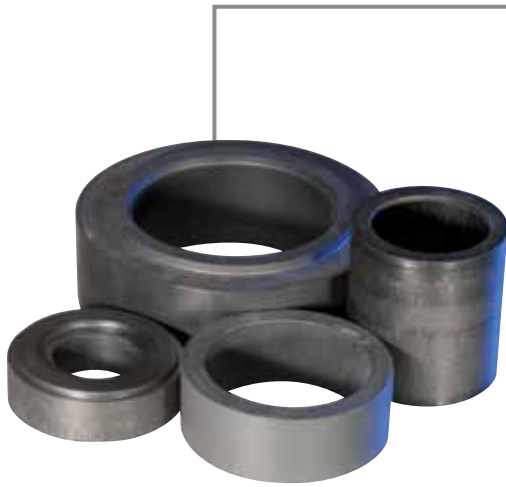


# CPI 183

## Special polymer alloy for pump bushes



**CPI 183 is proprietary polymer alloy for pump bushes designed to be used for wear rings, guide bushes and thrust washers. This material is intended to replace commonly used metallic materials in pump applications.**

CPI 183 allows a reduction in diametral clearance of 50% on vertical elements without the risk of damage to metal components. The properties of CPI 183 help to avoid catastrophic pump failures caused by dry-run start up or excessive vibration. CPI 183 meets the requirements of API610 for the application of non metallic wearing parts used in Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries.

CPI 183 provides advantages for pump application such as: intermittent dry run capabilities, low coefficient of thermal expansion and excellent resistance to chemical attack as well as impacts, thermal shocks, and hydrolysis.

Other CPI 183 advantages:

- Good machinability with no special treatment required.
- Non galling and non seizing properties.
- Low coefficient of friction ensuring long running life.
- Excellent quality to absorb shock and vibration.
- Pump performance increase and power consumption reduction.

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	35 MPa	5000 psi
Elongation (%)	2-3	2-3
Coefficient of thermal expansion	$40 \times 10^{-6} / ^\circ\text{C}$	$2.2 \times 10^{-5} / ^\circ\text{F}$
Hardness (Shore 'D')	70-80	70-80
Specific gravity	1.6	1.6
Water absorption	< 1%	< 1%
Mean temperature limits	-50°C to +175°C	-60 to +350 °F
Melting point	> 200°C	> 400 °F
Flexural strength	32 MPa	4650 psi
Compressive strength	46 MPa	6700 psi

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