

aThermoXX®

Athermalized protection windows (cover slides) for industrial high-power laser applications

- Minimized thermal focus shift
- Free of thermally induced aberrations – trouble-free work with TEM₀₀ lasers
- Extended duty-cycle
- Minimized thermal effects
 - by static and dynamic heating,
 - by contamination
- Laser power density up to 3 kW/cm²
- Various dimensions
- AR-coatings for widely used wavelengths
- Applications:
 - Selective Laser Melting
 - Welding
 - Cutting



Specifications

Model	Diameter, mm	Thickness, mm	Optimum spectrum, nm
aThermoXX 25/3_1064	24.9	3	1020 - 1100
aThermoXX 30/5_1064	29.9	5	1020 - 1100
aThermoXX 32/6.35_1064	31.9	6.35	1020 - 1100
aThermoXX 38/2_1064	37.9	2	1020 - 1100
aThermoXX 38/5_1064	37.9	5	1020 - 1100
aThermoXX 38/9.8_1064	37.9	9.8	1020 - 1100
aThermoXX 50.8/3_1064	50.8	3	1020 - 1100
aThermoXX 95/3_1064	94.8	3	1020 - 1100

Subject to change without notice

Notes:

- Experimental results:
 - measured focus shift <0.1 Rayleigh length – negligible in industrial applications,
 - estimated residual wave aberration < $\lambda/4$ – negligible in industrial applications,
 - power density up to 3 kW/cm² for windows of 3 mm thickness,
- Windows of other sizes optimized for other wavelengths are available on request,
- Tolerances: Diameter 0/-0.1mm, Thickness ± 0.1 mm,
- Denomination: **aThermoXX_32/6.35_1064**
Diameter, mm _____ wavelength, nm
Thickness, mm _____