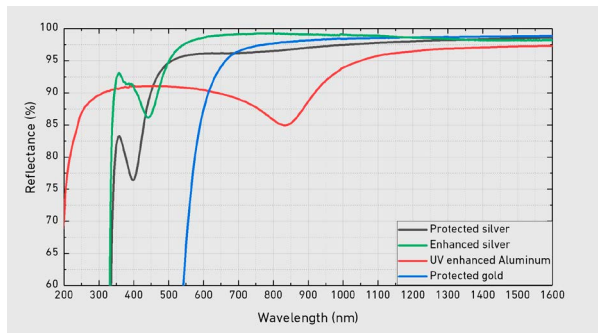
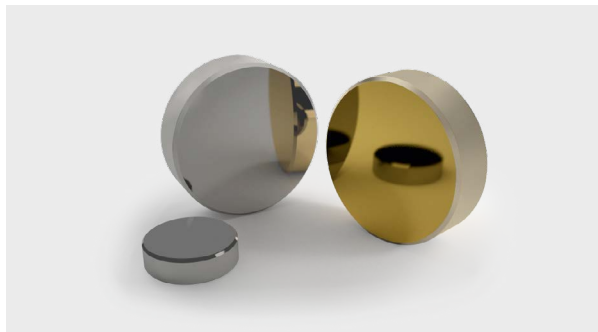


## Flat and curved metal-coated mirrors



Metal-coated mirrors exhibit a relatively uniform reflectivity over wide wavelength range. They are nearly insensitive to angle of incidence

and polarization state of light, thus their reflection losses are significantly higher compared to dielectric thin-film mirrors.

### Main features

- Mirror substrates fabricated from high-quality UV grade fused silica
- Standard substrate dimensions are  $\varnothing 25,4 \times 5$  mm
- UV enhanced aluminum, protected aluminum, protected silver, low GDD enhanced silver and protected gold metallic coatings selection
- Relatively uniform reflectance over a wide wavelength range
- Radius of curvature selection from infinity to -200 mm
- Custom metal-coated mirrors available upon request

### Application examples

- Broadband reflectivity and low chromatic dispersion mirrors for white-light interferometers and broadband laser sources
- Partially transmissive broadband mirrors
- Extremely long infrared (up to 20  $\mu\text{m}$ ) mirrors
- Plano-convex and plano-concave designs

### Standard specifications

FLAT AND CURVED METAL-COATED MIRRORS	
Substrate material	UV grade fused silica
Substrate dimensions	$\varnothing 25,4 \times 5$ mm
Clear aperture	>85%
Face dimensions tolerance	+0/-0,15 mm
Thickness tolerance	$\pm 1$ mm
Protective chamfers	<0,35 mm at 45°
Parallelism error	<3 arcmin for plano-plano mirrors
Surface quality	40-20 S-D
Surface flatness	$< \lambda/8 @ 632,8$ nm
Laser induced damage threshold	>0,25 J/cm <sup>2</sup> @1064 nm, 11 ns for protected aluminum mirrors, >1,8 J/cm <sup>2</sup> @1064 nm, 11 ns for protected silver mirrors and for enhanced silver mirrors, >0,9 J/cm <sup>2</sup> @1064 nm, 11 ns for protected gold mirrors

### Standard products

MATERIAL	DIMENSIONS	COATINGS	AVERAGE REFLECTANCE	TYPE	ROC	SKU	PRICE
UVFS	$\varnothing 25,4 \times 5$ mm	UV enhanced Aluminum	>80% @ 230-700 nm	Plano-plano	Infinity	6343	34 €
				Plano-concave	-50 mm	6345	52 €
				Plano-concave	-100 mm	6344	52 €
				Plano-plano	-200 mm	6346	52 €
				Plano-concave	Infinity	6355	28 €
				Plano-concave	-50 mm	6356	46 €
		Protected Aluminum	>85% @ 300 nm-IR	Plano-concave	-100 mm	6357	46 €
				Plano-concave	-200 mm	6358	46 €
				Plano-plano	Infinity	6347	32 €
		Protected Silver	>96% @ 400 nm-IR	Plano-concave	-50 mm	6348	50 €
				Plano-concave	-100 mm	6349	50 €
				Plano-concave	-200 mm	6354	50 €
		Enhanced Silver	>99% @ 700-900 nm	Plano-plano	Infinity	15197	62 €
				Plano-plano	Infinity	6350	38 €
		Protected Gold	>96% @ 900 nm-IR	Plano-concave	-50 mm	6351	56 €
				Plano-concave	-100 mm	6352	56 €
				Plano-concave	-200 mm	6353	56 €