

# Simrad ES333-7CD

## Split beam echo sounder transducer

### Introduction

The Simrad ES333-7CD is a split-beam composite transducer with a large bandwidth. This provides a fine range resolution, which is important for single fish detection and target strength measurement. The transducer has four quadrants. The ES333-7CD has been design to withstand a large water pressure, it is therefore well suited for towed bodies.

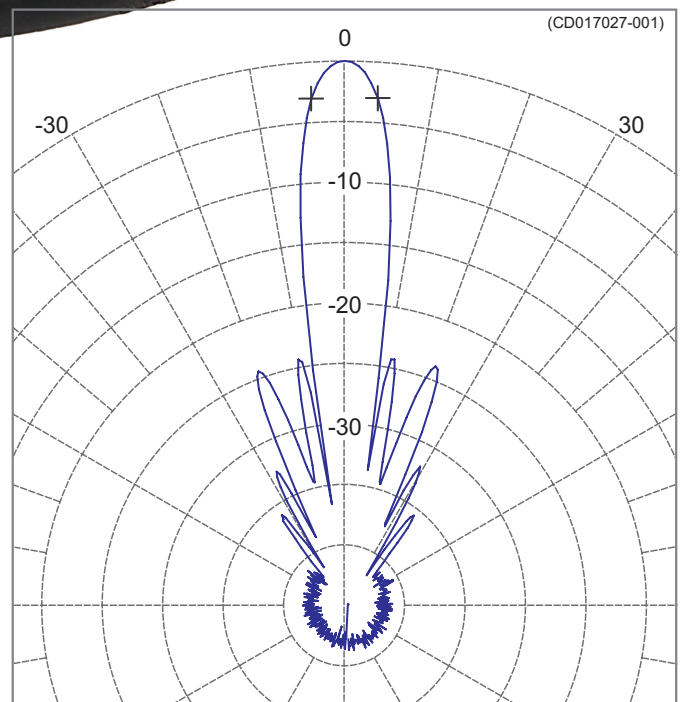
### Order number

312902

### Technical specifications

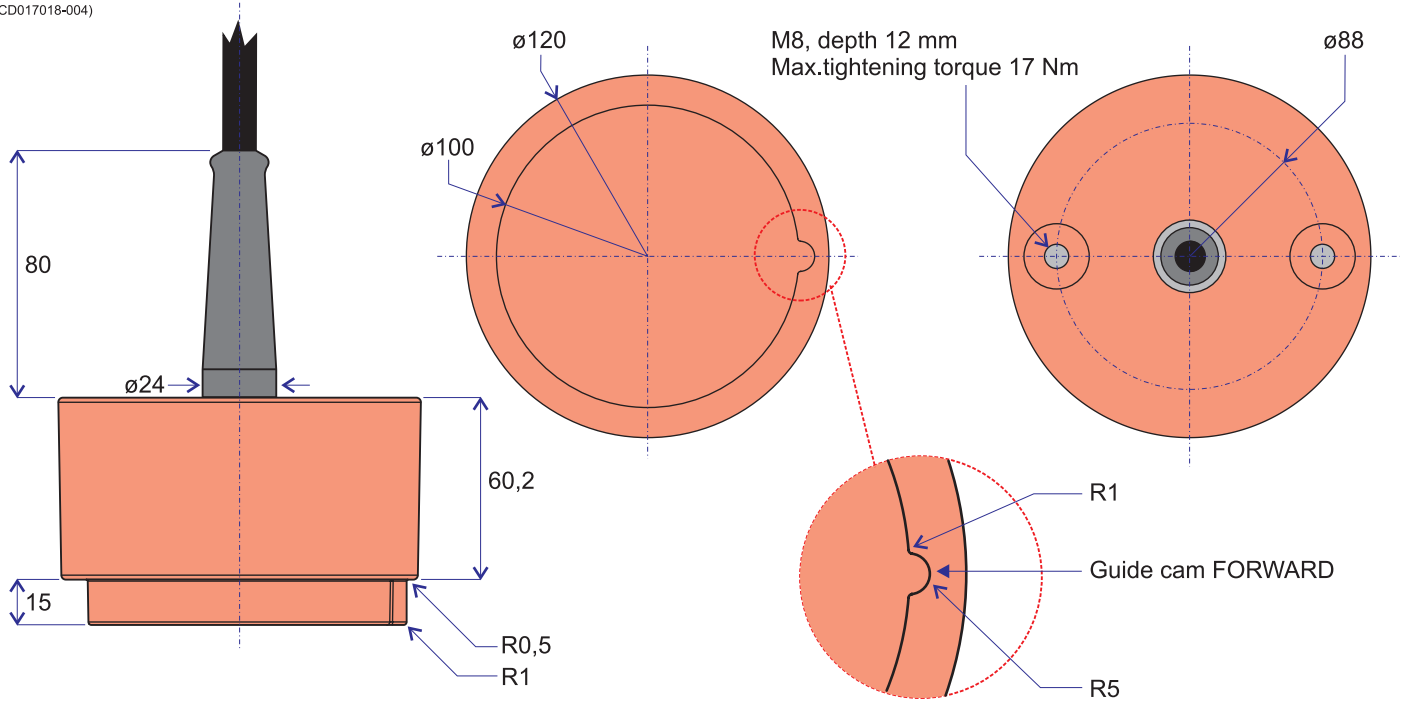
*The following specifications are valid for a 100 W pulse when all four quadrants are wired in parallel. Note that these specifications can be altered without prior warning.*

- Resonant frequency: 333 kHz
- Circular beamwidth: 7 deg
- Directivity:  $DI = 28$  dB
- Equivalent two-way beam angle:  $-21$  dB re 1sr
- Side lobes: Less than  $-21$  dB
- Back radiation: Less than  $-35$  dB
- Impedance:
  - Total:  $19 \Omega$
  - Each quadrant:  $75 \Omega$
- Transmitting response:  $182,5$  dB re  $1 \mu\text{Pa}$  per V
- Receiving sensitivity, open circuit:  $-196,5$  dB re  $1\text{V}$  per  $\mu\text{Pa}$
- Electro-acoustic efficiency: Better than 0.4
- Max. pulse power input: 200 W
- Max. continuous input: 2 W
- Max. transducer depth: 1500 m
- Cable length: 1.5 m
- Connector: Burton (5501-2008)
- Weight: Approximately 2 kg
- Storage temperature:  $-20^\circ$  to  $55^\circ\text{C}$



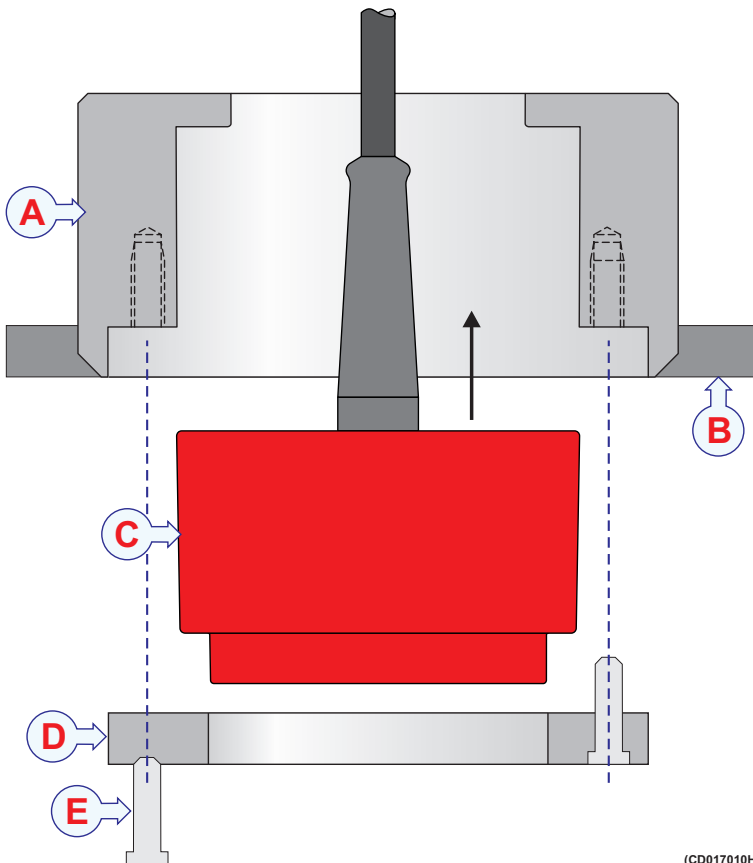
Beam pattern

(CD017018-004)



**Outline dimensions**

All dimensions in mm



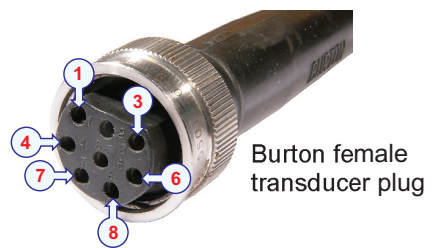
(CD017010H)

**Installation principle**

- A Mounting ring
- B Towed body's hull plating
- C Transducer
- D Clamping ring
- E Bolts

**Burton underwater connector**

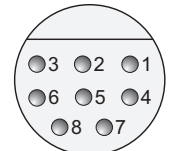
Pin configuration



Burton female transducer plug

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**

Kongsberg Maritime AS  
Strandpromenaden 50  
P.O.Box 111  
N-3191 Horten, Norway

Telephone: +47 33 03 40 00  
Telefax: +47 33 04 29 87  
[www.simrad.com](http://www.simrad.com)  
simrad.sales@simrad.com

