

ionixADVANCED
TECHNOLOGIES**INTECH NDE**

Inspection Solutions

HotSense™ ultrasonic thickness gauging transducers

Minimise operational risk and maximise productivity with on-stream asset intelligence

Dual element ultrasonic transducer for on-stream thickness, corrosion and erosion monitoring for use in applications across **refining, oil & gas, energy, nuclear, aerospace** and **process** sectors.

Keywords: corrosion, erosion, in-service inspection, extreme environments, high temperature



HOTSENSE

- **Built on the award winning HotSense™ ultrasonic platform** powered by the proprietary Ionix HPZ piezoceramic
- **Dual element thickness gauging transducers** in a range of frequencies and tip sizes for use in extreme environments
- **-55 to +550 °C** [-67 to +1,022 °F] wide measurement temperature range for all in-service assets
- **No cooling** required up to 350 °C / 662 °F. Increase your productivity between calibrations and reduce duty cycling
- **Stable signal** for maximum reliability and repeatability
- **Enhanced wear resistance** for the most extreme environments and applications

APPLICATION

- Make wall thickness measurements on hot assets, in-service, without the need to shutdown or isolate
- Measure remaining wall thicknesses from 1 to 500 mm thick with compliant thickness gauges.
- Compatible with recommended high-temperature ultrasonic couplants
- Robust stainless steel construction, and large tip options for scanning
- Range of accessories available, including port inspection wand, safety guards and scanner probe holders for the highest-temperature applications

SOLUTIONS

- Maximise productivity with reduced down-time and outages with in-service inspection
- On-stream corrosion surveys and inspection of forged and cast components
- Support asset integrity and corrosion management programs (including RBI, FFS & FEA) with high-temperature remaining wall thickness
- Compatible with industry standard ultrasonic inspection hardware
- Compliant to ISO 22232-2 and ASTM E/1065 to meet your existing asset integrity UT procedures

hotsense  Powered by **ionix****ix****HotSense™ UT**www.intechnde.com

TRANSDUCER RANGE SPECIFICATION

PARAMETER	VALUE	UNIT
Surface temperature range*	-55 to +550 / [-67 to +1,022]	°C / [°F]
Storage temperature	-55 to +80 / [-67 to 176] Store dry and in clean condition	°C / [°F]
Connector type	Dual UNF 10/32 Microdot	-
Wear allowance	15 / [0.06]	mm / [inch]
Ruggedisation	Weatherproof Stainless steel construction	

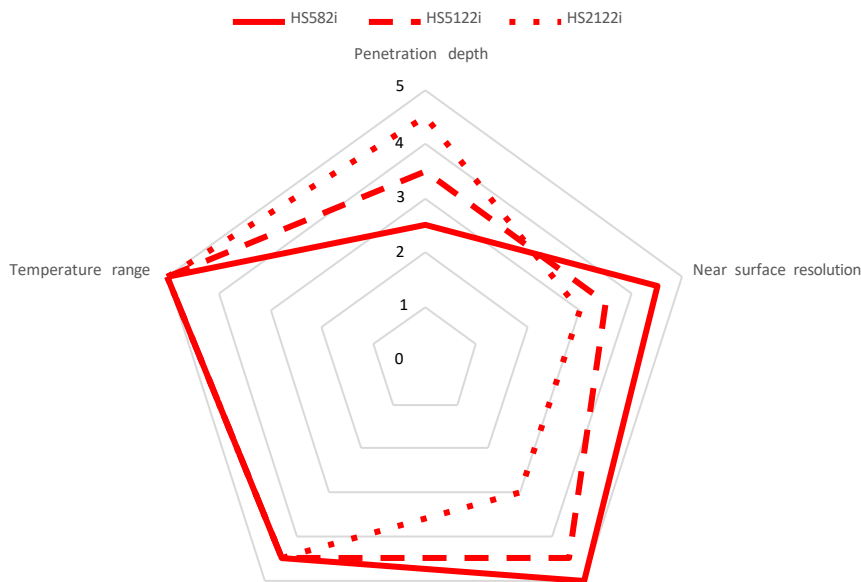
PRODUCT CODE	DESCRIPTION	RANGE IN STEEL	FOCUS
Acoustic characteristics certificate of conformity to ISO 22232-2 supplied with each unit			
HS 582i	5 MHz, 8 mm diameter/2 active element Tip diameter 11mm / [0.434"]	2 to 50 mm [0.08 to 2"]	10 mm [0.39"]
HS 5122i	5 MHz, 12 mm diameter/2 active element Tip diameter 18 mm / [0.708"]	2.5 to 250 mm [0.98 to 9.84"]	20 mm [0.79"]
HS 2122i	2.5 MHz, 12 mm diameter/2 active element Tip diameter 18 mm / [0.708"]	10 to 500 mm [0.39 to 19.7"]	30 mm [1.18"]

Compatible with UT gauges, flaw detectors and scanners

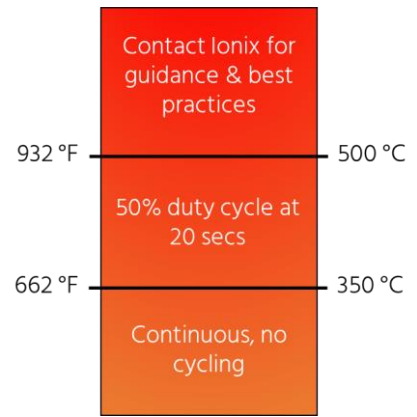
*See "temperature cycle chart"

For couplant, cables accessories and other specifications please contact our sales team

MEASUREMENT PERFORMANCE



TEMPERATURE CYCLE CHART



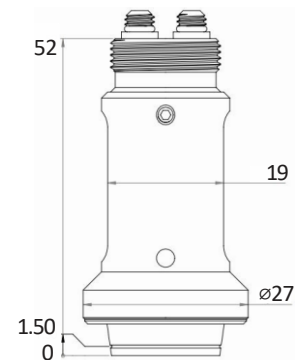
Due to the varied range of applications, this chart is provided as a guide only. Use outside of these parameters can reduce the lifetime of the transducer

CERTIFICATION

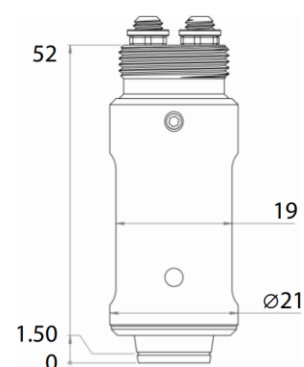
Meets the requirements of ISO 22232-2 and ASTM E/1065



HSX122i



HSX82i



For more information, please contact any of our 3 locations or email us at

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