

25.4mm Clear Aperture, 1 Arcsec, Gold Retroreflector



Stock **#46-183** 3 In Stock

-

1

+

€1.595^{.00}

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Qty 1-9	€1.595,00 each
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General

Retroreflector

Type:

Physical & Mechanical Properties

25.4

Clear Aperture CA (mm):

41.30

Diameter (mm):

± 1.6

Optical Properties	
Refractive Index	1.50
Transmittance (%)	95.0
Absorbance (nm)	0.02
Fluorescence Intensity	0.05
UV-Vis Spectrum	See Figure 1
FTIR Spectrum	See Figure 2
NMR Spectrum	See Figure 3
Mass Spectrum	See Figure 4
Elemental Analysis	See Table 1
Thermal Stability	See Figure 5
Thermal Conductivity	0.02 W/mK
Thermal Expansion Coefficient	10.0 $\times 10^{-6}$ /K
Thermal Shrinkage (%)	0.5
Thermal Degradation	See Figure 6
Thermal Decomposition	See Figure 7
Thermal Oxidation	See Figure 8
Thermal Reduction	See Figure 9
Thermal Polymerization	See Figure 10
Thermal Crystallization	See Figure 11
Thermal Annealing	See Figure 12
Thermal Curing	See Figure 13
Thermal Crosslinking	See Figure 14
Thermal Grafting	See Figure 15
Thermal Etching	See Figure 16
Thermal Deposition	See Figure 17
Thermal Evaporation	See Figure 18
Thermal Sublimation	See Figure 19
Thermal Desorption	See Figure 20
Thermal Adsorption	See Figure 21
Thermal Desorption	See Figure 22
Thermal Adsorption	See Figure 23
Thermal Desorption	See Figure 24
Thermal Adsorption	See Figure 25
Thermal Desorption	See Figure 26
Thermal Adsorption	See Figure 27
Thermal Desorption	See Figure 28
Thermal Adsorption	See Figure 29
Thermal Desorption	See Figure 30
Thermal Adsorption	See Figure 31
Thermal Desorption	See Figure 32
Thermal Adsorption	See Figure 33
Thermal Desorption	See Figure 34
Thermal Adsorption	See Figure 35
Thermal Desorption	See Figure 36
Thermal Adsorption	See Figure 37
Thermal Desorption	See Figure 38
Thermal Adsorption	See Figure 39
Thermal Desorption	See Figure 40
Thermal Adsorption	See Figure 41
Thermal Desorption	See Figure 42
Thermal Adsorption	See Figure 43
Thermal Desorption	See Figure 44
Thermal Adsorption	See Figure 45
Thermal Desorption	See Figure 46
Thermal Adsorption	See Figure 47
Thermal Desorption	See Figure 48
Thermal Adsorption	See Figure 49
Thermal Desorption	See Figure 50
Thermal Adsorption	See Figure 51
Thermal Desorption	See Figure 52
Thermal Adsorption	See Figure 53
Thermal Desorption	See Figure 54
Thermal Adsorption	See Figure 55
Thermal Desorption	See Figure 56
Thermal Adsorption	See Figure 57
Thermal Desorption	See Figure 58
Thermal Adsorption	See Figure 59
Thermal Desorption	See Figure 60
Thermal Adsorption	See Figure 61
Thermal Desorption	See Figure 62
Thermal Adsorption	See Figure 63
Thermal Desorption	See Figure 64
Thermal Adsorption	See Figure 65
Thermal Desorption	See Figure 66
Thermal Adsorption	See Figure 67
Thermal Desorption	See Figure 68
Thermal Adsorption	See Figure 69
Thermal Desorption	See Figure 70
Thermal Adsorption	See Figure 71
Thermal Desorption	See Figure 72
Thermal Adsorption	See Figure 73
Thermal Desorption	See Figure 74
Thermal Adsorption	See Figure 75
Thermal Desorption	See Figure 76
Thermal Adsorption	See Figure 77
Thermal Desorption	See Figure 78
Thermal Adsorption	See Figure 79
Thermal Desorption	See Figure 80
Thermal Adsorption	See Figure 81
Thermal Desorption	See Figure 82
Thermal Adsorption	See Figure 83
Thermal Desorption	See Figure 84
Thermal Adsorption	See Figure 85
Thermal Desorption	See Figure 86
Thermal Adsorption	See Figure 87
Thermal Desorption	See Figure 88
Thermal Adsorption	See Figure 89
Thermal Desorption	See Figure 90
Thermal Adsorption	See Figure 91
Thermal Desorption	See Figure 92
Thermal Adsorption	See Figure 93
Thermal Desorption	See Figure 94
Thermal Adsorption	See Figure 95
Thermal Desorption	See Figure 96
Thermal Adsorption	See Figure 97
Thermal Desorption	See Figure 98
Thermal Adsorption	See Figure 99
Thermal Desorption	See Figure 100

1.00

Protected Gold (700-2000nm)

 0.15λ

BOROFLOAT®

80-50

Left-Handed

180

700 - 2000

Threading & Mounting

(2) 1/4-20, M6 x 1.0

Regulatory Compliance

Compliant

Compliant

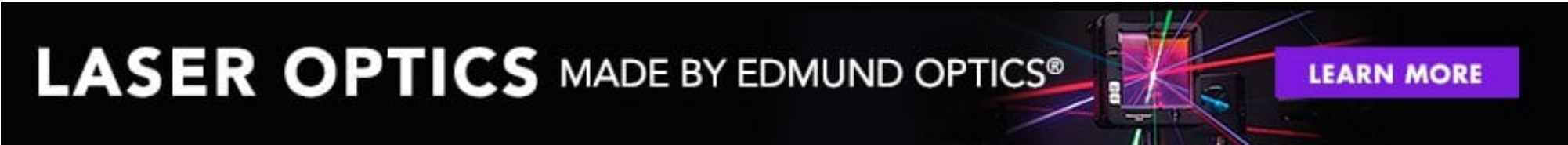
View

Product Details

- Incident Light is Reflected Back to the Source
- Hollow Lightweight Design
- No Material Absorption or Chromatic Aberration

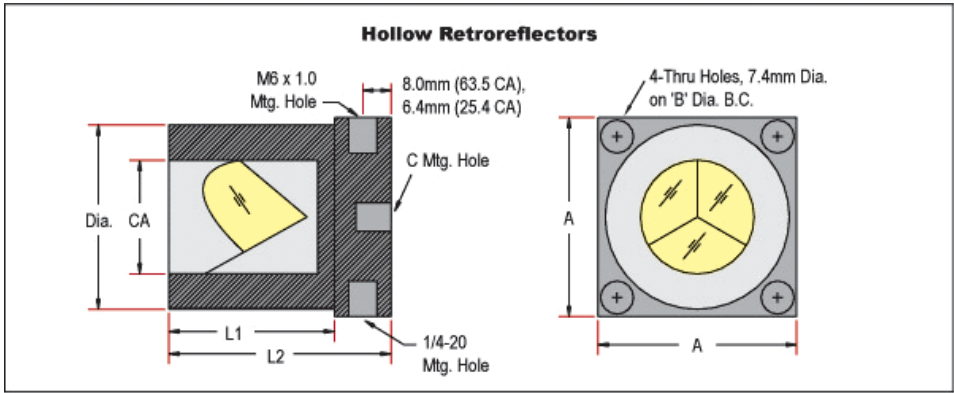
Hollow Retroreflectors are constructed of three first surface mirrors assembled into a corner cube. This produces a lightweight "hollow corner cube" that is totally insensitive to position and movement. The result is that parallel incident light is reflected back to the source with great accuracy, regardless of the angle of incidence. Since the optical path is in air, this configuration eliminates material absorption and chromatic aberrations present in solid glass prism-type retroreflectors. The larger housings feature a variety of mounting holes on the back plate.

The specified beam deviation value of each Hollow Retroreflector is the maximum deviation from parallelism of any single return beam from any of the six sub-apertures, when the retroreflector is fully illuminated. Exiting wavefront is the resultant peak-to-valley wavefront deformation from a fully illuminated retroreflector, which is listed in factors of λ (where $\lambda = 633\text{nm}$). The unique, patented cushion mounting makes these Hollow Retroreflectors extremely resistant to shock.



Technical Information

Clear Aperture (CA)	Diameter	L1	L2	A	B	C
6.4mm	8.1mm	8.1mm *	—	—	—	—
12.7mm	14.6mm	19.1mm *	—	—	—	M3 x0.5
25.4mm	41.3mm	36.5mm	49.2mm	44.5mm	50.8mm	1/4-20
50.8mm	76.2mm	62.0mm	79.5mm	78.7mm	94.2mm	1/4-20 **
63.5mm	89.4mm	61.5mm	79.0mm	92.3mm	101.6mm	1/4-20 **
127.0mm	166.7mm	125.5mm	150.8mm	171.5mm	221.9mm	1/4-20 **



*Does not have back plate

**Additional 8 mounting holes on 50.8mm and larger Dia: (4) M6 x 1.0 at 90° and (4) 1/4-20 at 90° on 2" Bolt Circle

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