

Answer on Question #41559 - Physics –Other

assuming that the linear temperature gradient been established

$$\chi = \frac{q}{grad(T)} = \frac{Q}{S * grad(T)} = \frac{164.9 J/s}{\pi \frac{(0.025m)^2}{4} * \frac{(500 - 20)K}{0.3m}} = 209.96 \frac{W}{mK}$$

Nearer answer is **b**

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