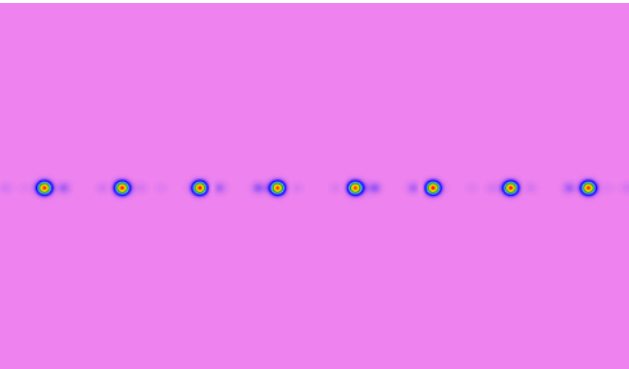


## DBS-1x8 1x8 Diffractive Beam Splitter



### 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



1x8 beam splitters diffract the input beam into 8 beams. Each beam has > 8.7 % 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 % (of input power).

### SPECIFICATIONS

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

<sup>1)</sup> Others on request

### AVAILABLE SEPARATION ANGLE $\alpha$

1064 nm	1030 nm	532 nm	515 nm	355 nm	343 nm
0.646 °	0.625 °	0.323 °	0.313 °	0.216 °	0.208 °
0.464 °	0.449 °	0.232 °	0.225 °	0.155 °	0.150 °
0.449 °	0.434 °	0.224 °	0.217 °	0.150 °	0.145 °

Model No.: DBS-1x8-wavelength-separation angle

Other angles or wavelengths on request.

