



DAKOTA ULTRASONICS


Engine Builders / Racing Sonic Testers, Transducers & Accessories Features

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The **PR Series** of gauges are packaged in an all aluminum case making them the most durable gauges on the market.

Models	Features	Part #
 <p>PR-9</p>	Field Calibration of all materials (one or two point option), High Speed Scanning, and Backlit Display.	Z-309-0001
 <p>PR-8V v2.0</p>	All the features of the PR-9 with a Time Based B-Scan to graphically draw the contour of the blind surface in a cylinder according to thickness. High speed scan (250 readings per second). Measures through paint and eliminates the thickness of the paint which causes errors on roll cages and chassis tubing. USB-C connectivity w/4GB internal SD memory. Selectable data structure option for engines, or general tubing inspection. Adjustable gain for noisy material or additional output. Probe type list for improved linearity. DakView cylinder wall mapping software (engine or grid file formats).	Z-158-0003
Kit Includes:	Unit, Standard Transducer, Couplant, Manual, Plastic Carrying Case and AA Batteries. PC Engine Mapping Software and Transfer Cable included with PR-8V gauge. Software available for download our website.	

Dual Transducer Reference Chart

Frequency & Diameter Disks

Note: The frequency and crystal diameter are stamped and sorted according to color, as illustrated above.

Size Options (Dual Element) – Top View Perspective		
		
3/16" Version	1/4" Version	1/2" Version
Note: Customs sizes are available upon request.		


Styles (Dual Element) – Dimensional Perspective		
		
3/16" Std Version – Chassis Tubing / Sanctioning	3/16" Low Profile Version	1/4" Std Version
		
1/4" Low Profile – Head Ports 1" Wand	1/4" Low Profile – Head Ports 9" Wand	1/2" Cylinder Walls - Blocks
Note: Customs sizes are available upon request.		


5.0 MHz Dual Element Transducers (Cast Iron)						
Materials Used: Cast Iron, Steel, Glass, Thin Plastics						
Applications Used: Cylinders , Heads, Decks, Tubing, Body panels, Wind shields						
√ Most Common: Covers majority of all iron automotive applications.						
Diameter	Part #	Comments	√	Connector	Radius	Entry
3/16"	T-121-2100	Low Profile		Potted	0"	Side
1/4"	T-102-2000	Chassis tubing-Standard	√	Potted	0"	Side
1/4"	T-102-2700	Thru-paint Chassis tubing – PR-8V (E-E)	√	Potted	0"	Side
1/4"	T-162-2110	Low Profile 1" wand for cast iron head ports	√	Potted	.6"	Side
1/4"	T-132-2110	Low Profile 9" wand for cast iron head ports		Potted	.6"	Side
1/2"	T-104-2120	Cylinder Probe - Iron	√	Potted	2"	Side
Note: The ranges below are general ranges only, as the cast consistency varies from batch to batch. The more consistent the cast material is, the easier it is to pass sound through. If the material range is not specified below, this indicates that the probe frequency is not a good match for the material.						
Diameter	Mode	Range (ST=Steel) (CI = Cast Iron) (CA= Cast Aluminum)		Wearface Diameter	Crystal Diameter	
3/16"	P-E	.060" to 2.0" ST		1/4"	3/16"	
3/16"	P-E	.060" to .500" CI		1/4"	3/16"	
1/4"	P-E	.040" to 6.0" ST		3/8"	1/4"	
1/4"	P-E	.040" to .650" CI		3/8"	1/4"	
1/4"	E-E PR-8V	.050" to 1.0" ST		3/8"	1/4"	
1/2"	P-E	.050" to 15.0" ST		5/8"	1/2"	
1/2"	P-E	.050" to 1.5" CI		3/8"	1/4"	
Note: Additional High Damped versions are available in the above configurations for an additional charge. These items are custom builds only.						

10.0 MHz Dual Element Transducers (Cast Aluminum)						
Materials Used: Cast Iron, Steel, Glass, Thin Plastics						
Applications Used: Cylinders , Heads, Decks, Tubing, Body panels, Wind shields						
√ Most Common: Covers majority of all aluminum automotive applications.						
Diameter	Part #	Comments	√	Connector	Radius	Entry
3/16"	T-101-4000	NHRA chassis tubing	√	Potted	0"	Side
1/4"	T-162-4110	Low Profile 1" wand for cast alum. head ports	√	Potted	.6"	Side
1/4"	T-132-4110	Low Profile 9" wand for cast alum. head ports		Potted	.6"	Side
1/2"	T-104-4120	Cylinder Probe – Alum.		Potted	2"	Side
<p>Note: The ranges below are general ranges only, as the cast consistency varies from batch to batch. The more consistent the cast material is, the easier it is to pass sound through. If the material range is not specified below, this indicates that the probe frequency is not a good match for the material.</p>						
Diameter	Mode	Range (ST=Steel) (CI = Cast Iron) (CA= Cast Aluminum)	Wearface Diameter	Crystal Diameter		
3/16"	P-E	.040" to 2.0" ST	1/4"	3/16"		
3/16"	P-E	.060" to .500" CA	1/4"	3/16"		
1/4"	P-E	.040" to 6.0" ST	3/8"	1/4"		
1/4"	P-E	.040" to 1.0" CA	3/8"	1/4"		
1/2"	P-E	.050" to 10.0" ST	5/8"	1/2"		
1/2"	P-E	.050" to 1.5" CA	3/8"	1/4"		
<p>Note: Additional High Damped versions are available in the above configurations for an additional charge. These items are custom builds only.</p>						

Accessory Items

Instrument & Carrying Cases			
			
Part #	Description	Comments	
F-100-0004	PR-8 Instrument Case	Nylon	
F-112-0005	PR-8 ² Series Nylon Case	Nylon	
A-302-6002	PR-9 Instrument Case	Rubber	
F-149-0001	PR-8V Instrument Case	Nylon	
A-149-6002	PR-8V v2.0 Instrument Case	Rubber	
A-100-6002	Plastic Carrying Brief Case	All Models	

Couplant			
			
Part #	Description	Comments	
V-000-0001	4 oz bottle		
V-000-0003	12 oz bottle		
V-000-0004	1 gallon		

Calibration Blocks			
			
Part #	Description	Mat'l Type	
X-000-0001	5 Step - .100" to .500"	4340 Steel	
X-000-0002	4 Step - .250 to 1.0"	4340 Steel	

Misc. Accessories			
			
Part #	Description	Comments	
F-000-7001	Bell Shaped Spring Loaded Probe Holder (V-Block)	Std Can Style Probes Only	
F-102-0001	Hammer Transducer (Cylinder Kit) with water path.	Used for with the B-Scan feature.	

Data Cables			
Part #	Description	Comments	
N-306-0010	6 foot RS232 (DB-9 to Lemo)	PR-8V	
N-402-0510	USB to Serial Adapter	PR-8V	

Software & Data CD			
Part #	Description	Comments	
A-158-7001	DakView Software & Manual (.pdf) (note: software & manual available for download on our website at no charge)	PR-8V	