale             | 88                   |           | ASTM D 785  |         |
| Coefficient of friction               | Dynamic (vs. steel) | 0.22                 |           | ASTM D 3702 |         |
| Coefficient of friction               | Static (vs. steel)  | 0.26                 |           | ASTM D 3702 |         |
| Thermal properties                    | condition           | value                |           | test method | comment |
| Vicat softening point                 |                     | 292                  | °F        | ASTM D 1525 |         |
| Deflection temperature                | @ 264 psi           | 280                  | °F        | ASTM D 648  |         |
| Deflection temperature                | @ 66 psi            | 290                  | °F        | ASTM D 648  |         |
| Service temperature                   |                     | 280                  | °F        | -           |         |
| Thermal expansion (CLTE)              |                     | 3.7*10 <sup>-5</sup> | in/in/°F  | ASTM D 696  |         |
| Other properties                      | condition           | value                |           | test method | comment |
| Moisture absorption                   | @ 24 hrs, 73 °F     | 0.12                 | %         | ASTM D 570  |         |

→ Resin specification:  
Ensinger Internal Specification  
Shapes specification:  
NONE

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at