

# CPI 565

## Valve Disc Material

**CPI 565 is a proprietary reinforced thermoplastic material developed for use in CPI Compressor valves.**

This CPI material exhibits very low moisture absorption and is therefore particularly beneficial in saturated gas applications such as atmospheric air or saturated carbon dioxide. CPI 565 also offers an exceptionally high temperature 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	158 MPa	22,800 psi
Elongation at 20°C (%)	2-3	2-3
Coefficient of thermal expansion	$19 \times 10^{-6} / ^\circ\text{C}$	$1.1 \times 10^{-5} / ^\circ\text{F}$
Specific gravity	1.5	1.5
Water absorption (%)	0.06	0.06
Flexural strength	230 MPa	33,000 psi
Flexural modulus	$10 \times 10^3 \text{ M Pa}$	$1.4 \times 10^6 \text{ psi}$
Suggested gas discharge temp. limit	225°C	440°F
Compressive strength	155 MPa	22,000 psi



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