

# Pulse Compression Gratings

- **High efficiency gratings**

When ordering a grating, please use the following example format, or choose from the list of predefined gratings below.

PC 1200 W x H x Thk 800 nm (TM/-1) constant deviation  $\leq 10^\circ$

- PC stands for pulse compression
- 1200 is the groove density (groove frequency) in grooves/mm
- W is the blank dimension in mm parallel with the grating grooves
- H is the blank dimension in mm perpendicular to the grating grooves
- Thk is the blank thickness in mm
- 800 nm is the desired optimised wavelength. A range or range with peaked wavelength can also be specified
- (TM/-1) is desired polarisation state and diffraction order the grating should be optimised for. TE and average (TM+TE)/2 can also be specified
- Constant deviation  $10^\circ$  is the configuration the grating should be optimised for. Constant incidence angle can also be specified

Standard tolerances on W, H:  $\pm 0.2$  mm, Thk  $\pm 0.5$  mm. CA > 90 % of each dimension.

Standard sizes: 25 x 25 x 6 mm, 30 x 30 x 6 mm, 30 x 64 x 10 mm, 30 x 75 x 16 mm, 30 x 110 x 16 mm, 50 x 50 x 10 mm, 50 x 110 x 16 mm, 58 x 58 x 10 mm, 64 x 64 x 10 mm, 90 x 90 x 16 mm, 110 x 110 x 16 mm, 100 x 140 x 20 mm, 120 x 140 x 20 mm

Materials: Gold coating (Au) standard for  $\lambda > 750$  nm.

Standard substrate material: Optical crown glass K4A or N-ZK7.

Optional substrate material: "Zero" thermal expansion glass ceramic, marked (Z) in table. (Lw1, Zerodur or equivalent material).

Other specifications available on request, contact our sales department!