

# *Internship Project*

## *Conveyor Belt - Project Divider*

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This project is funded by the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation, and Technology (BMK) and is being carried out as part of the ICT of the Future program.

# Internship DIVIDER 2023

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## Project Outline:

Fraunhofer Austria  
-Assembling Conveyor Belt

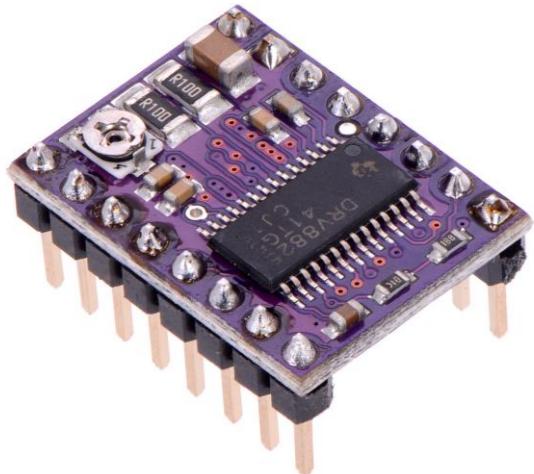
Joanneum Research Robotics  
-Measurement System for Conveyor Belt



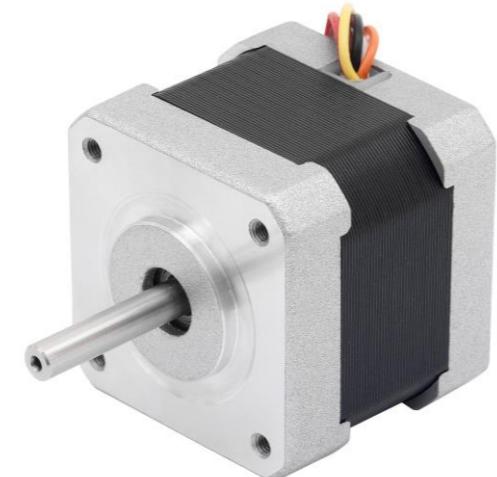
# Part 1 (Assembling) Components

3

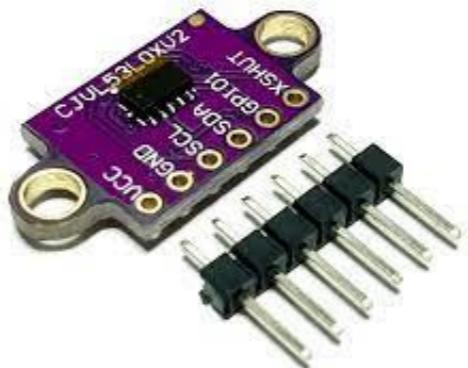
Motor driver



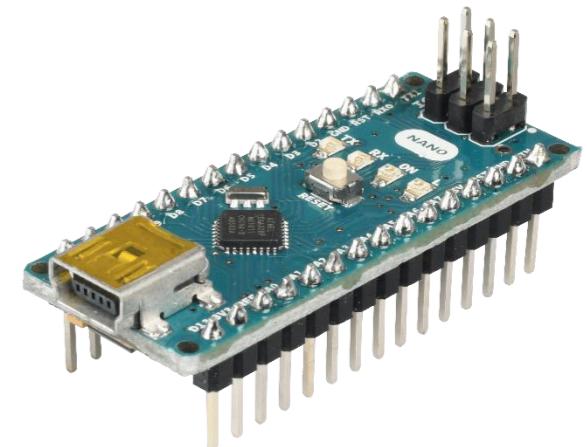
Stepper motor



ToF sensor



Arduino Nano



# Part 1 (Assembling) Components

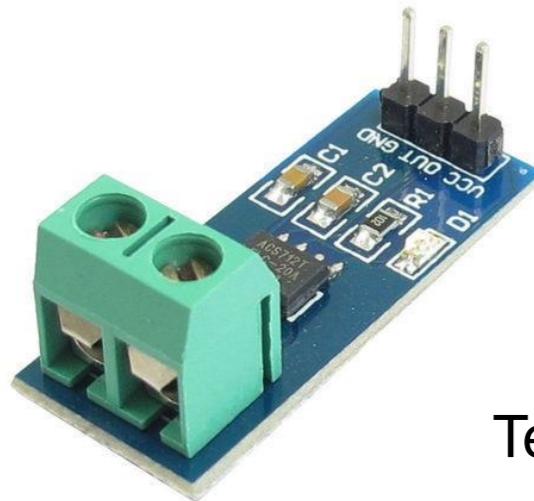
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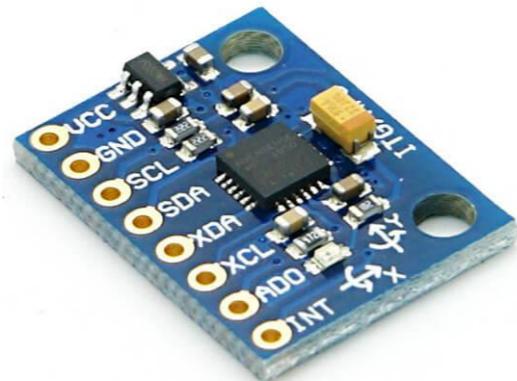
# Part 2 (Measurement) Components

5

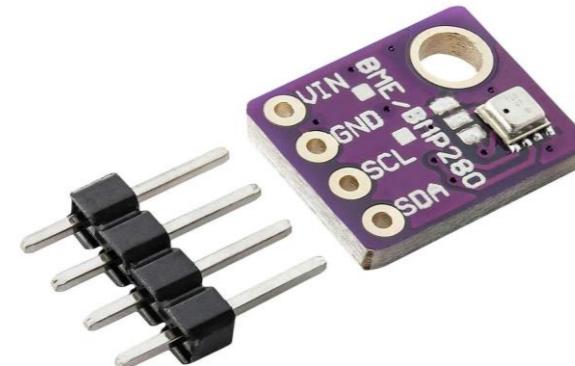
Current sensor



Acceleration sensor



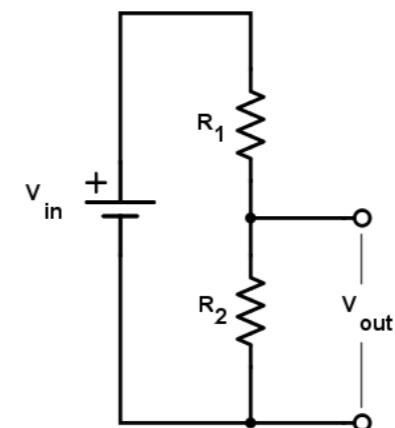
Temperature sensor



Microcontroller



Voltage divider

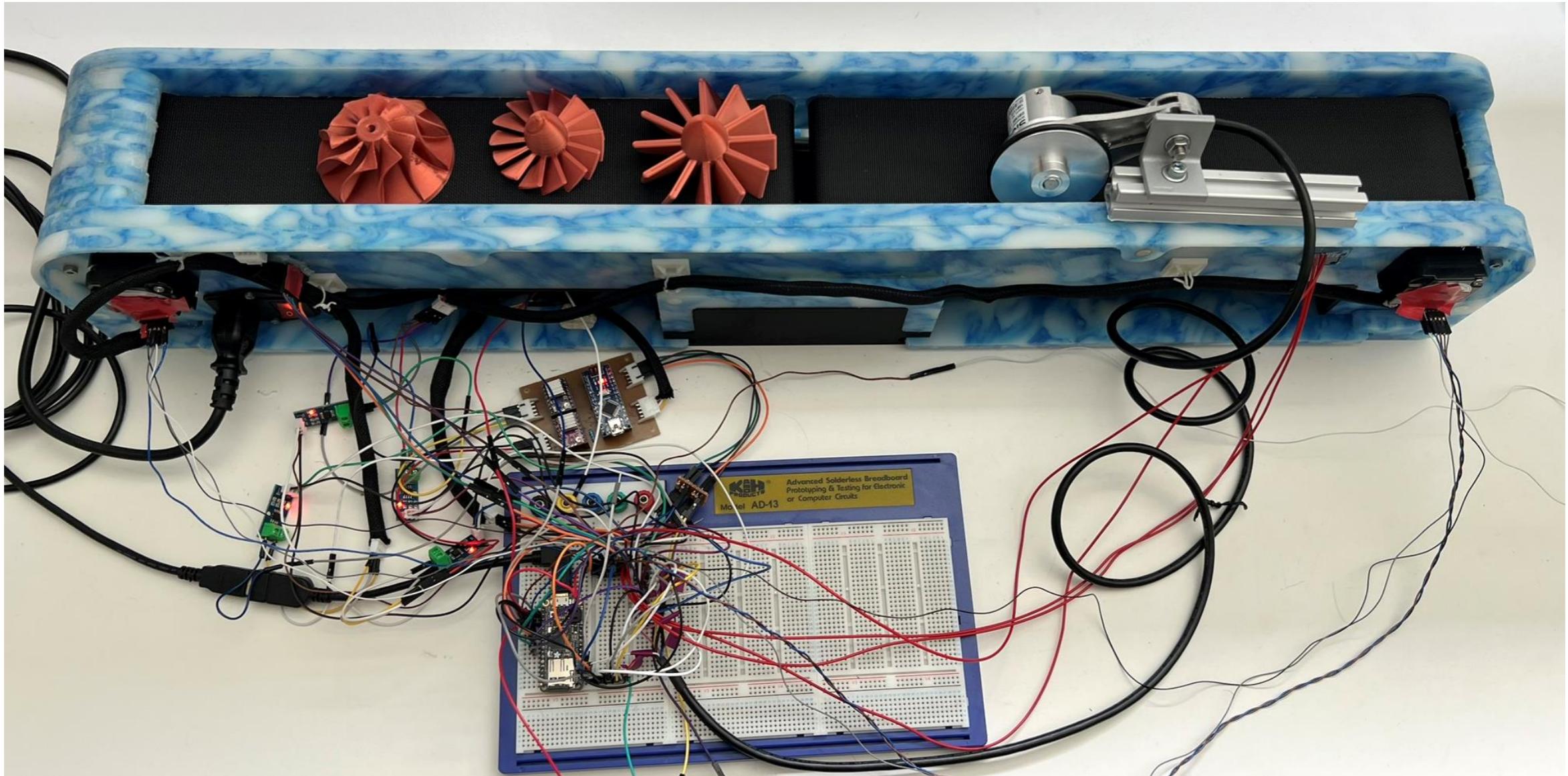


Encoder

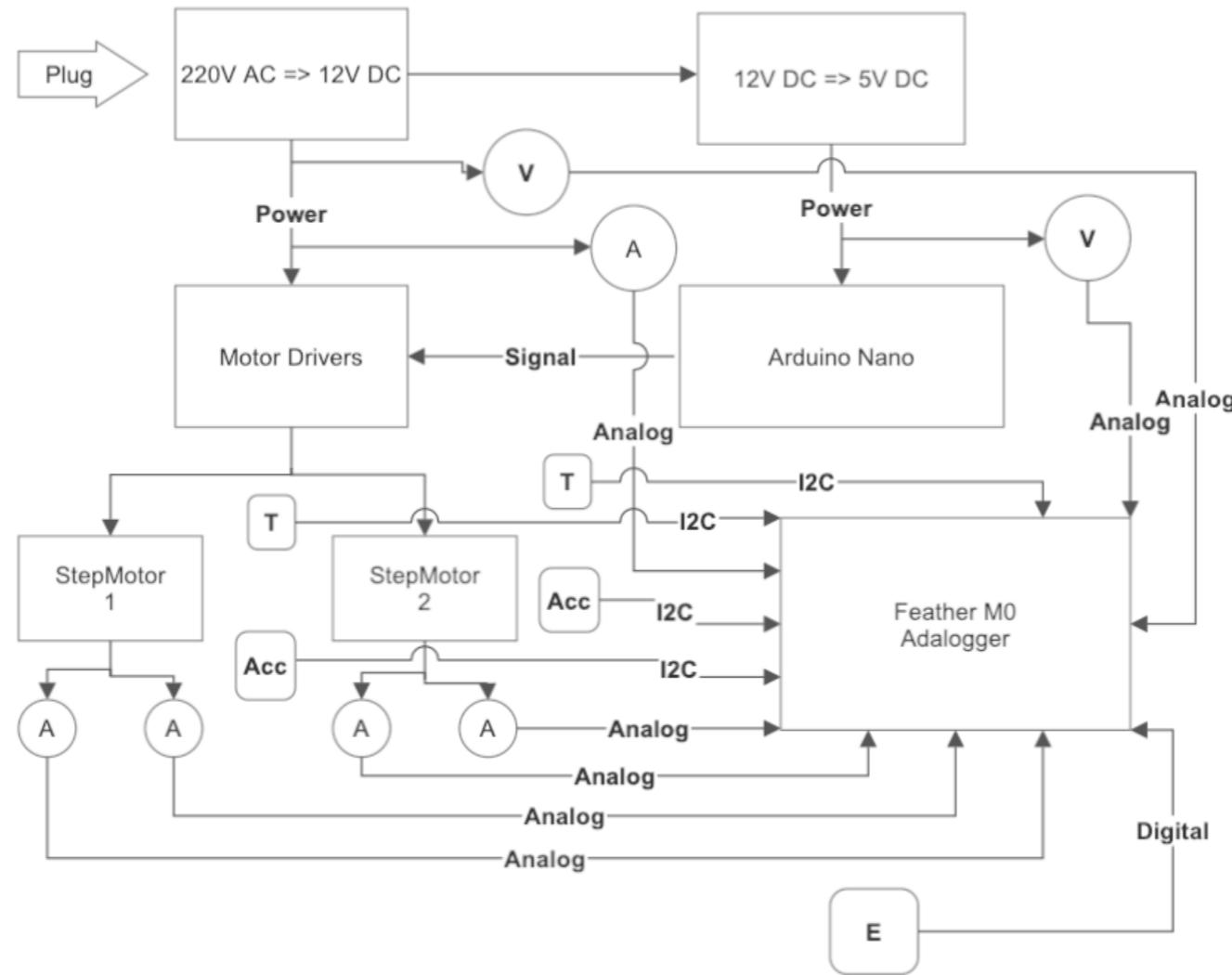


# Part 2 (Measurement) Components

6



7



**Ammeter**



**Voltage divider**



**Acceleration sensor**

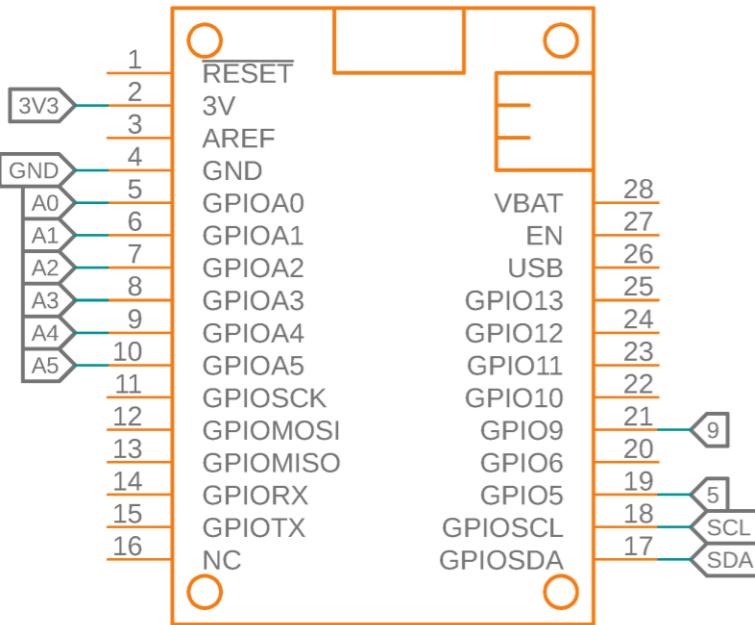


**Encoder**

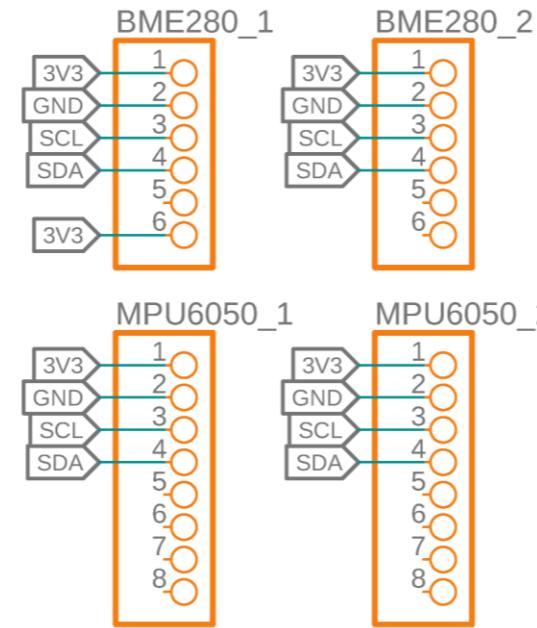


**Temperature sensor**

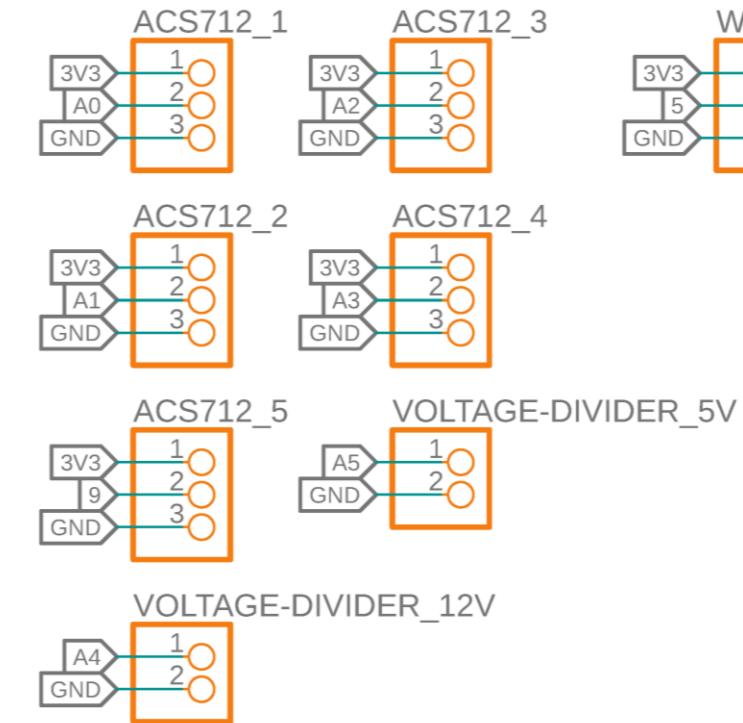
Adalogger Feather M0



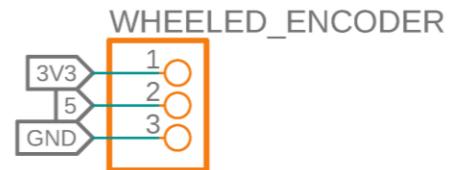
I<sup>2</sup>C



analog

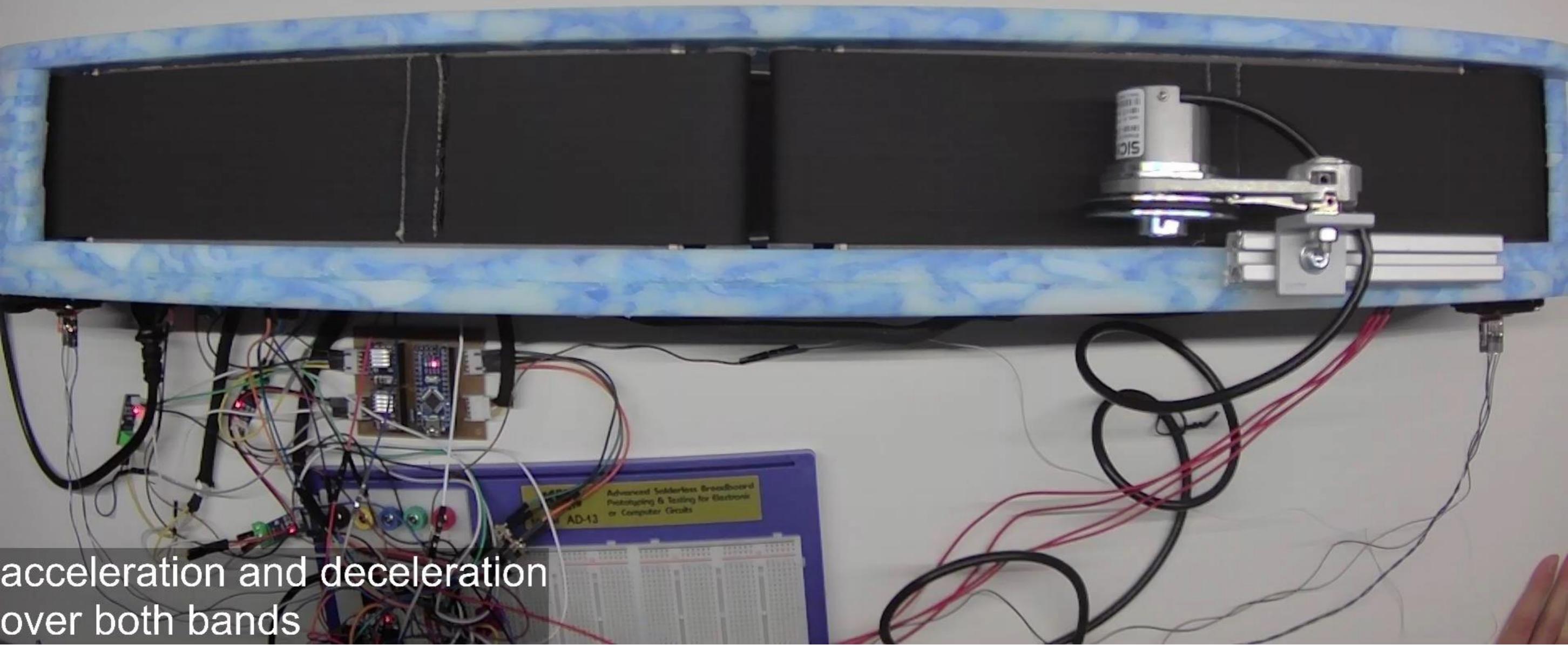


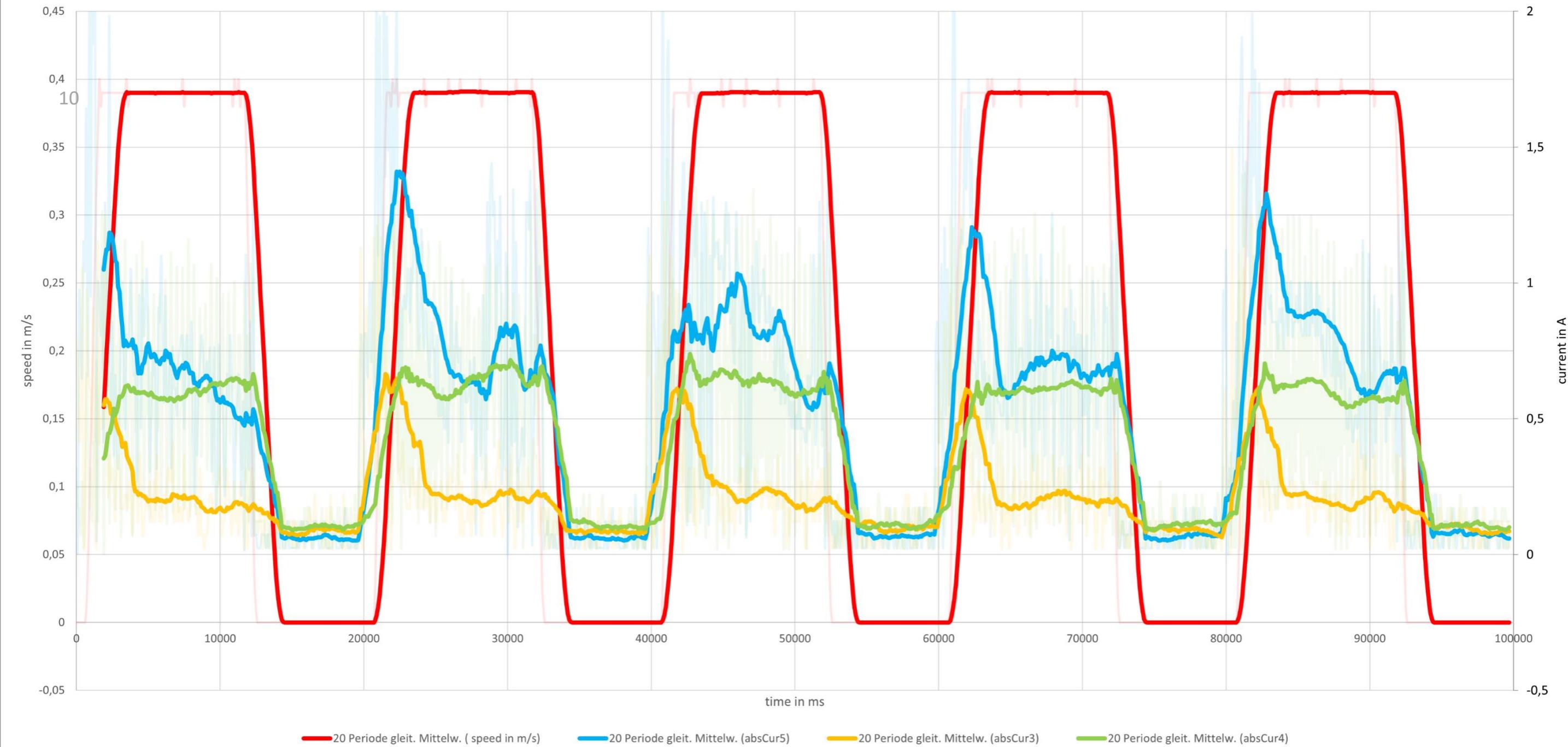
digital

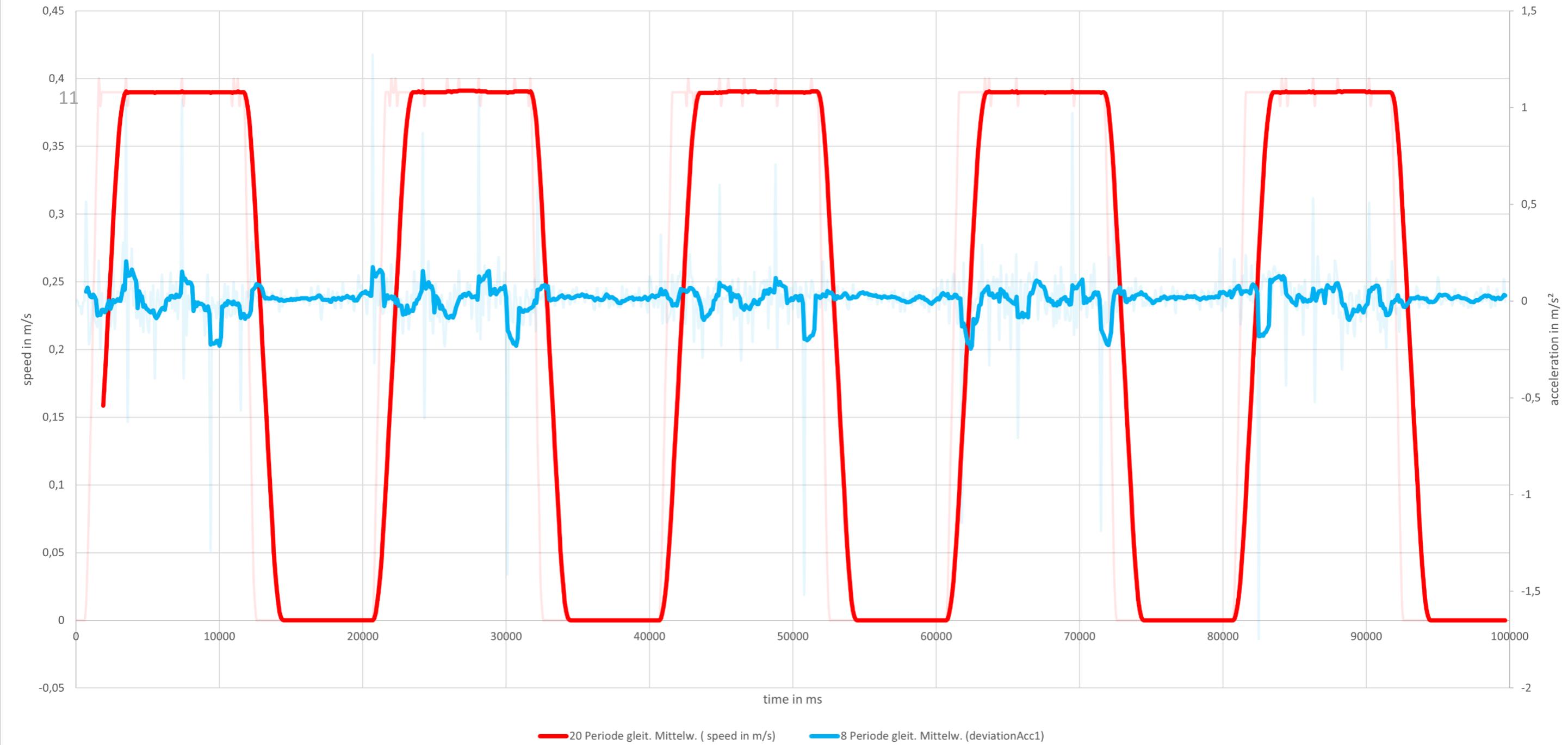


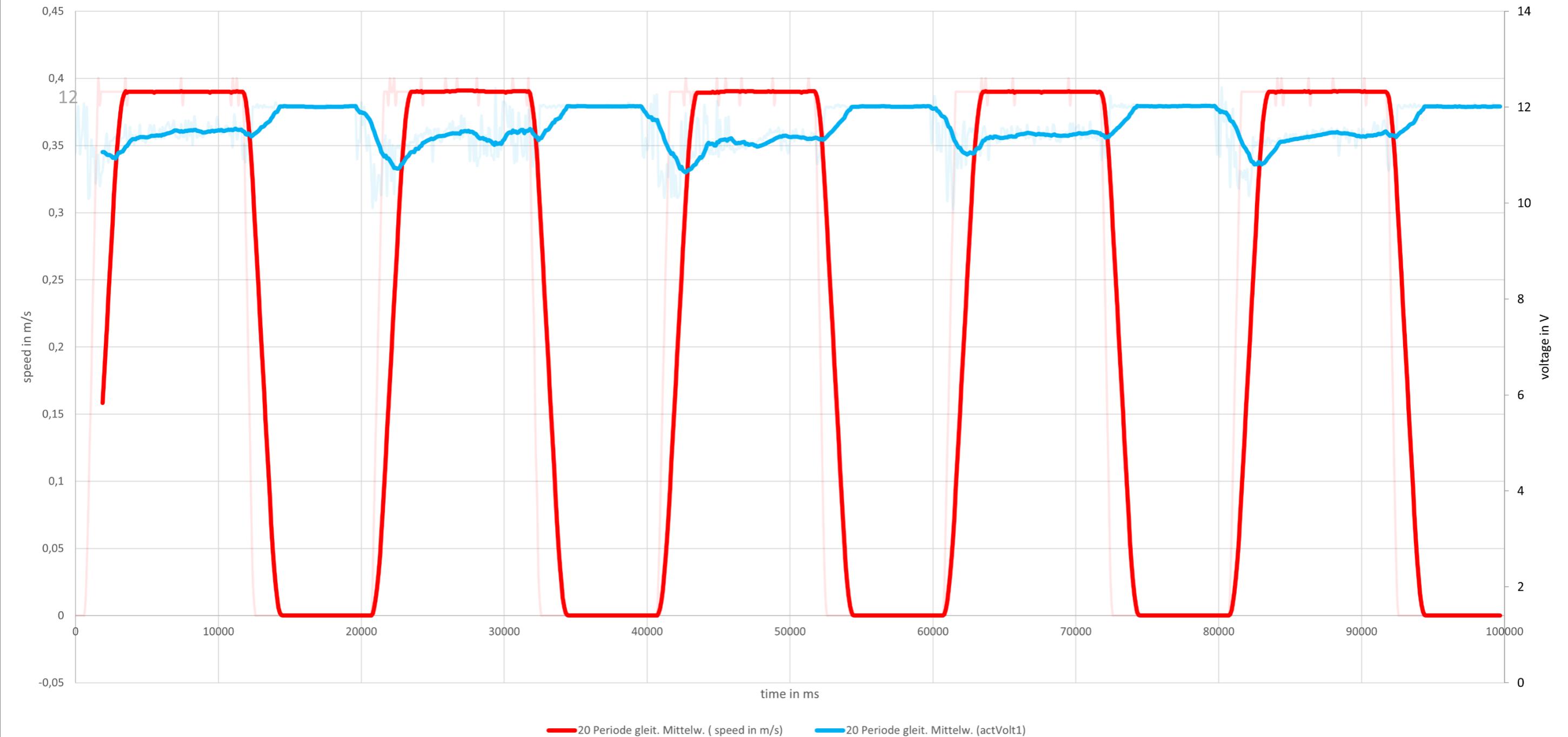
# 03.csv

9



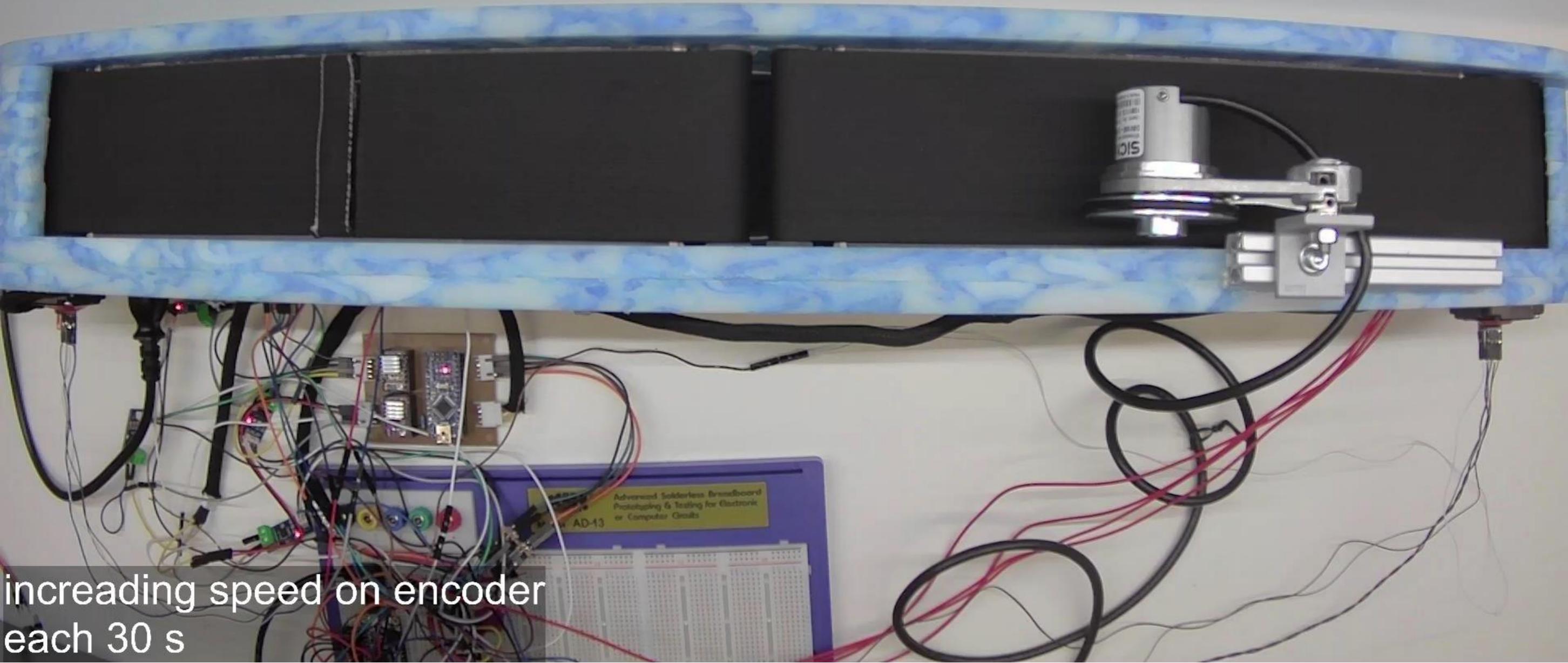




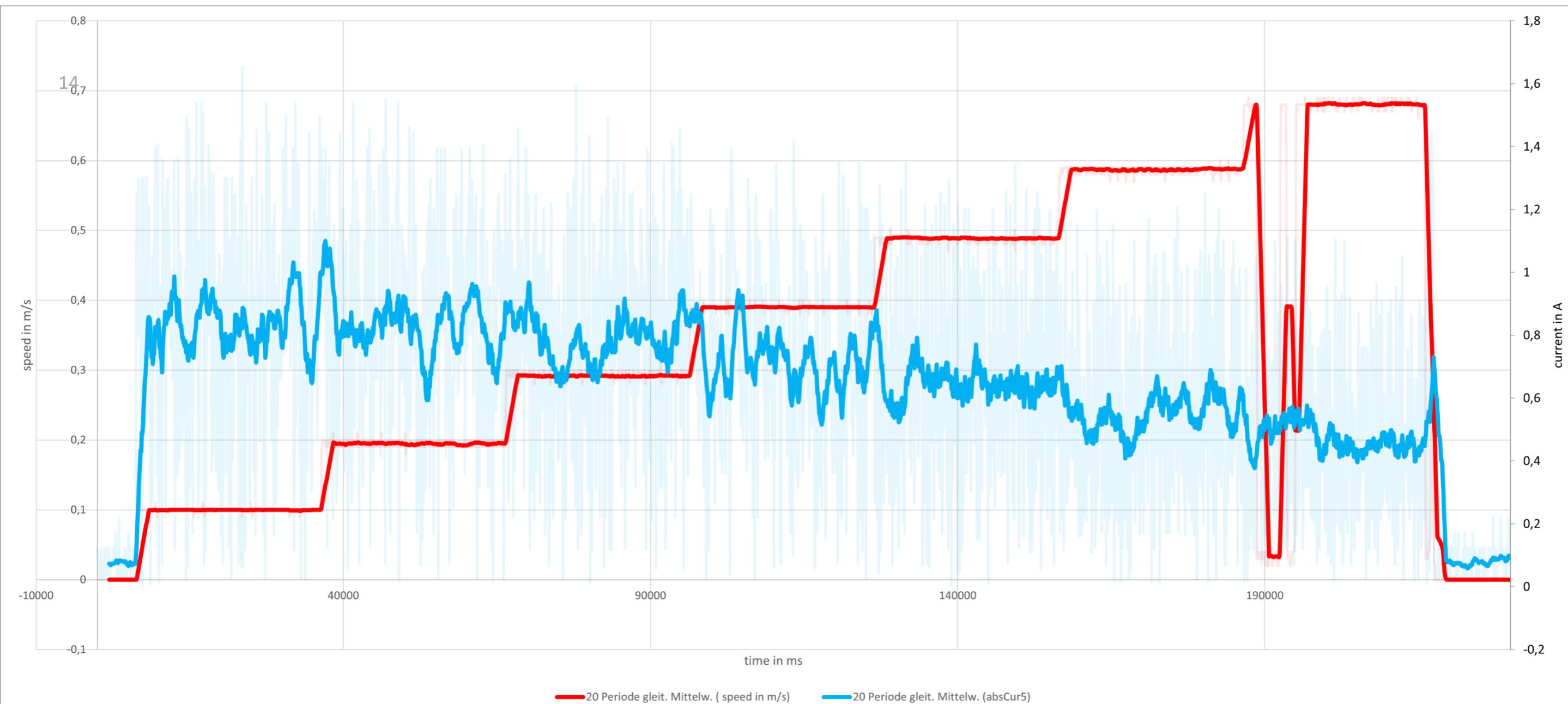


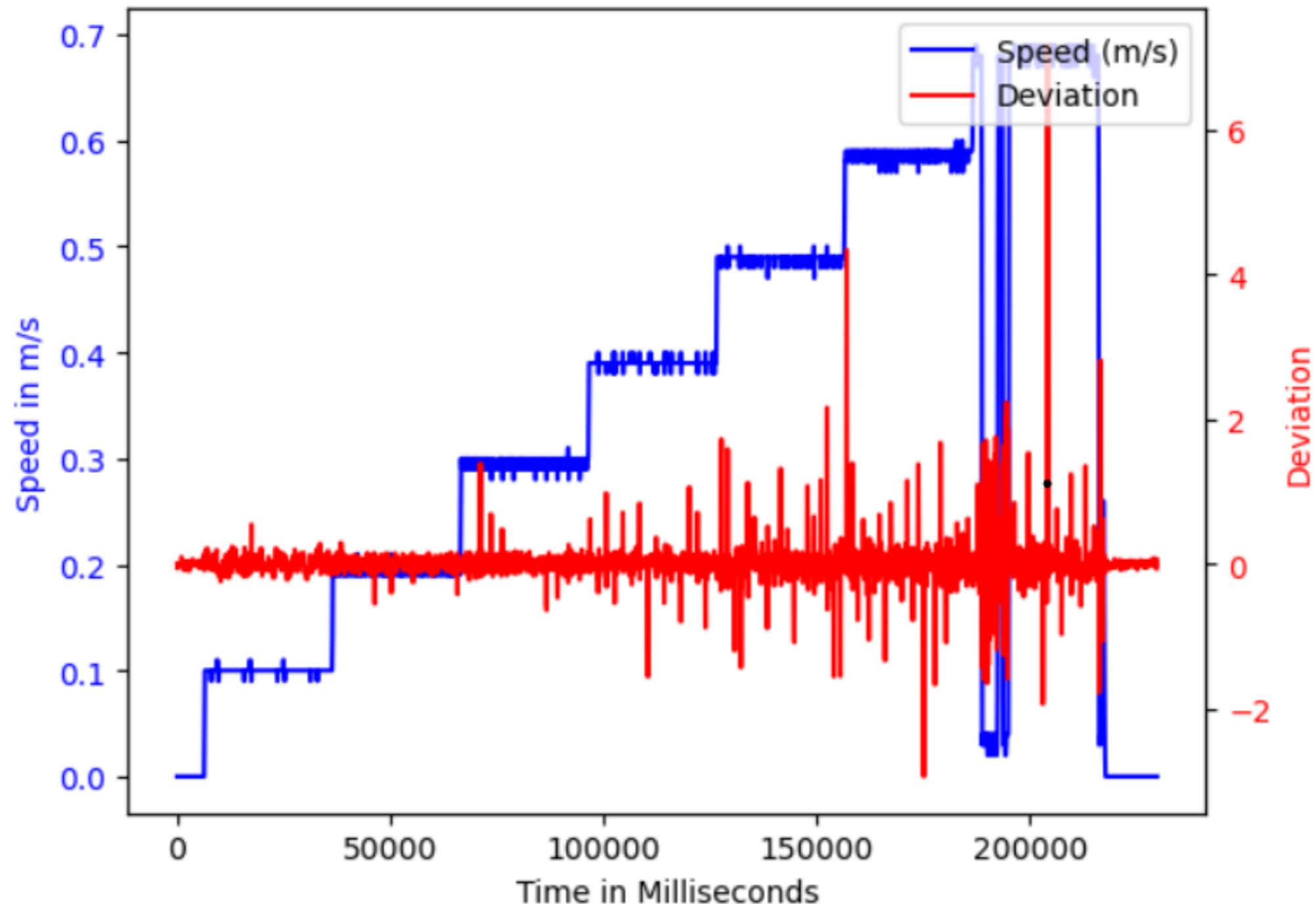
# 05.csv

13



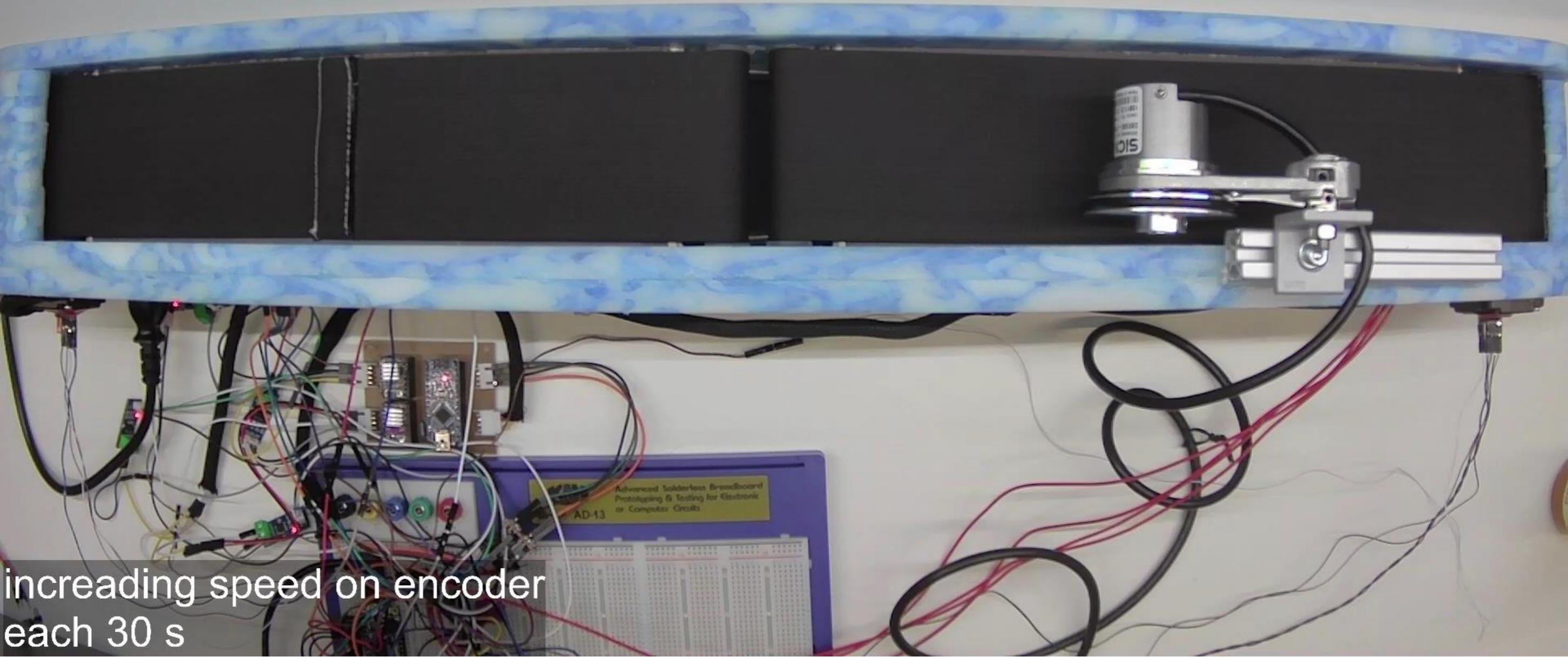
increasing speed on encoder  
each 30 s



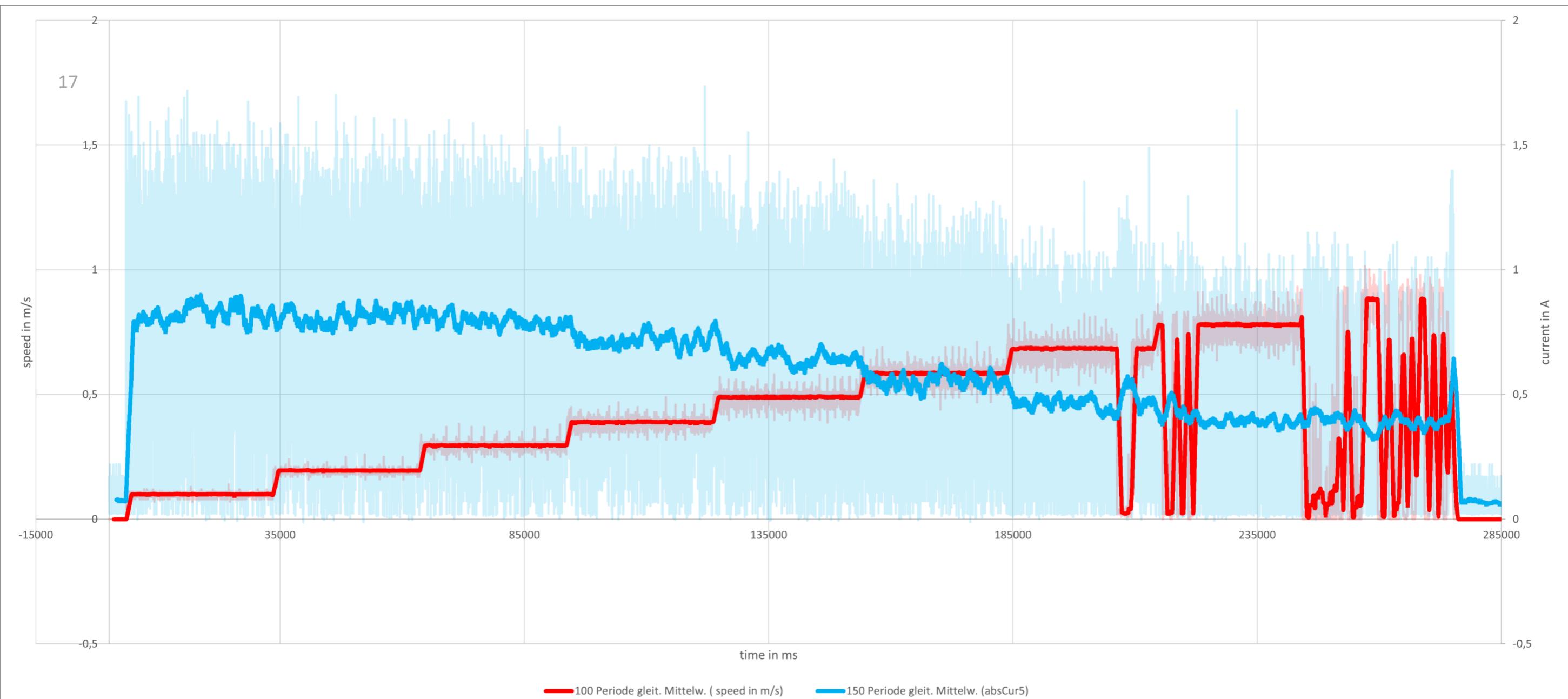


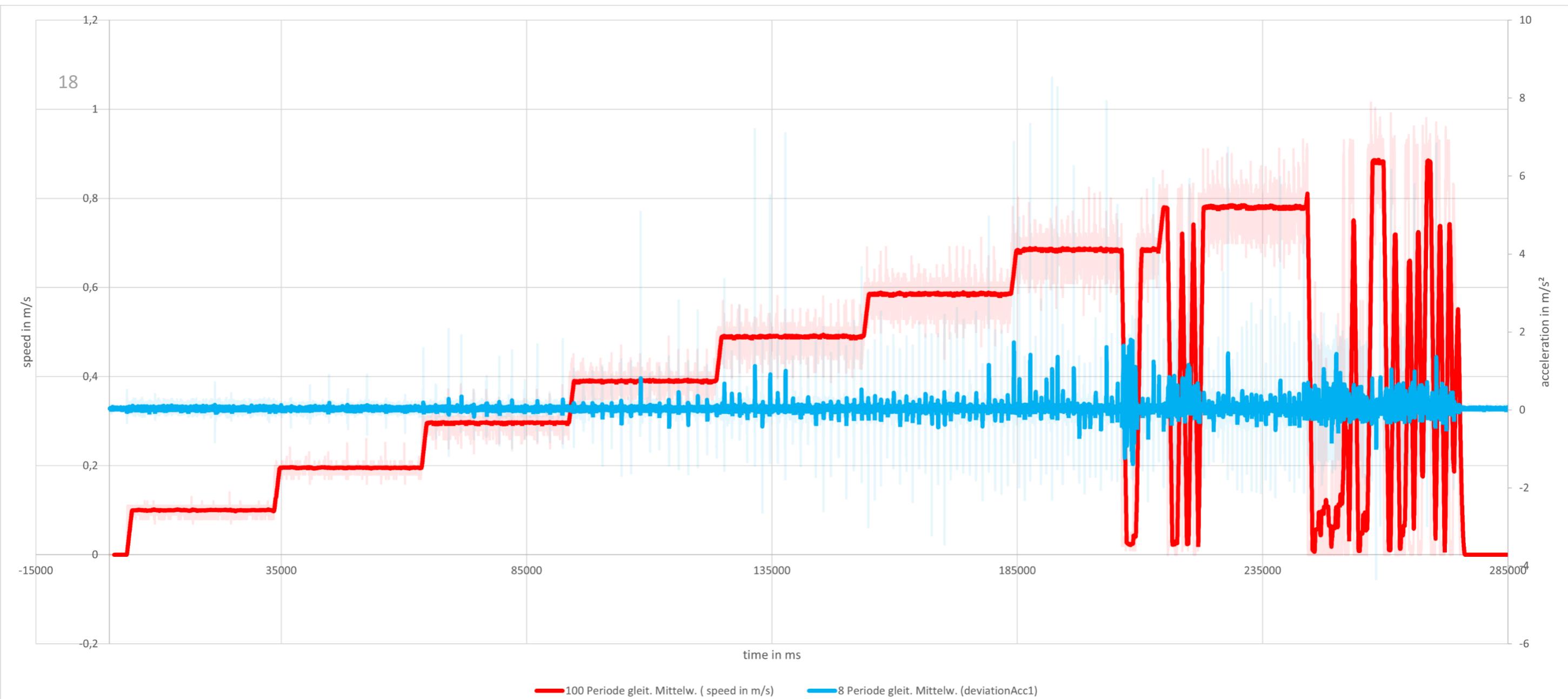
# 06.csv

16



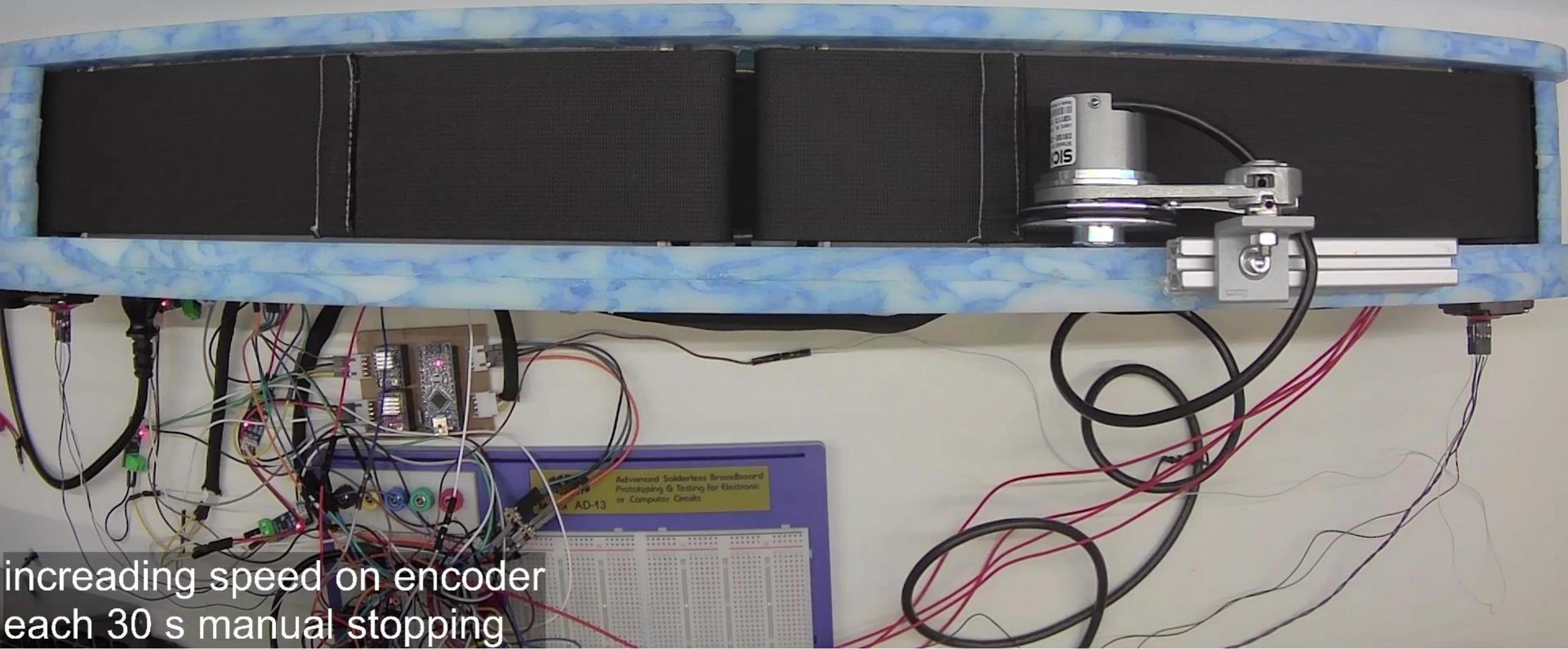
increasing speed on encoder  
each 30 s



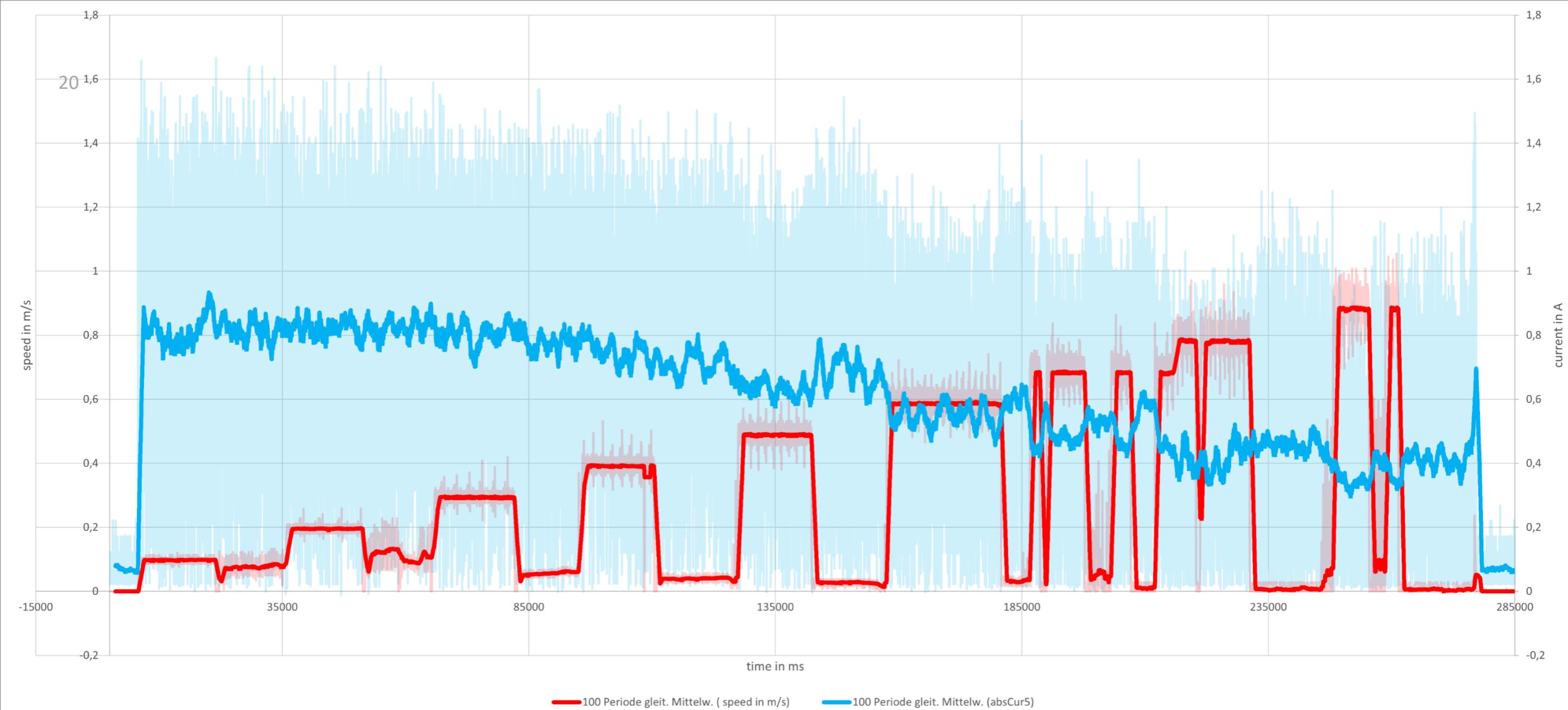


# 07.csv

19



increasing speed on encoder  
each 30 s manual stopping

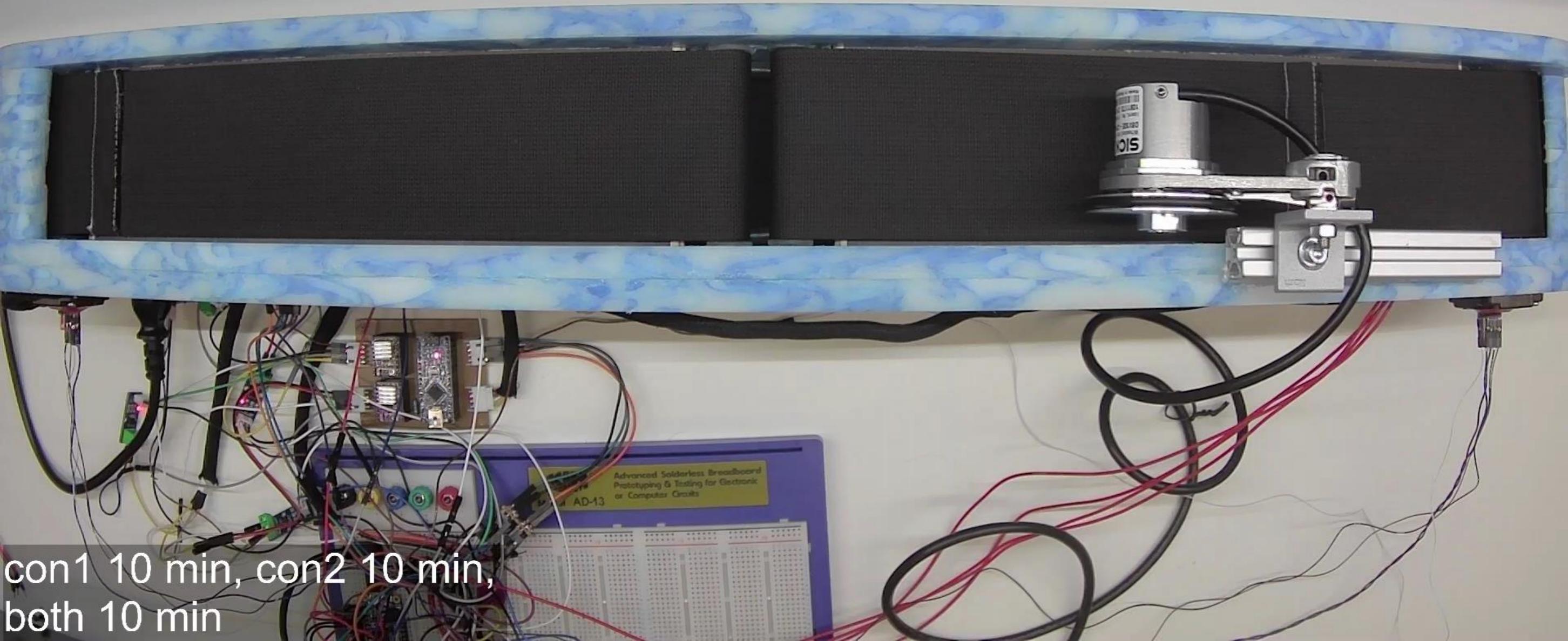




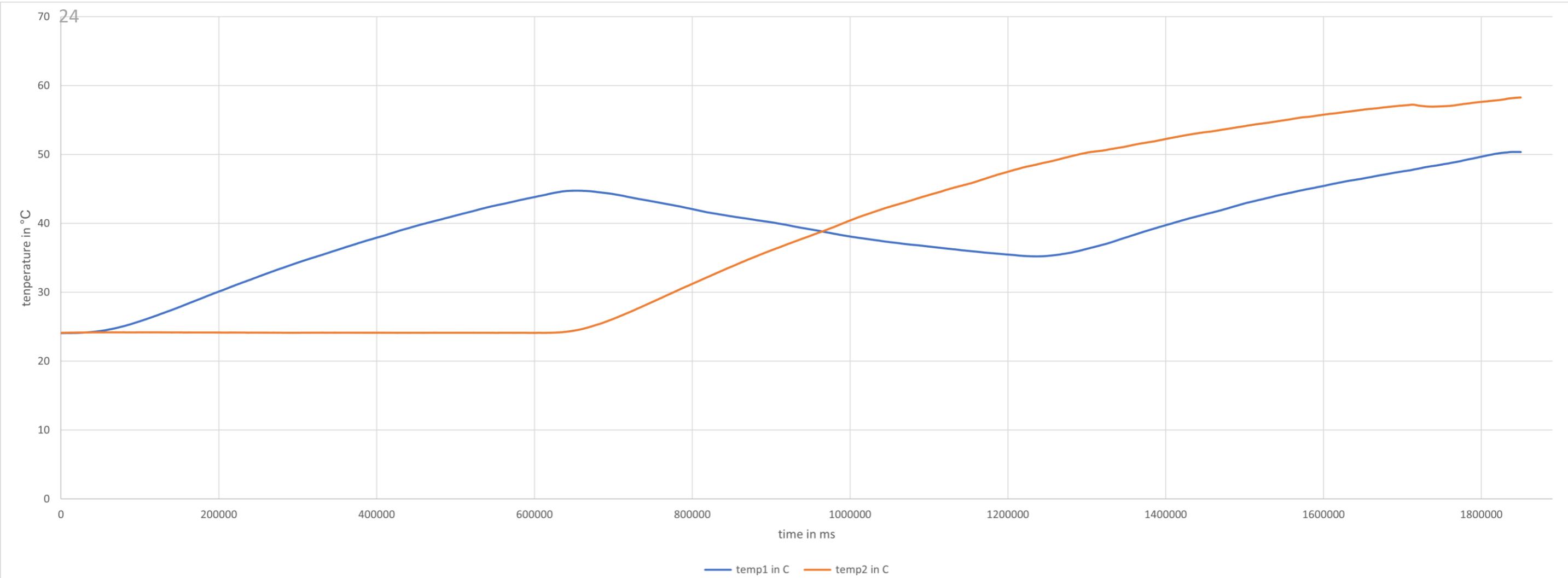


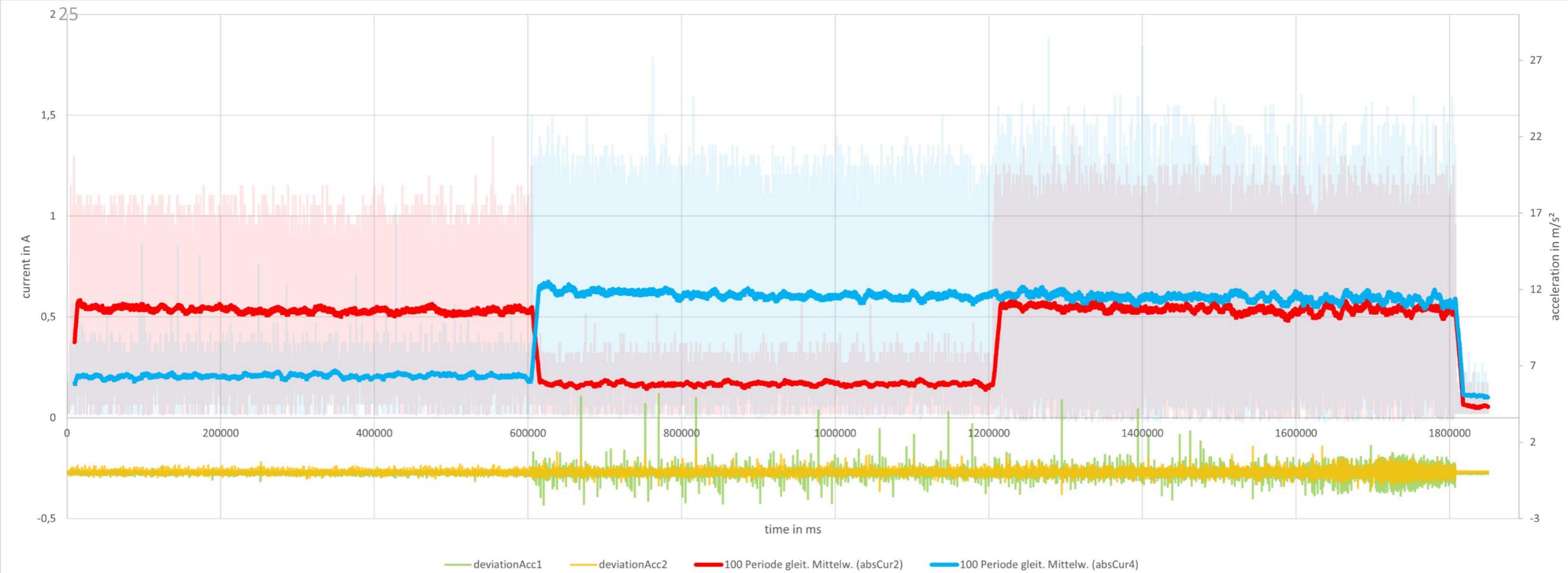
# 04.csv

23



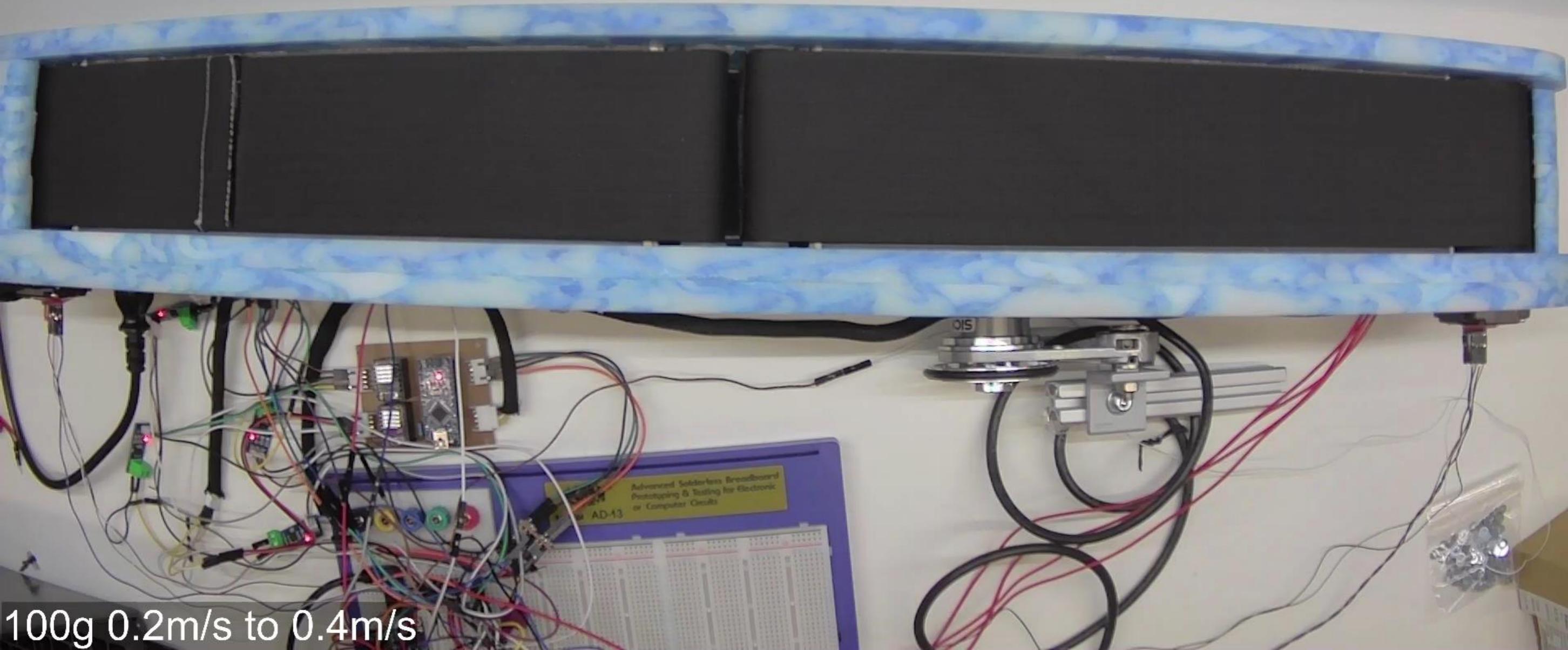
con1 10 min, con2 10 min,  
both 10 min





# 09.csv

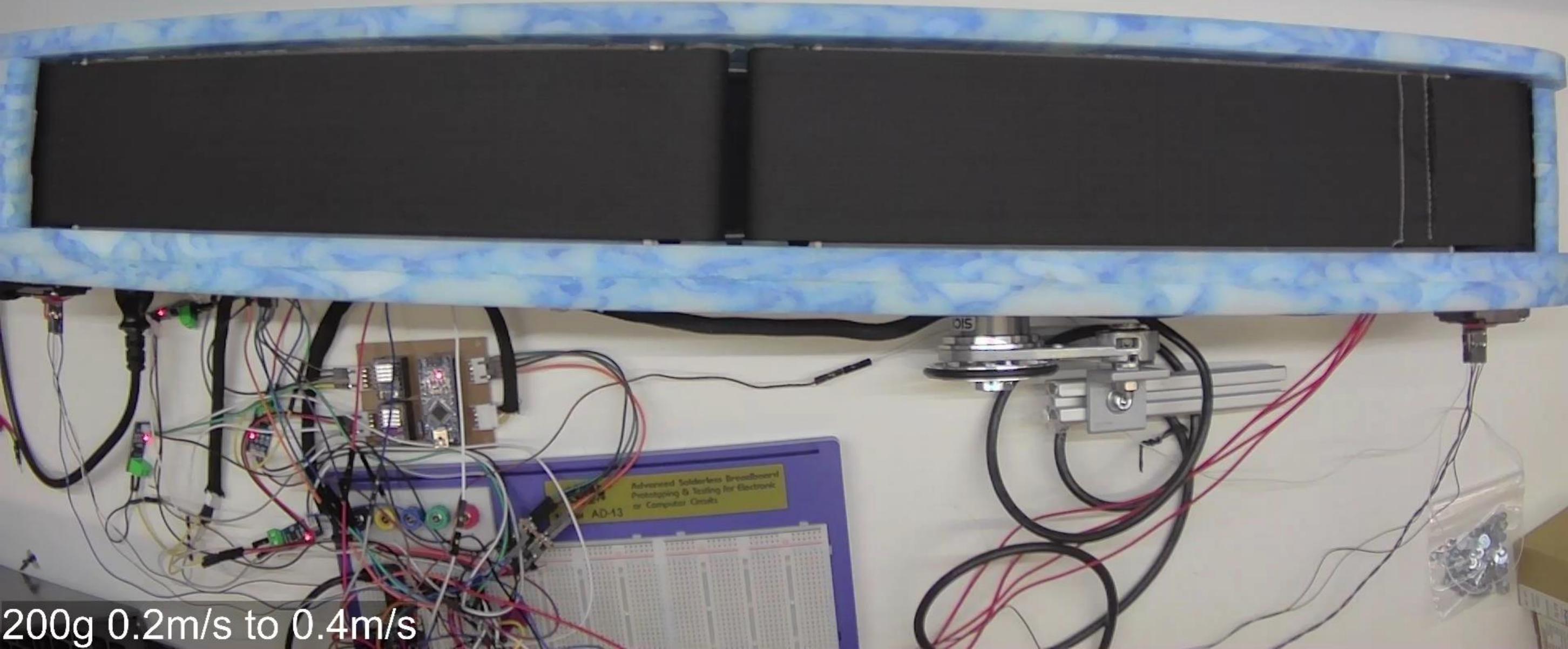
26



100g 0.2m/s to 0.4m/s

# 10.csv

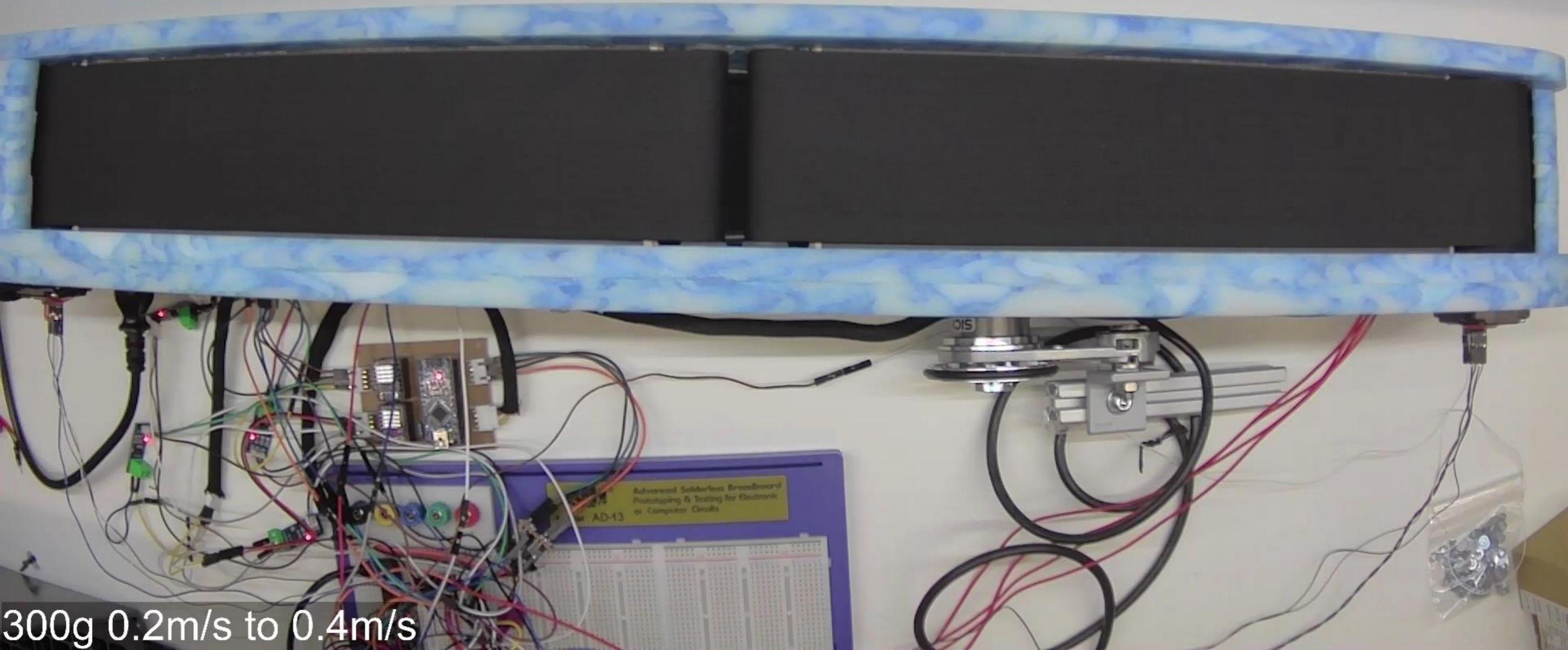
27



200g 0.2m/s to 0.4m/s

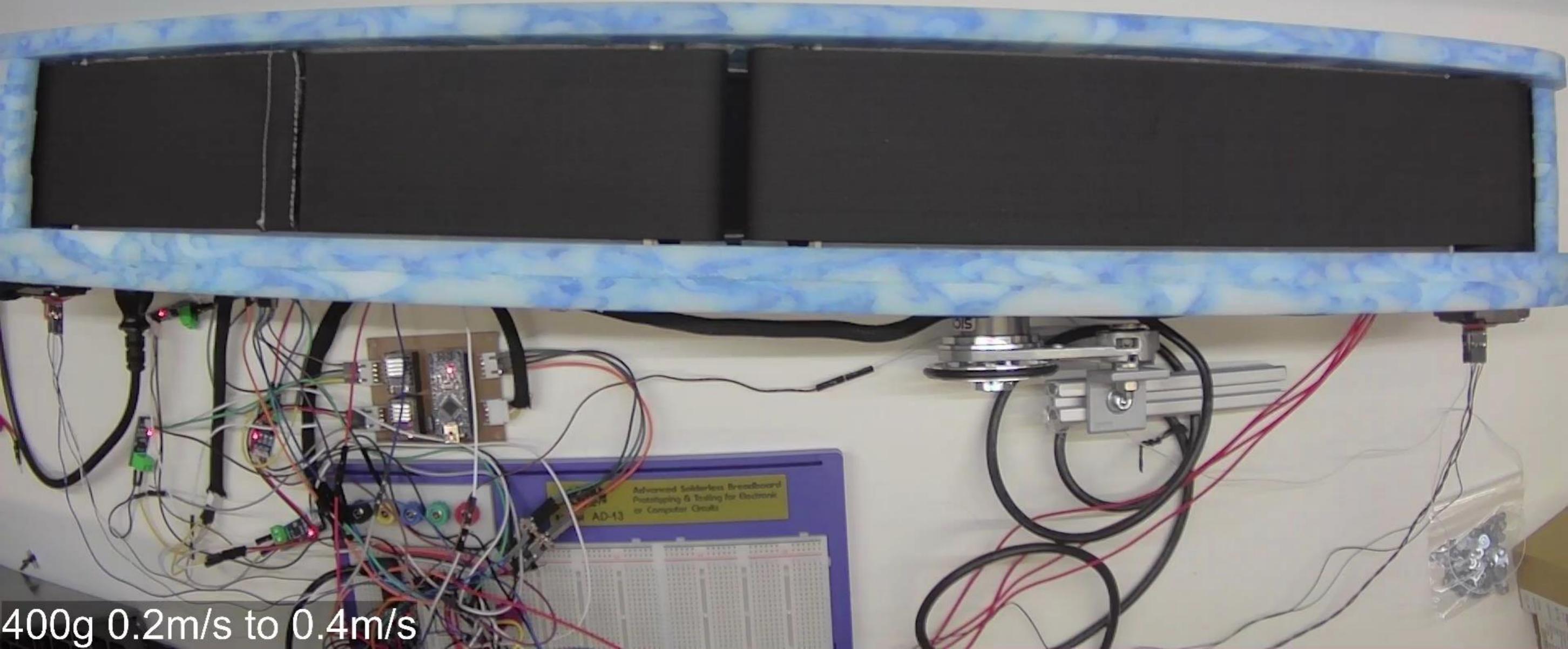
# 11.csv

28



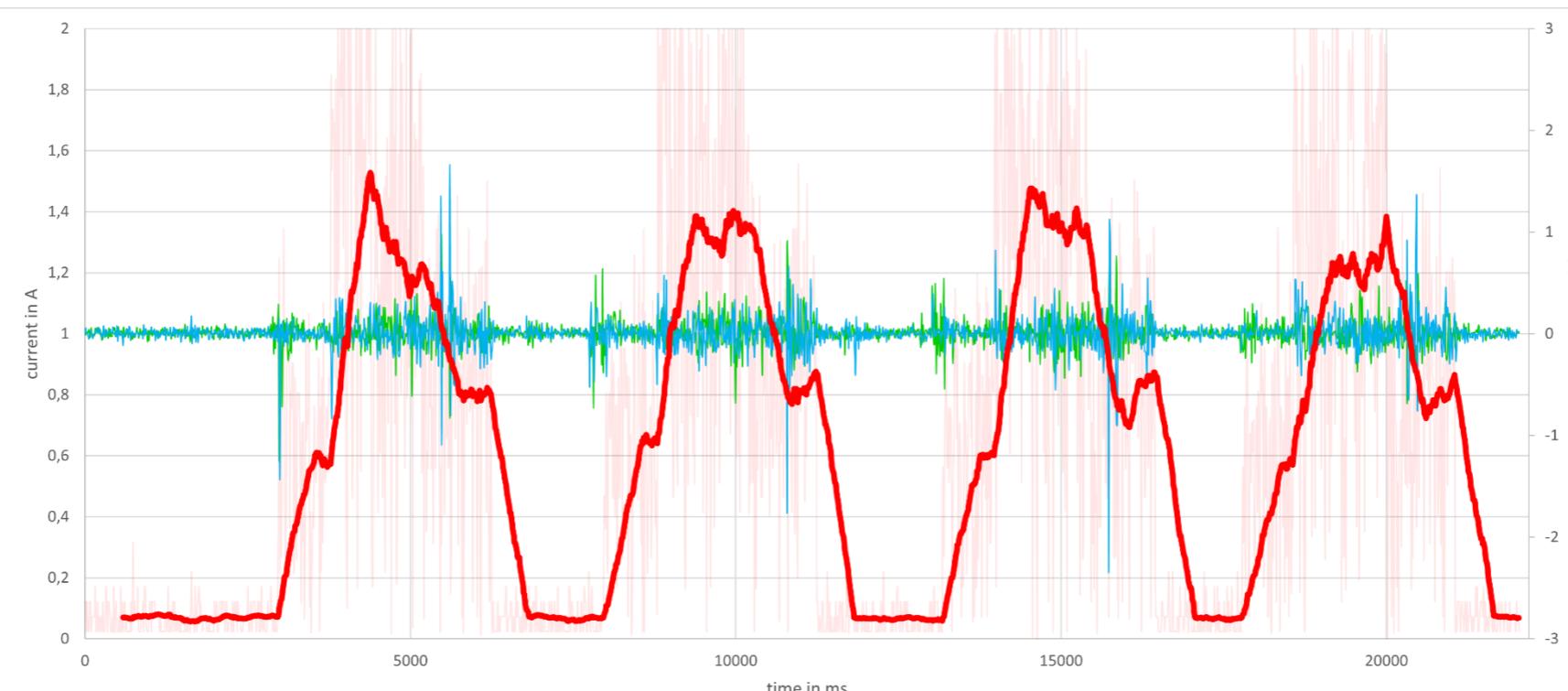
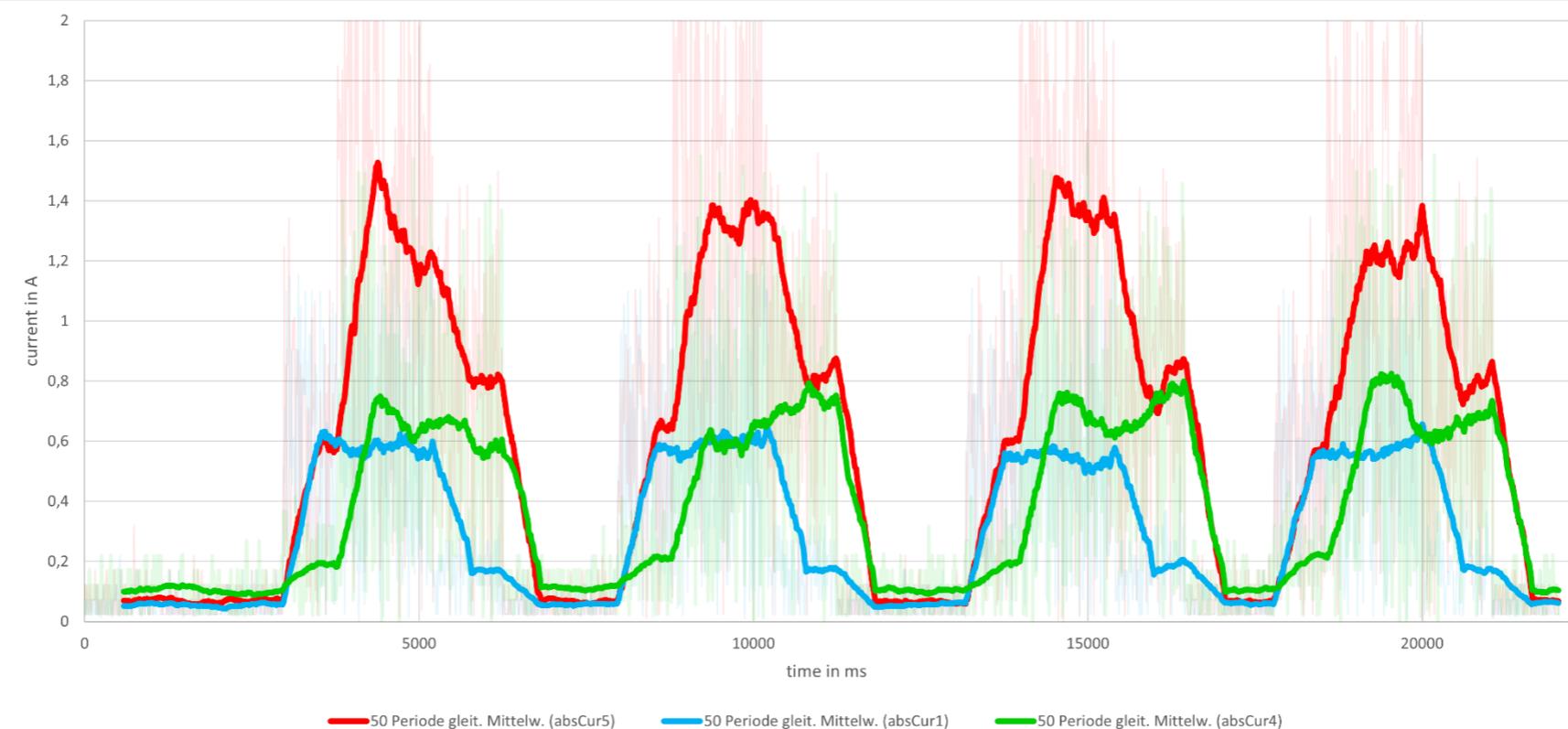
# 12.csv

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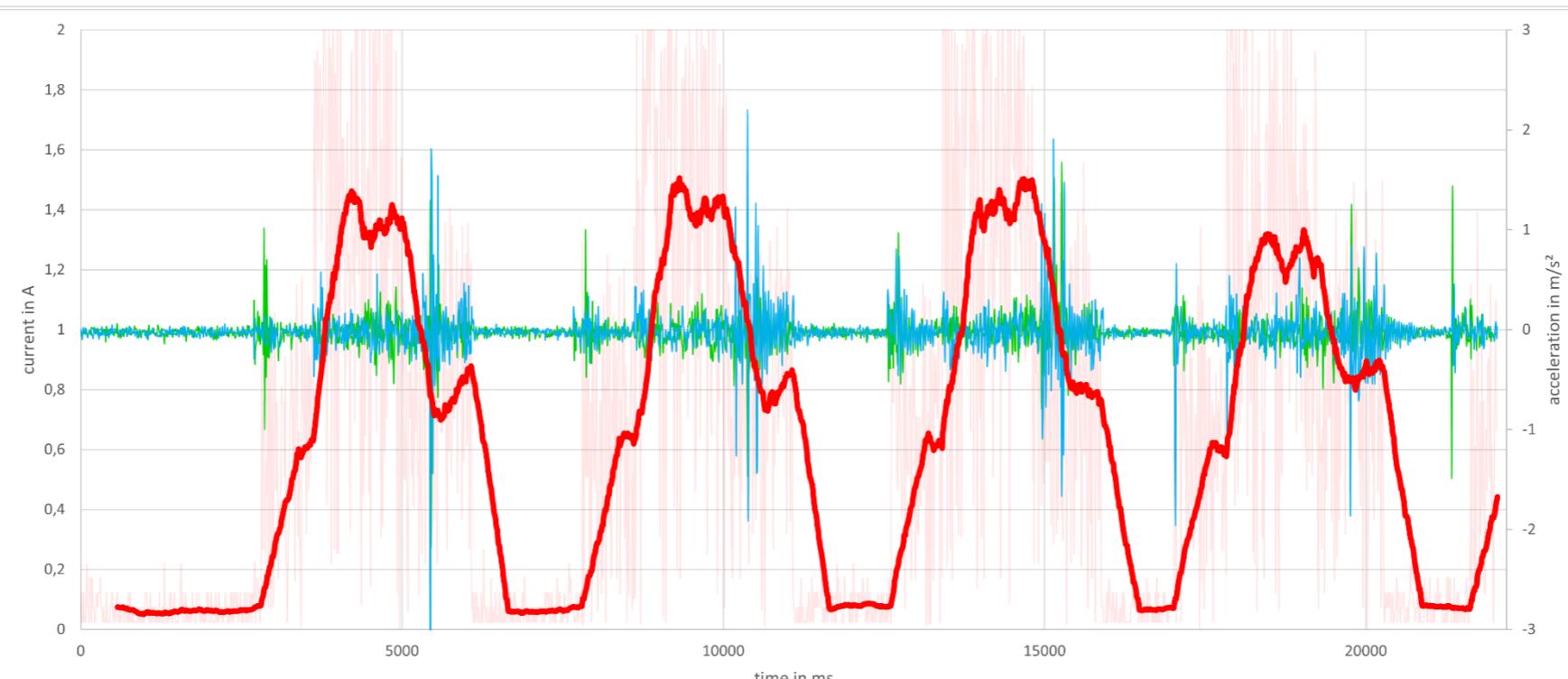
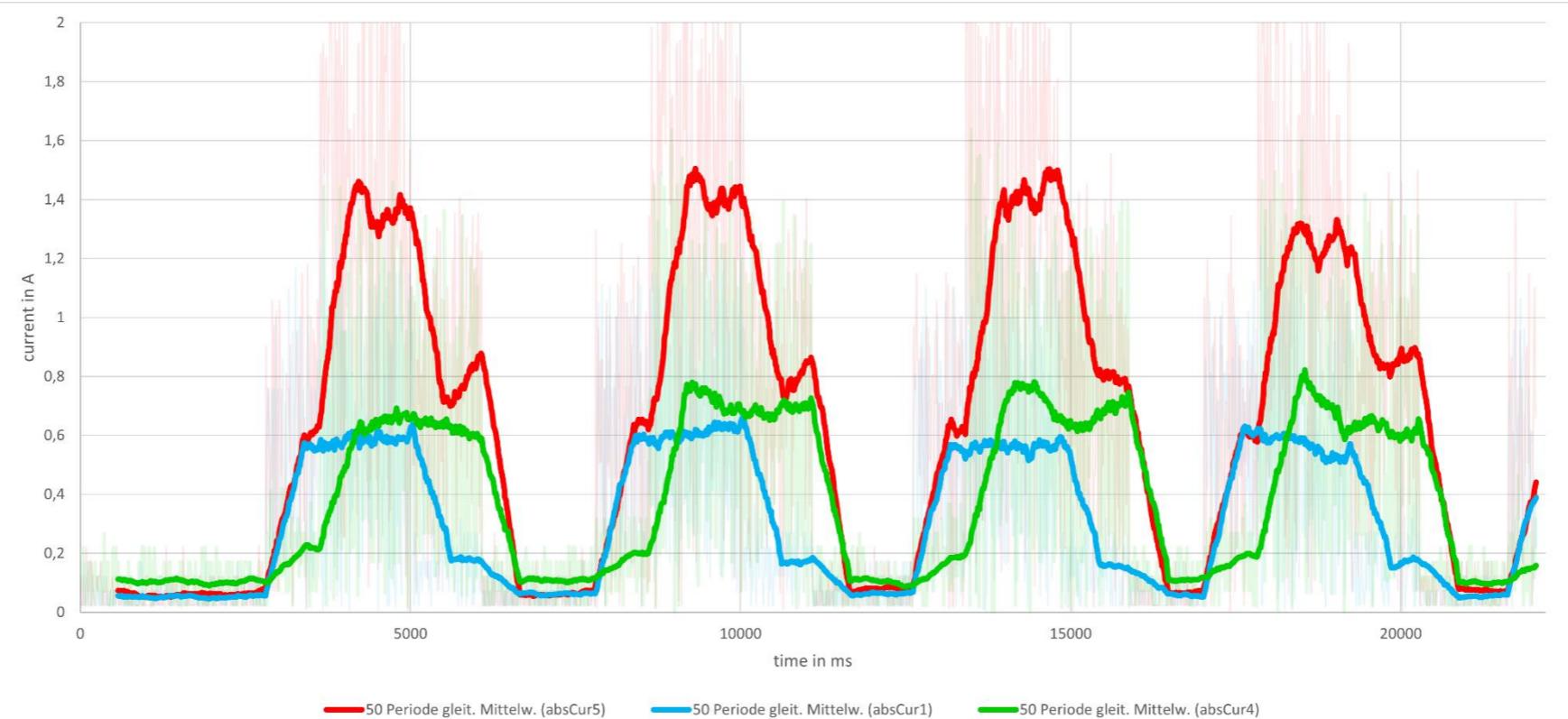


400g 0.2m/s to 0.4m/s

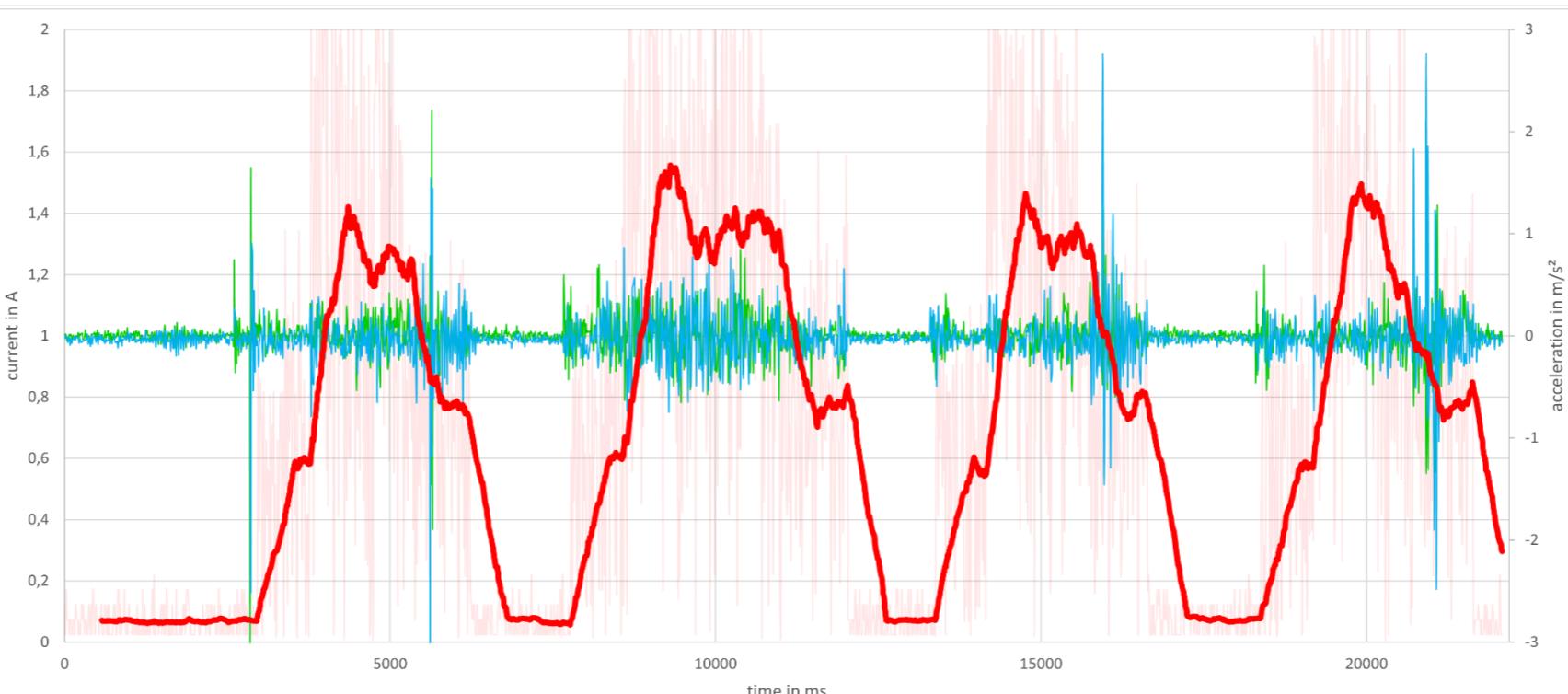
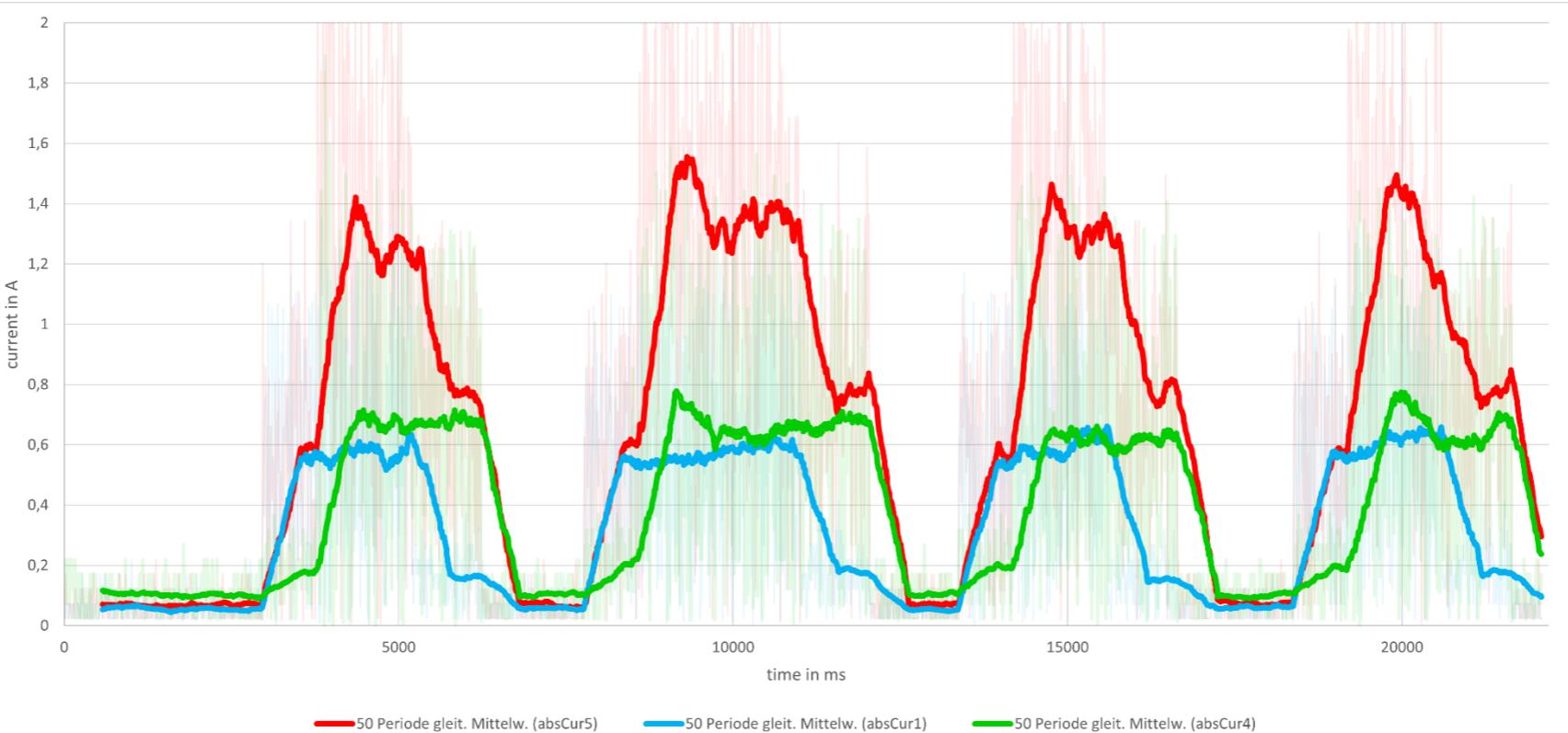
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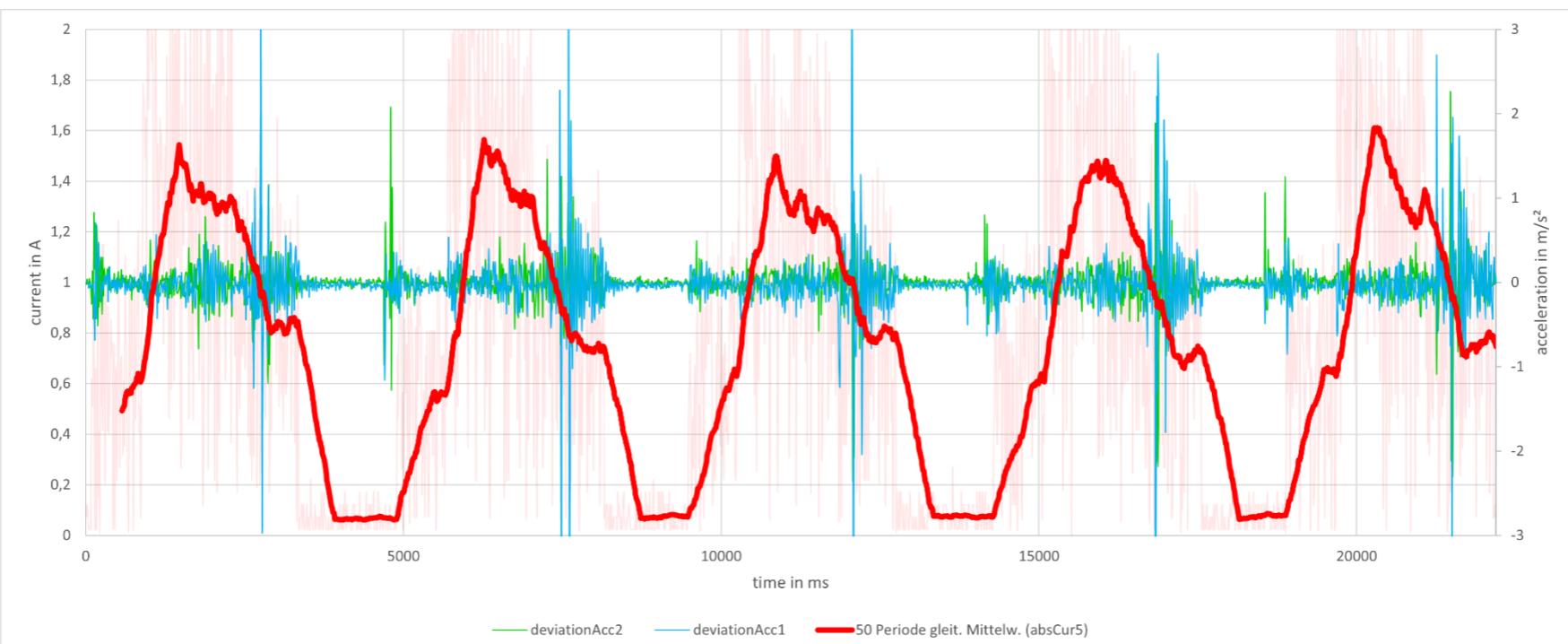
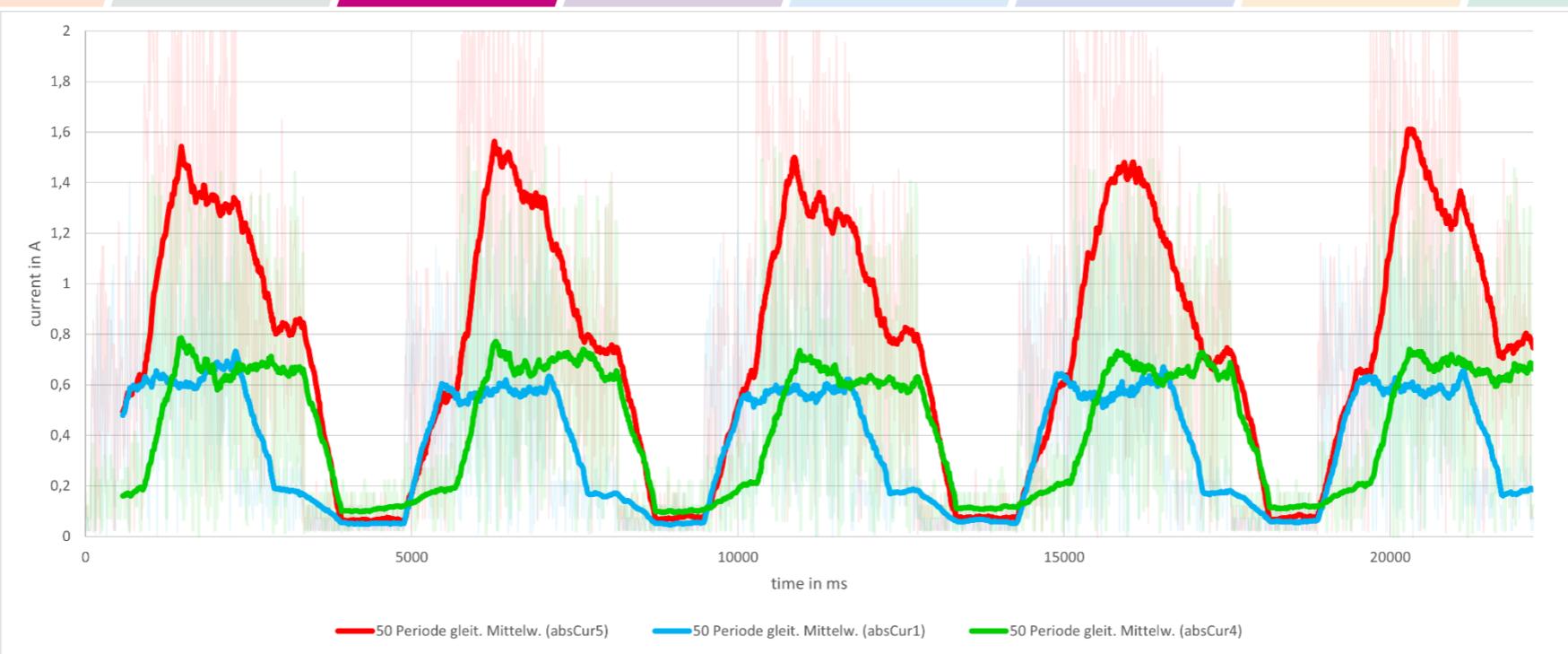
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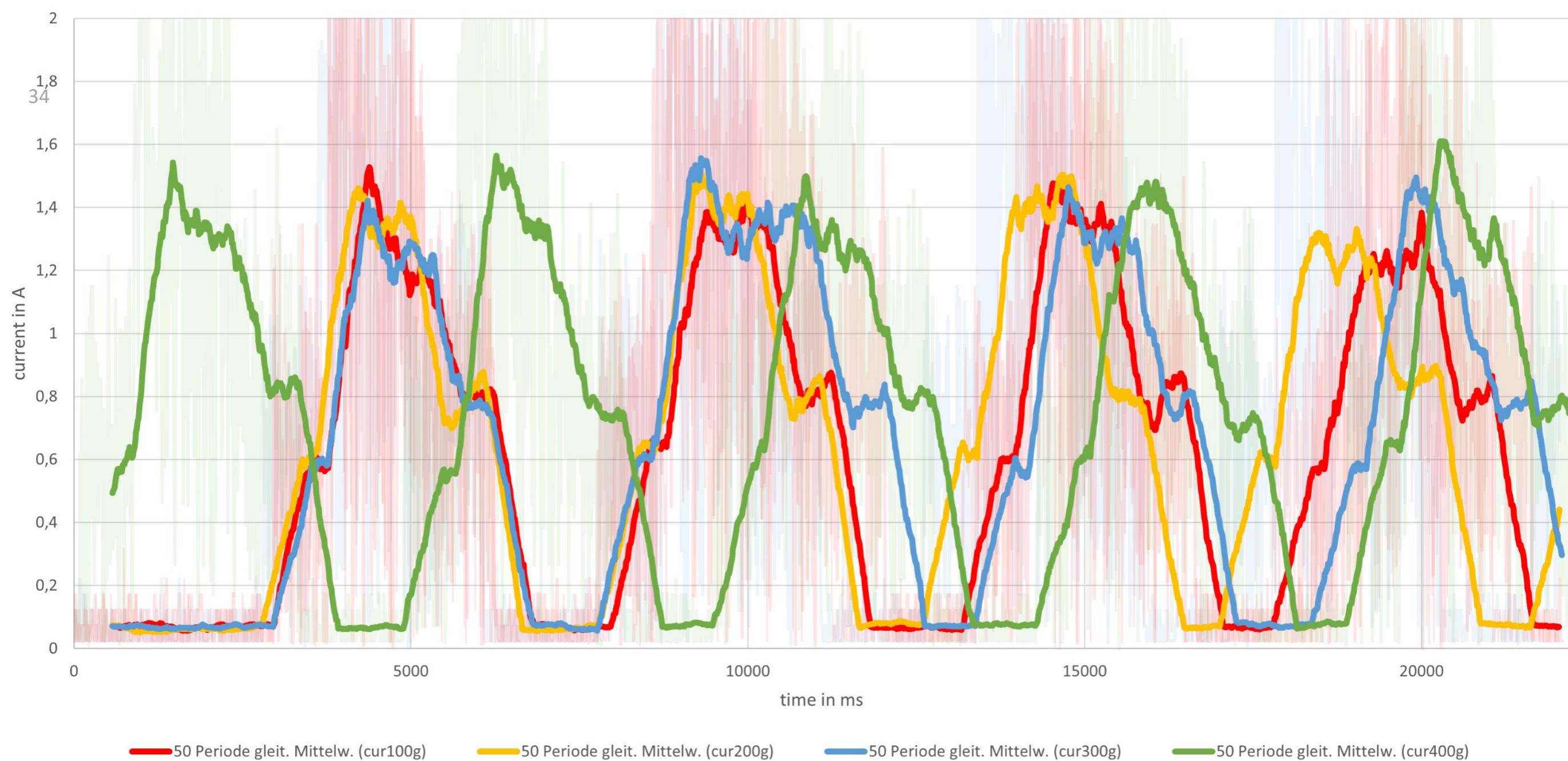


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*Shaping  
the future,  
together*



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