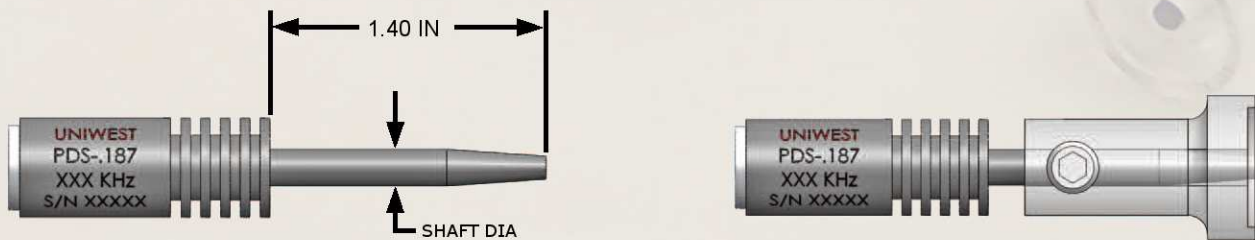


## Standard Probes

### Pencil Probes

Pencil Probes are used for general NDT inspections. Standard Pencil Probes are available in bridge or reflection configurations in either absolute or differential modes. Shielded or unshielded coils are available in several frequency ranges.

An optional collar may be used to stabilize the probe on flat surfaces.



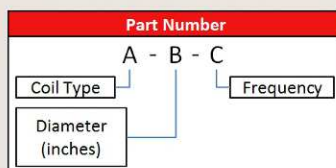
with optional collar P/N 80294

A Coil Type	B Shaft $\phi$ inches (mm)	C Frequency		
Bridge	$\phi$ .187(4.7)	100 kHz (100-500 kHz)	500 kHz (500 kHz - 1 MHz)	2 MHz (1 - 3 MHz)
P -(Absolute Unshielded)	✓	✓	✓	✓
PS -(Absolute Shielded)	✓	✓	✓	✓
PD -(Differential Unshielded)	✓	✓	✓	✓
PDS -(Differential Shielded)	✓	✓	✓	✓

All bridge configurations are fitted with Triax connectors.

A Coil Type	B Shaft $\phi$ inches (mm)	C Frequency	
Reflection	$\phi$ .187(4.7)	500 kHz (100 kHz - 1 MHz)	2 MHz (1 - 3 MHz)
PSR -(Absolute Shielded)	✓	✓	✓
PDSR -(Differential Shielded)	✓	✓	✓

All reflection configurations are fitted with 4-socket Fischer connectors.



#### EXAMPLE:

PS-.187-500 kHz is a bridge probe, .187 shaft diameter, absolute shielded coil at 500 kHz

#### CABLES:

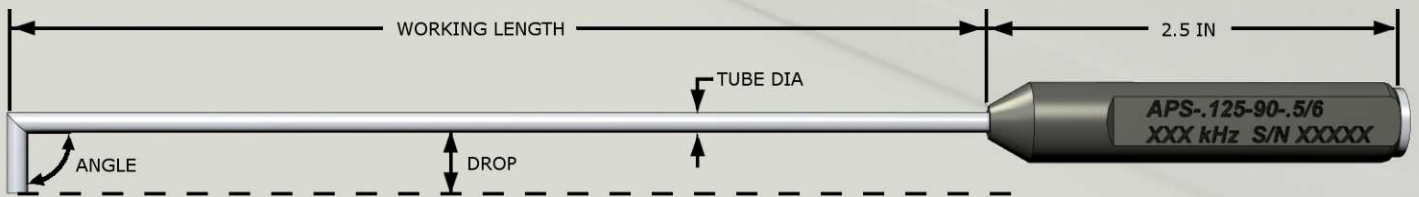
P/N 92836 for bridge probes, 8-pin Burndy/Triax  
 P/N 94032 for reflection probes, 8-pin Burndy/4-pin Fischer

## Standard Probes

## Angled Pencil Probes

Angled Pencil Probes are used for surface inspection in limited access areas. They are available in a variety of working lengths, tip angles and drops.

Angled Pencil Probes are available in bridge or reflection configurations in either absolute or differential modes. Shielded or unshielded coils are available in several frequency ranges.

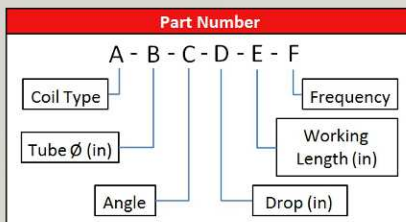


A Coil Type	B Tube $\phi$ inches (mm)	C Angle - deg		D Drop inches (mm)			E Working Length inches (mm)				F Frequency		
		45°	90°	.10 (2.5)	.25 (6.4)	.50 (12.7)	3 (76)	4 (102)	5 (127)	6 (152)	100 kHz (100-500 kHz)	500 kHz (500 kHz - 1 MHz)	2 MHz (1 - 3 MHz)
Bridge	.125 (3.2)	45°	90°	.10 (2.5)	.25 (6.4)	.50 (12.7)	3 (76)	4 (102)	5 (127)	6 (152)	100 kHz (100-500 kHz)	500 kHz (500 kHz - 1 MHz)	2 MHz (1 - 3 MHz)
AP - (Absolute Unshielded)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
APS - (Absolute Shielded)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
APD - (Differential Unshielded)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
APDS - (Differential Shielded)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

All bridge configurations are fitted with Triax connectors.

A Coil Type	B Tube $\phi$ inches (mm)	C Angle - deg		D Drop inches (mm)			E Working Length inches (mm)				F Frequency	
		45°	90°	.10 (2.5)	.25 (6.4)	.50 (12.7)	3 (76)	4 (102)	5 (127)	6 (152)	500 kHz (100 kHz - 1 MHz)	2 MHz (1 - 3 MHz)
Reflection	.125 (3.2)	45°	90°	.10 (2.5)	.25 (6.4)	.50 (12.7)	3 (76)	4 (102)	5 (127)	6 (152)	500 kHz (100 kHz - 1 MHz)	2 MHz (1 - 3 MHz)
APSR - (Absolute Shielded)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
APDSR - (Differential Shielded)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

All reflection configurations are fitted with 4-socket Fischer connectors.



### EXAMPLES:

APS-.125-90-.5/6 500 kHz is a bridge probe, .125 tube diameter, 90 deg angle, 1/2 inch drop, 6 inch working length, absolute shielded coil at 500 kHz

APDSR-.125-45-.25/3 2 MHz is a differential shielded reflection probe, .125 tube diameter, 45 deg angle, 1/4 inch drop, three inch working length, 2 MHz

### CABLES:

P/N 92836 for bridge probes, 8-pin Burndy/Triax

P/N 94032 for reflection probes, 8-pin Burndy/4-pin Fischer





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# Standard Probes

## Surface Probes

UniWest manufactures a variety of probes for surface and subsurface inspections. Surface probes are built with a flat bottom to offer better stability on the structure being inspected. Surface probes are available in absolute mode and in bridge or reflection configurations. All surface probes are shielded and available in different frequency ranges.

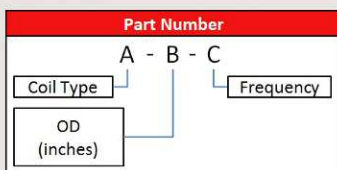


A Coil Type	B Size inches (mm)	C Frequency				
		1 kHz (1-10 kHz)	10 kHz (10-20 kHz)	20 kHz (20-50 kHz)	50 kHz (50-100 kHz)	100 kHz (100 kHz - 500 kHz)
Bridge	OD					
SS	∅.375 (9.5)	✓	✓	✓	✓	✓
SS	∅.500 (12.7)	✓	✓	✓	✓	✓
SS	∅.750 (19.0)	✓	✓	✓	✓	✓

All bridge configurations are fitted with Triax connectors.

A Coil Type	B Size inches (mm)	C Frequency				
		1 kHz (1-10 kHz)	10 kHz (10-20 kHz)	20 kHz (20-50 kHz)	50 kHz (50-100 kHz)	100 kHz (100 kHz - 500 kHz)
Reflection	OD					
SSR	∅.375 (9.5)	✓	✓	✓	✓	✓
SSR	∅.500 (12.7)	✓	✓	✓	✓	✓
SSR	∅.750 (19.0)	✓	✓	✓	✓	✓

All reflection configurations are fitted with 4-socket Fischer connectors.



### EXAMPLES:

SS-.750-50 kHz is a bridge probe, .750 OD, 50 kHz, absolute shielded coil

SSR-.750-50 kHz is a reflection probe, .750 OD, 50 kHz, absolute reflection shielded coil

### CABLES:

P/N 92836 for bridge probes, 8-pin Burndy/Triax

P/N 94032 for reflection probes, 8-pin Burndy/4-pin Fischer



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## Standard Probes

## Sliding Probes

Sliding probes are used on airframes structures for finding surface or subsurface flaws located near or between fasteners. Sliding probes are built in various frequency ranges depending on the inspection application.



Part No	Frequency				Removable Sightglass	Connector
	100 Hz (100 Hz - 40 kHz)	500 Hz (500 Hz - 30 kHz)	500 Hz (500 Hz - 100 kHz)	1 kHz (1 kHz - 100 kHz)		
US-158			✓			Dual M/D
US-584				✓		Triax
US-2419	✓				✓	Dual M/D
US-2682		✓				Triax
US-2907	✓					Dual M/D
US-2942				✓		Triax

### CABLES:

P/N 94051 8-pin Burndy/Triax, reflection

P/N 94012 8-pin Burndy/Dual Microdot, reflection

## Standard Probes

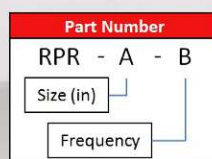
### Ring Probes

Ring probes are used for finding cracks around fasteners or corrosion on aerospace structures. These types of probes are typically manufactured with low frequency capability for deep inspection penetration into a structure. Ring Probe type coils are available in Reflection Absolute configurations.



Probe Style	A Size inches (mm)	B Frequency				
		100 Hz (100 - 500 Hz)	500 Hz (500 Hz - 1 kHz)	1 kHz (1 kHz - 10 kHz)	10 kHz (10 - 50 kHz)	50 kHz (50 - 100 kHz)
RPR	Ø.250 / Ø.600 (6.4) / (15.2)			✓	✓	✓
RPR	Ø.300 / Ø.650 (7.6) / (16.5)		✓	✓	✓	✓
RPR	Ø.350 / Ø.700 (8.9) / (17.8)	✓	✓	✓	✓	✓
RPR	Ø.400 / Ø.750 (10.2) / (19.1)	✓	✓	✓	✓	✓
RPR	Ø.450 / Ø.800 (11.4) / (20.3)	✓	✓	✓	✓	✓
RPR	Ø.500 / Ø.850 (12.7) / (21.6)	✓	✓	✓	✓	✓
RPR	Ø.550 / Ø.900 (14.0) / (22.9)	✓	✓	✓	✓	✓
RPR	Ø.600 / Ø.950 (15.2) / (24.1)	✓	✓	✓	✓	
RPR	Ø.650 / Ø1.000 (16.5) / (24.5)	✓	✓	✓		

Ring Probes are fitted with 4-socket Fischer connectors.



#### EXAMPLE:

RPR.250/.600 50 kHz is a Ring Probe, .250 ID/.600 OD, 50 kHz

#### CABLE:

P/N 94032, 8-pin Burndy/4-pin Fischer



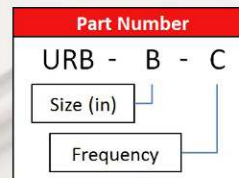
## Standard Probes

### Bolt Hole Scanner Probes

Bolt Hole Scanner probes are most often used in hole or bore inspections. These Bolt Hole probes can be used with high speed scanners, increasing inspection capability for finding flaws. Typically scanner bolt hole probes are utilized in aerospace structural inspection after removal of fasteners, bushings, or other open hole type inspection applications. Standard URB rotating bolt hole probes are designed with differential reflection coil configuration. The standard probe working length is 1.750" (44.45mm).

Probe Style	A	B	
	Probe Diameter inches (mm)	Frequency	
	OD	2 MHz (1- 3 MHz)	LF (Low Freq) (100- 500 kHz)
URB	Ø.125 (3.18)	✓	✓
URB	Ø.156 (3.96)	✓	✓
URB	Ø.187 (4.76)	✓	✓
URB	Ø.250 (6.35)	✓	✓
URB	Ø.312 (7.93)	✓	✓
URB	Ø.375 (9.53)	✓	✓
URB	Ø.437 (11.13)	✓	✓
URB	Ø.500 (12.70)	✓	✓
URB	Ø.562 (14.28)	✓	✓
URB	Ø.625 (15.88)	✓	✓
URB	Ø.687 (17.46)	✓	✓
URB	Ø.750 (19.05)	✓	✓

Bolt Hole Scanner Probes are fitted with 4-pin Fischer connectors.



#### EXAMPLES:

URB-. 125 2MHz

URB-. 125 LF

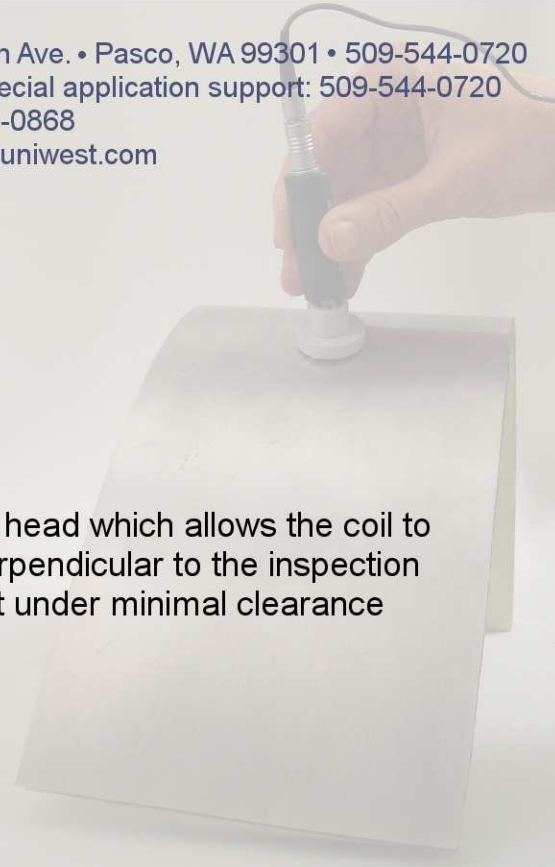
When ordering, select the proper probe size by using the (-) tolerance of the hole under inspection. The probe will be made .003 inch (.08 mm) smaller and expand to .030 inch (.76 mm) larger than diameter ordered.

Contact UniWest for custom diameters and working lengths.

## Standard Probes

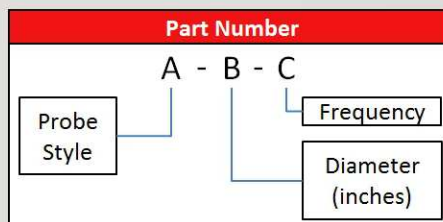
## Surface Following Probes

Surface Following Probes are fitted with a unique patented swivel head which allows the coil to follow curvilinear surfaces without the need to keep the handle perpendicular to the inspection zone. The 1.00 head diameter also allows the operator to inspect under minimal clearance features.



Head Dia → ←

A Probe Style	B Head Ø inches (mm)		C Frequency			Connector
	.625 (15.9)	1.00 (25.4)	20 kHz	200 kHz	2 MHz	
SFA - (Reflection Absolute)	✓	✓	✓	✓	✓	4-Socket Fischer
SFD - (Reflection Differential)	✓	✓		✓	✓	4-Socket Fischer
SFX - (Cross Wound)	✓	✓			✓	Triax



**EXAMPLES:**  
 SFA-1.00-20 kHz  
 SFX-.625-2 MHz

**CABLES:**  
 P/N 92836 8-pin Burndy/Triax  
 P/N 94032 8-pin Burndy/4-pin

## Standard Ultrasonics

### Contact Transducers

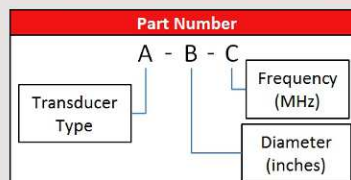
Single element longitudinal wave transducers are used for flaw detection, material thickness measurements and feature mapping. The Standard Contact configurations use a rugged stainless steel housing coupled with an aluminum oxide wear face. The Replaceable Delay Line transducers have a 0.200 inch long replaceable plastic tip.



A Transducer Type	B Active Element inches (mm)	C Frequency				
		2.25 MHz	5.0 MHz	7.5 MHz	10.0 MHz	15.0 MHz
Replaceable Delay Line	Diameter					
RDL	1/4 (6.4)		✓	✓	✓	✓
RDL	3/8 (9.5)	✓	✓	✓	✓	
RDL	1/2 (12.7)	✓	✓			

A Transducer Type	B Active Element inches (mm)	C Frequency				
		2.25 MHz	5.0 MHz	7.5 MHz	10.0 MHz	15.0 MHz
Standard Contact	Diameter					
SC	1/4 (6.4)	✓	✓	✓	✓	✓
SC	3/8 (9.5)	✓	✓	✓	✓	✓
SC	1/2 (12.7)	✓	✓	✓	✓	

All transducers are fitted with a Microdot style connector.



**EXAMPLES:**  
 RDL-3/8-5.0  
 SC-1/2-7.5



## U40 Encircling Coils

Encircling coils are used for inspecting tubes, bars and wires for flaws, such as inclusions, pores, cracks, laps and other defects.

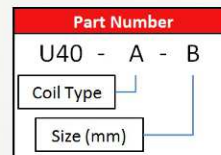


Probe Style	A Coil Type	B Coil Size mm (in)
	1 Differential/Absolute	
U40	✓	1.2 (0.047)
U40	✓	2.2 (0.087)
U40	✓	3.2 (0.126)
U40	✓	4.2 (0.165)
U40	✓	5.2 (0.205)
U40	✓	7.0 (0.276)
U40	✓	9.0 (0.354)
U40	✓	11.0 (0.433)
U40	✓	13.0 (0.512)
U40	✓	15.0 (0.591)
U40	✓	17.0 (0.669)
U40	✓	20.0 (0.787)
U40	✓	23.0 (0.906)
U40	✓	26.0 (1.024)
U40	✓	29.0 (1.142)
U40	✓	32.0 (1.260)
U40	✓	35.0 (1.378)
U40	✓	38.0 (1.496)
U40	✓	44.0 (1.732)

Actual coil diameter is 0.5 mm (0.02 in) larger  
 Contact UniWest for additional coil sizes



Multi-channel configuration



### CABLE:

P/N 99176, 8-pin Burndy/8-pin Burndy

### EXAMPLE:

U40-1-4.2mm