

Simrad ES38DD

Split-beam echo sounder transducer

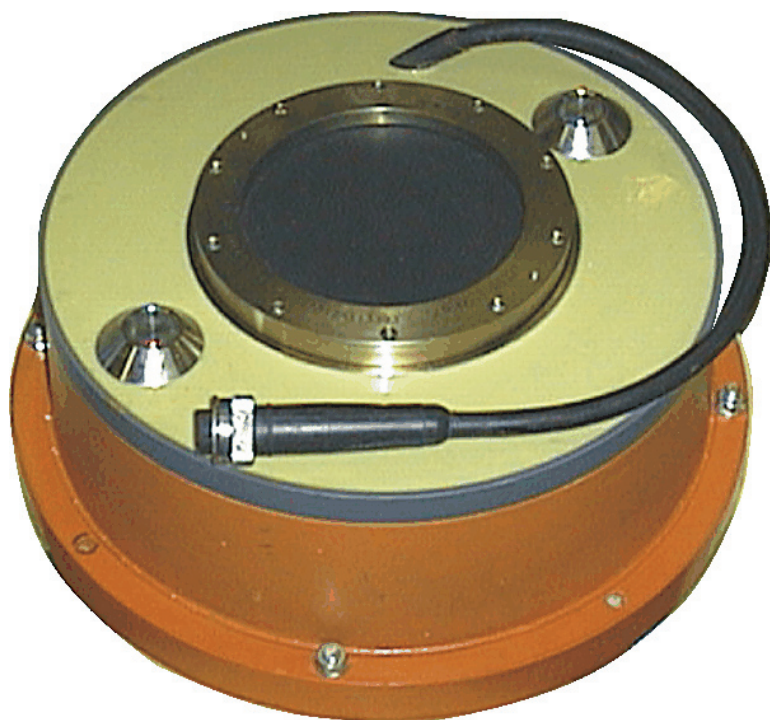
Introduction

The Simrad ES38DD is a split-beam echo sounder transducer incorporating 88 Tonpilz elements distributed over four quadrants. The transducer is filled with liquid, and may thus be used at water depths down to 1500 meters.

The Tonpilz elements used in the ES38DD are identical to those found in the ES38B transducer, and therefore generate similar data with the exception of higher back radiation and lower efficiency.

Order number

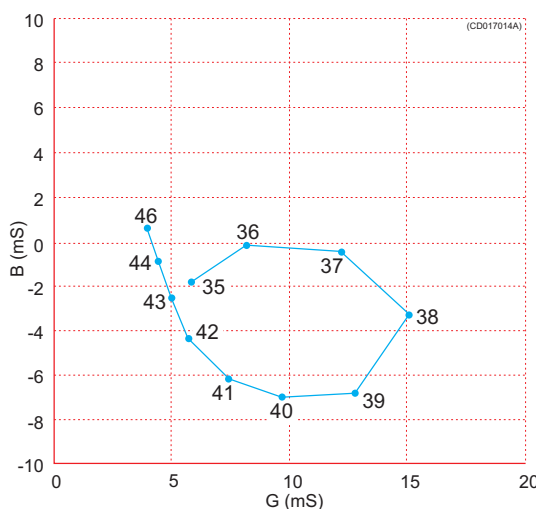
KSV-113392



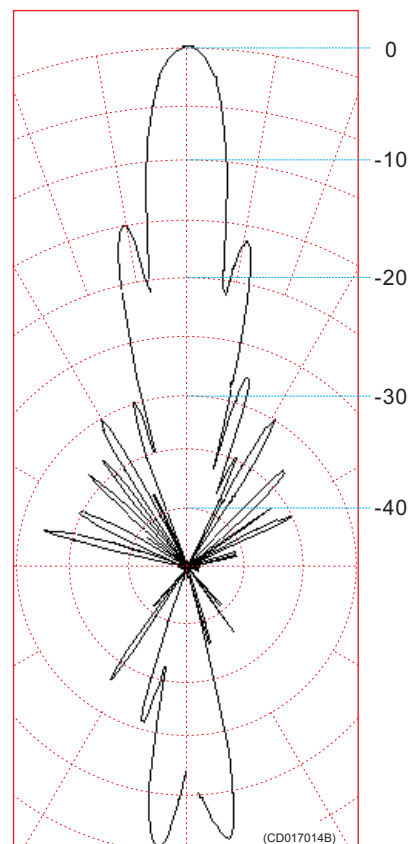
Specifications

The specifications provided are valid when all four quadrants are connected in parallel.

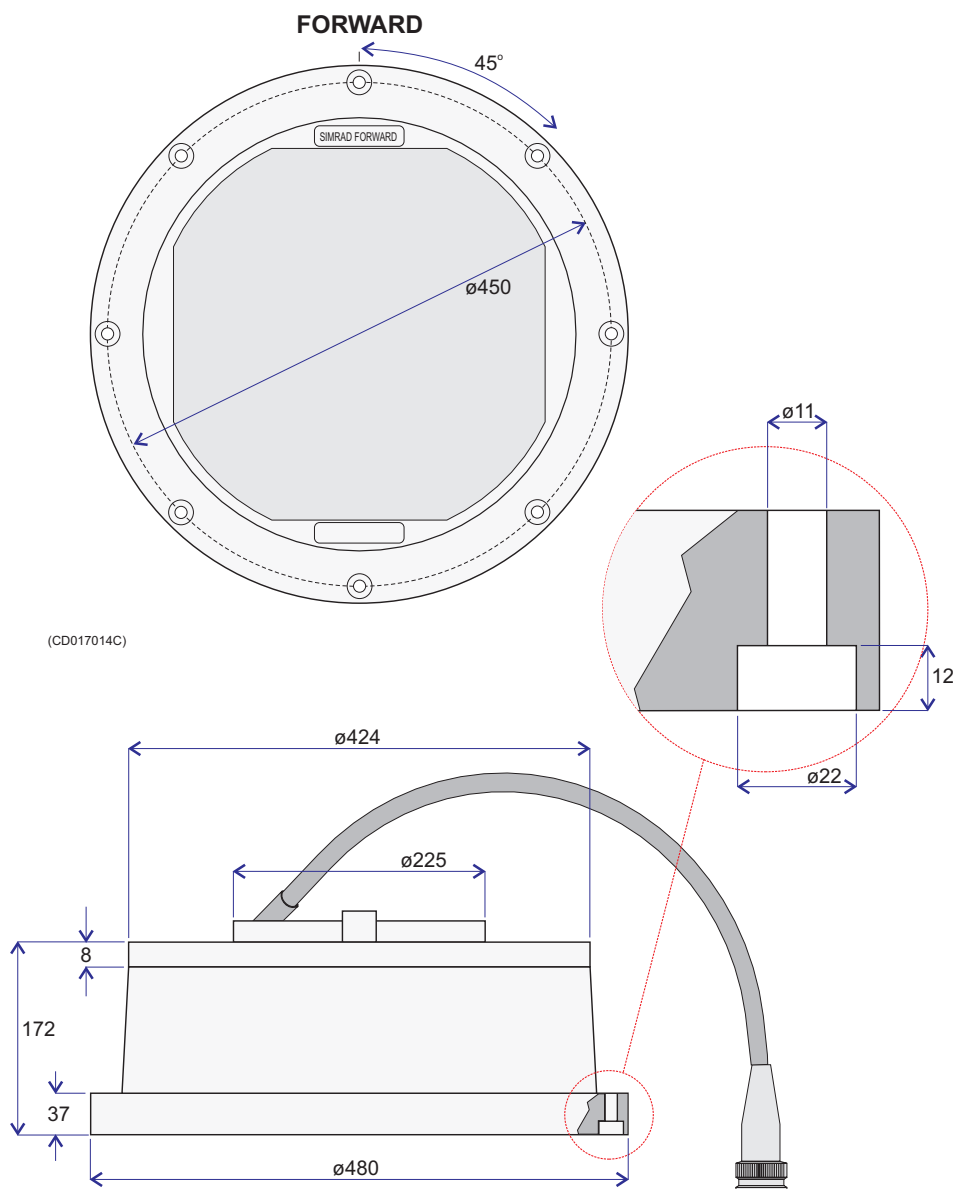
- Resonant frequency: 38 kHz
- Circular beamwidth: 7 deg
- Directivity D: 630
- DI = 10 log D: 28 dB
- Equivalent two-way beam angle Ψ : 0.009
- 10 log Ψ : -20.5 dB
- Side lobes: Less than -14 dB
- Back radiation: Less than -14 dB
- Angle sensitivity: 21.9
- Nominal impedance: 15 ohm
- Max. variation in $|Z|$: 11 to 20 ohm
- Max. variation in phase angle: ± 30 deg
- Transmitting response: 183 dB re 1 μ Pa per V
- Receiving sensitivity, open circuit: -179 dB re 1V per μ Pa
- Electro-acoustic efficiency: 0.40
- Max. pulse power input: 4000 W



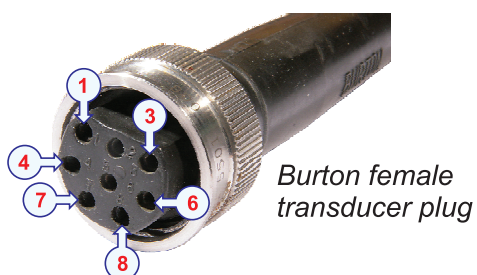
- Max. continuous input: 40 W
- Max. transducer depth: 1500 m
- Cable length, four pairs: 1 m
- Connector: 8-pin Burton female (5501-2008)
- Cable diameter: 11 mm
- Weight: 58 kg
- Storage temperature: -20° to 70°C



*ES38DD Outline dimensions
(Note that the drawing
is not to scale.)*

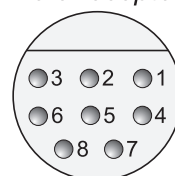


ES38DD Connections



Pin 1	+	Q1	Aft starboard
Pin 4	-		
Pin 2	+	Q2	Aft port
Pin 5	-		
Pin 3	+	Q3	Fore port
Pin 6	-		
Pin 7	+	Q4	Fore starboard
Pin 8	-		

Male receptor



(CD017014D)

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Simrad

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