



First Lens:  $f = 35 \text{ mm}$

$$d_o = 20 \text{ mm}$$

$$\frac{1}{d_o} + \frac{1}{d_i} = \frac{1}{f} \Rightarrow \frac{1}{d_i} = \frac{1}{f} - \frac{1}{d_o} = \frac{1}{35} - \frac{1}{20}$$

$$d_i = -46.7 \text{ mm}$$

Second Lens:



$$d_o = L - d_i = 55 \text{ mm} - (-46.7 \text{ mm}) \\ = 101.7 \text{ mm}$$

$$\frac{1}{d_i} = \frac{1}{f} - \frac{1}{d_o} = \frac{1}{25} - \frac{1}{101.7} \Rightarrow d_i = 33.1 \text{ mm}$$