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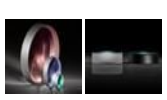
# TECHSPEC 25mm Diameter x -25 FL, VIS-NIR, Inked, Plano-Concave Lens

TECHSPEC VIS-NIR Coated Plano-Concave (PCV) Lenses



Stock **#45-922-INK** CONTACT US

Other Coating Options

- 1 + £53.60

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| Volume Pricing | |
|---|---|
| Qty 1-9 | **£53.60** each |
| Qty 10-25 | **£48.40** each |
| Qty 26-49 | **£42.80** each |
| Need More? | Request Quote |

Prices shown are exclusive of VAT/local taxes

Product Downloads

## General

**Type:**

Plano-Concave Lens

## Physical & Mechanical Properties

**Diameter (mm):**
25.00 ±0.025

**Bevel:**
Protective as needed

**Center Thickness CT (mm):**
3.50

**Center Thickness Tolerance (mm):**
±0.10

**Centering (arcmin):**
<1

**Clear Aperture CA (mm):**
24.00

**Edge Thickness ET (mm):**
7.75

## Optical Properties

**Effective Focal Length EFL (mm):**
-25.00

**Substrate:**
N-SF11

**f/#:**
1.00

**Numerical Aperture NA:**
0.50

**Coating:**
VIS-NIR (400-1000nm)

**Wavelength Range (nm):**
400 - 1000

**Back Focal Length BFL (mm):**
-26.96

**Coating Specification:**
$R_{abs}$ ≤0.25% @ 880nm
$R_{avg}$ ≤1.25% @ 400 - 870nm
$R_{avg}$ ≤1.25% @ 890 - 1000nm

**Focal Length Specification Wavelength (nm):**
587.6

**Focal Length Tolerance (%):**
±1

**Radius $R_1$ (mm):**
-19.62

**Surface Quality:**
40-20

**Damage Threshold, By Design:**
5 J/cm$^2$ @ 532nm, 10ns

**Power (P-V) @ 632.8nm:**
1.5λ

**Irregularity (P-V) @ 632.8nm:**
λ/4

## Regulatory Compliance

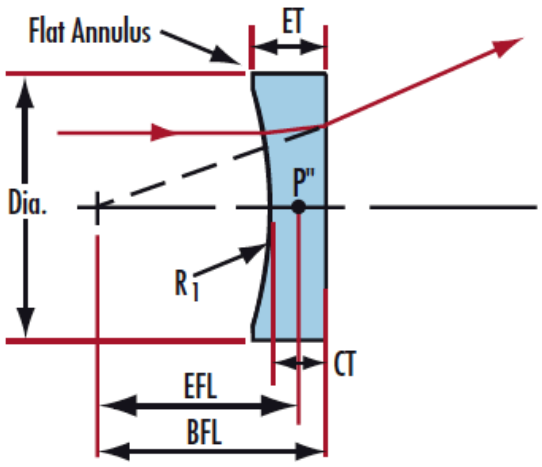
**Certificate of Conformance:**
View

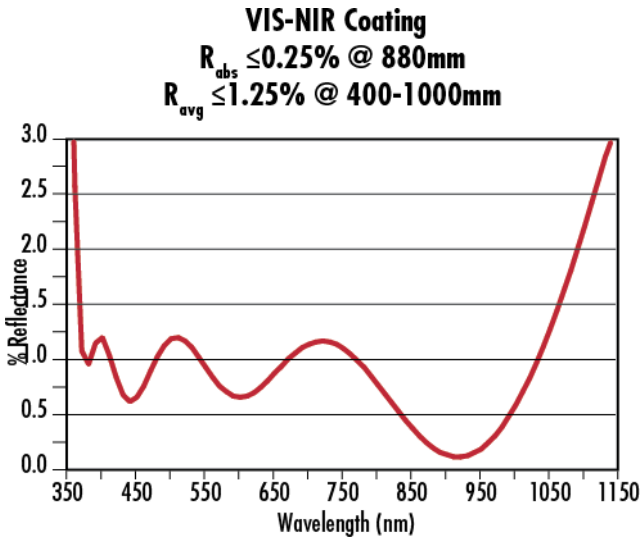
# Product Details

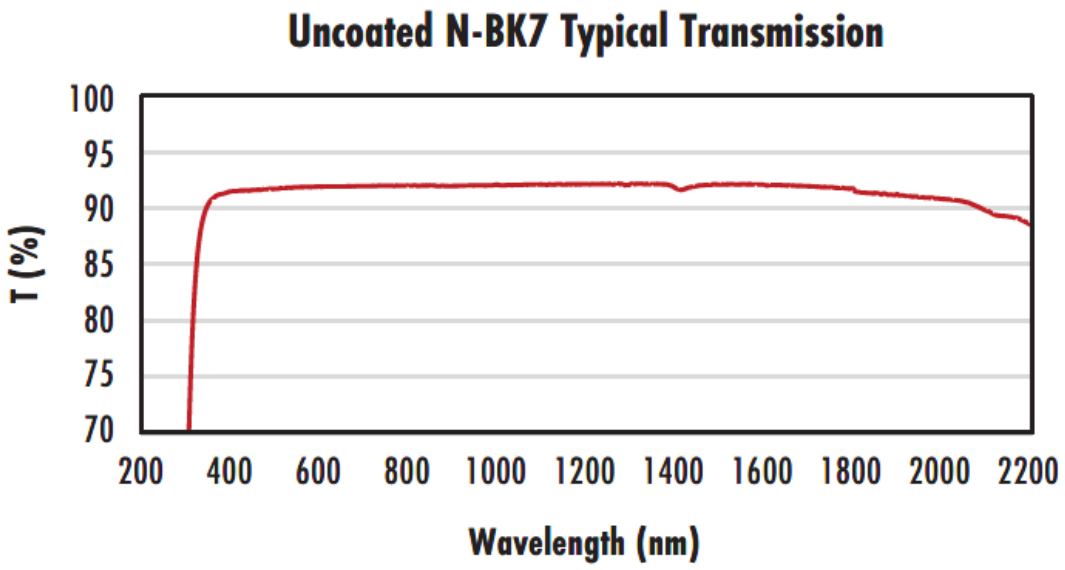
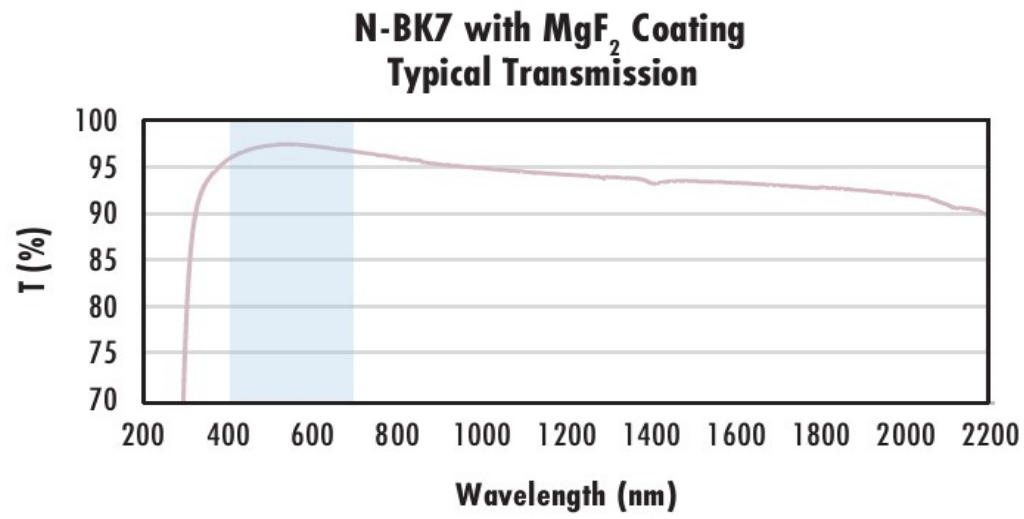
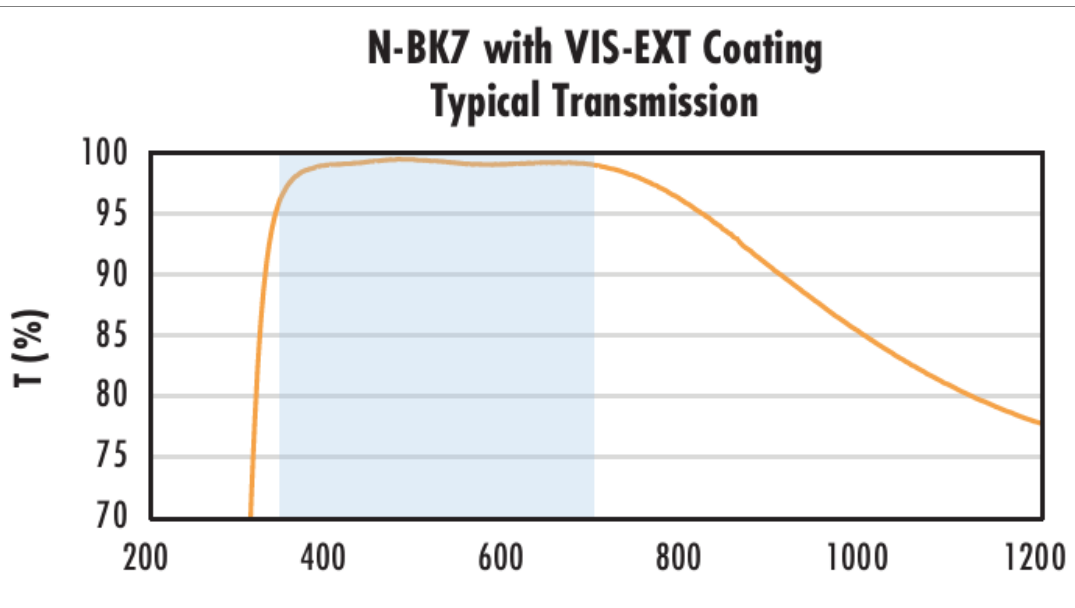
- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence
- Various Coating Options: Uncoated, VIS-EXT, $MgF_2$, VIS 0°, YAG-BBAR, NIR I, and NIR II

TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are optimized for transmission (>99%) in the near-infrared. These lenses are also available Uncoated, VIS-EXT, $MgF_2$, VIS 0°, YAG-BBAR, NIR I, or with NIR II AR coating options.

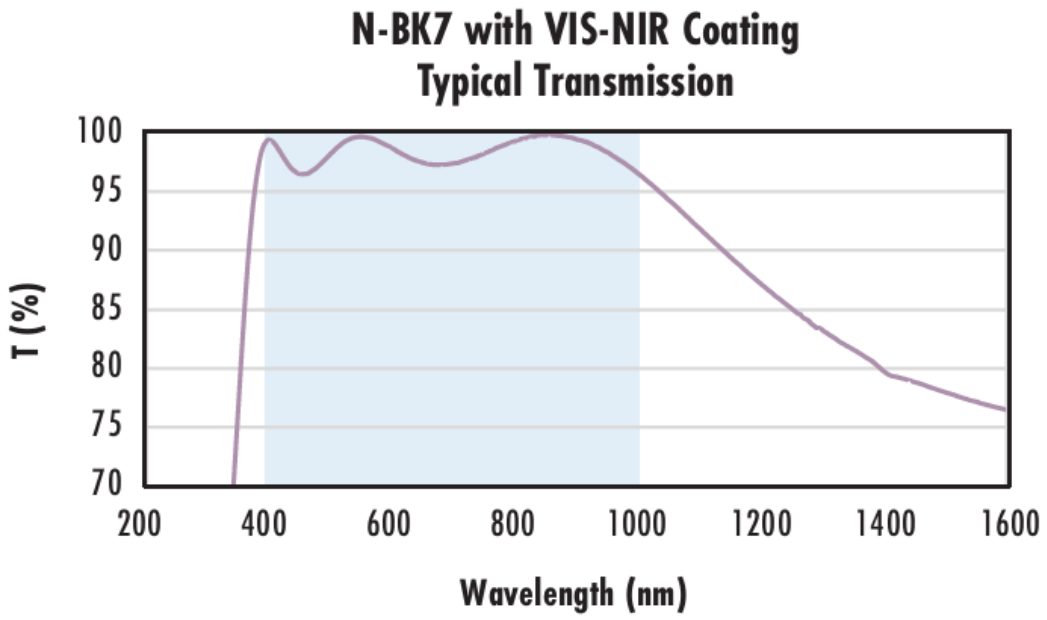
# Technical Information




| N-BK7 | |
|---|---|
|   | Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.<br>Click Here to Download Data |
|   | Typical transmission of a 3mm thick N-BK7 window with MgF2 (400-700nm) coating at 0° AOI.<br>The blue shaded region indicates the coating design wavelengh range, with the following specification:<br>$R_{avg}$ ≤ 1.75% @ 400 - 700nm (N-BK7)<br>Data outside this range is not guaranteed and is for reference only.<br>Click Here to Download Data |
|   | Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.<br>The blue shaded region indicates the coating design wavelengh range, with the following specification:<br>$R_{avg}$ ≤ 0.5% @ 350 - 700nm<br>Data outside this range is not guaranteed and is for reference only.<br>Click Here to Download Data |

Wavelength (nm)



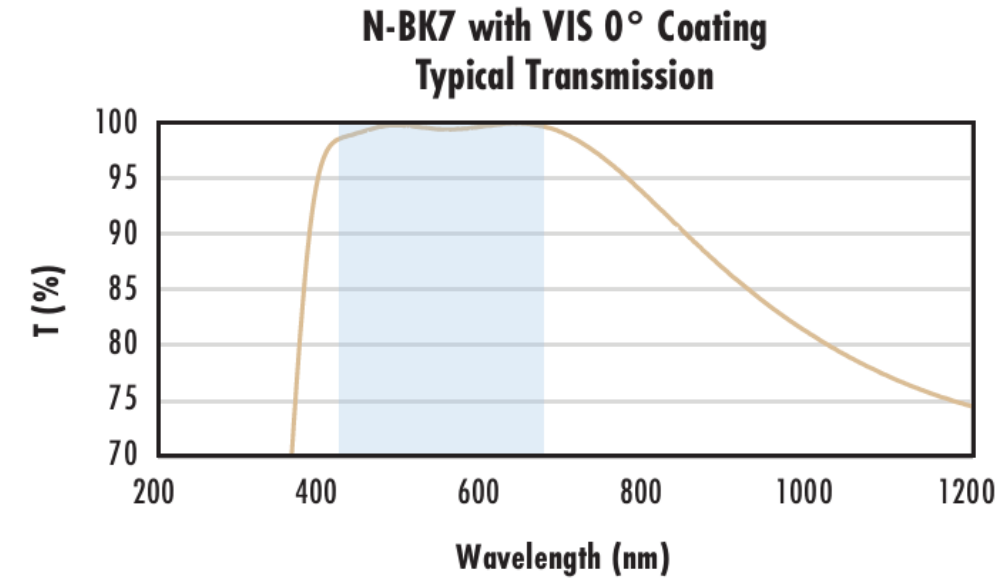

Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 880nm
$R_{avg} \leq 1.25\%$ @ 400 - 870nm
$R_{avg} \leq 1.25\%$ @ 890 - 1000nm

Data outside this range is not guaranteed and is for reference only.

Click Here to Download Data



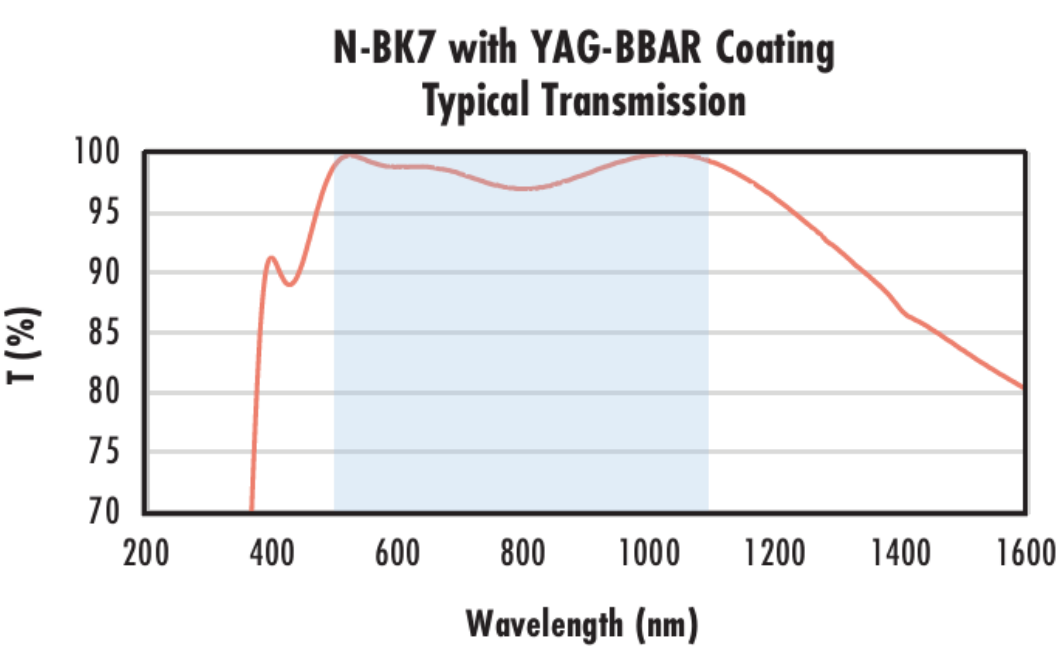

Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 0.4\%$ @ 425 - 675nm

Data outside this range is not guaranteed and is for reference only.

Click Here to Download Data



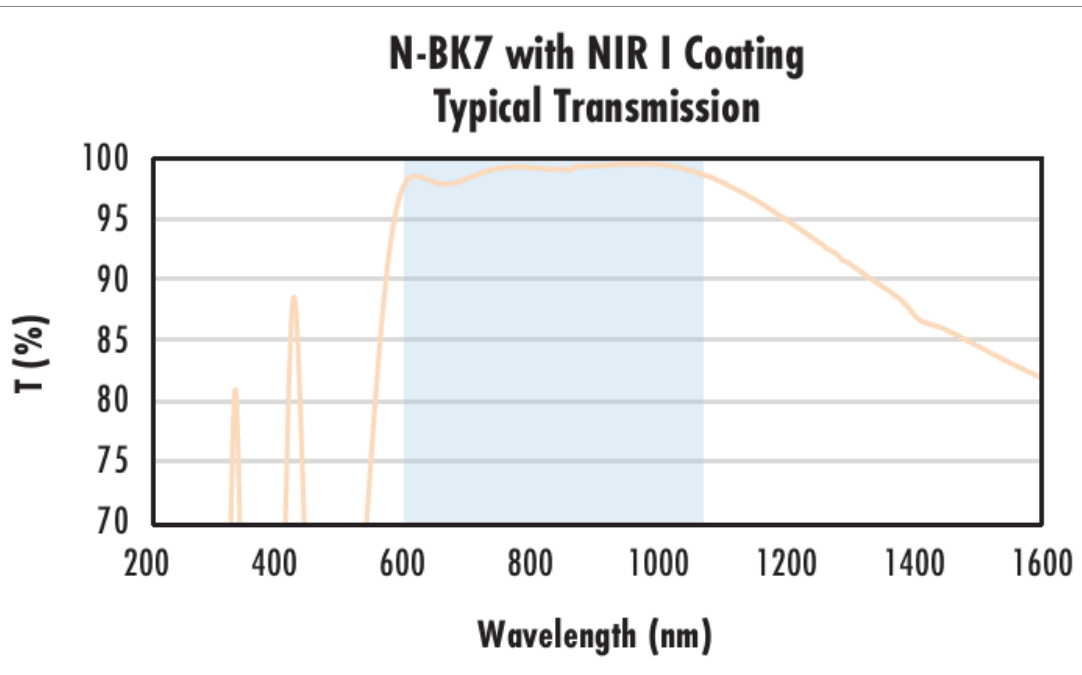

Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 532nm
$R_{abs} \leq 0.25\%$ @ 1064nm
$R_{avg} \leq 1.0\%$ @ 500 - 1100nm

Data outside this range is not guaranteed and is for reference only.

Click Here to Download Data




Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 0.5\%$ @ 600 - 1050nm

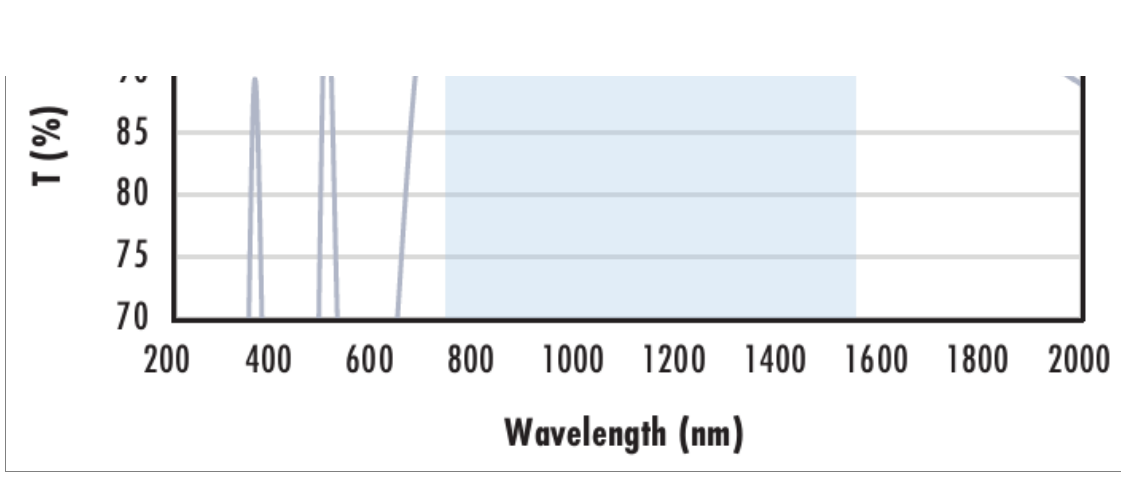
Data outside this range is not guaranteed and is for reference only.

Click Here to Download Data




Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:




$R_{abs}$ ≤ 1.5% @ 750 - 800nm
$R_{abs}$ ≤ 1.0% @ 800 - 1550nm
$R_{avg}$ ≤ 0.7% @ 750 - 1550nm

Data outside this range is not guaranteed and is for reference only.

Click Here to Download Data

## Coating Curves

## Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

## Compatible Mounts