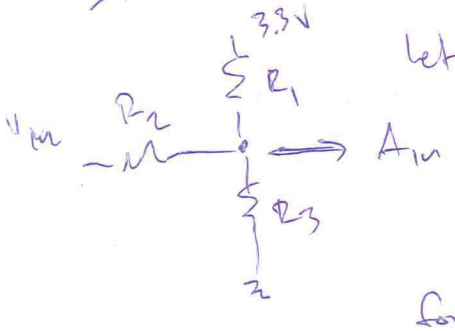
Protocol

1. Kies dag
2. Kies testpersoon
3. Kies gewricht(knie,heup,schouder,elleboog)
4. Begin bij ratio0 dan op volgorde naar ratio 4 (0 t/m 4)
5. Kopieer *gaitvariabelen_'gewricht', figuregewrichtangles.png en gewrichthoektotaal.mat* naar de map met ruwe data in de DRIVE.
6. Kopieer extrema_gewricht_testpersoon_ratio naar diezelfde map in DRIVE
7. Ga koffie drinken

Kistler analog output

± 10 VDC $\quad \Delta V = 20\,V \rightarrow \Delta V = 3.3\,V$



let $R2 = 10k$

for $V_{in} = -10\,V$, $V_{Ain} = 0V$

$$\frac{(0V)-(-10V)}{R2} = \frac{(3.3V)-(0V)}{R1} \qquad R1 = 3.3k$$

for $V_{in} = +10\,V$, $V_{Ain} = 3.3V$

$$\frac{(+10V)-(3.3V)}{R2} = \frac{(3.3V)-(0V)}{R3} \Rightarrow R3 = 4.925k$$

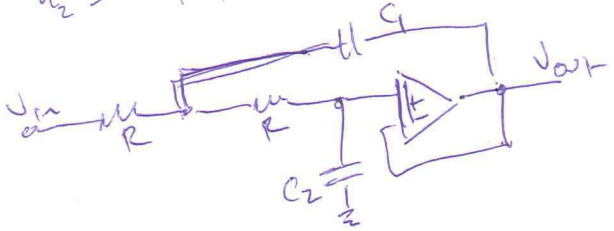
$2.2 + 2.7$

4th Order Butterworth

Unity-gain Sallen-Key

$k_1 = 1.082 \quad 2.613$

$k_2 = 0.924 \quad 0.383$



$f = 400\,Hz$

$\omega = 2\pi f$

$= 2\pi(400\,Hz)$

$= 2513\,rad/s$

$C_1 = 33\,nF \quad C_2 = 33\,nF \quad R = 11k$

$C_1 = 47\,nF \quad C_2 = 68\,nF \quad R = 22k$