

Simrad ES38B

38 kHz high power split-beam transducer

Introduction

The ES 38B is a split-beam transducer incorporating 88 piezo-ceramic elements distributed over four quadrants.

Order numbers

Transducer: KSV-074531

Support beam: 099-206575(*)

Mounting ring: 499-074076(*)

(*) These items must be ordered separately.

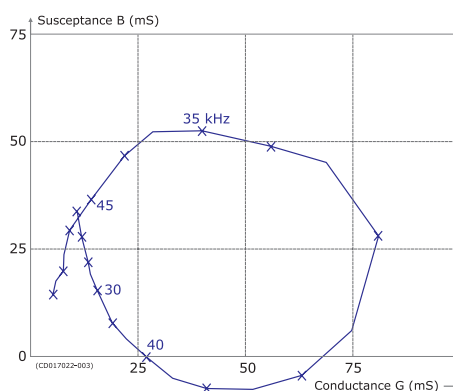


Specifications

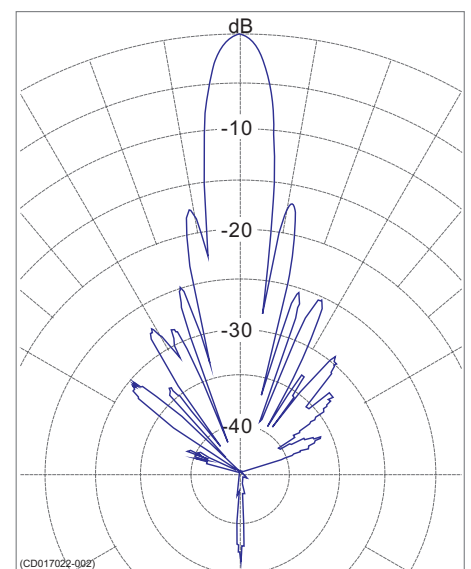
The following specifications are valid when all four quadrants are wired in parallel. Note that the specifications may be altered without prior notice.

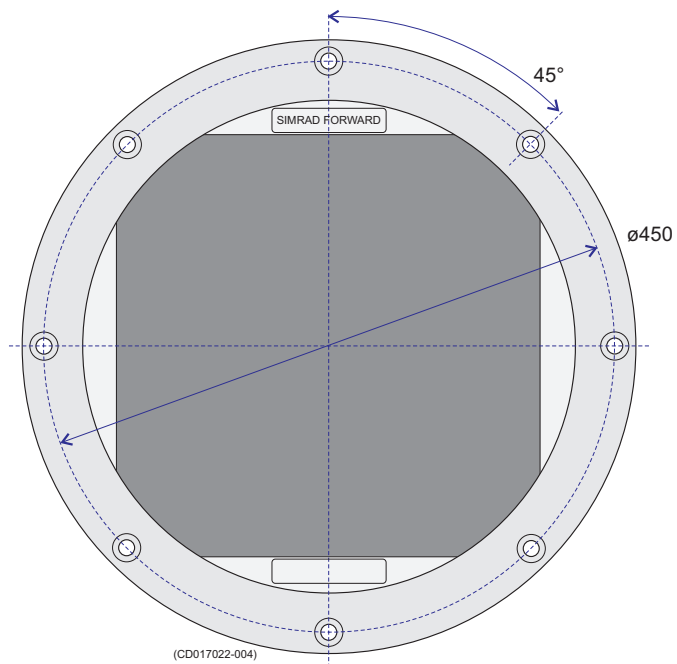
- Resonant frequency: 38 kHz
- Circular beamwidth: $7 \pm 1^\circ$
- Directivity: 28.0 ± 1 dB
- Equivalent two-way beam angle: -20.5 ± 1 dB
- Side lobes: ≤ -15 dB
- Back radiation: ≤ -35 dB
- Nominal impedance: 19Ω (Each quadrant: 75Ω)
- Transmitting response: 183 dB re $1\mu\text{Pa}$ per V
- Receiving sensitivity, open circuit: -177 dB re 1V per μPa
- Electroacoustic efficiency: 50%
- Max. input power: 4000 W
- Max. continuous power: 40 W¹
- Max. transducer depth: 50 m
- Cable length: 20 m
- Cable diameter: 17,5 mm
- Weight without cable: 40 kg
- Storage temperature: -40 to $+55^\circ\text{C}$

¹ The ping rate (pings per second) multiplied with the pulse duration (in seconds), and then multiplied with the power output, must be less than 40 W.



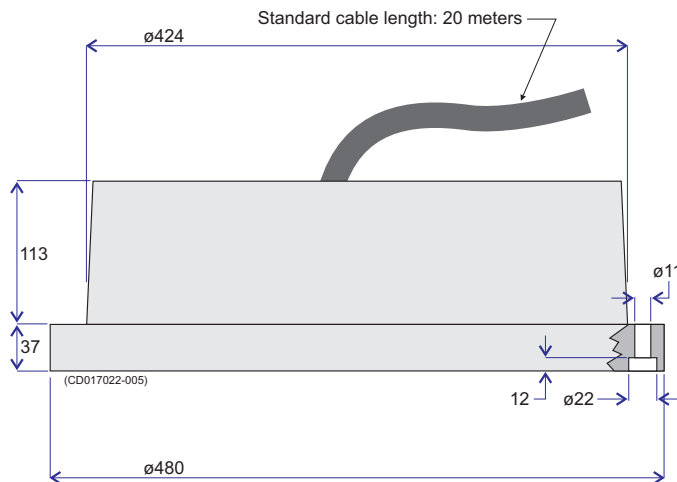
Admittance





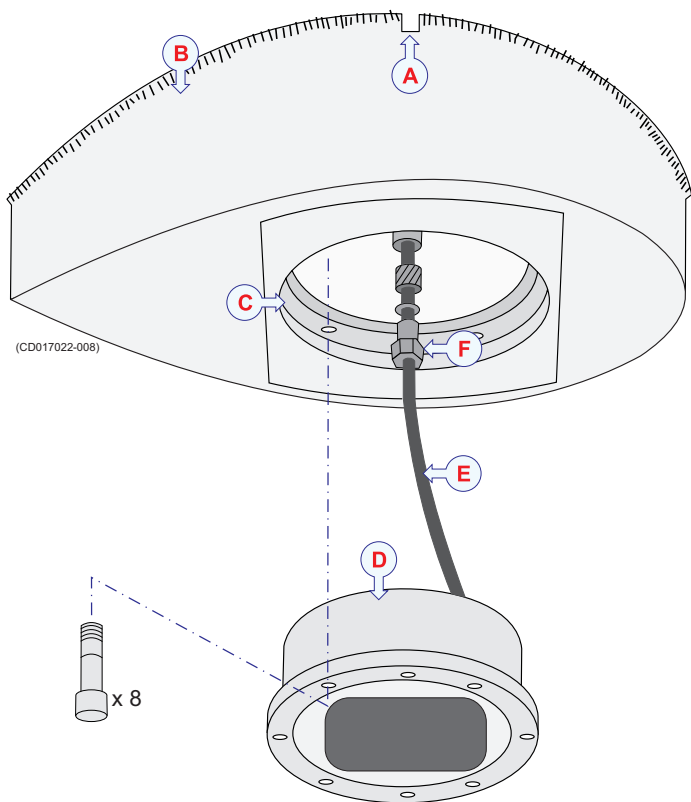
Outline dimensions

All measurements in mm.

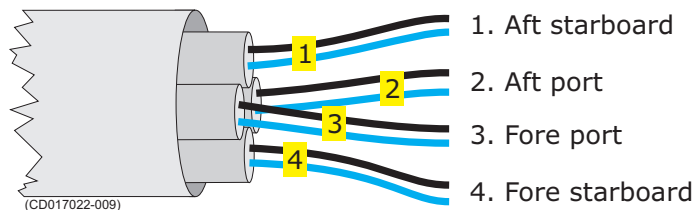


Installation

- A) Air outlet
- B) Steel blister
- C) Steel plate with mounting ring (may be supplied by Simrad)
- D) Transducer
- E) Transducer cable
- F) Part of cable gland



Cable termination



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