

# 120 kHz Split-beam transducer



## Introduction

The ES 120-7G is a split-beam transducer incorporating 76 piezo-ceramic elements arranged in four quadrants. Its compact housing is convenient for use with portable echo sounders. The specifications below are valid when all four quadrants are connected in parallel.

## Order number

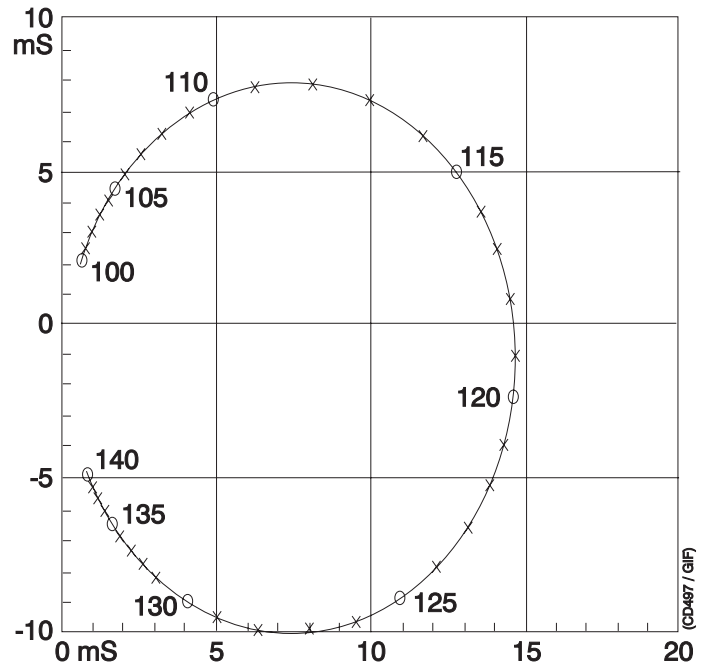
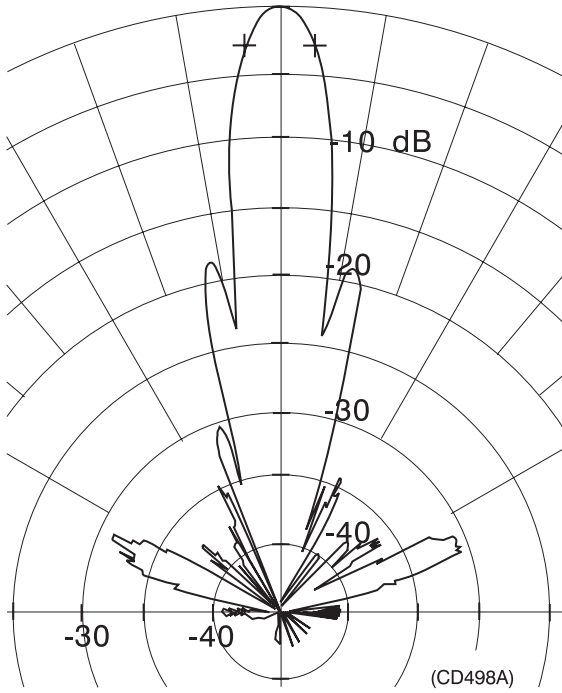
KSV-112101

## Technical specifications

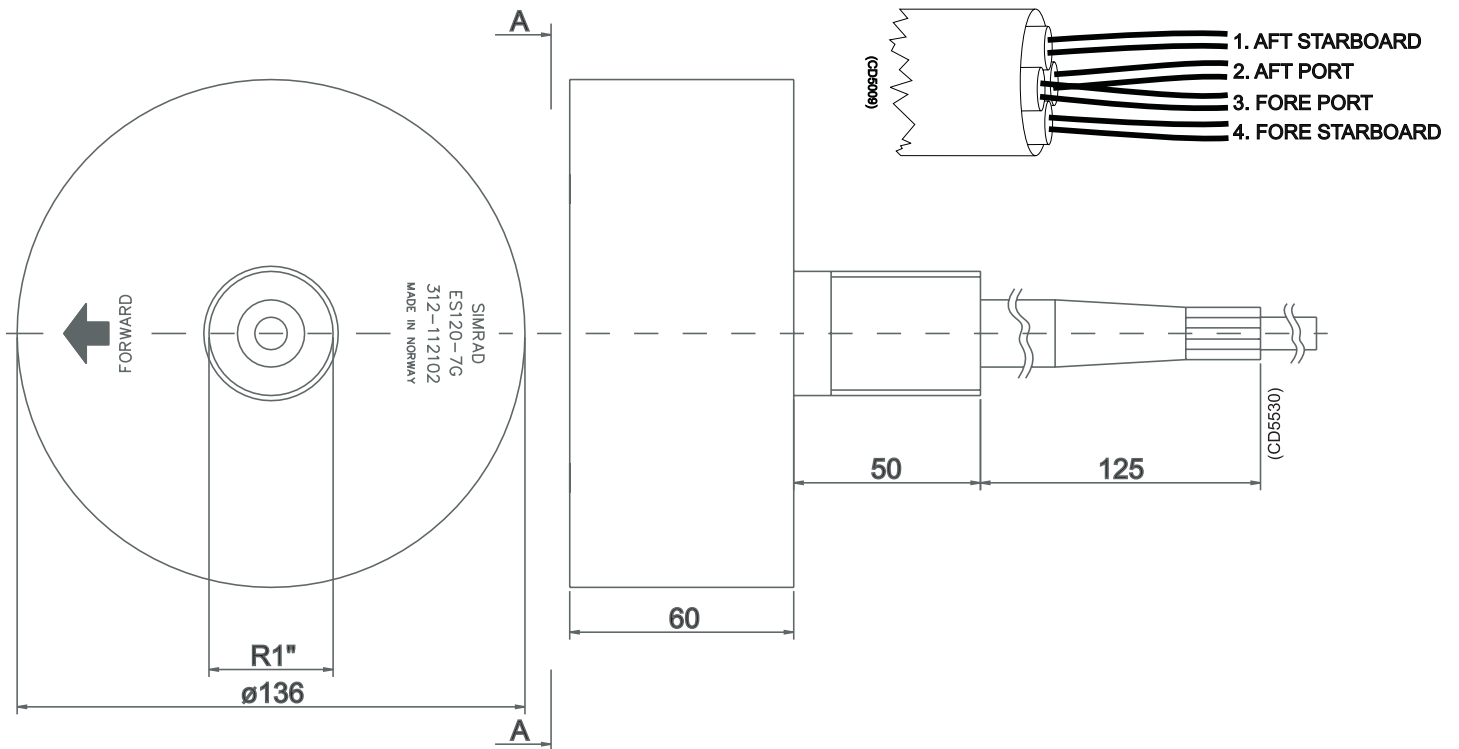
Resonant frequency .....	120 kHz
Beamwidth, circular .....	7 deg ±1
Directivity:	
D .....	650 ±20%
DI=10logD .....	28 ±1 dB
Equivalent two-way beam angle:	
Ψ .....	0.009 ± 20% steradain
10 logΨ .....	-20.5 ±1 dB
Side lobes .....	less than -15 dB
Back radiation .....	less than -30 dB
Angle sensitivity:	
Phase angle/angle to target .....	±21
Impedance:	
Nominal .....	5 ohms
Max. variation in  Z  .....	11 - 20 ohms
Max variation in phase angle .....	±30 deg
Transmitting response .....	185.0 dB ±2
	re 1μPa per V

Receiving sensitivity, open circuit .....	-186.5 dB ±2
	re 1V per μPa
Electroacoustic efficiency .....	0.70 ±0.20
Maximum pulse power input .....	1000 W
Maximum continuous power input .....	10 W
Maximum transducer depth .....	150 m
Cable length .....	20 m
Cable diameter .....	10.6 ±0.50 mm
Weight without cable .....	2 kg
Storage temperature .....	-20 to 70 °C

## Data



## Installation



### Manufacturer:

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