

CPI 559

Valve Disc Material



CPI 559 is a proprietary reinforced thermo-plastic material developed for use in CPI compressor valves

CPI 559 may be selected in applications where the discharge temperature exceeds that for which CPI 543 would otherwise be selected, up to a limit of 165 °C.

It has no pigment, so may be used in conditions where pigments may be an issue.

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	150 MPa	21,000 psi
Elongation at 20°C (%)	3-5	3-5
Coefficient of thermal expansion	$20 \times 10^{-6} / ^\circ\text{C}$	$1.1 \times 10^{-5} / ^\circ\text{F}$
Specific gravity	1.4	1.4
Water absorption (%)	2.0	2.0
Flexural strength	230 MPa	33,000 psi
Flexural modulus	$9 \times 10^3 \text{ MPa}$	$13 \times 10^5 \text{ psi}$
Suggested gas discharge temp. limit	165°C	330°F



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