

NDTKALA[®].CO
Non-Destructive Test (NDT) Equipment



تامین تجهیزات و مواد مصرفی تست های غیر مخرب ایران

۰۲۱-۷۱۰۵۳۸۸۸ ۰۹۱۲۰۲۶۶۲۷۰

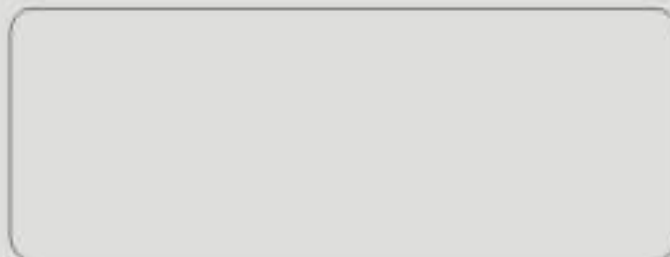
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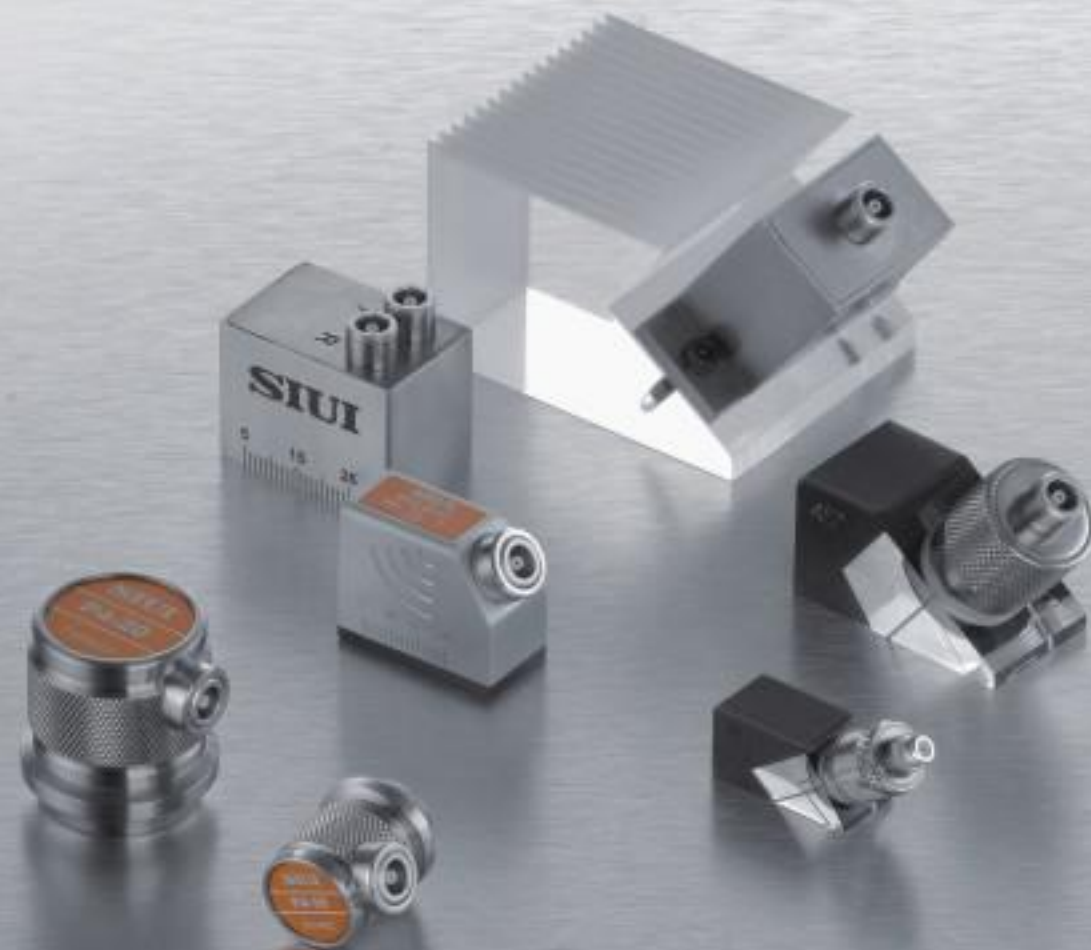
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SIUI



Normal Probe

There are three series of normal probes for your selection:

1. Narrow Frequency series
2. Mid Frequency series
3. Wide Frequency series

Application:

Mainly used for testing defects parallel to or slightly tilted against the test surface (e.g. steel plate)

Ordering Information:



Narrow Frequency series

Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2	$\Phi 6, \Phi 10, \Phi 13, \Phi 14, \Phi 19, \Phi 20$	C	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25			
2.5			
4			
5			
10	$\Phi 6$		

Mid Frequency Series

Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
1	$\Phi 10, \Phi 13, \Phi 14, \Phi 20, \Phi 24, \Phi 25, \Phi 30$	P	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2			
2.25			
2.5			
4			
5			
10	$\Phi 6, \Phi 10$		

Wide Frequency Series

Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2	$\Phi 6, \Phi 10, \Phi 13, \Phi 14$	M	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25			
2.5			
4			
5			

Replaceable Membrane Normal Probe

There are two series of Replaceable Membrane Normal probes for your selection:

1. Mid Frequency series

2. Wide Frequency series

- Higher Penetration; Higher Signal-to-noise;
Higher resolution; Higher Sensitivity

Application:

Mainly used for inspecting container flaws as well as flaws parallel to the inspected surface, applicable for checking coarse and slightly-curved surfaced objects.

Ordering Information:

RP2-25L

RP: Series Code

L: Connector Type

2: Frequency

25: Crystal dimension $\Phi 25$



Mid Frequency series

Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
1	$\Phi 10, \Phi 13, \Phi 14, \Phi 19, \Phi 20, \Phi 24, \Phi 25$	RP	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2			
2.25			
2.5			
4			
5			

Wide Frequency series

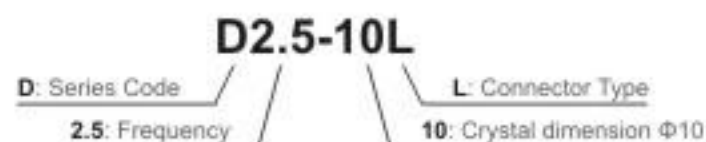
Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2	$\Phi 10, \Phi 13, \Phi 14$	RM	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25			
2.5			
4			
5			

Replaceable Delay Line normal probe

Application:

Mainly used for inspecting flaws parallel to/ near to the inspected object surface, applicable for inspected objects with sharp edge. If the delay line is made of high-temperature material, it can also inspect high-temperature objects.

Ordering Information:



Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2	$\Phi 10, \Phi 14, \Phi 20, \Phi 24$	D	Blank: BNC
2.5			L: LEMO 00
4			L1: LEMO 01
5			MD: Microdot

Surface Wave Probe

Application:

Mainly used for surface defect testing and also for surface crack depth testing.

Ordering Information:



Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2.5	6x6, 10x10	AS	Blank: BNC
5			L: LEMO 00
			MD: Microdot

Angle Probe (Transverse Wave)

There are two series of Transverse Angle probes for your selection:

1.Narrow Frequency series

2.Mid Frequency series

- Mid pulse width and mid damping
- Mid band width — -6dB band width range 40%~60%

Ordering Information:

AFN4-89-60L

AFN: Series Code

4: Frequency

89: Crystal dimension 8×9

L: Connector Type

60: Angle



Narrow Frequency series

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	6×6,8×9, 10×10, 14×14, 14×16, 20×20, 20×22	45 60 70	AFN	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25				
2.5				
4				
5				

Mid Frequency series

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	6×6,8×9, 10×10, 14×14, 14×16, 20×20, 20×22	45 60 70	AFP	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25				
2.5				
4				
5				

Angle Probe (Longitudinal Wave)

There are two series of Longitudinal Angle probes for your selection:

1.Narrow Frequency series

2.Mid Frequency series

- Mid pulse width and mid damping
- Mid band width — -6dB band width range 40%~60%

Ordering Information:

LFP2-1010-70L

LFP: Series Code

2: Frequency

1010: Crystal Dimension 10×10

L: Connector Type

70: Angle



Narrow Frequency series

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	6×6,8×9, 10×10,	45	LFN	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25		60		
4	70			
5	20×22			

Mid Frequency series

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	6×6,8×9, 10×10,	45	LFP	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25		60		
4	70			
5	20×22			

Angle Probe With Replaceable Wedge

There are two Frequency types for selection:

1. Mid Frequency Type

- General purpose, recommended for most applications
- Mid pulse width and mid damping — perfect combination of gain and resolution
- Mid band width — -6dB band width range 40%~60%

2. Wide Frequency Type

Ordering Information:

ADP2-1616-70L

ADP: Series Code

2: Frequency

1616: Crystal Dimension 16×16

L: Connector Type

70: Angle



Mid Frequency Type(Transverse Wave and Longitudinal Wave for option)

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	13×25, 16×16, 16×19, Φ6, Φ10, Φ13, Φ20, Φ25	45 60 70	ADP LDP	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25				
2.5				
4				
5				

Wide Frequency Type(Transverse Wave and Longitudinal Wave for option)

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	Φ6, Φ10, Φ13	45 60 70	ADM LDM	Blank: BNC L: LEMO 00 L1: LEMO 01 MD: Microdot
2.25				
2.5				
4				
5				

Dual-Element Angle Probe

Application:

Mainly used for testing defects tilted against the test surface or perpendicular to the test surface

1.For TRANSVERSE WAVE type:

- Mainly used for testing small near-surface defects, thin wall pipe, and ring-type work piece.

2.For LONGITUDINAL WAVE type:

- Mainly used for macro-crystal welding inspection, attenuating material and Austenite welding.
- For 70 degree angle, it can be applied for creeping wave.



TRANSVERSE WAVE angle probes option:

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	7×10, 10×10, 20×20, The size is for twin-element crystals	45	TRT	L: LEMO 00
4		60		
		70		

Ordering Information:

TRT2-1010-70L



LONGITUDINAL WAVE angle probe option:

Frequency (MHz)	Crystal Size (mm)	Angle	Series Code	Connector Type
2	7×10, 10×10, 20×20, The size is for twin-element crystals	45	TRL	L: LEMO 00
4		60		
		70		

TR Probe

Application:

Mainly used for testing defects parallel to or slightly tilted against the test surface (e.g. steel plate);

Much more appropriate for detecting near surface flaws than normal probes.



Ordering Information:

TR2.5-14-30L

TR: Series Code
 2.5: Frequency
 14: Crystal dimension $\Phi 14$
 L: Connector Type
 30: Focal Length

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	$\Phi 10, \Phi 14$ $\Phi 20, \Phi 24$	None	TR	L: LEMO 00 MD: Microdot
2.5		10		
4		20		
5		30		

Variable-angle Probe

Application:

The reflection angle can be adjusted to meet different requirements.

Ordering Information:

AV2.5-1016L

AV: Series Code
 2.5: Frequency
 L: Connector Type
 1016: Crystal dimension 10x16



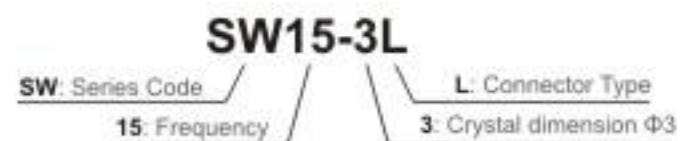
Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2.5	10x8, 10x16	AV	Blank: BNC L: LEMO 00
5			L1: LEMO 01 MD: Microdot

Spot-Weld Probe

Application:

Straight-beam probe with soft protective membrane, using water column as water delay coupling, so as to achieve optimal coupling between the probe and spot weld surface. Especially good for spot-weld testing on thin plates of automotive industry.

Ordering Information:

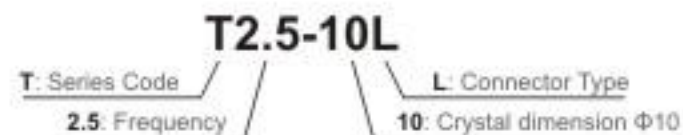


Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
15	$\Phi 3$, $\Phi 4$, $\Phi 5$, $\Phi 6$, $\Phi 7$, $\Phi 8$	SW	L: LEMO 00 MD: Microdot



TOFD Probe

Ordering Information:



Frequency (MHz)	Crystal Size (mm)	Series Code	Connector Type
2	$\Phi 10$	T	L: LEMO 00
2.5			
3.5			
4	$\Phi 6$		
5			
7.5	$\Phi 3$		
10			

Immersion Probe

There are two series of Immersion probes for your selection:

1. Narrow Frequency series

2. Wide Frequency series

- Higher Penetration; Higher Signal-to-noise;
Higher resolution; Higher Sensitivity
- Big bandwidth — -6dB band width range 60%~120%

Application:

Mainly used in situations where the work piece and the probe do not contact directly. It is suitable for testing work piece with rough surface and automatic testing required to increase scanning speed and shorten testing time.

Ordering Information:

INM4-10-20L

INM: Series Code L: Connector Type
 4: Frequency 20: Focal Length
 10: Crystal dimension Φ20



Narrow Frequency series

Immersion probe without focusing

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	Φ6, Φ10, Φ15, Φ14, Φ19, Φ20, Φ24, Φ25, Φ30	None	INP	Blank: BNC
2.25				L: LEMO 00
4				LI: LEMO 01
5				MD: Microdot

Immersion Probe with Line Focusing

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	Φ6, Φ10, Φ15, Φ14, Φ19, Φ20, Φ24, Φ25, Φ30	10 20 30	ICP	Blank: BNC
2.25				L: LEMO 00
4				LI: LEMO 01
5				MD: Microdot

Immersion Probe with Point Focusing

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	Φ6, Φ10, Φ15, Φ14, Φ19, Φ20, Φ24, Φ25, Φ30	10 20 30	ISP	Blank: BNC
2.25				L: LEMO 00
4				LI: LEMO 01
5				MD: Microdot

Wide Frequency series

Immersion probe without focusing

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	Φ6, Φ10, Φ13, Φ14	None	ISM	Blank: BNC
2.25				L: LEMO 00
4				LI: LEMO 01
5				MD: Microdot

Immersion Probe with Line Focusing

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	Φ6, Φ10, Φ13, Φ14	10 20 30	ICM	Blank: BNC
2.25				L: LEMO 00
4				LI: LEMO 01
5				MD: Microdot

Immersion Probe with Point Focusing

Frequency (MHz)	Crystal Size (mm)	Focal Length	Series Code	Connector Type
2	Φ6, Φ10, Φ13, Φ14	10 20 30	ISM	Blank: BNC
2.25				L: LEMO 00
4				LI: LEMO 01
5				MD: Microdot

Probes and Accessories



* All the probes are EN-12668-2 compliant.

Glory



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