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(54) Title: MULTIPLE-SIZE OPTICAL FIBER IDENTIFIER

(57) Abstract

An instrument for detecting optical signals in optical fibers of various diameters includes a piston adapted to urge a portion of an optical fiber against a light detector, the piston being movable between open and closed positions, and having at least two piston surfaces, one defining a first precision bend geometry adapted to urge a fiber of a first diameter against the detector, and another defining a second precision bend geometry adapted to urge a fiber of a second diameter against the detector. The piston is biased toward the detector by a spring mechanism which also applies a predetermined amount of pressure against the fiber. The piston includes a mandrel having the two piston surfaces, the mandrel further having a shaft such that it may be rotated about the shaft to present either one of the piston surfaces to the detector. Indicia may be provided on the mandrel shaft, or the body, to visually indicate which piston surfaces has been selected. The mandrel may be moved between the first and second orientations without disassembling the device, although such movement is allowed only when the piston is in a retracted position away from the detector. The mandrel includes detent means for releasably securing the mandrel in either one of the first and second orientations. A novel ambient light shield is also disclosed.

