

Preliminary Grating Specifications

Contact (Name, organization, address, email, phone etc.)	
Project, beamline or other reference	

HZB Contact
Precision Gratings (PG)

Helmholtz-Zentrum Berlin
Albert-Einstein-Straße 15
12489 Berlin
Germany

Phone: +49 30 8062-14776
gratings@helmholtz-berlin.de

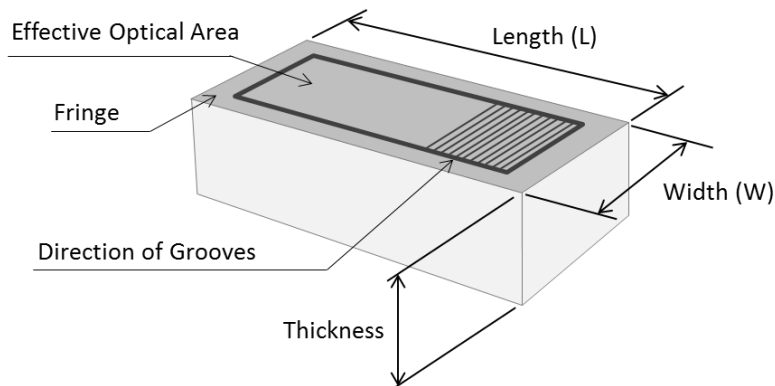
In order to inquire a grating, please fill out the tables. If you need support, please contact the HZB grating team. Thank you very much for your request.

1) Grating blank

A1	Blank material				
A2	Blank dimensions	Tolerance			
A2.1	Length L		mm	+/-	mm
A2.2	Width W		mm	+/-	mm
A2.3	Thickness		mm	+/-	mm
A3	Effective optical area (please consider a fringe of at least 3 mm width)				
A3.1	Length LO		mm	+/-	mm
A3.2	Width WO		mm	+/-	mm
A4	Surface properties				
A4.1	Radius				
A4.2	Slope error meridional (rms)				
A4.3	Slope error sagittal (rms)				
A4.5	Micro roughness (rms)				

Will the substrate be provided by the customer? Yes No

Fig. 1

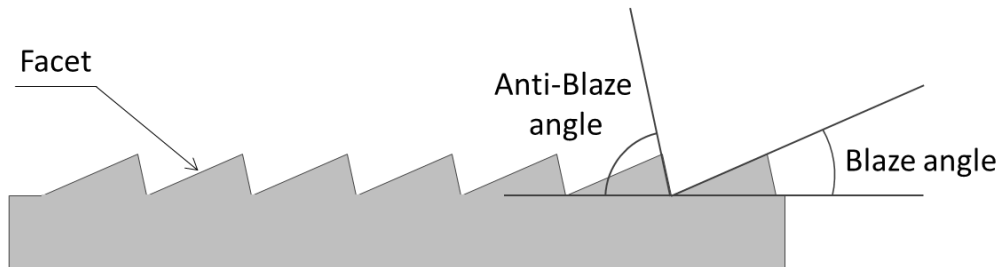


2) Grating pattern

B	Type	
B1	blaze profile <input type="checkbox"/> (continue at C)	laminar profile <input type="checkbox"/> (continue at D)

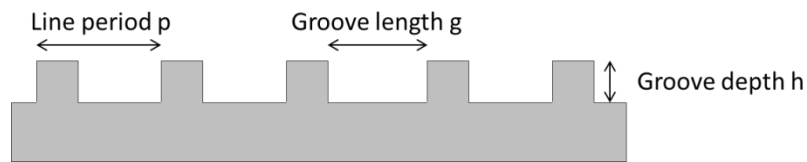
C	Blaze profile				
C1	Variable line spacing				
C1.1	Polynomial (e.g. $N=N_0+b_1x+b_2x^2+b_3x^3$)			Tolerance	
C1.2	Average density	grooves/mm	+/-		grooves/mm
C1.3	Linear coefficient		+/-		
C1.4	Quadratic coefficient		+/-		
C1.5	Cubic coefficient		+/-		
C1.6	Higher degree coefficients (if applicable)				
C2	Constant line spacing				
C2.1	Average density	grooves/mm	+/-		grooves/mm
C3	Angle				
C3.1	Blaze angle	°	+/-		°

Fig. 2



D	Laminar profile					
D1	Variable line spacing					
D1.1	Polynomial			Tolerance		
D1.2	Average density		grooves/mm	+/-		grooves/mm
D1.3	Linear coefficient			+/-		
D1.4	Quadratic coefficient			+/-		
D1.5	Cubic coefficient			+/-		
D1.6	Higher degree coefficients (if applicable)					
D2	Constant lines spacing					
D2.1	Average density		grooves/mm	+/-		grooves/mm
D3	Line profile					
D3.1	Depth h		nm	+/-		nm
D3.2	Ratio g/p					

Fig. 3



3) Grating finishing

E	Finishing					
E1	Top coating					
E1.1	Material			Tolerance		
E1.2	Thickness		nm	+/-		nm

4) Further requirements or notes