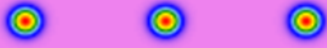


## DBS-1x3

# 1x3 Diffractive Beam Splitter



### PRODUCT FEATURES

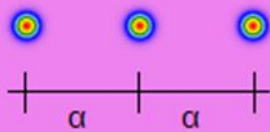
- ▲ Separation of the input beam into three beams
- ▲ Thin single optical element

### APPLICATIONS

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

### RELATED PRODUCT

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



1x3 beam splitters diffract the input beam into 3 beams. Each beam has > 28 % of total input power. The uniformity error  $(I_{max} - I_{min}) / (I_{max} + I_{min})$  is < 5 %. Besides, the power in the highest unwanted diffraction order is < 3.5 % (of input power).

### SPECIFICATIONS

Efficiency	> 84 %
Uniformity error	< 5 %
Strongest unwanted beam	< 3.5 %
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 α

1064 nm	1030 nm	532 nm	515 nm	355 nm	343 nm
2.292 °	2.219 °	1.146 °	1.109 °	0.765 °	0.739 °
0.999 °	0.968 °	0.500 °	0.484 °	0.333 °	0.322 °
0.500 °	0.484 °	0.250 °	0.242 °	0.167 °	0.161 °
0.229 °	0.222 °	0.115 °	0.111 °	0.077 °	0.074 °
0.115 °	0.111 °	0.057 °	0.056 °	0.038 °	0.037 °
0.092 °	0.089 °	0.046 °	0.044 °	0.031 °	0.030 °
0.057 °	0.056 °	0.029 °	0.028 °	0.019 °	0.019 °
0.023 °	0.022 °	0.012 °	0.011 °	0.008 °	0.007 °
0.020 °	0.019 °	0.010 °	0.010 °	0.007 °	0.006 °

Model No.: DBS-1x3-wavelength-separation angle

Other angles or wavelengths on request.