

5 A micrometer is used to measure the diameters of two cylinders.

$$\text{diameter of first cylinder} = (12.78 \pm 0.02) \text{ mm}$$

$$\text{diameter of second cylinder} = (16.24 \pm 0.03) \text{ mm}$$

The difference in the diameters is calculated.

What is the uncertainty in this difference?

A 0.01 mm

B 0.02 mm

C 0.03 mm

D 0.05 mm