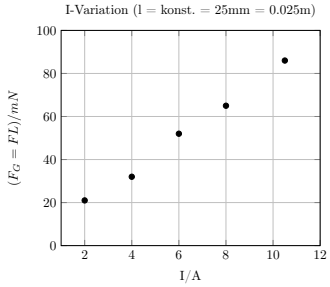
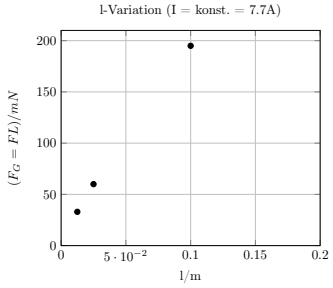
- Wenn F_E kleiner

I/A	0	2	4	6	8	10.5
m/g	0	2.1	3.2	5.2	6.5	8.6
$\frac{F_G=F_L}{mN}$	0	21	32	52	65	86



l/m	0	0.0125	0.025	0.1
m/g	0	3.3	6	19.5
$\frac{F_G=F_L}{mN}$	0	33	60	195



$F_L =$ I $\times$ L $\times$ B $=$ e $\times \frac{l}{t} \times B$

(Stromstärke $= \frac{Ladung}{Zeit}$) Weg, den das Elektron in einer Zeit zurücklegt

$=$ e $\times$ v $\times$ B

1) $r = 5cm =$ m; $B = 1,12mT =$ T; $U_B = 240V \rightarrow m_e =$
2) $r = 4cm =$ m; $B = 1,5mT =$ T; $U_B = 300V \rightarrow m_e =$
3) $r = 3cm =$ m; $B = 2,175mT =$ T; $U_B = 360V \rightarrow m_e =$
4) $r = 3cm =$ m; $B = 2,375mT =$ T; $U_B = 400V \rightarrow m_e =$

Lorentz:	$F_L = I \times l \times B$	bzw.	$F_L = e \times v \times B$
	(kompletter Draht)		(einzelnes Elektron)
Elektrisch:	$F_E = E \times Q = \frac{U}{d} \times Q$	bzw.	(siehe 1.3)
siehe Beschreibung	$F_L = F_E$	$\Leftrightarrow$	$e \times v \times B = \frac{U}{d} \times e$

$v = \frac{E}{B} = \frac{U_K}{B \times d}$

aus 1.7: $F_E = F_L$

$v = \frac{U}{v \times d}$

$v = \frac{U}{B \times d}$