





# DAKOTA ULTRASONICS

## Single Element Precision Thickness Gauges, Transducers & Accessories - Price List

Date: 01/01/24

The Precision Series of gauges are packaged in an all aluminum case.

Models	Features	Part #	Price US
<b>PZX-7</b> 	Easy field calibration; 1 or 2 point options. Selectable 8 common material velocities and 2 custom velocities. Automatic and time dependent gain with manual override. Echo-Echo, Interface-Echo, Plastics, and pulse-echo modes. Selectable probe options; delay line, plastics delay line, and contact probes with diameters. Features; high speed scan, differential, hi/lo alarms, and VX velocity gauge. CDC compatible serial over USB-C. RS232 serial or Bluetooth modules available (See accessory items).	Z-307-0001	2075.00
<b>PZX-7 DL</b> 	Same features as the PZX-7 (less serial over USB), plus an on-board data logger – Stores 10,000 readings in 40 files of 250 readings per file. USB-C connectivity, includes transfer cable. No software required; formatted text file (.csv).	Z-308-0001	2275.00
<b>PVX</b> 	A-Scan waveform (RF & Rectified views), Large Digits, and time based B-Scan views. Multiple calibration options, and selectable material list. Selectable pulser voltage and damping options. Time dependent gain (TDG) with adjustable slope and start settings. Selectable mode options: Interface-Echo (I-E), Interface-Echo –Echo (I-E-E), Pulse-Echo (P-E), Echo-Echo(E-E), and Echo-Echo Verify (E-EV) options. Alarm Mode (Hi & Lo Limits), Hi Speed Scan Mode, multiple Languages, Setups (64 user defined), Data Logger (4 GB SD card), USB-C connectivity, and screen capture to (.tif) images. Probe options: Delay-Line, Pencil & Contact.	Z-157-0003	3175.00
<b>PVX (color)</b> 	Same features as PVX grayscale, plus AMOLED ¼ VGA display with 60 Hz screen refresh, and rotating landscape view.	Z-157-0004	3525.00
<b>Kits Includes:</b>	Unit, standard 1/4" Delay Line Transducer (2 Delay Tips – 3/8" & 1/2" L) & Cable, Couplant, Manual, Certificate of Calibration, AA Batteries and Plastic Carrying Case. PC Software (download) & transfer cable included.		

**Single Element Delay Line Transducers (\*\*15MHz is Included with gauge unless specified otherwise)**

**Materials Used:** \*Aluminum, \*Titanium, \*Steels, \*Thin Plastics

Diameter	MHz	Part #	Comments	Connector	Entry	Price \$
1/4"	15	T-402-5507	**Standard	Microdot	Side	595.00
1/4"	20	T-402-6507		Microdot	Side	595.00

**Note:** 1 to 10 MHz low frequency delay line transducers with 1/4", 3/8", 1/2" diameters available on request (PVX only).

**PX Series – Measurement Range**
**Note:** Acrylic delay tips will measure plastics if the material velocity is different from that of acrylic. If the velocities are similar, a graphite tip will need to be used. Measurement ranges in plastics will vary depending on the type of plastic measured.

Diameter	MHz	Mode	Range (ST=Steel) (PL=Plastic)	Delay Tip Part #	Delay Tip Length	Delay Tip Diameter	Crystal Diameter
3/16"	15	E-E	.006" to .400" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	15	I-E	.060" to .750" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	15	E-E	.010" to .100" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	15	I-E	.060" to .500" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	15	PLAS	.005" to .150" PL	X-533-0000	3/8"	3/16"	3/16"
1/4"	15	E-E	.006" to .400" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	15	I-E	.060" to 1.00" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	15	I-E	.005" to .250" PL	F-000-7103	1/2"	1/4"	1/4"
1/4"	15	E-E	.010" to .100" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	15	I-E	.060" to 1.00" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	15	PLAS	.005" to .150" PL	X-633-0000	3/8"	1/4"	1/4"
3/16"	20	E-E	.006" to .400" ST	X-532-	3/8"	3/16"	3/16"

3/16"	20	I-E	.060" to .750" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	20	E-E	.015" to .100" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	20	I-E	.060" to .500" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	20	PLAS	.005" to .150" PL	X-533-0000	3/8"	3/16"	3/16"
1/4"	20	E-E	.006" to .400" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	20	I-E	.060" to .750" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	20	I-E	.005" to .250" PL	F-000-7103	1/2"	1/4"	1/4"
1/4"	20	E-E	.040" to .100" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	20	I-E	.060" to .500" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	20	PLAS	.005" to .150" PL	X-633-0000	3/8"	1/4"	1/4"

**Note:** Ranges were determined using standard 4340 steel calibration standards, and common plastic samples. These ranges may vary according to material type differences and surface conditions.

### Single Element Delay-Line – Continued

<b>PVX A/B SCOPE– Measurement Range</b>							
<b>Note:</b> Acrylic delay tips will measure plastics if the material velocity is different from that of acrylic. If the velocities are similar, a graphite tip will need to be used. Measurement ranges in plastics will vary depending on the type of plastic measured.							
Diameter	MHz	Mode	Range (ST=Steel) (PL=Plastic)	Delay Tip Part #	Delay Tip Length	Delay Tip Diameter	Crystal Diameter
1/8"	15	E-E	.007" to .300" ST	X-132-0000	3/8"	1/8"	1/8"
1/8"	15	I-E	.020" to .400" ST	X-132-0000	3/8"	1/8"	1/8"
1/8"	15	I-E	.005" to .100" L	X-132-0000	3/8"	1/8"	1/8"
3/16"	15	E-E	.007" to .400" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	15	I-E	.020" to .500" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	15	I-E	.010" to .200" PL	X-532-0000	3/8"	3/16"	3/16"
3/16"	15	E-E	.010" to .500" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	15	I-E	.020" to .500" ST	X-533-0000	3/8"	3/16"	3/16"

3/16"	15	I-E	.005" to .200" PL	X-533-0000	3/8"	3/16"	3/16"
1/4"	15	E-E	.006" to .500" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	15	I-E	.025" to 1.00" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	15	I-E	.005" to .150"	F-000-7103	1/2"	1/4"	1/4"
1/4"	15	E-E	.010" to .500" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	15	I-E	.020" to .500" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	15	I-E	.005" to .250" PL	X-633-0000	3/8"	1/4"	1/4"
3/16"	20	E-E	.006" to .400" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	20	I-E	.060" to .750" ST	X-532-0000	3/8"	3/16"	3/16"
3/16"	20	E-E	.015" to .100" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	20	I-E	.060" to .500" ST	X-533-0000	3/8"	3/16"	3/16"
3/16"	20	PLAS	.005" to .150" PL	X-533-0000	3/8"	3/16"	3/16"
1/4"	20	E-E	.006" to .400" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	20	I-E	.060" to .750" ST	F-000-7103	1/2"	1/4"	1/4"
1/4"	20	I-E	.005" to .250" PL	F-000-7103	1/2"	1/4"	1/4"
1/4"	20	E-E	.040" to .100" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	20	I-E	.060" to .500" ST	X-633-0000	3/8"	1/4"	1/4"
1/4"	20	PLAS	.005" to .150" PL	X-633-0000	3/8"	1/4"	1/4"

**Note:** Ranges were determined using standard 4340 steel calibration standards, and common plastic samples. These ranges may vary according to material type differences and surface conditions.

#### Single Element Delay Line Pencil Transducers



<b>Materials Used:</b> *Aluminum, *Titanium, *Steels, *Thin Plastics							
Diameter	MHz	Part #	Comments	Connector	Entry	Price \$	
3/16"	10	T-481-4507	1/16" Tip	Microdot	Top	675.00	
3/16"	10	T-681-4507	90° Right Angle	Microdot	Side	675.00	
3/16"	15	T-581-5507	1/16" Tip	Microdot	Side	775.00	
<b>Note:</b> Should be used in conjunction with and A-Scan gauge model for best accuracy.							
<b>PVX A/B SCOPE– Measurement Range</b>							
<b>Note:</b> Acrylic delay tips will measure plastics if the material velocity is different from that of acrylic. If the velocities are similar, a graphite tip will need to be used. Measurement ranges in plastics will vary depending on the type of plastic measured.							
Diameter	MHz	Mode	Range (ST=Steel) (PL=Plastic)	Delay Tip Part #	Delay Tip Length	Delay Tip Diameter	Crystal Diameter
3/16"	10	E-E	.006" to .300" ST	X-152-0000	3/8"	1/16"	3/16"
3/16"	10	I-E	.010" to .400" ST	X-152-0000	3/8"	1/16"	3/16"
3/16"	10	E-E	.005" to .300" PL	X-152-0000	3/8"	1/16"	3/16"
3/16"	10	I-E	.005" to .300" PL	X-152-0000	3/8"	1/16"	3/16"
3/16"	10	E-E	.006" to .300" ST	X-752-0000	3/8"	1/8"	3/16"
3/16"	10	I-E	.010" to .500" ST	X-752-0000	3/8"	1/8"	3/16"
3/16"	10	E-E	.005" to .400" PL	X-752-0000	3/8"	1/8"	3/16"
3/16"	10	I-E	.005" to .400" PL	X-752-0000	3/8"	1/8"	3/16"
3/16"	15	E-E	.006" to .100" ST	X-152-0000	3/8"	1/16"	3/16"
3/16"	15	I-E	.008" to .250" ST	X-152-0000	3/8"	1/16"	3/16"
3/16"	15	E-E	.005" to .150" PL	X-152-0000	3/8"	1/16"	3/16"
3/16"	15	I-E	.005" to .250" PL	X-152-0000	3/8"	1/16"	3/16"
3/16"	15	E-E	.006" to .150" ST	X-752-0000	3/8"	1/8"	3/16"
3/16"	15	I-E	.006" to .400" ST	X-752-0000	3/8"	1/8"	3/16"
3/16"	15	E-E	.005" to .100" PL	X-752-0000	3/8"	1/8"	3/16"
3/16"	15	I-E	.005" to .150" PL	X-752-0000	3/8"	1/8"	3/16"
<b>Note:</b> Ranges were determined using standard 4340 steel calibration standards, and common plastic samples. These ranges may vary according to material type differences and surface conditions.							

**Single Element Contact Transducers - (cable not included)**

**Materials Used:** \*Aluminum, \*Titanium, \*Steels, \*Plastics

Diameter	MHz	Part #	Comments	Connector	Entry	Price \$
1/8"	5	T-4903-2875		Microdot	Side	400.00
1/8"	5	T-5903-2875		Microdot	Top	400.00
1/8"	10	T-4903-4875		Microdot	Side	430.00
1/8"	10	T-5903-4875		Microdot	Top	430.00
1/4"	2.25	T-4023-1855		Microdot	Side	360.00
1/4"	2.25	T-5023-1855		Microdot	Top	360.00
1/4"	5	T-4023-2855		Microdot	Side	360.00
1/4"	5	T-5023-2855		Microdot	Top	360.00
1/4"	10	T-4023-4855		Microdot	Side	395.00
1/4"	10	T-5023-4855		Microdot	Top	395.00
1/2"	2.25	T-4043-1855		Microdot	Side	360.00
1/2"	2.25	T-5043-1855		Microdot	Top	360.00
1/2"	5	T-4043-2855		Microdot	Side	360.00
1/2"	5	T-5043-2855		Microdot	Top	360.00

**PVX A/B SCOPE- Measurement Range**

**Note:** Ranges were determined using standard 4340 steel calibration standards, and common plastic samples. These ranges may vary according to material type differences and surface conditions.

Diameter	MHz	Mode	Range (ST=Steel) (PL=Plastic)	Wearface Diameter	Crystal Diameter
1/8"	5	P-E	.040" to 3.0" ST	1/4"	1/8"
1/8"	5	E-E	.020" to 3.0" ST	1/4"	1/8"
1/8"	5	P-E	.020" to .500" PL	1/4"	1/8"
1/8"	10	P-E	.040" to 3.0" ST	1/4"	1/8"
1/8"	10	E-E	.010" to 3.0" ST	1/4"	1/8"
1/8"	10	P-E	.020" to .400" PL	1/4"	1/8"
1/4"	2.25	P-E	.050" to 3.0" ST	3/8"	1/4"
1/4"	2.25	E-E	.040" to 3.0" ST	3/8"	1/4"
1/4"	2.25	P-E	.040" to .650" PL	3/8"	1/4"
1/4"	5	P-E	.040" to 6.0" ST	3/8"	1/4"
1/4"	5	E-E	.020" to 3.0" ST	3/8"	1/4"
1/4"	5	P-E	.025" to .600" PL	3/8"	1/4"


1/4"	10	P-E	.025" to 6.0" ST	3/8"	1/4"
1/4"	10	E-E	.010" to 3.0" ST	3/8"	1/4"
1/4"	10	P-E	.020" to .500" PL	3/8"	1/4"
1/2"	2.25	P-E	.075" to 10.0" ST	5/8"	1/2"
1/2"	2.25	E-E	.100" to 3.0" ST	5/8"	1/2"
1/2"	2.25	P-E	.065" to .750" PL	5/8"	1/2"

### Accessory Items

Instrument & Carrying Cases			
			
Part #	Description	Comments	Price \$
F-112-0005	PX Series Instrument case	Nylon	60.00
F-302-0001	PZX Series Instrument case	Nylon	60.00
F-149-0001	PVX Series Instrument Case	Nylon	85.00
A-302-6002	PZX Series Instrument Case	Rubber	90.00
A-149-6002	PVX Series Instrument Case	Rubber	110.00
A-100-6002	Plastic Carrying Brief Case	PX	40.00
A-302-6003	Plastic Carrying Brief Case	PZX	40.00
A-100-6003	Plastic Carrying Brief Case	PVX	40.00

Transducer Cables			
			
Custom Lengths & High Temp/Wear Teflon: Available on request.			
Part #	Description	Comments	Price \$
N-104-0020	4' Single Lemo to Microdot	All Gauges	75.00
N-110-0020	10' Single Lemo to Microdot	All Gauges	85.00
N-120-0020	20' Single Lemo to Micodot Single	All Gauges	95.00

Couplant			
			
Part #	Description	Comments	Price \$
V-000-0001	4 oz bottle		17.00
V-000-0003	12 oz bottle		28.00
V-000-0004	1 gallon		170.00

Calibration Blocks			
			
Part #	Description	Mat'l Type	Price \$
X-000-0001	5 Step - .100" to .500"	4340 Steel	235.00
X-000-0002	4 Step - .250 to 1.0"	4340 Steel	235.00
Custom	5 Step - .100" to .500"	1018 Steel	235.00
Custom	4 Step - .250 to 1.0"	1018 Steel	235.00
X-000-0022	5 Step - 2.5 - 12.5mm	1018 Steel	255.00
X-000-0021	4 Step - 6.25 - 25.0mm	1018 Steel	255.00
Custom	5 Step - .100" to .500"	7075 Aluminum	235.00
Custom	4 Step - .250 to 1.0"	7075 Aluminum	235.00
Custom	5 Step - .100" to .500"	304 Stainless Steel	530.00
Custom	4 Step - .250 to 1.0"	304 Stainless Steel	530.00
Custom	5 Step - .100" to .500"	Titanium	595.00
Custom	4 Step - .250 to 1.0"	Titanium	595.00
X-000-0005	Carrying case	Wood	60.00
Custom	10 Step - .100" to 1.0"	1018 Steel	525.00
Custom	10 Step - .100" to 1.0"	7075 Aluminum	525.00
Custom	10 Step - .100" to 1.0"	304 Stainless Steel	1045.00
Custom	10 Step - .100" to 1.0"	Titanium	1255.00
Custom	Carrying Case	Wood	150.00
Custom	4 Step Thin - .04" - .100"	1018 Steel	300.00
Custom	4 Step Thin - .04" - .100"	7075 Aluminum	300.00
Custom	4 Step Thin - .04" - .100"	304 Stainless Steel	525.00
Custom	4 Step Thin - .04" - .100"	Titanium	890.00
Custom	Carrying Case	Wood	60.00
Custom	10 Step Metric - 1 to 10 mm	1018 Steel	595.00



Custom	10 Step Metric – 1 to 10 mm	7075 Aluminum	595.00
Custom	10 Step Metric – 1 to 10 mm	304 Stainless Steel	1190.00
Custom	10 Step Metric – 1 to 10 mm	Titanium	1490.00
Custom	Carrying Case	Wood	150.00
Custom	10 Step Metric – 2 to 20 mm	1018 Steel	595.00
Custom	10 Step Metric – 2 to 20 mm	7075 Aluminum	595.00
Custom	10 Step Metric – 2 to 20 mm	304 Stainless Steel	1190.00
Custom	10 Step Metric – 2 to 20 mm	Titanium	1490.00
Custom	Carrying Case	Wood	150.00
Custom	10 Step Metric – 2.5 to 25 mm	1018 Steel	595.00
Custom	10 Step Metric – 2.5 to 25 mm	7075 Aluminum	595.00
Custom	10 Step Metric – 2.5 to 25 mm	304 Stainless Steel	1190.00
Custom	10 Step Metric – 2.5 to 25 mm	Titanium	1490.00
Custom	Carrying Case	Wood	150.00
Custom	8 Step Metric – 1 to 8 mm	1018 Steel	525.00
Custom	8 Step Metric – 1 to 8 mm	7075 Aluminum	525.00
Custom	8 Step Metric – 1 to 8 mm	304 Stainless Steel	820.00
Custom	8 Step Metric – 1 to 8 mm	Titanium	1040.00
Custom	Carrying Case	Wood	100.00

**Delay Tips - Delay Line Transducer Accessories**


Part #	Description	Comments	Price \$
F-000-7102	1/4" Dia. x 3/8" L Delay Tips	Acrylic	18.00
F-000-7103	1/4" Dia. x 1/2" L Delay Tips	Acrylic	18.00
X-132-0000	1/8" Cone Tip Delay Line	Acrylic	18.00
X-532-0000	3/16" Cone Tip Delay Line	Acrylic	18.00
X-633-0000	1/4" Graphite Tip Delay (plastics)	Graphite	45.00
X-533-0000	3/16" Graphite Cone Tip Delay Line	Graphite	50.00
X-152-0000	1/16" Dia. x .450 L Delay Tip (Pencil)	Acrylic	55.00
X-752-0000	1/8" Dia. x .450 L Delay Tip (Pencil)	Acrylic	55.00

**Misc. Accessories**


Part #	Description	Comments	Price \$
F-000-7000	Bell shaped Spring Loaded Probe Holder (V-Block) – Pencil Probes	Top Cable Entry Models Only	195.00
A-129-6003	6" Extension Wand for Single Element Microdot Transducers		215.00

<b>Data Cables</b>			
<b>Part #</b>	<b>Description</b>	<b>Comments</b>	<b>Price \$</b>
N-306-0010	6 foot RS232 ( DB-9 to lemo )		75.00
N-402-0510	USB to Serial Adapter		40.00

<b>Wireless Modules</b>			
<b>Part #</b>	<b>Description</b>	<b>Comments</b>	<b>Price \$</b>
A-302-1002	RS232 Serial Port (2 pin LEMO 00)	PZX-7	220.00
A-303-1002	Bluetooth Module (w/integral antenna)	PX/PZX-7	220.00