

## HIGH-PERFORMANCE CERAMICS

### DOSING UNITS

**Application:**

Filling and Dosing of Liquids

**Material:**

Zirconia FZM

Alumina F99.7



Liquids in the food industry or pharmaceuticals must be precisely dosed. The most varying demands have given rise to a wide range of varying technologies. Weight, volume or flow rate can here be taken as a basis.

Cylinder/piston units are used in a wide variety of filling tasks in order to ensure exact filling quantities in individual bottles or filling sets. Here, volume serves as the measurement unit for the required amount.

Pistons are fitted to the cylinders with as little clearance as possible. Thanks to the extremely high precision in the quality of workmanship, the remaining difference in diameter between the piston and cylinder can be reduced to just a few  $\mu\text{m}$ . By means of this technology, sealing elements, such as O-rings, etc., can be dispensed with. This offers huge advantages in terms of operational lifetime and sterilisability as compared to metallic solutions with sealing elements.

Industrial filling machines place high demands on the material used. Oxide ceramics provide an outstanding solution.

- ▶ Foodstuff compatible
- ▶ Corrosion resistant
- ▶ Stability of form
- ▶ Good gliding properties
- ▶ Abrasion resistant