

SonoFlex 850-HP Flexural Disc Transducer (High Power)

ctg

Typical Uses: Low Frequency Sound Source, Calibration Standard, Sound Navigation and Ranging Applications



FEATURES

The SonoFlex 850-HP transducer is a flexural disc transducer providing a high power low frequency sound source. Compared to many low frequency projectors the SonoFlex 850 is compact and low cost.

Due to the flexural motion this transducer makes use of the projector should be operated at depths of 10m or greater to ensure a sufficient amount of pressure is placed on the transducer.

The SonoFlex series are reliable, robust, high performance, low frequency transducers.

ADVANTAGES

- Horizontally omni-directional
- High Performance
- Low Frequency Acoustic Source
- Lightweight with high efficiency

ORDER NUMBER

CTG 0241-0001-HP

Please specify any additional cable, alternative connectors and/or calibration requirements with order

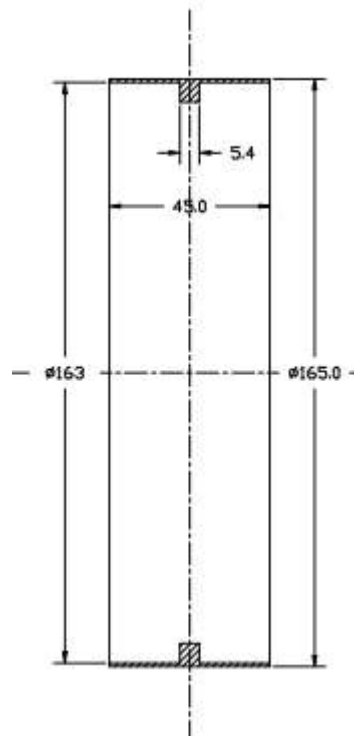
TECHNICAL SPECIFICATION

Nominal resonant frequency	850 Hz (in bending motion)
Integral Amplifier or Tuning Element	No
Receive Sensitivity @ 880 Hz	-152 dB re 1V/ μ Pa
Recommended receive frequency range	10Hz – 2kHz
Linear frequency range	N/a
Maximum acoustic input @880 Hz	+ 212 dB re 1 μ Pa
Transmit sensitivity @ 880 Hz	+131 dB re 1 μ Pa/V at 1m
-3dB bandwidth	80Hz
Quality Factor	10.6
Recommended transmit frequency range	600Hz – 20kHz
Maximum source level @ 880 Hz	+191 dB re 1 μ Pa
Maximum applied voltage	1000 Vrms
Horizontal beam pattern	Omni-directional +/- 1dB @ 850Hz
Vertical beam pattern	Omni-directional +/- 1db @ 850Hz

MECHANICAL SPECIFICATION

Dimensions	Maximum outer diameter 165mm, Length 45mm
Transducer head weight in air	***
Transducer head weight in water	***
Minimum operating depth	10m
Maximum recommended operating depth	100m
Survival depth	200m
Operating temperature range	-5 to +35°C
Cable	5m screened twisted pair cable (high power)
Connector	Bare ends
Mounting	Dunking

MECHANICAL DRAWING

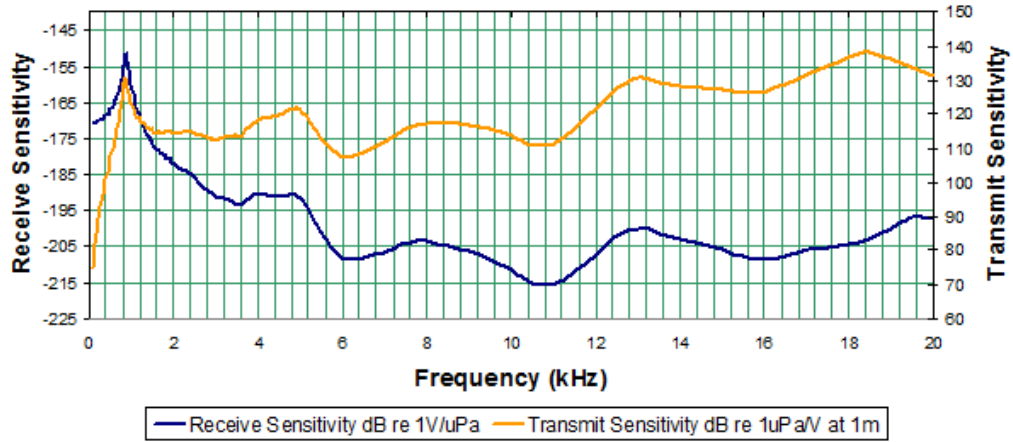


CONNECTOR LAYOUT

Not Applicable

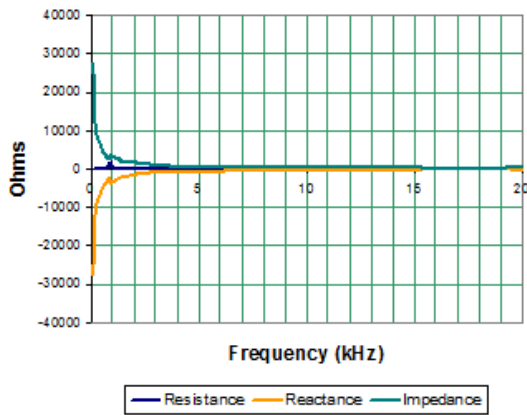
SENSITIVITY

SonoFlex 850 Sensitivity



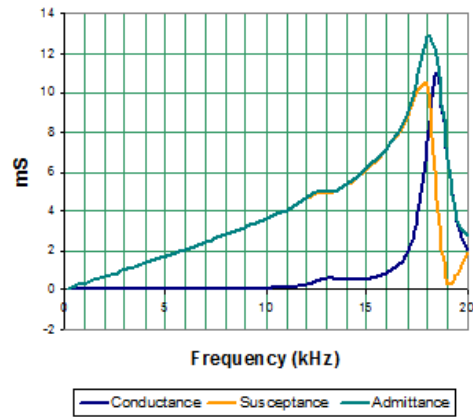
IMPEDANCE

SonoFlex 850 Impedance



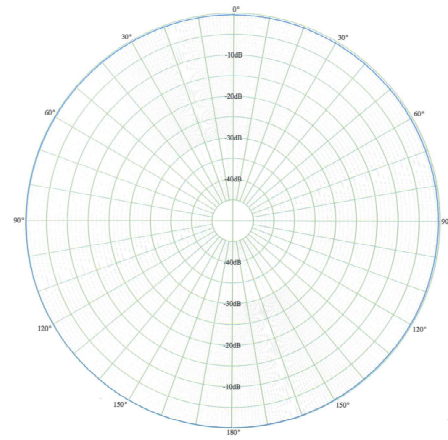
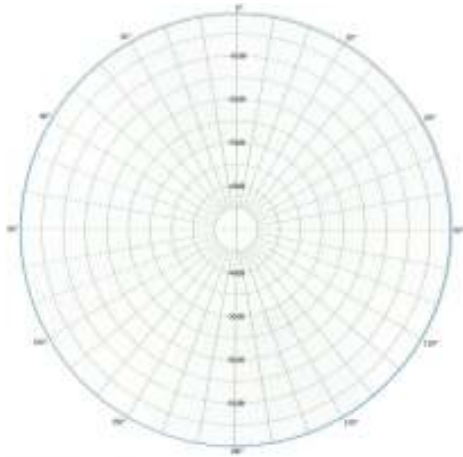
ADMITTANCE

SonoFlex 850 Admittance



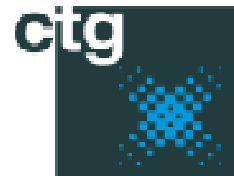
HORIZONTAL BEAM PATTERN @ 850Hz

VERTICAL BEAM PATTERN @ 850Hz



VARIATIONS

The SonoFlex 850-HP also comes in a standard power rated version, the SonoFlex 850



Chelsea
Technologies
Group Ltd

55 Central Avenue
West Molesey
Surrey KT8 2QZ
United Kingdom
Tel: +44 (0)20 8481 9000
Fax: +44 (0)20 8941 9319
sales@chelsea.co.uk
www.chelsea.co.uk

*** For further information please contact CTG.

In view of our policy of continual improvement, the designs and specifications of our products may vary from those described 2271-024-RS-A)