

Nomographs

AXIS Q1942-E Thermal Network Camera

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1. Introduction

A nomograph is a two-dimensional diagram explaining the relation between the focal length of the lens, the number of pixels across the object, and the range. For example, if the number of pixels required and the distance at which an object needs to be recognized are known, it is possible to calculate which lens or camera to use. Equally, if the camera and the number of pixels required are known, the distance at which the camera can detect an object is indicated by the nomograph.

1.1 Example

For example, take a thermal camera with a 60 mm lens pointed at a person with a critical dimension of 0.75 m (2.46 ft.). The nomograph in Figure 1 shows that the object will be recognizable at 300 m (328 yd.) and 6 pixels across the object (A). If only detection is required, the range will instead be 1 200 m (1 312 yd.) and 1.5 pixels across the object (B).

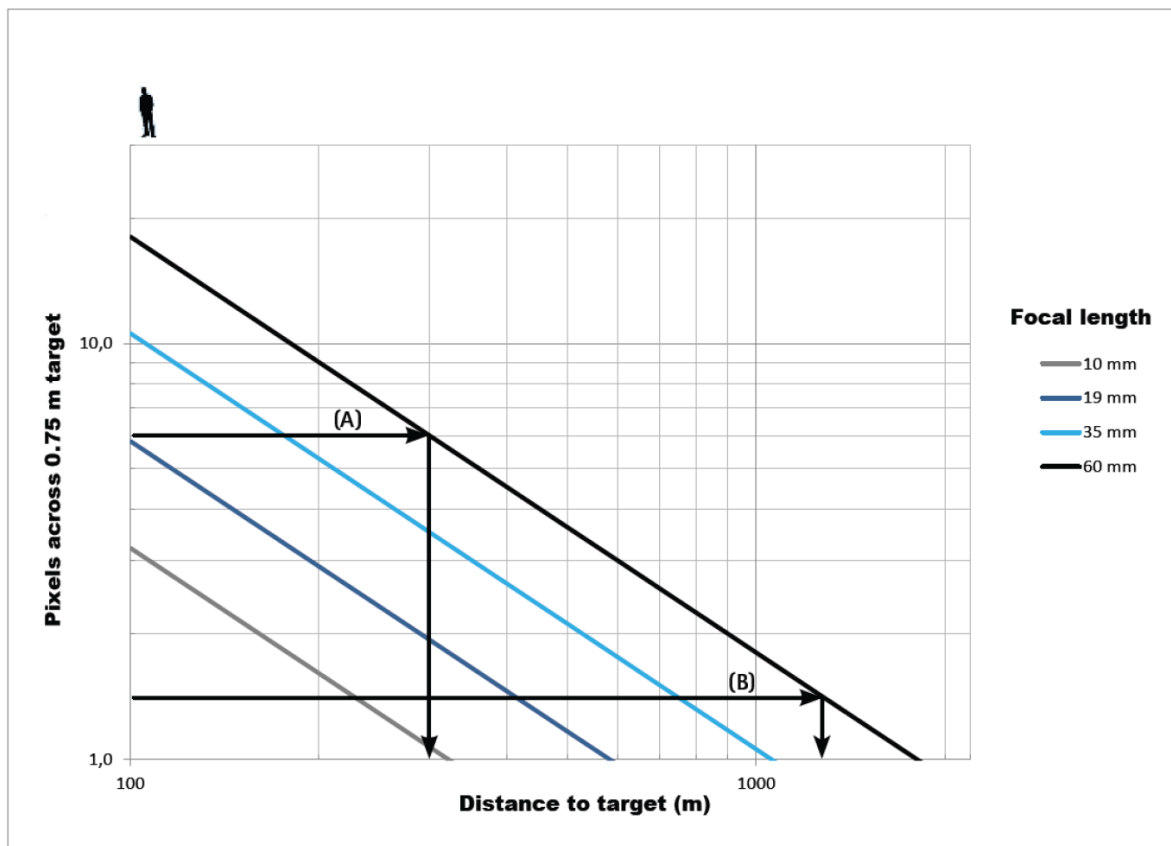


Figure 1: Example of a nomograph.

2. Nomographs AXIS Q1942-E

