



# M21-203-1400 SPECIFICATIONS

## M21-203-1400 Bender

### OVERVIEW

The M21-203-1400 is a flexural disc projector belonging to the M21 bender family.

Like all of M21 products, it is omnidirectional, and can produce moderate power over a wide frequency band, or produce high power near resonance. M21s can also be used in a stack to produce greater power and bandwidth at lower frequencies, or in conventional arrays to produce a directive, high-power source.



### CHARACTERISTICS

#### PHYSICAL:

Maximum Operating Depth	400 m
Mass	5 Kg
Apparent Mass in Water	3.4 Kg
Thickness	50 mm
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C
Connector Type	Subconn 0M3M
Locking Sleeve	Subconn DLSA-F

#### ACOUSTIC:

Resonance Frequency	1400 Hz
Maximum Transmitted Voltage Response	139 dB re $\mu\text{Pa}/\text{V}$ @ 1m
Maximum SPL	194 dB re 1 $\mu\text{Pa}$ @ 1 m
Maximum Drive Voltage	600 Vrms
Transmitting Range	350Hz-3500Hz
Directivity	Omni-Directional
Capacitance	190nF
Cavitation Depth at 194 dB re $\mu\text{Pa}$ @ 1 m	10 Meters

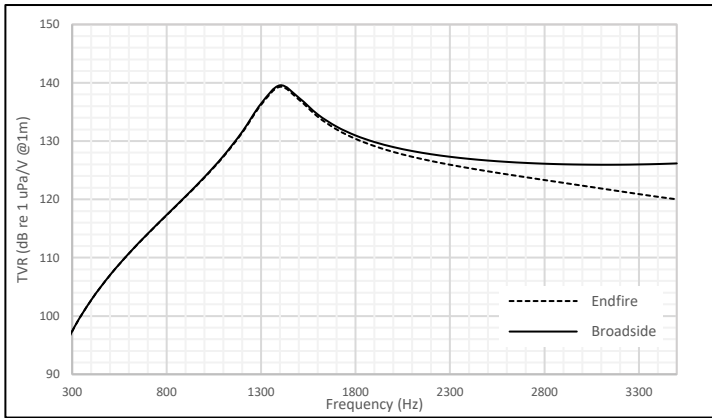


Figure 1: Transmit Voltage Response for M21-203-1400

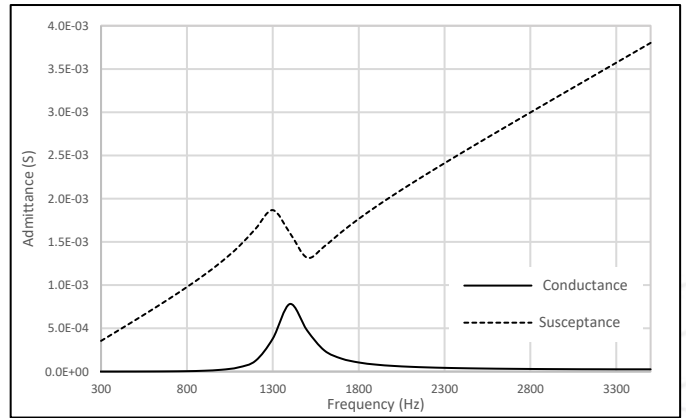


Figure 2: Admittance Plot for M21-203-1400

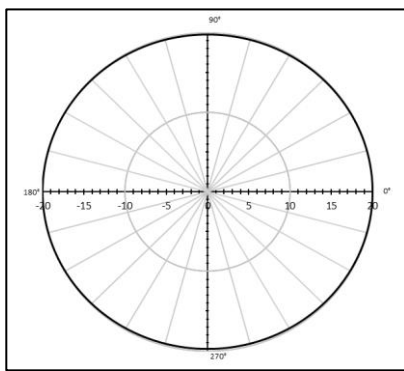


Figure 3: Typical Horizontal Beam Pattern for the M21-203-1400 at Resonance Frequency

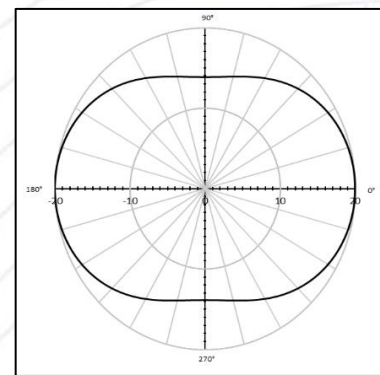


Figure 4: Typical Horizontal Beam Pattern for the M21-203-1400 at 3500Hz

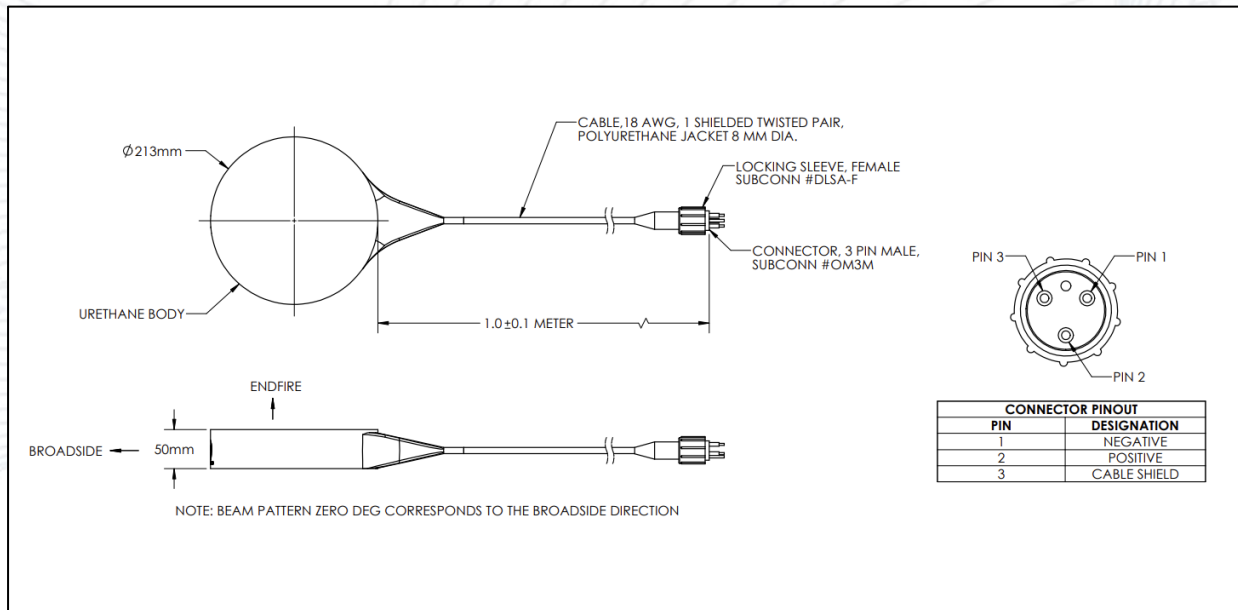


Figure 5: Dimensions of the M21-203-1400 with labeled pin out