

# Injector with piezoceramic microactuator

**DESCRIPTION:** The piezo injector with electronic command is the most important piece from the injection equipment, being the element which strictly measures the quantity of fuel required by thermal engine, assuring a very fine sputtering.

The injector permits to know precisely the injection beginning, as well as the fuel quantity passed through the atomizer. Due to additional equipment, it can be very quick remark the appearance of post-injection, phenomenon which damages the burning process from thermal motor cylinder and leads to the high increasing of noxes content from burning gases.

## TECHNICAL CHARACTERISTICS OF MICROACTUATOR

Number of piezo elements: 10 – 30 with thickness 0.2 mm.

(Material PZT5 or equivalent).

Overall size and weight:  $\Phi 12 \times 30(40), m \approx 20g$

Range of supply voltage: DC 150 – 300 V

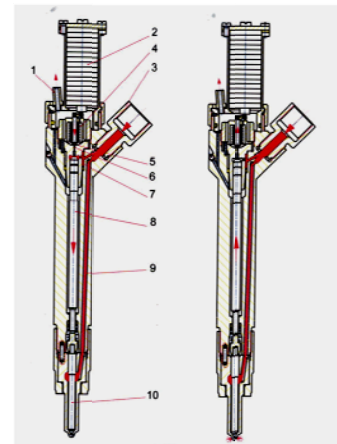
Maximum micro-moving: 20 microns.

Frequency in pulse regime: 1.5 kHz.

Estimated fuel flow of injector:  $4cm^3 / 100pulsations$ .

Electrical resistance of column:  $> 200M\Omega$ .

Electrical capacity: 70- 100nF.



*Closed injector  
(state of rest)*

*Open injector  
(injection phase)*

## ECONOMIC EFFECTS

Reducing the fuel consumption

## USERS

Companies for auto equipment

Auto service companies