

"Naked" Pumps

Our patented solution for demanding pharmaceutical applications

High tech ceramics

- Pharmalox®
- Pharmazirc®
- FDA compliant
- No coating/No contamination

Fast assembly

- · No lubrication required
- Xchange[®]
- GMP oriented
- CIP/SIP designs

Low maintenance cost

- No leakage
- No seizing
- No wear

Hardness higher than coated stainless steel pumps

- No release of particulates
- High precision over time
- Typical life 5 to 10 years





- One material only in contact with the
- Cylinder and connections in one solid piece of ceramic
- · Compact, solid and shock proof design
- Fully compatible with existing ma-

Outstanding performance

- Suitable for metal sensitive products
- Improved cleanability





