

120 kHz Split-beam transducer



Introduction

The ES 120-7 is a split-beam transducer with 76 piezo-ceramic elements arranged in four quadrants. The following specifications are valid when all four quadrants are connected in parallel.

Order number

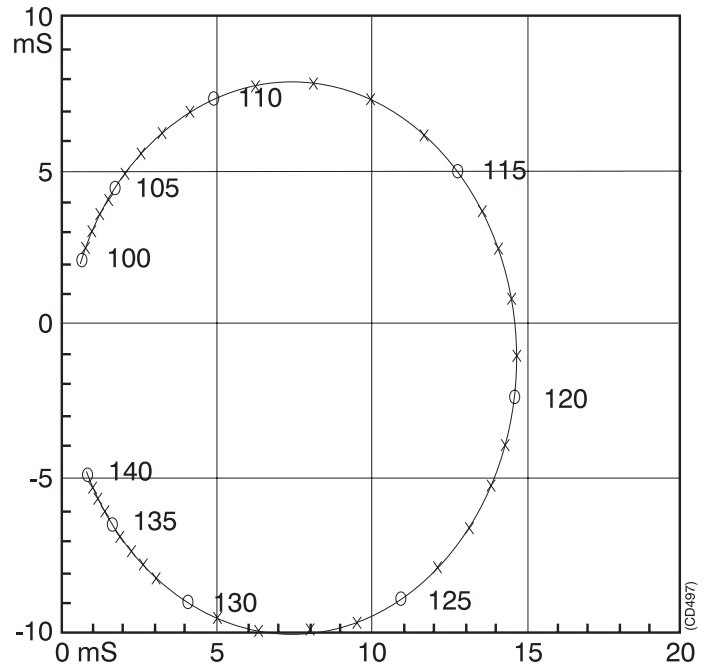
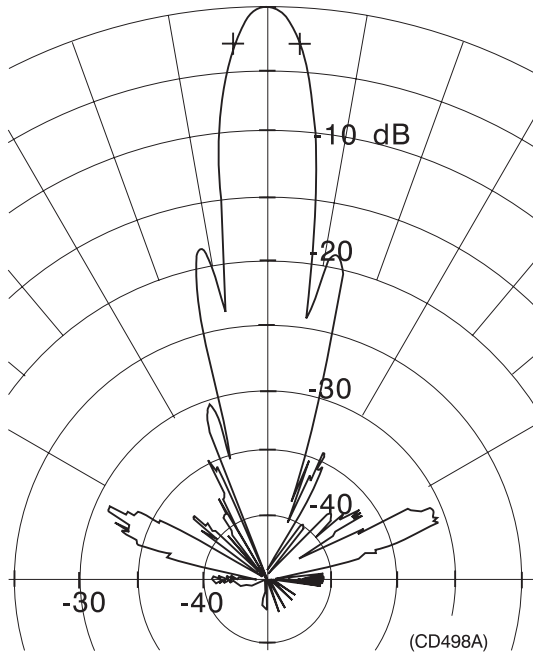
KSV-088277

Technical specifications

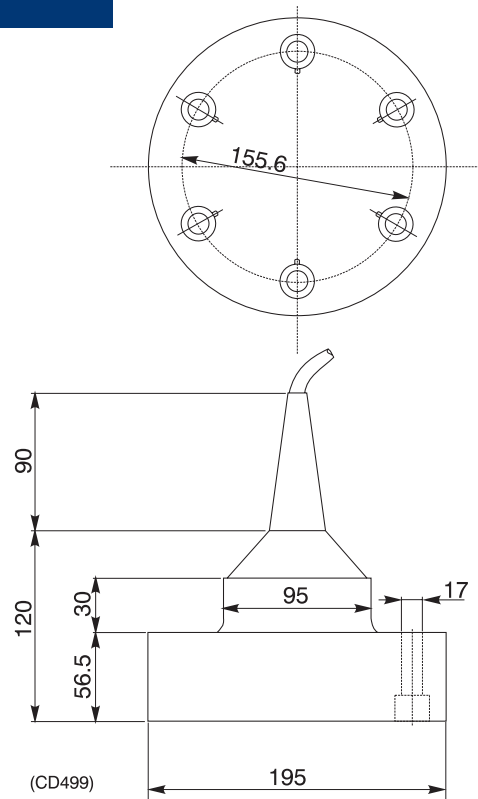
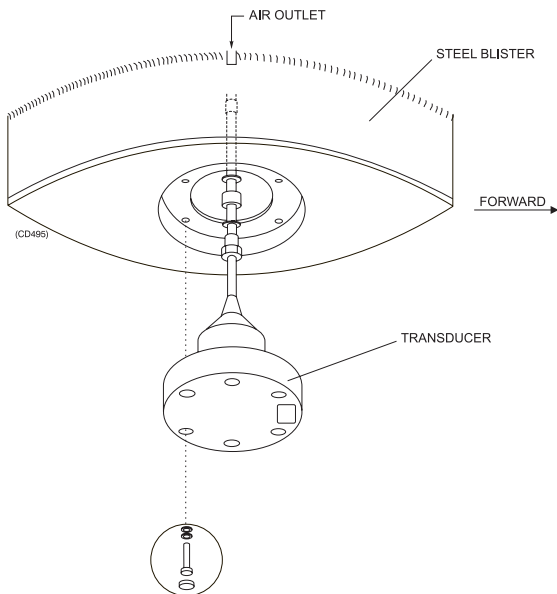
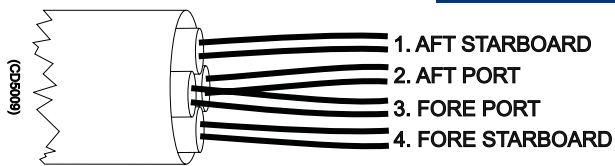
Resonant frequency.....	120 kHz
Beamwidth, circular.....	7 deg ±1
Directivity:	
D.....	650 ±20%
DI=10logD.....	28 ±1 dB
Equivalent two-way beam angle:	
Ψ.....	0.009 ± 20% steradain
10 logΨ.....	-20.5 ±1 dB
Side lobes.....	less than -15 dB
Back radiation.....	less than -35 dB
Angle sensitivity:	
Phase angle/angle to target.....	21
Impedance:	
Nominal.....	15 ohms
Max. variation in Z	11 - 20 ohms
Max variation in phase angle.....	±30 deg
Transmitting response.....	185.5 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.....	18 mm
Weight without cable.....	5 kg
Storage temperature.....	-20 to 70 °C

Data



Installation



Manufacturer:

Simrad AS

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