

# Checkline Ultrasonics

## Flaw Detectors, Accys, & Probes Price List

Date: 07/15/06

Models:	Connector Type	Part #	Price €
DFX-444	BNC	Z-207-0001	Call
DFX-444	Lemo	Z-207-0002	
DFX-544	BNC	Z-208-0001	
DFX-544	Lemo	Z-208-0002	

Kit Includes	
Lithium Ion Battery	Operating Manual
Battery charger CH-700	Calibration Certificate
Canvas instrument case	Certificate of Conformity
Clear Screen	

Additional Options:	Part #	Price €
Firmware software upgrade included w/service	FRMSRV	250.00
Firmware software upgrade only	FRMONLY	350.00
Data Management Reporting Software – RS232 Interface	WINDFX	725.00

Accessory Items:	Part #	Price €
Lithium ion battery pack	BPLITE	495.00
Line power option	Y-04M	395.00
Power cable for CH-700 charger	Y-04L	15.00
Battery Charger CH-700 Dual Voltage	800208	195.00
UK power cable	192030	15.00
US line power cable	192031	15.00
Euro power cable	192032	15.00
Set of fuses	FD-1	5.00
Operators manual DFX-444	P-207-0002	25.00
Operators manual DFX-544	P-208-0002	25.00
Instrument case	195121	130.00
Replacement Transflective Color display	143222	950.00
Clear cover for display window	145013	2.00
Viewing hood for DFD Lite	145014	189.00
Printer – Citizens PN60 includes cable	NP60	495.00
Printer cable adapter for parallel printers	152121	265.00

**Note:** The DFX series flaw detectors will work with any printer that has Epson compatible graphics and a Centronics parallel connector. However, an adapter cable RS232/parallel type 152121 may be needed.

Video output cable	152119	75.00
RS232 PC cable ( 9 pin )	152120	65.00
Heads Up Display – Std video out connected to the 444 & 544	HUD-DFD	925.00

Educational Training Software ( self-paced courses – CD's ):	Part #	Price €
Ultrasonic Testing ( U/T )	UTEDU	825.00
Penetrant Testing ( PT )	PTEDU	215.00
Magnetic Testing ( MT )	MTEDU	375.00
Radiographic Testing ( RT )	RTEDU	825.00

## TRANSDUCER CABLES & CABLE ADAPTORS

<b>Single probe cable – 6' length</b>						
Type	Part #	Price		Type	Part #	Price
BNC - S'BVIS	152022	45.00		BNC – M'DOT	152052	40.00
BNC - BNC	152053	35.00		MINI LEMO – M'DOT	152102	40.00
BNC - MINI BNC	152054	60.00		LEMO 1 – LEMO 1	152074	90.00
BNC – MINI LEMO	152086	45.00		BNC – UHF	152058	90.00
LEMO 1 – MINI LEMO	152076	80.00		LEMO – UHF	152059	90.00
BNC - LEMO 1	152055	65.00		UHF – UHF	152079	90.00
LEMO 1 – S'VIS	152056	65.00		LEMO 1 – M'DOT	152057	70.00
FISCHER – M'DOT	152126	90.00		Premium Flex cable BNC-BNC		95.00

<b>Single probe cable – 6' length</b>						
Type	Part #	Price		Type	Part #	Price
BNC - S'BVIS	152023	90.00		LEMO - MINI LEMO	152008	160.00
BNC - MINI BNC	152051	120.00		BNC – M'DOT	152060	75.00
BNC - MINI LEMO	152087	90.00		MINI LEMO - M'DOT	152115	75.00
LEMO 1 – S'VIS	152061	130.00		LEMO 1 – M'DOT	152062	140.00
FISCHER – M'DOT	152131	130.00				

## TRANSDUCERS

<b>SINGLE ELEMENT CONTACT TRANSDUCERS ( SLM ) – HIGH WEAR</b>				
<b>Description:</b>	High wear contact transducers with extended stainless steel ring.			
<b>Used:</b>	Rough surfaces, Castings, Billets, and Extruded Parts.			
<b>Damping:</b>	Medium			
<b>Connectors:</b>	(B), Lemo (L) *Specify connector type after part #			
<b>Price:</b>	<b>€275.00</b>			
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>3.5 MHz</b>	<b>5.0 MHz</b>
<b>.500" DIA.</b>	SLM501	SLM5025	SLM503.5	SLM5050
<b>.750" DIA.</b>	SLM751	SLM7525	SLM753.5	SLM7550
<b>1.00" DIA.</b>	SLM101	SLM1025	SLM103.5	SLM1050
Ordering Example: SLM7525B = SLM .750 x 2.25 BNC				

<b>SINGLE ELEMENT CONTACT TRANSDUCERS ( SLF ) – MEMBRANE</b>				
<b>Description:</b>	Replaceable membrane protected contact transducers.			
<b>Used:</b>	Rough surfaces, Castings (provides better contact).			
<b>Damping:</b>	High Gain			
<b>Connectors:</b>	BNC, Microdot *Specify connector type after part #			
<b>Price:</b>	<b>€275.00</b>			
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>3.5 MHz</b>	<b>5.0 MHz</b>
<b>.500" DIA.</b>	SLF501	SLF5025	SLF503.5	SLF5050
<b>1.00" DIA.</b>	SLF101	SLF1025	SLF103.5	SLF1050
Ordering Example: SLF101 = SLF 1.00" 1.0 MHz				

<b>SINGLE ELEMENT CONTACT TRANSDUCERS ( SLH ) – HIGH DAMPED</b>				
<b>Description:</b>	High wear contact transducers with extended stainless steel housing.			
<b>Used:</b>	Rough surfaces, Castings, Billets, and Extruded Parts.			
<b>Damping:</b>	High Damped			
<b>Connectors:</b>	(B), Lemo (L) *Specify connector type after part #			
<b>Price:</b>	<b>€350.00</b>			
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>3.5 MHz</b>	<b>5.0 MHz</b>
<b>.500" DIA.</b>	SLH501	SLH5025	SLH503.5	SLH5050
<b>.750" DIA.</b>	SLH751	SLH7525	SLH753.5	SLH7550
<b>1.00" DIA.</b>	SLH101	SLH1025	SLH103.5	SLH1050
Ordering Example: SLH7525B = SLM .750 x 2.25 BNC				

<b>SINGLE ELEMENT CONTACT TRANSDUCERS ( FC ) – FINGER TIP</b>					
<b>Description:</b>	General contact style transducers with stainless steel construction. Good for near surface resolution with a 70% bandwidth.				
<b>Used:</b>	Common metals, plastics				
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after (FC)				
<b>Connectors:</b>	Microdot ( Standard Side Connect ), optional top connect (T)				
<b>Price:</b>	<b>€250.00 **€275.00</b> *Specify connector mount after part #				
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>3.5 MHz</b>	<b>5.0 MHz</b>	<b>**10.0 MHz</b>
<b>.250" DIA.</b>	—	FC2525	FC253.5	FC2550	FC2510
<b>.375" DIA.</b>	—	FC3725	FC373.5	FC3750	FC3710
<b>.500" DIA.</b>	FC501	FC5025	FC503.5	FC5050	FC5010
<b>.750" DIA.</b>	FC751	FC7525	FC753.5	FC7550	—
Ordering Example: FCR5025T = FC .500" x 2.25 MHz Resolution TOP MOUNT					

<b>SINGLE ELEMENT CONTACT TRANSDUCERS ( FCSSL ) – FINGER TIP (SLIM LINE)</b>				
<b>Description:</b>	Line high frequency general contact transducers with a stainless steel housing.			
<b>Used:</b>	Common metals, plastics			
<b>Damping:</b>	High Damped			
<b>Connectors:</b>	Microdot ( Standard Side Connect ), optional top connect (T)			
<b>Price:</b>	<b>See below</b> *Specify connector mount after part #			
<b>Element Size</b>	<b>5.0 MHz</b>	<b>10.0 MHz</b>	<b>15.0 MHz</b>	<b>20.0 MHz</b>
<b>Price</b>	€300	€325	€350	€375
<b>.125" DIA.</b>	FCSSL1250	FCSSL1210	FCSSL1215	FCSSL1220
Ordering Example: FCSSL1250M = FCSSL .125" Microdot				

<b>STANDARD SHEAR WAVE TRANSDUCERS ( SS )</b>			
<b>Description:</b>	Shear wave transducers designed to use a variety of angle beam wedges for general weld inspection & A.W.S, and constructed in a low noise plastic or stainless steel housing.		
<b>Used:</b>	General weld inspection.		
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after (SS)		
<b>Connectors:</b>	BNC (B) // Microdot (M) *Specify connector after part #		
<b>Price:</b>	<b>€250.00 **€275.00</b>		
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>
<b>.500" x .500"</b>	SS50501	SS50502	SS50505
<b>.500" x 1.00"</b>	SS50101	SS50102	SS50105
<b>.625" x .625"</b>	SS62621	SS62622	SS62625
<b>.750" x .750" **</b>	SS75751	SS75752	SS75755
Ordering Example: SSG50502 = SS HIGH GAIN 1/2 x 1/2 2.25 MHz			

<b>STANDARD WEDGES (SW)</b>			
<b>Price:</b>	<b>€35.00</b>		
<b>Angle Beam Wedges – Custom angles available on request.</b>			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.500" x .500"</b>	SW5045	SW5060	SW5070
<b>.500" x 1.00"</b>	SW5145	SW5160	SW5170
<b>.625" x .625"</b>	SW6245	SW6260	SW6270
<b>.750" x .750"</b>	SW7545	SW7560	SW7570
<b>Note:</b> An additional €10 will be charged to radius edges.			
Ordering Example: SW5045 = SW 1/2" x 1/2" 45 Degree steel			

<b>SNAIL (AWS TYPE) WEDGES</b>			
<b>Price:</b>	<b>€45.00</b>		
<b>Angle Beam Wedges</b> – Custom angles available on request.			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.625" x .625"</b>	SNW6245	SNW6260	SNW6270
<b>Note:</b> An additional €10 will be charged to radius edges.			
Ordering Example: SNW6245 = SNW 5/8" x 5/8" 45 Degree steel			

<b>MINI SHEAR WAVE TRANSDUCERS ( MS )</b>			
<b>Description:</b>	Small shear wave transducers designed for inspections that are inaccessible for larger units, curved surfaces, or for reducing the "offset". Constructed in a low noise stainless steel housing.		
<b>Used:</b>	General weld inspection ( hard to get to areas ).		
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after (MS)		
<b>Connectors:</b>	Microdot		
<b>Price:</b>	<del>€50.00</del> ** <del>€75.00</del>		
<b>Element Size</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>	<b>**10.0 MHz</b>
<b>.125" DIA.</b>	MS1225	MS1250	MS1210
<b>.250" DIA.</b>	MS2525	MS2550	MS2510
<b>.500" DIA.</b>	MS5025	MS5050	MS5010
Ordering Example: MSG2550 = MS .250" x 5.0 MHz High Gain			

<b>MINI SHEAR WAVE WEDGES (MW)</b>			
<b>Price:</b>	<b>€35.00</b>		
<b>Angle Beam Wedges</b> – Custom angles available on request.			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.125" DIA.</b>	MW1245	MW1260	MW1270
<b>.250" DIA.</b>	MW2545	MW2560	MW2570
<b>.500" DIA.</b>	MW5045	MW5060	MW5070
Ordering Example: MW2545 = QW .25" 45 Degree			

<b>QUICK CHANGE SHEAR WAVE TRANSDUCERS</b>				
<b>Description:</b>	Threaded shear wave transducers for quickly interchanging between wedges. Ideal for limited access and curved surfaces.			
<b>Used:</b>	General weld inspection			
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after part #			
<b>Connectors:</b>	Microdot			
<b>Price:</b>	<b>€250.00</b>			
<b>Element Size</b>	<b>2.25 MHz</b>	<b>3.5 MHz</b>	<b>5.0 MHz</b>	<b>10.0 MHz</b>
<b>.250" DIA.</b>	QC2525	QC2535	QC2550	QC2510
<b>.375" DIA.</b>	QC3725	QC3735	QC3750	QC3710
<b>.500" DIA.</b>	QC5025	QC5035	QC5050	QC5010
Ordering Example: QCR2510 = QC .250 x 10.0 MHz Resolution				

<b>STANDARD QUICK CHANGE WEDGES</b>			
<b>Price:</b>	<b>€35.00</b>		
<b>Quick Change Wedges – Custom angles available on request.</b>			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.250" DIA.</b>	QW2545	QW2560	QW2570
<b>.375" DIA.</b>	QW3745	QW3760	QW3770
<b>.500" DIA.</b>	QW5045	QW5060	QW5070
Ordering Example: QW2545 = QW .25" 45 Degree			

<b>DUAL SHEAR WAVE TRANSDUCERS ( CDA )</b>			
<b>Description:</b>	Designed for thin material and weld inspections that require near surface resolution. Will Detect of IGSCC (Inter Granular Stress Corrosion Cracking).		
<b>Used:</b>	Weld inspection		
<b>Damping:</b>	Medium Damped		
<b>Connectors:</b>	Microdot End (E) or Top (T) connect *Specify after part #		
<b>Price:</b>	<b>€300.00</b>		
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>
<b>.250" x .250"</b>	CDA251	CDA2525	CDA2550
<b>.250" x .375"</b>	CDA25371	CDA25372	CDA25375
Ordering Example: CDA2525-60T = CDA 1/4" x 1/4" 2.25 MHz, 60 Degree Top Connector.			

<b>CDA ANGLE OPTIONS – NOT INTERCHANGEABLE</b>			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.250" DIA.</b>	ADD 45 TO PT#	ADD 60 TO PT#	ADD 70 TO PT#
<b>.500" DIA.</b>	ADD 45 TO PT#	ADD 60 TO PT#	ADD 70 TO PT#
Ordering Example: QW2545 = QW .25" 45 Degree			

<b>MINI ANGLE BEAM POTTED</b>	
<b>Description:</b>	Mini angle beam transducers with a fixed angle. Stainless steel Housing, all angles are in steel, aluminum angle available on request.
<b>Used:</b>	Weld inspection ( tight areas )
<b>Damping:</b>	Medium Damped
<b>Connectors:</b>	Microdot Side Entry
<b>Price:</b>	<del>€250.00</del> ** <del>€275.00</del>

Element Size	2.25 MHz			5.0 MHz		
	45°	60°	70°	45°	60°	70°
<b>.187" DIA.</b>	MAP 182545	MAP 182560	MAP 182570	MAP 185045	MAP 185060	MAP 185070
<b>.250" DIA.</b>	MAP 252545	MAP 252560	MAP 252570	MAP 255045	MAP 255060	MAP 255070
<b>.375" DIA.</b>	MAP 372545	MAP 372560	MAP 372570	MAP 375045	MAP 375060	MAP 375070

Element Size	<b>**10.0 MHz</b>		
	45°	60°	70°
<b>.187" DIA.</b>	MAP 181045	MAP 181060	MAP 181070
<b>.250" DIA.</b>	MAP 251045	MAP 251060	MAP 251070
<b>.375" DIA.</b>	MAP 371045	MAP 371060	MAP 371070



<b>MINI MINIATURE ANGLE BEAM POTTED – DIM .375” L x .250” H</b>	
<b>Description:</b>	Mini miniature angle beam potted transducers with a fixed angle, are designed with stainless steel Housing for durability. Standard angles are in steel, all other non-standard angles with specific materials can be produced.
<b>Used:</b>	Weld inspection ( tight areas )
<b>Damping:</b>	Medium Damped
<b>Connectors:</b>	Microdot Side Entry
<b>Price:</b>	<b>€25.00 **€375.00</b>

Element Size	2.25 MHz			5.0 MHz		
	45°	60°	70°	45°	60°	70°
<b>.187” DIA.</b>	MMA 182545	MMA 182560	MMA 182570	MMA 185045	MMA 185060	MMA 185070
<b>.250” DIA.</b>	MMA 252545	MMA 252560	MMA 252570	MMA 255045	MMA 255060	MMA 255070
<b>.375” DIA.</b>	MMA 372545	MMA 372560	MMA 372570	MMA 375045	MMA 375060	MMA 375070

Element Size	<b>**10.0 MHz</b>		
	45°	60°	70°
<b>.187” DIA.</b>	MMA 181045	MMA 181060	MMA 181070
<b>.250” DIA.</b>	MMA 251045	MMA 251060	MMA 251070
<b>.375” DIA.</b>	MMA 371045	MMA 371060	MMA 371070

<b>IMMERSION TRANSDUCERS ( IM )</b>					
<b>Description:</b>	Designed for immersion tank or bubbler system inspections. Stainless steel housing with UHF connector. Three different lens configurations are available – Flat, Spherical focus, and Cylindrical focus.				
<b>Used:</b>	Immersion and bubbler inspections				
<b>Damping:</b>	High Gain (G), Resolution (R), and High Resolution (HR)				
<b>Connectors:</b>	UHF				
<b>Price:</b>	<b>€75.00 **€300 Add: €50.00 for focusing</b>				
<b>Note:</b> Specify damping after (IM) in part # Lens configuration, or focal length when placing order. <b>Note:</b> Higher frequencies available upon request.					
Element Size	1.0 MHz	2.25 MHz	5.0 MHz	10.0 MHz	15.0 MHz
<b>.250” DIA.</b>	—	IM2525	IM255	IM2510	IM251
<b>.375” DIA.</b>	—	IM3725	IM3750	IM3710	—
<b>.500” DIA.</b>	IM501	IM5025	IM5050	IM5010	—
<b>.750” DIA.</b>	IM751	IM7525	IM7550	IM7510	—
<b>1.00” DIA.</b>	IM101	IM1025	IM1050	—	—
Ordering Example: IMR7550 = IM .750” 5.0 MHz Resolution					

## ULTRASONIC TEST AND CALIBRATION BLOCKS

BLOCK TYPE	STEEL	7075 AL	304 SS	TITANIUM	CASE
<b>IIW TYPE 1</b> – per institute of welding (IIW), ASTM-E-164 & MIL-STD-2154	€465	€465	€785	€1395	€75
<b>Application</b> – Calibration of transverse and longitudinal wave distance setting determination of the sound beam point of incidence and exact angle of propagation. <b>Geometry</b> – 1" x 4" x 12". Contains 2" dia. hole and 4" radius. Also 1/8" x 1" radius alternate reflector 1/16" deep on echo side.					
<b>IIW V-1 (METRIC)</b> – (European version of IIW) per BS-2704	€465	€510	€860	€1555	€75
<b>IIW TYPE 2</b> – per IIW & USAFTO 33 B-1-1 (6-1-84)	€535	€535	€910	€1635	€75
<b>Application</b> – Modified version of IIW Type 1, with a 2" radius ¼" deep cut out test side, and 3 extra side drilled resolution holes.					
<b>MINI IIW</b>	€15	€15	€760	€1365	€75
<b>Application</b> – Miniature version of IIW type blocks resembling the Type 2. <b>Geometry</b> – 1" x 2" x 6". Contains 1" diameter hole, 2" radius ¼" deep cut out test side 3 side drilled resolution holes, and ¾" sq. x .100" deep cut out.					
<b>DSC</b> – per AWS & ATM-E-164	€245	€245	€425	€760	€40
<b>Application</b> – Shear wave distance and sensitivity calibration. <b>Geometry</b> – 1" thick, 4" long with 1" radius and 3" radius. Contains a 3/8" deep x 1/32" radius notch and a ½" dia. side drilled hole for 45, 60, & 70 degrees.					
<b>DS -DISTANCE &amp; SENSITIVITY</b> per ANSI / AWS	€660	€660	€1055	€1900	€100
<b>Application</b> – Distance and sensitivity. <b>Geometry</b> – 2" x 2" x 6" with a 2" wide cutout.					
<b>ANGLE BEAM (ROMPAS)</b> - per ASTM-E-164 & USAFTO 33 B-1-1 (6-1-84) - Kidney	€260	€260	€425	€765	€40
<b>Application</b> – Angle beam calibration. <b>Geometry</b> – ½" or 1" thick, 1" radius opposite 2" radius with 5/64" dia. by ¾" deep flat bottom hole (1" thick only).					
<b>ANGLE BEAM (V-2) METRIC</b> 20MM or 12.5MM & 5MM or 1.5MM dia. target hole.	€260	€260	€430	€770	€40
<b>Application</b> – Angle beam calibration. <b>Geometry</b> – European version of Angle Beam calibration block. Optional 25mm or 12.5mm versions with 5mm or 1.5mm target hole.					
<b>ANSI/AWS RESOLUTION - RC</b>	€265	€265	€450	€810	€40
<b>Application</b> – Checking resolution capabilities of angle beam transducers. Per AWS and BPR. <b>Geometry</b> – 1" x 3" x 6". Contains nine .062" dia. holes for 45, 60, and 70 degrees.					
<b>SC</b> – per AWS / ASTM-E-164	€165	€165	€310	€555	€40
<b>Application</b> – Sensitivity calibration (shear wave). <b>Geometry</b> - .905" x 1.25" x 3". Contains two .062" diameter side drilled holes.					
<b>DC</b> – per AWS & ASTM-E-164	€245	€245	€425	€760	€40
<b>Application</b> – Distance calibration (shear wave). <b>Geometry</b> – 1" radius overlying 2" radius on 180 degree half circle.					
<b>IOW BEAM PROFILE</b> – English or metric. Per BS2704 (British Standards).	€590	€590	€1005	€1800	€80
<b>Application</b> – Beam profile measurement of angle beam transducer. <b>Geometry</b> – 2" x 3" x 12". Contains two 1/16" diameter x 7/8" deep calibration holes on far side. Also contains five 1/16" diameter resolution holes drilled on 10 degree slope, far side only.					
<b>NAVSHIPS</b> – per NAVSEA T 9074-AS-GIB-010/271 formerly Navships 0900-006-3010Sec. 6	€450	€450	€780	€1400	€80

& MIL STD -271F					
<b>Application</b> – Distance correction and sensitivity levels. <b>Geometry</b> – 1 ¼" x 3" x 12". Contains seven 3/64" dia. side drilled holes at distances of 1/8" through 2 ¾".					
<b>ASME ref. block 0" - 1"</b>	€415	€415	€565	call	€90
<b>Application</b> – Angle beam calibration <b>Geometry</b> – 1" or less – ¾" x 6" x 7"					
<b>ASME ref. block 1" – 2"</b>	€665	€665	€825	call	€125
<b>Application</b> – Angle beam calibration <b>Geometry</b> – Over 1" through 2" – 1.5" x 6" x 10"					
<b>ASME ref. block 2" – 4"</b>	€1000	€1000	call	call	€275
<b>Application</b> – Angle beam calibration <b>Geometry</b> – Over 2" through 4" – 3" x 6" x 12"					

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**Prices subject to change without notice: please call for an updated price list.**