

CPI 542

Valve Disc Material

Formerly CPI 141



CPI 542 is a proprietary reinforced thermo-plastic material developed for use in CPI compressor valves

CPI 542 is selected for use in compressor applications involving low suction temperature (cryogenic) conditions.

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	215 MPa	31,000 psi
Elongation at 20°C (%)	3-4	3-4
Coefficient of thermal expansion	$32 \times 10^{-6} / ^\circ\text{C}$	$1.8 \times 10^{-5} / ^\circ\text{F}$
Specific gravity	1.57	1.57
Water absorption (%)	0.9	0.9
Flexural strength	275 MPa	39,000 psi
Flexural modulus	$10 \times 10^3 \text{ MPa}$	$14 \times 10^5 \text{ psi}$
Suggested gas discharge temp. limit	140°C	285°F



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

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