

IMMERSION TRANSDUCERS TECHNICAL FEATURES

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

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

Customization is available.

Transducers type	Immersion Combined Focusing
Nominal frequency	5 MHz
Piezoelectric element diameter	10 mm
Piezoelement capacity	1000-2500 pF
Electrical power, max	300 V
Work surface diameter	14 mm
Connector type	"Lemo" HVR.03.250
Ambient temperature	- 40 °C... + 65 °C
Storage temperature	- 15 °C... + 50 °C
Dimensions	Ø16x35 mm
Weight	22,5±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
Operating temperature	(20±5)°C
Operating temperature in immersion bath	(22±2)°C

Best before: 5 years

Warranty period of operation: 1 year