

CPI 188**Dry nitrogen compressor
piston ring and packing material**

CPI 188 is a specially developed polymer alloy for use in oil-free dry nitrogen compressors, or in other inert gases such as helium or argon.

The special formulation and unique processing of this material provides exceptional wear resistance in this demanding application, in which the majority of self-lubricating materials, such as filled PTFEs give unacceptably short lives.

CPI 188 may be selected for low to medium pressure nitrogen compressors. For high pressure nitrogen compressors and for most packing duties, the special grades CPI 196 or CPI 197 may be used.

CPI 188 should not be selected for crude nitrogen or argon compressors, in which a small percentage of oxygen is present. Other CPI grades are available for this service.

Typical Properties of CPI 188

Tensile strength at 20°C (Mpa)	9
Elongation at 20°C (%)	2-4
Coefficient of thermal expansion (1/°C)	70-90x10 ⁻⁶
Hardness (Shore 'D')	65-70
Specific gravity	2.0
Suggested mean temperature limit (non-lube air compressors) (°C)	120

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 via the details below.