$$\text{vol\_kegel}(d,h) := \pi\cdot\left(\frac{d}{2}\right)^2\cdot\frac{h}{3} \qquad \text{opp\_kegelwand}(d,h) := \pi\cdot\left(\frac{d}{2}\right)\cdot\sqrt{\left(\frac{d}{2}\right)^2 + h^2}$$

$$\text{opp\_halvebol}(d,h) := 2\cdot\pi\cdot\left(\frac{d}{2}\right)^2 \qquad \text{vol\_halvebol}(d,h) := \frac{4}{6}\cdot\pi\cdot\left(\frac{d}{2}\right)^3$$

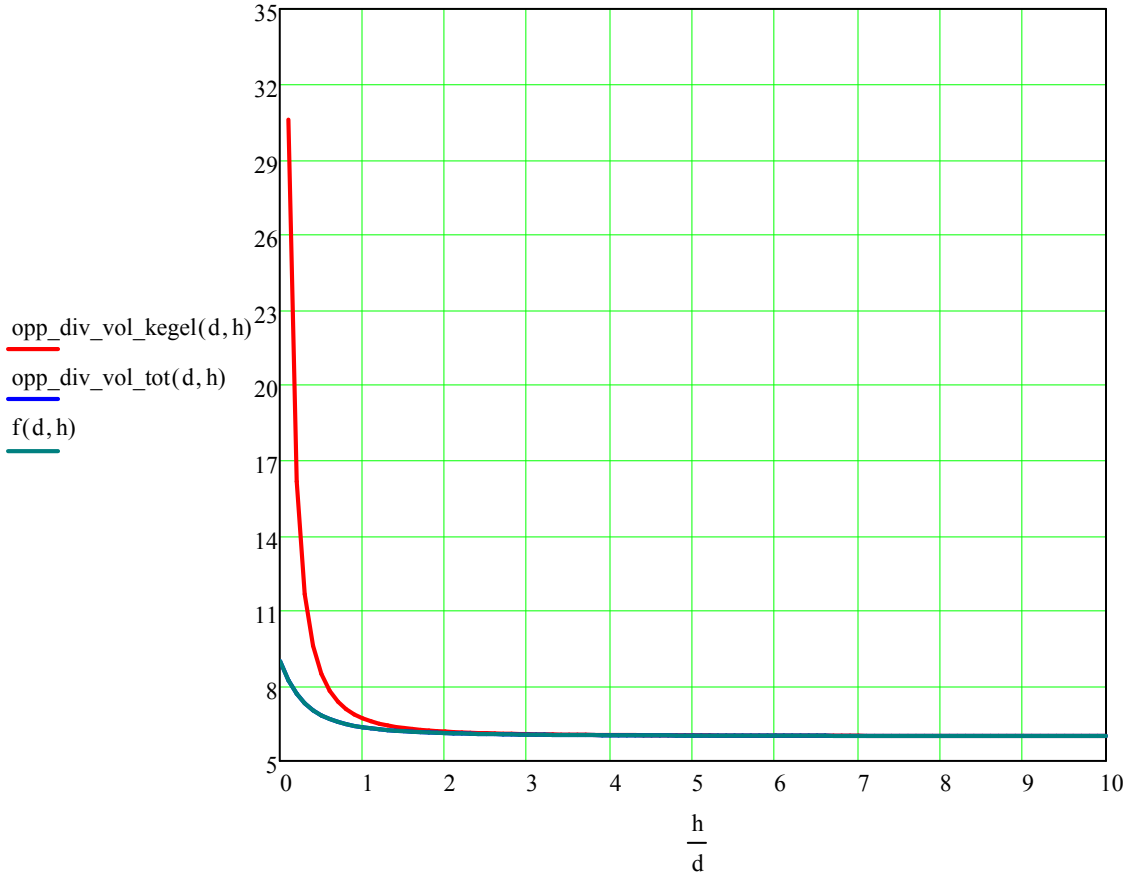
$$\text{opp\_div\_vol\_kegel}(d,h) := \frac{\text{opp\_kegelwand}(d,h)}{\text{vol\_kegel}(d,h)}$$

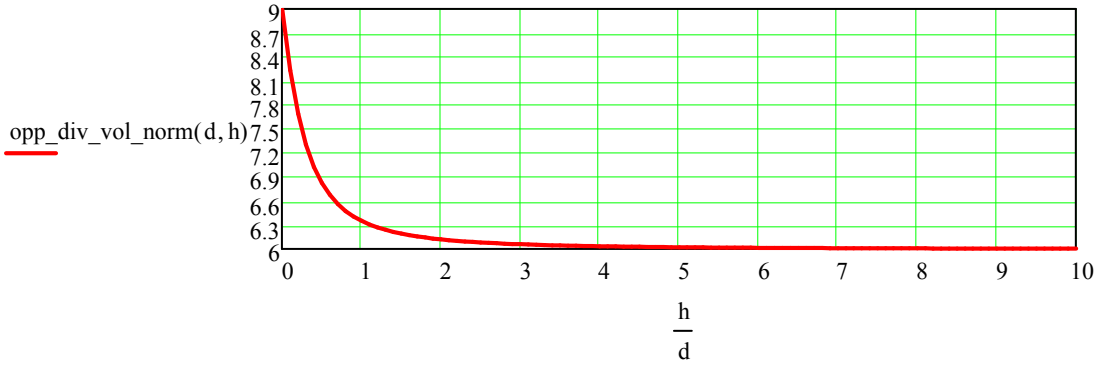
$$\text{opp\_div\_vol\_tot}(d,h) := \frac{\text{opp\_halvebol}(d,h) + \text{opp\_kegelwand}(d,h)}{\text{vol\_halvebol}(d,h) + \text{vol\_kegel}(d,h)}$$

$$\text{opp\_div\_vol\_norm}(d,h) := \text{opp\_div\_vol\_tot}(d,h)\cdot d$$

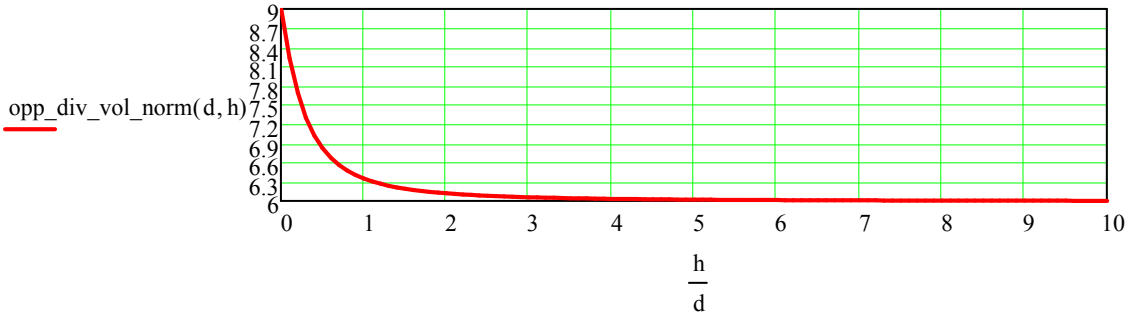
$$f(d,h) := \frac{6 + 3\cdot\sqrt{1 + 4\cdot\frac{h^2}{d^2}}}{d + h}$$

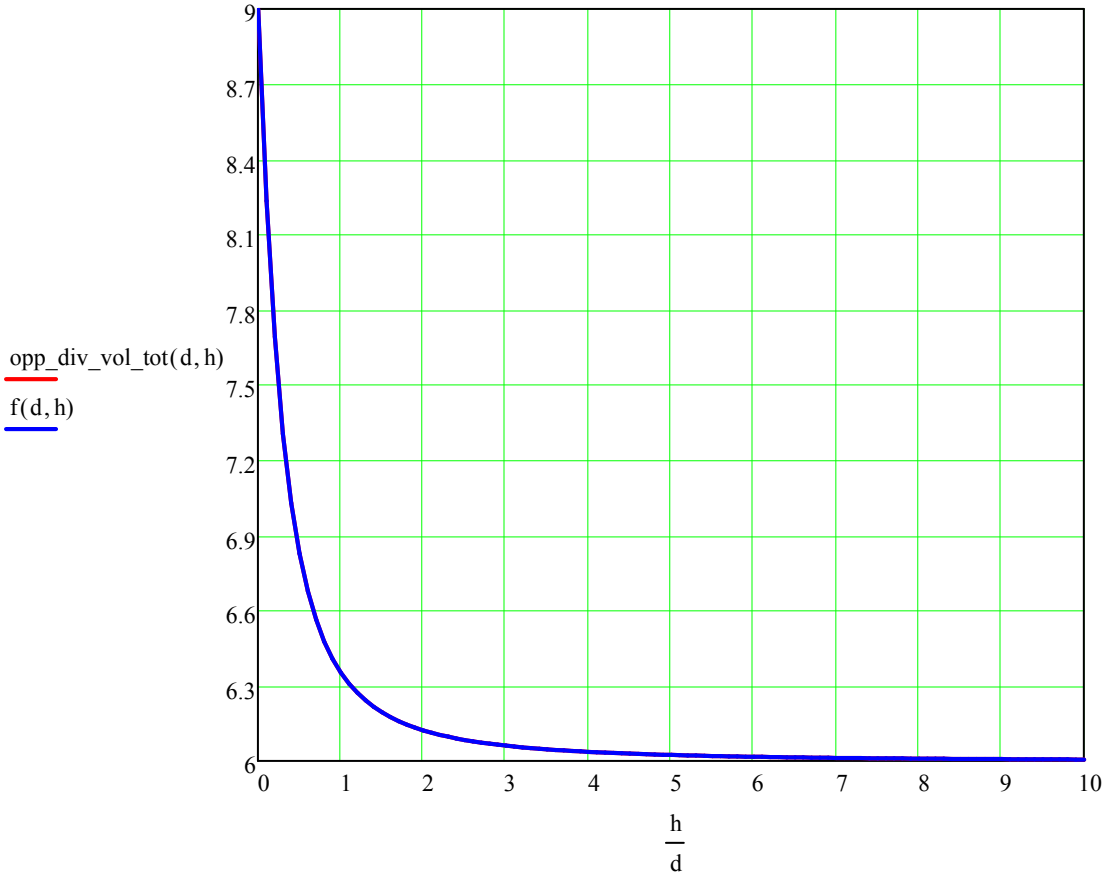
$$d := 1 \qquad h := 0, 0.1\cdot d .. 10\cdot d$$





$h := 0, 0.1 \cdot d .. 10 \cdot d$


opp_div_vol_norm(d, h)
9
8.7
8.4
8.1
7.8
7.5
7.2
6.9
6.6
6.3
6
0
1
2
3
4
5
6
7
8
9
10
h
d


opp_div_vol_tot(d, h)
f(d, h)
9
8.7
8.4
8.1
7.8
7.5
7.2
6.9
6.6
6.3
6
0
1
2
3
4
5
6
7
8
9
10
h
d