

IMMERSION TRANSDUCERS TECHNICAL FEATURES

Piezoelectric ultrasonic transducer (PZT) **4CD-1 P211F-5.0** is an immersion combined focusing probe designed to scan pipe walls and pipe fittings with different diameters from 254 to 1219.2 mm for pipelines inspection in a flow under pressure up to 14 MPa. It is used in oil and gas, chemical, power industries, and in municipal and utility sector.

Immersion transducers are used to transmit ultrasound in cases where the test pieces are partially or completely submerged in water, enabling to scan the parts evenly and quickly. A focusing lens increases sensitivity and performance of the transducer.

Customization is available.

Transducers type	Immersion Combined Focusing
Nominal frequency	3,5 MHz
Piezoelectric element diameter	15 mm
Piezoelement capacity	2500 pF
Electrical power, max	300 V
Work surface diameter	20 mm
Connector type	“Lemo” HVR.03.250
Storage temperature	- 40 °C... + 65 °C
Operating temperature	(20±5)°C
Operating temperature in immersion bath	(22±2)°C
Dimensions	Ø20x36 mm
Weight	35±1 g
Standards	TP TC 012/2011, GOST 31610.0-2012
Explode protection marking	0Ex ia IIB T6 X
Protection class GOST 14254-2015	IP68
Cable	RG174 waveforming resistance is 50 Ohm, length of 1 meter
Test excitation drive pulse	rectangular pulse with an amplitude of 300 V and a duration of 0.65 microseconds

Measurements are made in accordance with GOST R 55808

Warranty

Best before: 5 years

Warranty period of operation: 1 year