

CPI 591

Valve Disc Material

Formerly CPI 149



CPI 591 is a proprietary reinforced thermo-plastic material developed for use in CPI compressor valves

CPI 591 exhibits exceptional strength, temperature and all-round chemical resistance.

CPI should be consulted for the proper design and application of its specialised products and materials. For further advice and technical support please contact CPI directly

| Typical properties | Metric | Imperial |
|-------------------------------------|--------------------------------------|---------------------------------------|
| Tensile strength at 20°C | 180 MPa | 26,000 psi |
| Elongation at 20°C (%) | 1-2 | 1-2 |
| Coefficient of thermal expansion | $30 \times 10^{-6} / ^\circ\text{C}$ | $1.7 \times 10^{-5} / ^\circ\text{F}$ |
| Specific gravity | 1.6 | 1.6 |
| Water absorption (%) | 0.03 | 0.03 |
| Flexural strength | 250 MPa | 36,000 psi |
| Flexural modulus | $14 \times 10^3 \text{ MPa}$ | $2.0 \times 10^6 \text{ psi}$ |
| Suggested gas discharge temp. limit | 225°C | 440°F |



Note: The values above are for reference only and are not intended for specification or quality control purposes.