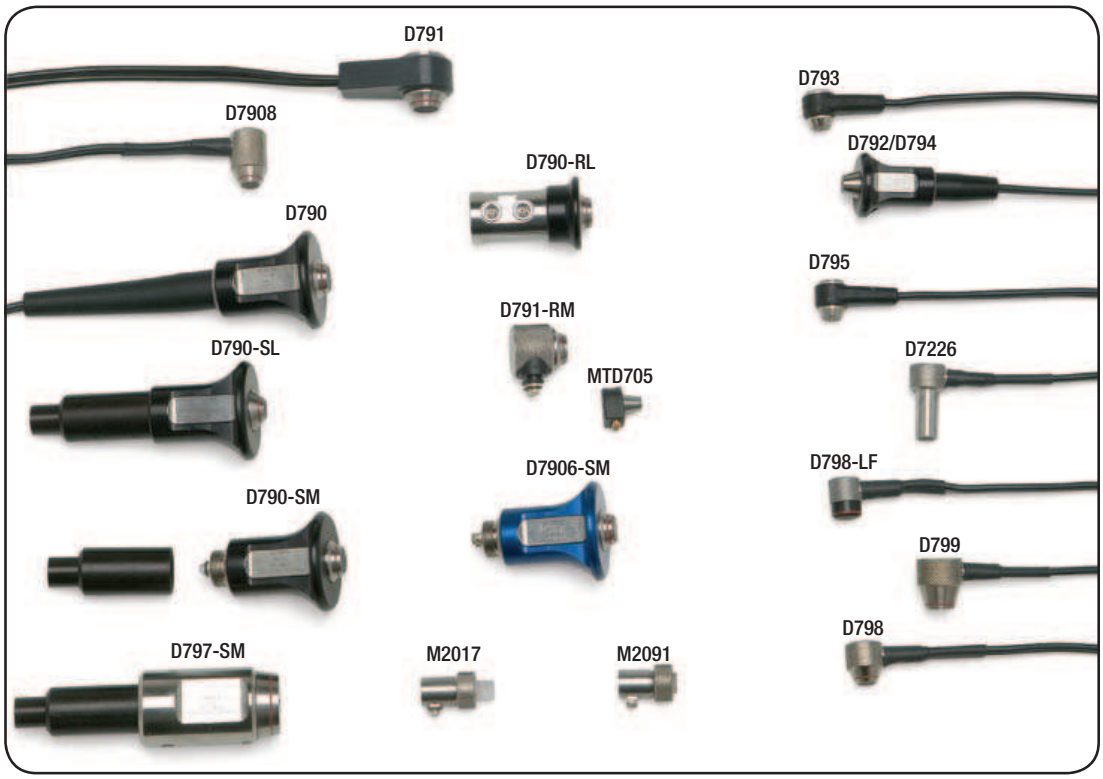
Dual Element Transducers for Thickness Gages

Olympus NDT offers a complete line of dual element and single element transducers for use with its corrosion thickness gages. Most of these transducers feature Automatic Probe Recognition for maximum gage performance for each transducer. These transducers are available in an assortment of frequencies, sizes, and temperature capabilities to provide an off-the-shelf solution to most corrosion applications. Note: TP103 Certification is available at an additional charge by request.



Gage Dual Transducers

Transducer Part Number	Frequency	Tip Diameter		Connector Type	Connector Location	Range in Steel		Temperature Range		Wand	Holder (w/wand)
	MHz	inches	mm			inches	mm	°F	°C		
D790	5.0	0.434	11	Potted	Straight	0.040 - 20	1.0 - 508	-5 to 932	-20 to 500	F152	F152A
D790-SM	5.0	0.434	11	Microdot	Straight	0.040 - 20	1.0 - 508	-5 to 932	-20 to 500	F152	F152A
D790-SL	5.0	0.434	11	LEMO 00	Straight	0.040 - 20	1.0 - 508	-5 to 932	-20 to 500	F152	F152A
D790-RL	5.0	0.434	11	LEMO 00	Rt Angle	0.040 - 20	1.0 - 508	-5 to 932	-20 to 500	—	—
D791	5.0	0.434	11	Potted	Rt Angle	0.040 - 20	1.0 - 508	-5 to 932	-20 to 500	F153	—
D791-RM	5.0	0.434	11	Microdot	Rt Angle	0.040 - 20	1.0 - 508	-5 to 752	-20 to 400	—	—
D792	10	0.283	7.2	Potted	Straight	0.020 - 1	0.5 - 25	32 to 122	0 to 50	F150	F150A
D793	10	0.283	7.2	Potted	Rt Angle	0.020 - 1	0.5 - 25	32 to 122	0 to 50	F151	—
D794	5.0	0.283	7.2	Potted	Straight	0.030 - 2	0.75 - 50	32 to 122	0 to 50	F150	F150A
D795	5.0	0.283	7.2	Potted	Rt Angle	0.030 - 2	0.75 - 50	32 to 122	0 to 50	F151	—
D797	2.0	0.900	22.9	Potted	Rt Angle	0.150 - 25	3.8 - 635	-5 to 752	-20 to 400	—	—
D797-SM	2.0	0.900	22.9	Microdot	Straight	0.150 - 25	3.8 - 635	-5 to 752	-20 to 400	—	—
D7226	7.5	0.350	8.9	Potted	Rt Angle	0.028 - 4	0.71 - 100	-5 to 300	-20 to 150	—	—
D798-LF	7.5	0.350	8.9	Potted	Rt Angle	0.028 - 4	0.71 - 100	-5 to 300	-20 to 150	—	—
D798	7.5	0.283	7.2	Potted	Rt Angle	0.028 - 4	0.71 - 100	-5 to 300	-20 to 150	—	—
D798-SM	7.5	0.283	7.2	Microdot	Straight	0.028 - 4	0.71 - 100	-5 to 300	-20 to 150	—	—
D799	5.0	0.434	11	Potted	Rt Angle	0.040 - 20	1.0 - 508	-5 to 300	-20 to 150	—	—
MTD705	5.0	0.200	5.1	Lepra/Con	Rt Angle	0.040 - 0.75	1.0 - 19	32 to 122	0 to 50	—	—

Other Thickness Gage Transducers

- For use with 37DL PLUS and 38DL PLUS

Transducer Part Number	Frequency	Tip Diameter		Transducer Type	Connector Type	Connector Location	Range in Steel		Temperature Range		Holder
	MHz	inches	mm				inches	mm	°F	°C	
V260-SM	15	0.080	2	Sonopen®	Microdot	Straight	0.02 - 0.400	0.5 - 10	32 to 122	0 to 50	SLH-V260-SM
V260-RM	15	0.080	2	Sonopen	Microdot	Right Angle	0.02 - 0.400	0.5 - 10	32 to 122	0 to 50	—
V260-45	15	0.080	2	Sonopen	Microdot	45˚ Handle	0.02 - 0.400	0.5 - 10	32 to 122	0 to 50	—
D7906-SM*	5.0	0.434	11	Thru-Coat Dual	Microdot	Straight	0.040 - 2.0	1.0 - 50	32 to 122	0 to 50	F152 / F152A
D7906-RM*	5.0	0.434	11	Thru-Coat Dual	Microdot	Right Angle	0.040 - 2.0	1.0 - 50	32 to 122	0 to 50	F152 / F152A
D7908*	7.5	0.283	7.2	Thru-Coat Dual	Potted	Potted	0.040 - 1.5	0.71 - 37	32 to 122	0 to 50	—
M2017	20	0.250	6.35	Internal Oxide Scale	Microdot	Right Angle	Steel: 0.020 - 0.50 Oxide: 0.010 - 0.050	Steel: 0.5 - 12 Oxide: 0.25 - 1.25	32 to 122	0 to 50	2127
M2091	20	0.250	6.35	Replaceable Delay Line Shear Wave	Microdot	Right Angle	Steel: 0.020 - 0.50 Oxide: 0.006 - 0.050	Steel: 0.5 - 12 Oxide: 0.150 - 1.25	32 to 122	0 to 50	2127
E110-SB†	—	1.25	28.5	EMAT	BNC	Straight	0.080 - 5	2.0 - 125	32 to 176	0 to 80	—

* Compatible with MG2-XT and MG2-DL

† Adaptor required for E110 (part number 1/2XA/E110).

Electromagnetic Acoustic Transducer (EMAT)

Electromagnetic Acoustic Transducers are single element transducers that employ a magnetostrictive effect to transmit and receive ultrasonic waves. Part number E110-SB.

Advantages

- No need to remove external scale
- No couplant required
- Use in contact with or at a small distance from surface

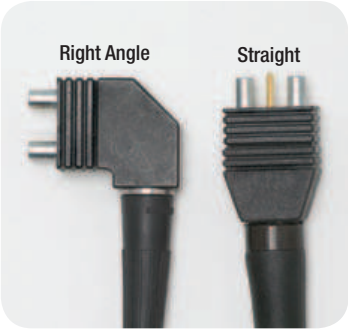
Applications

- External oxide scaled surfaces
- Use with 37DL PLUS** or 38DL PLUS** thickness gages, EPOCH LT**, EPOCH 4 PLUS, EPOCH XT, EPOCH LTC, EPOCH 600 or EPOCH 1000 flaw detectors

*Temperature specification are 32 °F to 140 °F (0 °C to 60 °C) for continuous contact and 176 °F (80 °C) for intermittent contact, defined as 10 seconds in contact with part and 60 seconds of cooling time.
**Adaptor required. Please order separately. Part number 1/2XA/E110

Gage Dual Cables

Cable Part Number	For Use With	Length		Cable Type	Plug Type
		feet	meters		
LCMD-316-5B	D790-SM	5.0	1.5	Standard	Straight
RLCMD-316-5B	D790-SM	5.0	1.5	Standard	Rt Angle
LCMD-178-5B SSA	D790-SM	5.0	1.5	Armored	Straight
RLCMD-178-5B SSA	D790-SM	5.0	1.5	Armored	Rt Angle
LCLD-316-5G	D790-RL	5.0	1.5	Standard	Straight
LCLD-316-5H	D790-SL	5.0	1.5	Standard	Straight
LCMD-316-5C	D791-RM	5.0	1.5	Standard	Straight
LCMD-316-5D	D797-SM	5.0	1.5	Standard	Straight
LCMD-316-5J	D798-SM	5.0	1.5	Standard	Straight
LCMD-316-5L	D7906-SM	5.0	1.5	Standard	Straight
LCMD-316-5N	D7906-RM	5.0	1.5	Standard	Straight
LCLPD-78-5	MTD705	5.0	1.5	Standard	Straight
LCM-74-4	V260-SM, V260-RM, V260-45, M2017	4.0	1.2	Standard	—
LCM-188-4 SSA	V260-SM, V260-RM, V260-45, M2017	4.0	1.2	Armored	—
LCB-74-4	E110-SB	4.0	1.2	Standard	—



The above picture illustrates the Panametrics RLCMD (Right Angle) and LCMD (Straight) probe recognition plugs that are compatible only with Panametrics brand thickness gages. The Probe Recognition technology automatically notifies the gage of the frequency and probe type being used. No information needs to be entered by the inspector.