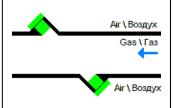


Ultrasonic sensors (Ultrasonic transducers impulse electric signal in acoustics and back (For gas)

APP100-10



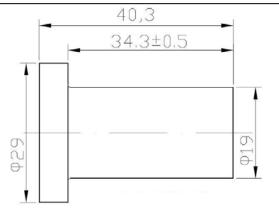
(Piezoelectric converters - PEC)

EMITTER can be PROTECTED by TITANIC PROTECTOR

«Aterma Export» ltd. Russia, Yekaterinburg, Rastochnaya str. 44-211 Tel/Fax.+7(343) 2980343 Mob.+7(919) 3914801 Email: psc@olympus.ru http//www.termokub.ru







APP100-10 piezoelectric ultrasonic active converters are intended for:

transformation of impulse electric excitation signal into acoustic signal, its emission into gas environment and inverse transformation of received acoustic signal into electrical signal.

APP100-10 converter is used in ultrasonic gas counters.

APP100-10 converter can be used in natural gas environment. APP100-10 converter has aluminic box, which eliminates gas environment intrusion into current-carrying parts.

Fixing hoop is located from the rear.

Disposition of fixing hoop is front.

Emitter can be protected by titanic protector. Also special materials, that improve efficiency of electroacoustic transformation in gas environment, are used in its construction.

Converter is set at the border of two environments.

APP100-10 converter is nonrepairable and unmendable.

Normally a couple of converters of selected technical characteristics is supplied. Selection of the emitter couple is carried out in measuring pipe, whose inner diameter is 18 mm when path length is (160+-0,2) mm.

Converters are used in gas flowmeters (for pipes under 1 000 mm), headers, ultrasonic gas counters, flues, torches and etc.

Operating mode of converter is impulsive.

Technical characteristics:

rating output signal amplitude of first positive half-wave when single monitoring	
pulse of negative polarity amplitude is 45V	5 mV
operation temperature	50 /+50 °C
limit of admissible absolute error	± 1 mV
electric capacitance of piezoactive element of converter	200 ± 44 pF
operative resonance frequency	95-115 kHz
pressure of operating environment	under 0,9MPa