



Olympus NDT ultrasonic spotweld transducers are specifically designed to provide optimal performance for nondestructive testing of numerous types of spotwelds, including those used in automotive and industrial applications. Ultrasonic inspection of spotwelds involves the analysis of what is known as the “ringdown” of sound within the weld nugget. Unlike many other direct measurement techniques, spotweld inspection looks at the characteristics of the multiple echoes returned from sound energy ringing within the weld nugget. Echo spacing, sound attenuation, and intermediate echo detection are some of the indicators of weld quality that are analyzed by trained inspectors.

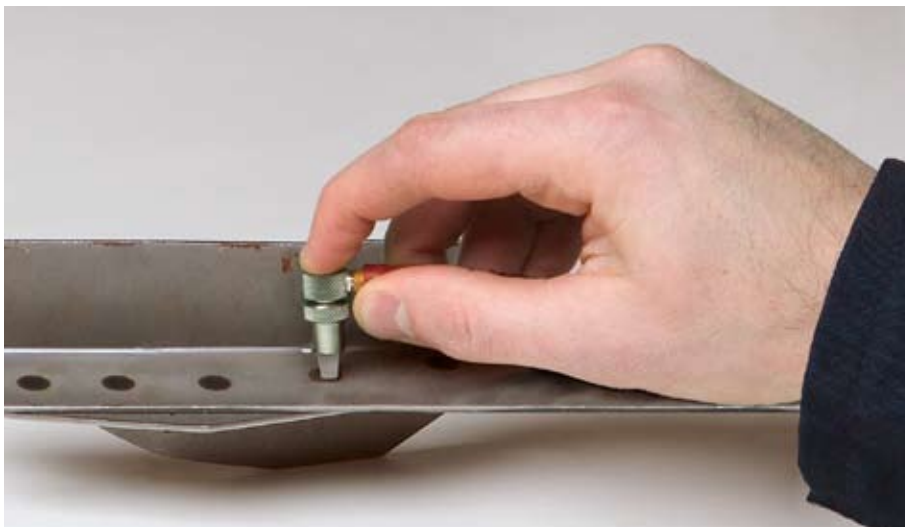


PANAMETRICS-NDT™

Our new Panametrics-NDT transducers have excellent signal-to-noise ratios due to broadband design, which is critical for distinguishing good welds from poor welds. These transducers are available in a multitude of sizes in 0.5 mm increments to ensure that the proper transducers are available for a variety of weld nugget sizes. Element sizes are engraved with both English and metric units for worldwide use. The versatile design of these spotweld transducers allows them to be used with either a soft membrane captive water column or a hard tip delay line. Panametrics-NDT transducers, delay lines, and water columns are sold separately.

HARISONIC®

Olympus NDT also offers a series of PVDF (polymer) transducers from the Harisonic line specifically for use with custom captive water column systems. These polymer transducers are very high resolution transducers due to the very broad bandwidth of the PVDF elements. These Harisonic probes are only for use with captive water columns, which come standard with the purchase of the transducer.



Ultrasonic spotweld inspection can quickly and nondestructively provide valuable information about weld quality.

PANAMETRICS-NDT™ *Select either delay line or water column.
(Transducers, delay lines, delay line retaining rings, water columns, and membranes need to be ordered separately.)*

TRANSDUCER PART NUMBER	FREQUENCY MHZ	DIAMETER (MM)	DIAMETER (INCHES)	DELAY LINE*		DELAY LINE RETAINING RING	WATER COLUMN <i>Order Membranes (below)</i>
				<i>Choose Appropriate Diameter</i>			
V2325	15	2.5	0.098	SWDL-25 (2.5 mm)	SWDL-27 (2.7 mm)	SWRR-1	DLCW-1003
V2330	15	3	0.118	SWDL-30 (3.0 mm)	SWDL-32 (3.2 mm)	SWRR-1	DLCW-1003
V2335	15	3.5	0.138	SWDL-35 (3.5 mm)	SWDL-37 (3.7 mm)	SWRR-2	DLCW-2003
V2340	15	4	0.157	SWDL-40 (4.0 mm)	SWDL-42 (4.2 mm)	SWRR-2	DLCW-2003
V2345	15	4.5	0.177	SWDL-45 (4.5 mm)	SWDL-47 (4.7 mm)	SWRR-2	DLCW-2003
V2350	15	5	0.197	SWDL-50 (5.0 mm)	SWDL-52 (5.2 mm)	SWRR-2	DLCW-2003
V2355	15	5.5	0.217	SWDL-55 (5.5 mm)	SWDL-57 (5.7 mm)	SWRR-2	DLCW-2003
V2360	15	6	0.236	SWDL-60 (6.0 mm)	SWDL-62 (6.2 mm)	SWRR-2	DLCW-2003
V2365	15	6.5	0.256	SWDL-65 (6.5 mm)	SWDL-67 (6.7 mm)	SWRR-3	DLCW-3003
V2380	15	8	0.315	SWDL-80 (8.0 mm)	SWDL-82 (8.2 mm)	SWRR-3	DLCW-3003
V2425	20	2.5	0.098	SWDL-25 (2.5 mm)	SWDL-27 (2.7 mm)	SWRR-1	DLCW-1003
V2430	20	3	0.118	SWDL-30 (3.0 mm)	SWDL-32 (3.2 mm)	SWRR-1	DLCW-1003
V2435	20	3.5	0.138	SWDL-35 (3.5 mm)	SWDL-37 (3.7 mm)	SWRR-2	DLCW-2003
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Captive Water Column Membranes *(Includes O-Rings)*

fits DLCW-1003	
PART NUMBER	DESC. (QTY.)
DLCW-1003-MK25	25 Std.
DLCW-1003-MK50	50 Std.
DLCW-1003-MKX25	25 Hvy. Duty
DLCW-1003-MKX50	50 Hvy. Duty

fits DLCW-2003	
PART NUMBER	DESC. (QTY.)
DLCW-2003-MK25	25 Std.
DLCW-2003-MK50	50 Std.
DLCW-2003-MKX25	25 Hvy. Duty
DLCW-2003-MKX50	50 Hvy. Duty

fits DLCW-3003	
PART NUMBER	DESC. (QTY.)
DLCW-3003-MK25	25 Std.
DLCW-3003-MK50	50 Std.
DLCW-3003-MKX25	25 Hvy. Duty
DLCW-3003-MKX50	50 Hvy. Duty



HARISONIC® *(Purchase of transducer includes water column, one O-ring, and one membrane. Purchase of additional membranes is recommended.)*

PVDF WATER COLUMN TRANSDUCERS		
PART NUMBER	FREQUENCY MHz	SIZE (MM)
HPF-0315	20	3.15
HPF-0360	20	3.6
HPF-0400	20	4
HPF-0450	20	4.5
HPF-0500	20	5
HPF-0560	20	5.6
HPD-0630	20	6.3

	PVDF WATER COLUMN	O-RINGS	MEMBRANES		
COMPATIBLE WITH TRANSDUCERS	PART NUMBER	PART NUMBER	DESC. (QTY.)	PART NUMBER	DESC. (QTY.)
3.15 to 4.5 mm	HAX-3131	HAX-3134	10	HAX-3140	10
		HAX-3135	25	HAX-1991	25
5 to 5.6 mm	HAX-3132	HAX-3136	10	HAX-3142	10
		HAX-3137	25	HAX-2002	25
6.3 mm	HAX-3143	HAX-3138	10	HAX-3140	10
		HAX-3139	25	HAX-3103	25



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