



# 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, part of the Howden group, should be consulted for the proper design and application of its specialized 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.

[www.CPIcompression.com](http://www.CPIcompression.com)

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