

### Miniature focusing transducers for operation in air (1 MHz)

These transducers can be used to check presence of small items (1.5 – 2 mm width) or level of liquid through small hole with diameter 1.6 – 3 mm. These transducers can be operated in pulse – echo mode (transmitter – receiver mode).



Fig. 6. Miniature focusing transducer for operation in pulse – echo mode. The transducer contains installed cable RG-174/U (length ~ 60 cm) with SMA connector at the end. There may be applied other connector – BNC. Diameter of the housing is 13.2 mm.

Focal distance of the transducer is ~ 11 mm.

Recommended parameters of the transmitter:

- duration of the pulse is 3 periods
- amplitude of the pulse is 20 – 30 V