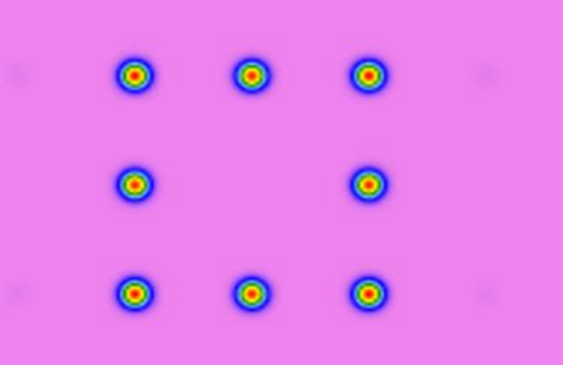


DBS-8/4 8/4 Diffractive Beam Splitter



PRODUCT FEATURES

- ▲ Separation of the input beam into eight beams
- ▲ Thin single optical element

APPLICATIONS

- ▲ Parallel laser material processing
- ▲ Parallel laser scanning
- ▲ Laser perforation
- ▲ Optical measurement

RELATED PRODUCT

- ▲ Rotation mount HSF03 for rotation /alignment of the spot array



8/4 beam splitters diffract the input beam into 8 beams. Positions of 4 beams are in the corners of a square. The other 4 beams are centred on the edges of the square. Each beam has > 8.75 % of total input power. The uniformity error $(I_{max} - I_{min}) / (I_{max} + I_{min})$ is < 2.5 %. Besides, the power in the highest unwanted diffraction order is < 1.3 % (of input power).

SPECIFICATIONS

Efficiency	> 70 %
Uniformity error	< 2.5 %
Light in 0th order beam	< 1 %
Strongest unwanted beam	< 1.3 %
Dimensions ¹⁾	dia. 25.4 mm / thickness 3 mm
Active area ¹⁾	dia. 23 mm
Material ¹⁾	fused silica
Damage threshold	10 J/cm ² @ 1064 nm, 10 ns 5 J/cm ² @ 532 nm, 10 ns 3 J/cm ² @ 355 nm, 10 ns

Incl. AR/AR coating

¹⁾ Others on request

AVAILABLE SEPARATION ANGLE α

1064 nm	1030 nm	532 nm	515 nm	355 nm	343 nm
2.903 °	2.811 °	1.452 °	1.405 °	0.969 °	0.936 °
1.501 °	1.453 °	0.750 °	0.726 °	0.501 °	0.484 °
1.204 °	1.166 °	0.602 °	0.583 °	0.402 °	0.388 °
1.000 °	0.968 °	0.500 °	0.484 °	0.334 °	0.322 °
0.500 °	0.484 °	0.250 °	0.242 °	0.167 °	0.161 °
0.296 °	0.286 °	0.148 °	0.143 °	0.099 °	0.095 °

Model No.: DBS-8/4-wavelength-separation angle

Other angles or wavelengths on request.

