CPI 196

High duty polymer alloy for dry nitrogen compressor piston rings and packings

materials technology

materialsdata

CPI 196 special polymer alloy has been developed to meet the requirements of non-lubricated dry nitrogen compressors, and in particular those operating at medium to high pressures.

This material is the preferred selection for dry nitrogen compressor packings, and is able to extend the operating limits of both pressure and temperature, by comparison with CPI 188 material.

CPI 196 may also be used in dry helium or dry argon compressors, but is not suitable for oxygen or dry gases which contain oxygen, such as bone dry air, crude argon or crude nitrogen.

CPI 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	30 MPa	4300 psi
Elongation at 20°C (%)	1-2	1-2
Coefficient of thermal expansion	40 x 10^{-6} /°C	2.2 x 10^{-5} /°F
Hardness (Shore 'D')	80-85	80-85
Specific gravity	1.7	1.7
Suggested mean temperature limit (Ts +Td)/2 (non-lube nitrogen compressors)	175 °C	350 °F