

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 <10°

1. PC stands for pulse compression
2. 1200 is the groove density (groove frequency) in grooves/mm
3. W is the blank dimension in mm parallel with the grating grooves
4. H is the blank dimension in mm perpendicular to the grating grooves
5. Thk is the blank thickness in mm
6. 800 nm is the desired optimised wavelength. A range or range with peaked wavelength can also be specified
7. (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
8. Constant deviation 10° is the configuration the grating should be optimised for. Constant incidence angle can also be specified

Standard tolerances on W, H: ± 0.2 mm, Thk ± 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!

Grating stock list (subject to prior sales):

Note: The absolute efficiency curves shown are only representative for the stated geometry and wavelength(s) and can vary depending on use geometry and measurement technique.

Art no	Description, (Z)	Optimised for (nm) see curve	Deviation (Deg) see curve	Min Efficiency % (TM/-1)
715.704.400	PC 0300 50x50x10 NIR	800	8	25
715.704.550	PC 0600 30x30x6 NIR	800	8	29
715.703.080	PC 0600 30x30x6 1550 nm	1550	10	90
715.701.890	PC 0600 50x50x10 NIR	1600	16	90
715.703.560	PC 0600 50x50x10 1550 nm	1550	10	90
715.707.500	PC 0600 50x50x10 1550 nm (Z)	1550	10	90
715.705.510	PC 0600 50x50x10 NIR	2450	10	90
715.707.120	PC 0600 50x110x16 1550 nm (Z)	1550	10	90

715.701.910	PC 0600 50x110x16 NIR	1600	16	90
715.706.430	PC 0600 110x110x16 NIR	2450	10	90
715.706.880	PC 0600 120x140x20 NIR	2450	10	90
715.707.230	PC 0600 120x140x20 NIR (Z)	2450	10	90
715.704.900	PC 0800 25x50x10 NIR	1250	10	90
715.707.290	PC 0800 30x30x6 NIR	1250	10	90
715.707.300	PC 0800 30x75x16 NIR (Z)	1250	10	90
715.707.430	PC 0800 50x50x10 NIR	1350	10	90
715.706.540	PC 0800 100x140x20 NIR (Z)	1250	10	90
715.706.530	PC 0800 110x110x16 NIR (Z)	1250	10	90
.				
715.703.070	PC 0900 30x30x6 NIR	800	10	50
715.703.060	PC 0900 30x30x6 NIR	1032	8	90
715.704.600	PC 0900 30x30x6 NIR	1060	8	90
715.703.450	PC 0900 30x30x6 1350 nm	1350	8	90
715.703.130	PC 0900 30x30x6 1550 nm	1550	8	90
715.707.540	PC 0900 30x30x6 1950 nm	1950	10	90
715.703.210	PC 0900 30x64x10 1550 nm	1550	8	90
715.703.440	PC 0900 30x110x16 1350 nm	1350	8	90
715.703.090	PC 0900 30x110x16 1550 nm	1550	8	90
715.706.550	PC 0900 30x110x16 1950 nm	1950	10	90
715.704.340	PC 0900 50x50x10 NIR	1047	8	90
715.707.580	PC 0900 50x50x10 NIR	1200	8	90
715.703.550	PC 0900 50x50x10 1550 nm	1550	8	90
715.707.030	PC 0900 50x50x10 1950 nm (Z)	1950	10	90
715.707.020	PC 0900 50x110x16 NIR	800	10	50
715.707.040	PC 0900 50x110x16 1950 nm (Z)	1950	10	90
715.706.440	PC 0900 120x140x20 1550 nm	1550	8	90
715.704.140	PC 1100 25x25x6 NIR	1550	8	90
715.707.420	PC 1100 30x30x6 NIR	1032	10	90
715.706.390	PC 1100 30x75x16 NIR	800	8	88
715.706.520	PC 1100 30x75x16 NIR (Z)	800	8	88
715.702.240	PC 1100 30x110x16 NIR	800	8	88
715.706.580	PC 1100 30x110x16 NIR (Z)	800	8	88
715.706.900	PC 1100 30x110x16 NIR	1550	8	90
715.705.180	PC 1100 50x50x10 NIR	800	8	88
715.703.200	PC 1100 50x50x10 NIR	1550	8	90
715.703.500	PC 1100 110x110x16 NIR	800	8	88
715.704.160	PC 1200 25x25x6 NIR	800	8	90
715.702.200	PC 1200 25x25x6 NIR	1047	8	90
715.701.120	PC 1200 30x30x6 NIR	800	8	90
715.703.770	PC 1200 30x30x6 NIR	1047	8	90
715.702.940	PC 1200 30x30x6 1550 nm	1550	8	90

715.701.200	PC 1200 30x64x10 NIR	800	8	90
715.703.410	PC 1200 30x64x10 1035 nm	1035	8	90
715.705.810	PC 1200 30x64x10 1550 nm	1550	8	90
715.700.550	PC 1200 30x110x16 NIR	800	8	90
715.702.950	PC 1200 30x110x16 NIR (Z)	800	8	90
715.702.740	PC 1200 30x110x16 NIR	1550	8	90
715.700.640	PC 1200 50x50x10 NIR	800	8	90
715.705.050	PC 1200 50x50x10 NIR (Z)	800	8	90
715.704.690	PC 1200 50x50x10 NIR	1053	8	90
715.707.590	PC 1200 50x50x10 NIR (Z)	1053	8	90
715.704.250	PC 1200 50x50x10 NIR	1250	8	90
715.702.150	PC 1200 58x58x10 NIR	800	8	90
715.703.930	PC 1200 58x58x10 NIR (Z)	800	8	90
715.703.700	PC 1200 58x58x10 NIR	1550	8	90
715.703.880	PC 1200 58x58x10 NIR (Z)	1550	8	90
715.700.620	PC 1200 64x64x10 NIR	800	8	90
715.700.630	PC 1200 50x110x16 NIR	800	8	90
715.701.320	PC 1200 50x110x16 NIR	800	14	90
715.702.910	PC 1200 50x110x16 NIR (Z)	800	8	90
715.705.600	PC 1200 50x110x16 NIR	1047	8	90
715.705.030	PC 1200 50x140x20 NIR	800	8	90
715.700.460	PC 1200 90x90x16 NIR	800	8	90
715.703.280	PC 1200 100x140x20 NIR	800	8	90
715.700.580	PC 1200 110x110x16 NIR	800	8	90
715.703.960	PC 1200 110x110x16 NIR (Z)	800	8	90
715.701.220	PC 1200 120x140x20 NIR	800	8	90
715.704.670	PC 1200 120x140x20 NIR (Z)	800	8	90
715.705.400	PC 1200 120x140x20 NIR	1053	8	90
715.707.210	PC 1200 120x140x20 NIR	1550	8	90
715.704.680	PC 1250 30x64x10 1040 nm	1040	8	90
715.703.190	PC 1400 25x25x6 NIR	800	8	90
715.707.310	PC 1400 25x50x10 NIR	800	8	90
715.702.620	PC 1400 30x30x6 NIR	800	12	90
715.700.720	PC 1400 30x110x16 NIR	800	15	90
715.701.760	PC 1400 30x110x16 NIR	800	8	90
715.707.010	PC 1400 40x140x20 NIR (Z)	800	15	90
715.702.840	PC 1400 50x50x10 NIR	800	8	90
715.703.990	PC 1400 50x50x10 NIR (Z)	800	8	90
715.707.510	PC 1400 50x50x10 NIR	1030	10	90
715.704.510	PC 1400 50x110x16 NIR	800	8	90
715.704.010	PC 1400 50x110x16 NIR (Z)	800	8	90
715.704.610	PC 1400 60x120x20 NIR	800	21	90
715.703.260	PC 1400 64x64x10 NIR	800	8	90

715.703.620	PC 1400 90x90x16 NIR	800	8	90
715.703.240	PC 1400 110x110x16 NIR	800	15	90
715.704.990	PC 1400 110x110x16 NIR (Z)	800	10	90
715.704.080	PC 1400 100x140x20 NIR	800	17	90
715.704.190	PC 1400 120x140x20 NIR	800	12	90
715.704.660	PC 1400 120x140x20 NIR (Z)	800	8	90
715.705.730	PC 1480 25x25x6 NIR	1053	10	90
715.704.030	PC 1480 50x50x10 NIR	765	20	89
715.707.330	PC 1480 50x50x10 NIR	1053	10	90
715.705.780	PC 1480 50x110x16 NIR	1053	10	90
715.706.150	PC 1480 58x58x10 NIR	800	10	90
715.707.100	PC 1480 60x140x20 NIR	800	10	90
715.703.750	PC 1480 60x140x20 NIR	1060	8	90
715.705.740	PC 1480 110x110x16 NIR	800	10	90
715.705.750	PC 1480 120x140x20 NIR	800	10	90
715.706.110	PC 1480 120x140x20 NIR (Z)	800	10	90
715.706.780	PC 1480 140x120x20 NIR (Z)	800	10	90
715.705.990	PC 1480 140x120x20 NIR	800	18	90
.				
715.703.640	PC 1500 25x25x6 NIR	800	8	90
715.702.590	PC 1500 30x30x6 NIR	800	55	90
715.704.050	PC 1500 30x30x6 NIR	1030	8	90
715.703.860	PC 1500 30x64x10 NIR	800	8	90
715.705.070	PC 1500 30x75x16 1030 nm	1030	8	90
715.701.470	PC 1500 30x110x16 800 nm	800	8	90
715.702.990	PC 1500 30x110x16 800 nm	800	26	90
715.706.330	PC 1500 30x110x16 NIR (Z)	800	30	90
715.703.110	PC 1500 30x110x16 1030 nm	1030	8	90
715.703.100	PC 1500 30x110x16 1030 nm (Z)	1030	8	90
715.704.120	PC 1500 50x50x10 NIR	800	13	90
715.703.980	PC 1500 50x50x10 NIR (Z)	800	13	90
715.701.380	PC 1500 50x110x16 800	800	8	90
715.703.510	PC 1500 50x110x16 NIR (Z)	800	8	90
715.703.520	PC 1500 50x110x16 NIR (Z)	800	30	90
715.702.470	PC 1500 50x140x20 NIR	800	13	90
715.706.670	PC 1500 50x140x20 NIR (Z)	800	13	90
715.704.350	PC 1500 58x58x10 NIR	800	14	90
715.703.920	PC 1500 58x58x10 NIR (Z)	800	13	90
715.701.750	PC 1500 64x64x10 NIR	800	8	90
715.705.230	PC 1500 64x64x10 NIR (Z)	800	8	90
715.706.510	PC 1500 70x140x20 NIR	800	13	90
715.707.070	PC 1500 70x140x20 NIR (Z)	800	13	90
715.704.520	PC 1500 80x50x16 NIR	800	8	90
715.703.780	PC 1500 90x90x16 NIR	800	14	90

715.703.610	PC 1500 100x140x20 NIR	800	8	90
715.702.040	PC 1500 100x140x20 NIR	800	33	90
705.703.420	PC 1500 110x50x16 NIR	800	8	90
715.706.940	PC 1500 110x50x16 NIR (Z)	800	8	90
715.704.200	PC 1500 110x110x16 NIR	800	8	90
715.704.850	PC 1500 110x110x16 NIR (Z)	800	8	90
715.705.480	PC 1500 110x110x16 NIR	800	30	90
715.701.660	PC 1500 120x140x20 NIR	800	8	90
715.703.950	PC 1500 120x140x20 NIR (Z)	800	13	90
715.705.620	PC 1500 120x140x20 NIR	800	30	90
715.704.430	PC 1600 25x25x6 NIR	800	8	90
715.705.220	PC 1600 30x30x6 NIR	800	8	90
715.704.150	PC 1600 30x64x10 NIR	800	8	90
715.704.870	PC 1600 30x75x16 NIR	800	15	90
715.700.350	PC 1600 30x110x16 NIR	800	15	90
715.704.440	PC 1600 50x50x10 NIR	750	20	90
715.707.090	PC 1600 50x50x10 NIR (Z)	800	13	90
715.707.140	PC 1600 50x110x16 NIR	800	10	90
715.704.880	PC 1600 50x110x16 NIR (Z)	800	15	90
715.705.440	PC 1600 64x64x10 NIR	1064	10	90
715.705.110	PC 1600 110x110x16 NIR (Z)	800	8	90
715.704.320	PC 1600 110x110x16 NIR	1053	10	90
715.704.420	PC 1600 120x140x20 NIR	800	8	90
715.704.560	PC 1700 25x25x6 NIR	800	8	90
715.706.240	PC 1700 30x30x6 NIR	800	8	90
715.702.400	PC 1700 30x30x6 NIR	1053	10	90
715.702.960	PC 1700 30x64x10 NIR	800	30	90
715.702.970	PC 1700 30x64x10 VIS	633	30	79
715.705.190	PC 1700 30x64x10 NIR	1053	10	90
715.707.180	PC 1700 30x110x16 NIR (Z)	1035	10	90
715.706.680	PC 1700 30x110x16 NIR (Z)	1053	10	90
715.703.670	PC 1700 50x50x10 NIR	1040	10	90
715.702.650	PC 1700 50x110x16 NIR	1040	10	90
715.701.680	PC 1700 64x64x10 800 nm	800	8	90
715.703.230	PC 1700 64x64x10 1053 nm	1053	10	90
715.705.420	PC 1700 120x140x20 NIR	1053	10	90
715.705.680	PC 1740 30x30x6 NIR	1053	8	90
715.705.910	PC 1740 30x64x10 NIR (Z)	1053	8	90
715.705.690	PC 1740 30x110x16 NIR	1053	8	90
715.706.590	PC 1740 50x50x10 NIR (Z)	1060	8	90
715.705.800	PC 1740 50x50x10 NIR	1053	8	90
715.704.570	PC 1740 50x110x16 NIR (Z)	1040	11	90
715.707.060	PC 1740 50x140x20 NIR (Z)	1030	10	90

715.706.020	PC 1740 64x30x10 NIR (Z)	1053	8	90
715.705.920	PC 1740 64x64x10 NIR (Z)	1053	8	90
715.701.880	PC 1740 64x64x10 NIR	1053	8	90
715.705.840	PC 1740 100x140x20 NIR	1057	8	90
715.707.050	PC 1740 110x110x16 NIR (Z)	1018	10	90
715.705.830	PC 1740 110x110x16 NIR	1057	8	90
715.707.080	PC 1740 120x140x20 NIR (Z)	1030	10	90
715.704.070	PC 1740 120x140x20 NIR (Z)	1054	14	90
715.704.100	PC 1740 120x140x20 NIR	1054	14	90
715.701.070	PC 1800 15x15x6 NIR	800	8	90
715.705.540	PC 1800 15x30x6 NIR	800	8	90
715.704.130	PC 1800 25x25x6 NIR	800	8	90
715.701.140	PC 1800 30x30x6 NIR	800	8	90
715.702.510	PC 1800 30x30x6 NIR	1030	8	90
715.704.180	PC 1800 30x30x6 NIR	1047	8	90
715.703.690	PC 1800 30x64x10 NIR	800	8	90
715.702.520	PC 1800 30x64x10 NIR	1030	8	90
715.703.120	PC 1800 30x64x10 1060 nm	1060	8	85
715.700.450	PC 1800 30x110x16 NIR	800	8	90
715.705.250	PC 1800 30x110x16 NIR (Z)	800	8	90
715.702.530	PC 1800 30x110x16 NIR	1030	8	90
715.704.170	PC 1800 30x110x16 NIR	1047	8	90
715.700.800	PC 1800 50x50x10 NIR	800	8	90
715.704.110	PC 1800 50x50x10 NIR (Z)	800	8	90
715.704.280	PC 1800 50x50x10 NIR	1030	8	90
715.704.490	PC 1800 50x50x10 NIR	1064	8	85
715.700.600	PC 1800 50x110x16 NIR	800	8	90
715.703.020	PC 1800 50x110x16 800 nm	800	16	90
715.703.570	PC 1800 50x110x16 NIR (Z)	800	16	90
715.704.290	PC 1800 50x110x16 NIR	1030	8	90
715.704.370	PC 1800 50x110x16 NIR	1053	8	82
715.705.160	PC 1800 50x140x20 NIR	800	8	90
715.704.540	PC 1800 50x140x20 NIR	1030	8	90
715.700.560	PC 1800 64x64x10 NIR	800	8	90
715.704.380	PC 1800 64x64x10 NIR	1053	8	82
715.704.220	PC 1800 100x140x20 NIR	800	8	90
715.700.590	PC 1800 110x110x16 NIR	800	8	90
715.704.410	PC 1800 110x110x16 NIR	1054	8	82
715.701.150	PC 1800 120x140x20 NIR	800	8	90
715.703.820	PC 1800 120x140x20 NIR (Z)	800	8	90
715.703.270	PC 2000 25x25x6 NIR	800	8	90
715.701.920	PC 2000 30x30x6 NIR	800	8	90
715.701.040	PC 2000 30x30x6 800 nm	800	8	90

715.700.470	PC 2000 30x64x10 NIR	800	8	90
715.701.580	PC 2000 30x75x16 800 nm	800	8	90
715.700.570	PC 2000 30x110x16 NIR	800	15	90
715.700.920	PC 2000 30x110x16 NIR	800	8	90
715.700.820	PC 2000 50x50x10 NIR	800	8	90
715.701.330	PC 2000 50x110x16 NIR	800	8	90
715.703.800	PC 2000 50x110x16 NIR (Z)	800	8	90
715.703.630	PC 2000 50x110x16 NIR (Z)	800	23	88
715.702.600	PC 2000 58x58x10 NIR	950	8	90
715.700.830	PC 2000 64x64x10 NIR	800	8	90
715.704.230	PC 2000 100x140x20 NIR	800	8	90
715.704.270	PC 2000 110x110x16 NIR	800	8	90
715.701.710	PC 2000 120x140x20 NIR	800	8	90
715.705.280	PC 2100 25x25x6 NIR	800	8	90
715.703.480	PC 2100 30x30x6 NIR	800	8	90
715.703.040	PC 2100 30x64x10 NIR	800	8	90
715.701.650	PC 2100 30x110x16 NIR	800	8	90
715.702.260	PC 2100 50x50x10 NIR	800	8	90
715.702.250	PC 2100 50x110x16 NIR	800	8	90
715.704.360	PC 2200 25x25x6 NIR	800	8	90
715.701.970	PC 2200 30x30x6 NIR	800	8	90
715.705.120	PC 2200 30x64x10 NIR	800	8	90
715.701.230	PC 2200 30x110x16 NIR	800	8	90
715.703.360	PC 2200 50x50x10 NIR	765	16	90
715.701.630	PC 2200 50x50x10 NIR	800	8	90
715.703.370	PC 2200 50x110x16 NIR	765	16	90
715.701.530	PC 2200 50x110x16 NIR	800	8	90
715.703.810	PC 2200 50x110x16 NIR (Z)	800	8	90
715.703.580	PC 2200 50x110x16 NIR (Z)	800	15	88
715.703.350	PC 2200 100x140x20 NIR	800	8	90
715.703.540	PC 2200 100x140x20 NIR	800	13	90
715.702.560	PC 2200 100x140x20 NIR	800	21	85
715.700.650	PC 2200 110x110x16 NIR	800	8	90
715.703.910	PC 2200 120x140x20 NIR	800	13	90
715.704.580	PC 2300 25x25x6 NIR	800	8	88
715.702.850	PC 2300 30x30x6 NIR	800	8	88
715.702.190	PC 2300 30x64x10 NIR	800	8	88
715.701.450	PC 2300 30x110x16 NIR	800	15	88
715.702.800	PC 2300 50x50x10 NIR	800	8	88
715.701.990	PC 2400 30x30x6 NIR	800	8	87
715.701.980	PC 2400 30x64x10 NIR	800	8	87
715.701.350	PC 2400 30x110x16 NIR	800	8	87

