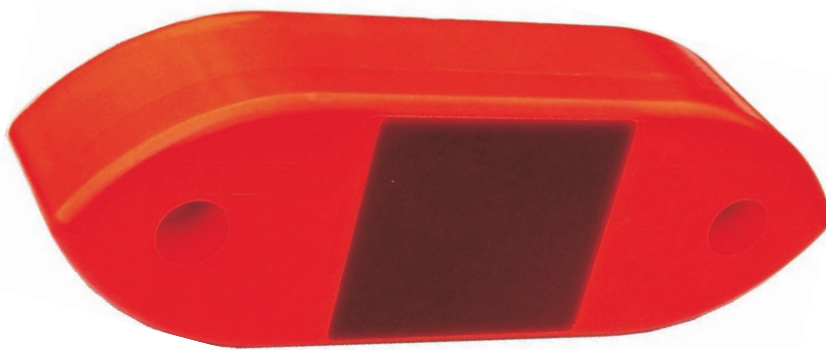


70 kHz Split-beam transducer



Introduction

The ES70-11 is a split-beam transducer in a streamlined housing. It can be mounted outside the vessel hull or on a towed foil. The transducer has 36 piezoceramic elements arranged in four quadrants. It can also be used as a single-beam transducer by connecting the four quadrants two and two, first in parallel and then in series. The specifications below are valid when wired as a single-beam unit.

Order number

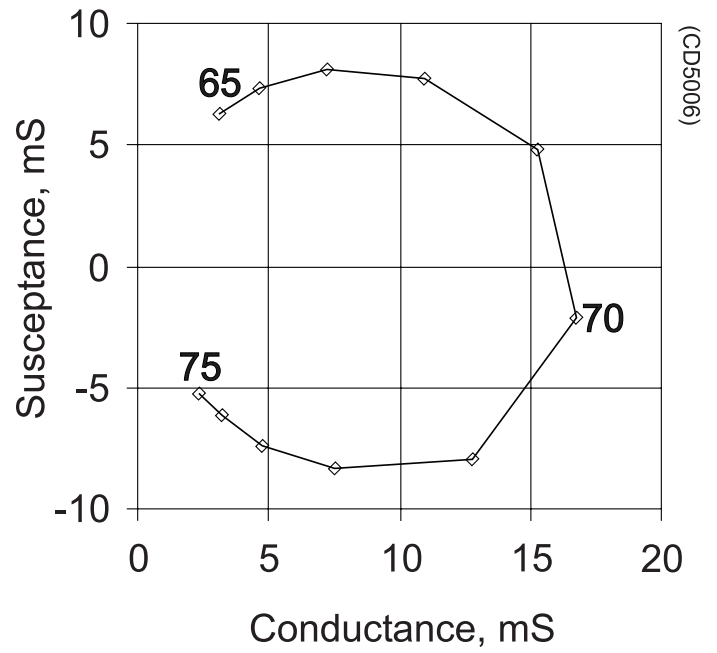
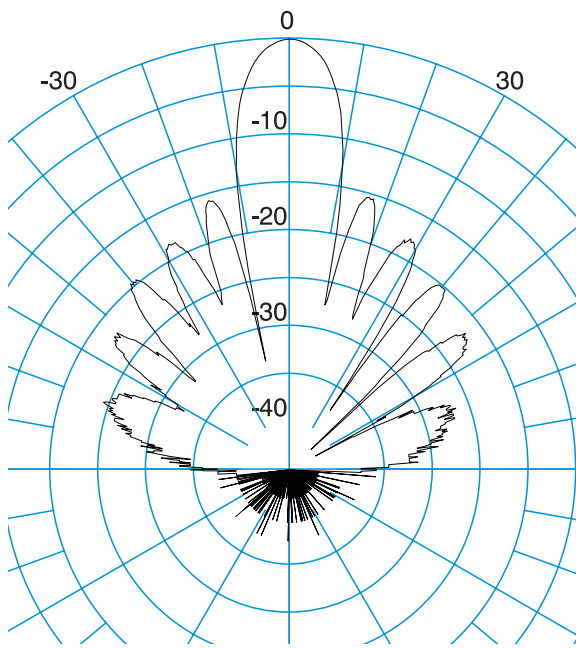
KSV-110280

Technical specifications

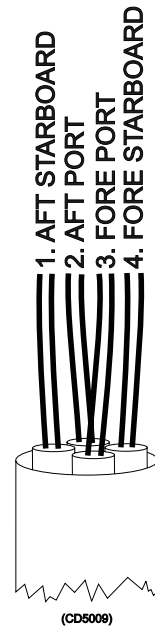
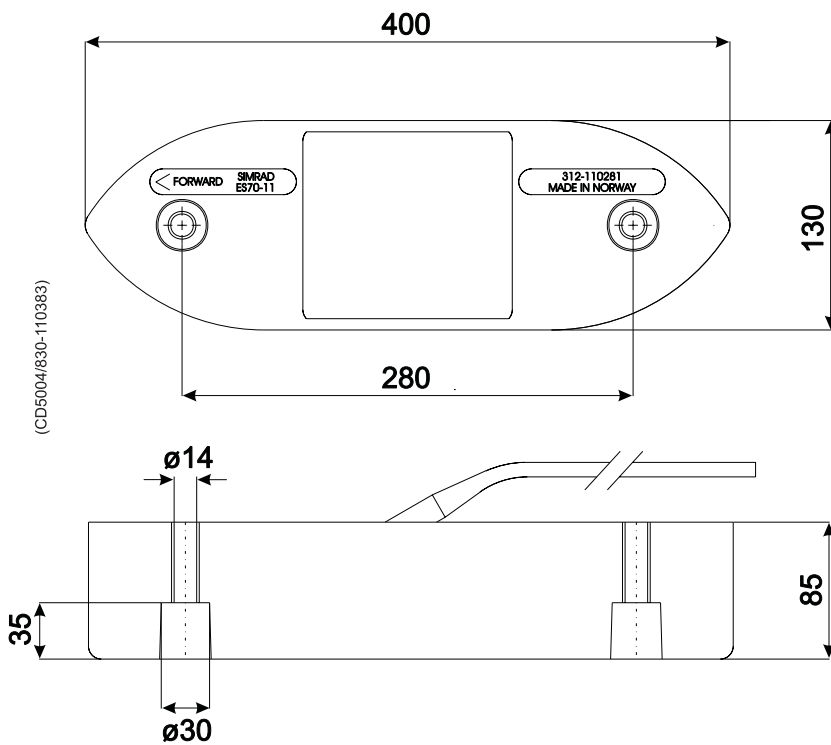
Resonant frequency 70 kHz
Beamwidth, circular 11 deg \pm 1
Directivity:
D 250 \pm 20%
DI=10logD 24 \pm 1 dB
Equivalent two-way beam angle:
 Ψ 0.022 \pm 20% steradain
10 log Ψ -16.5 \pm 1 dB
Side lobes less than -15 dB
Back radiation less than -30 dB
Angle sensitivity:
Phase angle/angle to target 13.7
Impedance:
Nominal 60 ohms
Max. variation in |Z| 45 - 80 ohms

Max variation in phase angle \pm 30 deg
Transmitting response 175 dB \pm 2
re 1 μ Pa per V
Receiving sensitivity, open circuit -181 dB \pm 2
re 1 V per μ Pa
Electroacoustic efficiency 0.50 \pm 0.10
Maximum pulse power input 800 W
Maximum continuous power input 40 W
Maximum transducer depth 150 m
Cable length 20 m
Cable diameter 10.6 \pm 0.5 mm
Weight without cable in water 8 kg
Weight without cable in air 12 kg
Storage temperature -20 to 70 $^{\circ}$ C

Data



Installation



Junction box and additional cable can be supplied by Simrad

Manufacturer:

Simrad AS
 Strandpromenaden 50
 P.O.Box 111
 N-3191 Horten
 Telephone: +47 33 03 40 00