

## MARFi 1.0

### Mobile Artificial Finger

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#### 1. SPECIFICATIONS

Parameter	Unit	Conditions / Description	MIN	TYP	MAX
Dimensions	Mm	230x34x34			
Force range (movement)	N	*See remark section for explanation		2	
Force (applied)	N		1		20
Sample rate (acceleration)	Hz			6500	
Operating Voltage	V			3.3	
Acceleration scale	G	X, Y, Z axis	-8	+/-4	+8
Packaging				BOX	
Weight	g			180	

#### Remark:

The MARFi is a mobile measurement device intended to be used for quantifying haptic feedback. The MARFi is preloaded with a given force by rotating the top of the device. The preload is indicated with a red line on the indicator glass. The red line describes the force that the MARFi will apply to when the compression is started. The MARFi is by default calibrated to have a movement run equivalent to ~2N. This means that when the MARFi is compressed fully (just before hitting itself), the force applied will be 2N higher than what the red line indicates. The two bolts (M2) on the sensor head of the device can be loosened and the distance can be increased, providing a bigger change in force over the movement run.

To use the MARFi, set up the desired preload, place your finger in the ring on the top of the device, and place it on the surface that is to be measured. Once you are ready to activate your vibration, start the measurement on the UI and hold the device steady. When the measurement is finished, remove the device and inspect your measurement.

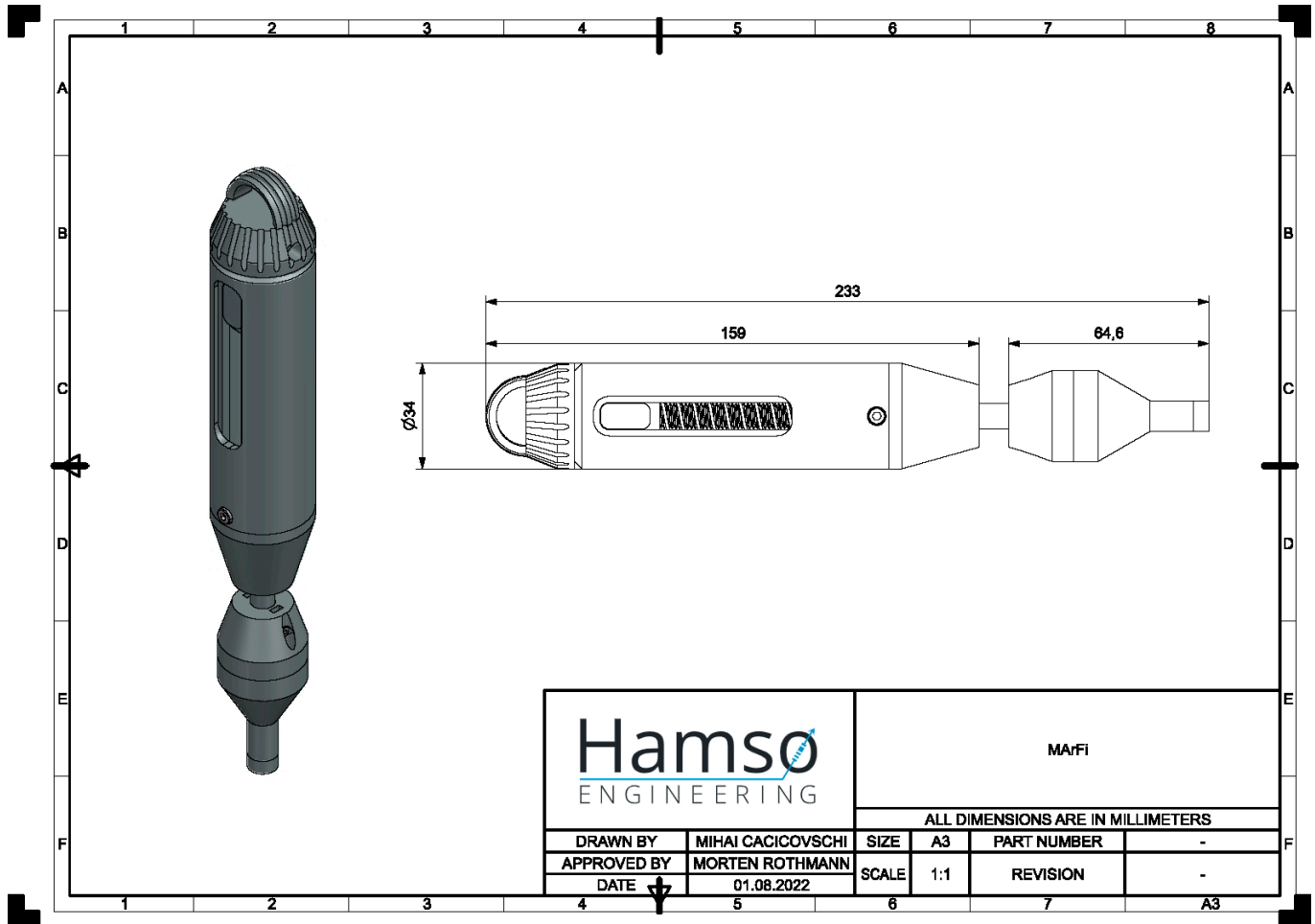
The MARFi is to be used together with the ArFi or as a StandAlone device which comes with a UI for easy control of the measurements.

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### 2. DRAWING



The MARFi is a single device where the force is controlled mechanically, and the sensor is powered through either the ArFi or through the StandAlone hardware and UI.

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### 3. HISTORY CHANGE RECORD

REV	CHANGE ITEMS		DATE
	BEFORE CHANGE	AFTER CHANGE	
		Initial Version	2022.08.01

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