

45° rod mirrors.

45° rod mirrors can operate over a very wide waveband, for example, from below 200nm to beyond 5µm. The 45° rod mirrors have a range of diameters that produce different sized rod diameters and lengths. The reflective coatings available include protected aluminium, enhanced aluminium, protected gold, and bare gold.

The 45° flat mirror can be used to redirect the light path of, for example, a laser beam. They are particularly useful for borescope applications, such as, inspecting the bores of an engine.

The most frequently requested specifications for cone and 45° rod mirrors are as follows:

Diameter range	1mm to 20mm
Diameter tolerance	better than $\pm 0.2\text{mm}$
Centre thickness	the same as the diameter
Centre thickness tolerance	better than $\pm 0.2\text{mm}$ at room temperature
Clear aperture	90% of diameter
Surface form error	better than $\lambda/4@ 632.8\text{nm}$
Surface quality	< 20-10 scratch/ dig
Coating finish	ground back and edge
Chamfer	0.3x0.3@45°

Coatings

Various surface coats are available, such as: protected aluminium, enhanced aluminium, bare gold, and protected gold.

Our capabilities are always expanding so if your requirement is not mentioned above please enquire as we have many years of experience in this field.

Contact our multilingual technical sales team and discover how Knight Optical's high quality 45° rod mirrors capabilities and service can improve your instrumentation and supply chain experience.