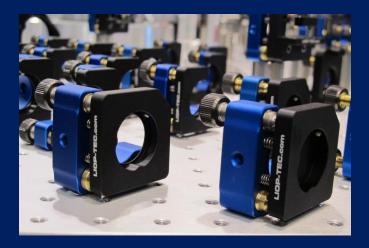




# **Optomechanics**





- 170 TPI (0.15mm) Fine Thread Screws
- Screws in Brass or Stainless Steel and Titanium (NEW)
- Mirror Mount Up To 22" Optical Size
- Colour Concept Components
- Stainless Steel Mirror Mounts
- UHV Mirror Mounts And Components
- Customer-Specific Design









Our team of experts is dedicated to lasers and scientific laser applications as well as to high precision opto-mechanics. For more than a decade we have been working closely together with laser and optical scientists and researchers applying laser technology in their field. Based on this experience we will be happy to provide you with innovative solutions to your needs and support you.

One main line of high quality products manufactured at our facilities in Germany:

• Opto-mechanical components: Fine-Thread Screws with a pitch of 150 μm (170 TPI), high-precision mirror mounts, custom-made solutions



# We focus on your requirements and demands



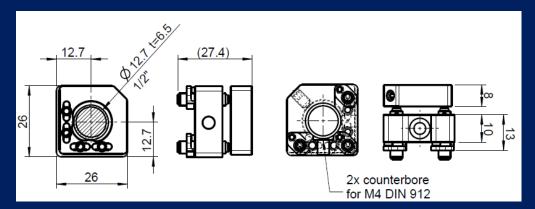
# **ASTEROID Series**



The ASTEROID series is a series of high quality mirror mounts to be used for OEM applications. The back plate, front plate and adjusters are manufactured in stainless steel to compensate for thermal expansion and to reduce wear. This series has also got a locking system for the fine thread screws.

Features:

- Adjusting screws with standard thread pitch of 170 TPI
- Available with 3 screws and locking system
- Available for vacuum applications



#### Sample: AS050K-050-3



# **STAR Series**

#### Features:

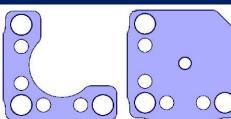
- Adjusting screws with standard thread pitch of 170 TPI
- Available with 2 or 3 screws made of brass (standard) or stainless steel
- Special combination of materials virtually eliminates wear over time
- Unprecedented precision and reproducibility in adjusting
- Available for mirror sizes from 0.5" to 12"
- Available in 9 different colors to facilitate identification of beam paths (blue (standard), black, red, green, purple, orange, silver, anthracite & yellow)
- Available for vacuum applications
- Available with thick back plate for ultra-high stability

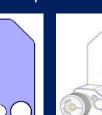
closed back plate

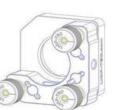
- Available in different varieties (e.g. open or closed back plate, left-hand or right-hand version) designed to your specific needs

#### Samples:

open back plate







3 screws

2 screws

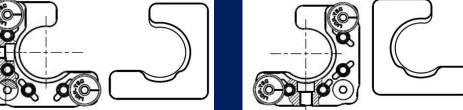
Back Plates

 completely closed
 6h7 bore hole
 closed version

 Image: Second constraints
 Image: Second constraints
 Front Plates

 open left version
 open right version
 Image: Second constraints

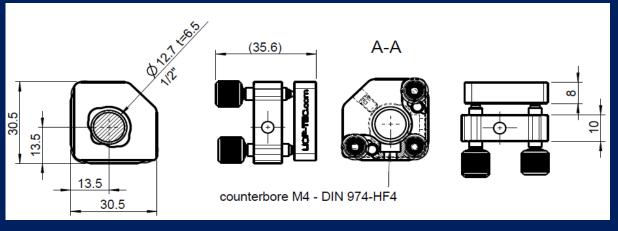
 Image: Second constraints
 Image: Second constraints
 Image: Second constraints





Star Series 050:

#### Sample: SR050-050-3

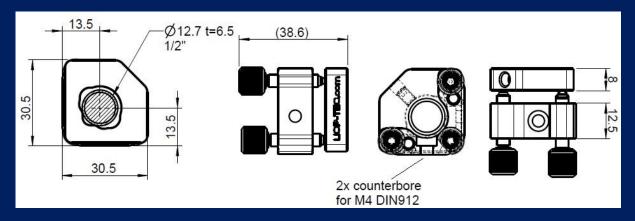


Features:

- back plate open or closed
- front plate: completely closed; 6h7 bore hole; <sup>1</sup>/<sub>2</sub>" closed, <sup>1</sup>/<sub>2</sub>" open left;
   <sup>1</sup>/<sub>2</sub>" open right; 1" closed

#### **Star Series 050-HS**

#### Sample: SR050-HS-050-3S

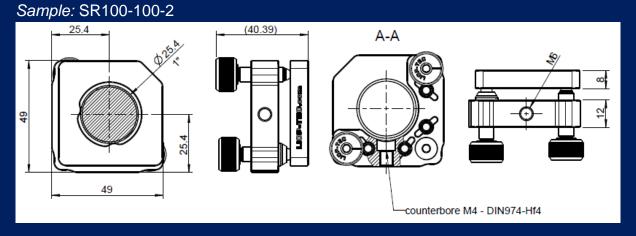


Features:

- back plate open or closed
- screws in stainless steel
- front plate: completely closed; 6h7 bore hole; ½" closed, ½" open left;
   ½" open right; 1" closed



#### **Star Series SR100**

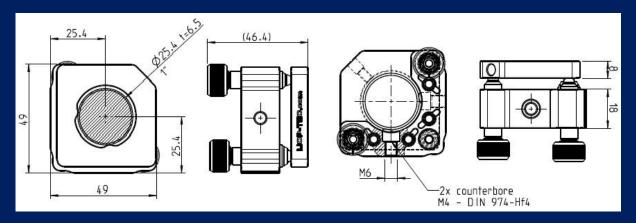


#### Features:

- back plate open or closed
- screws in M6.5x0.15mm in brass (standard), also available in stainless steel M8x0.15mm
- front plate: completely closed; 6h7 bore hole; ½" closed, 1" closed;
  1" completely closed; 1" open left; 1" open right; 1.5" closed; 2" closed

#### **Star Series SR100-HS:**

#### Sample: SR100-HS-100-2S

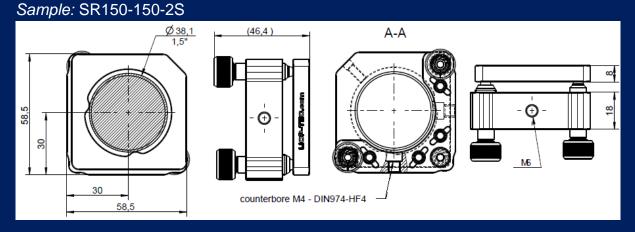


#### Features:

- back plate open or closed
- screws in in stainless steel M8x0.15mm
- front plate: completely closed; 6h7 bore hole; <sup>1</sup>/<sub>2</sub>" closed, 1" closed;
  1" completely closed; 1" open left; 1" open right; 1.5" closed; 2" closed



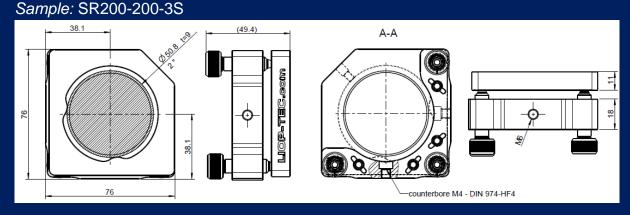
#### **Star Series SR150**



Features:

- back plate open or closed
- screws in in stainless steel M8x0.15mm
- 1.5" closed; 1.5" open left & 1.5" open right

#### **Star Series SR200**



#### Features:

- back plate open or closed
- screws in in stainless steel M8x0.15mm
- 2" closed; 2" open left; 2" open right & 3" closed



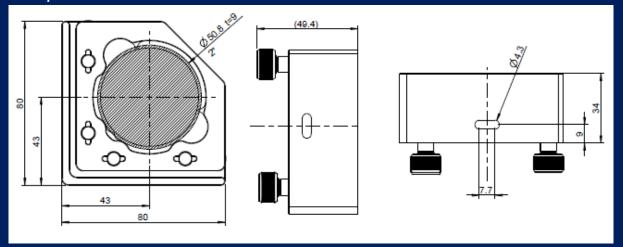
#### 2" and larger STAR is also available with integrated front plate:

Advantage:

- STARi can be parked on the table without clamping
- easier alignment of complex optical setups
- closed front with 4 fixing screws for left- and right hand use
- two Access holes allows easy exchange of optic
- available as 2", 3" ... 6" mounts, open and closed front

#### **STAR Series 200i:**

#### Sample: SR200i-200-3S



Features:

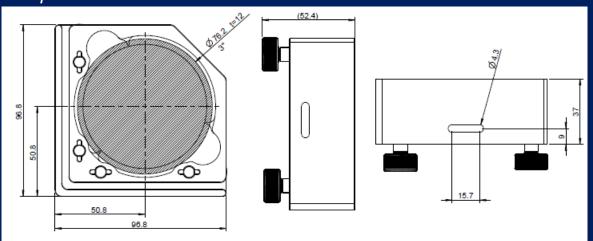
- screws in in stainless steel M8x0.15mm
- 2" closed; 2" open left & 2" open right





#### STAR Series 300i:

#### Sample: SR300i-300-3S



#### Features:

- screws in stainless steel M8x0.15mm
- 3" closed; 3" open left & 3" open right





# **PLANET Series**



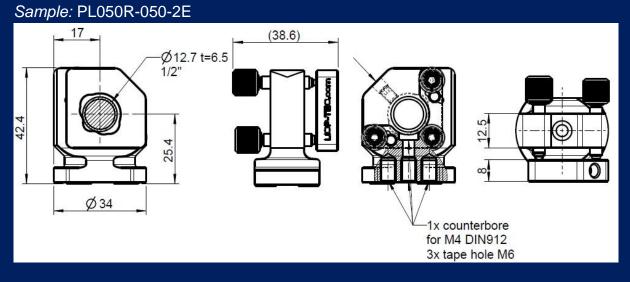
#### Features:

- Adjusting screws with standard thread pitch of 170 TPI
- Available with 2 or 3 screws made of stainless steel
- Built from special combination of materials to virtually eliminate wear over time
- Unprecedented precision and reproducibility in adjusting
- Available for mirror sizes from 0.5" to 2"
- Available in 9 different colours to facilitate identification of beam paths (blue (standard), black, red, green, purple, orange, silver, anthracite & yellow)
- Available for vacuum applications
- Available in different varieties (left hand or right hand version) designed to your specific needs



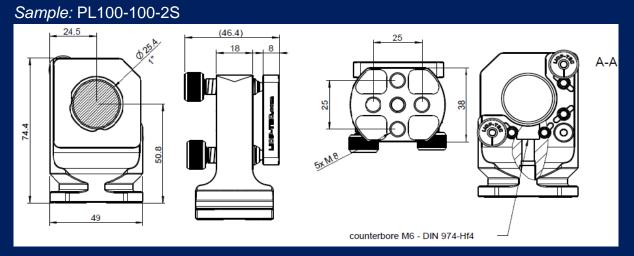


#### Planet Series PL050



#### Features:

- screws in stainless steel M4.5x0.15mm
- left and right handed version available
- completely closed; 1/2" closed; 1/2" open left; 1/2" open right;
   1" completely closed



#### **Planet Series PL100**

#### Features:

- screws in stainless steel M8x0.15mm
- left and right handed version available
- completely closed; 1" closed; 1" open left; 1" open right;
   1" completely closed; 2" closed



# ANTARES Series:

# The Bright Solution for your Large-Sized Optics

- Gimbal design.
- For large optics according to customer demand.
- Adjustment by 170 TPI fine thread screws (standard).
- Available with piezo drive.
- Suitable for high vacuum applications.
- **Typical application:** Beam steering in compressor chambers of ultrahigh power laser systems.





# **Mirror mounts with remote control**

From now on we offer our mirror mounts with remote control. This option was developed in collaboration with Physik Instrumente GmbH. The control is based on a linear screw-type actuator with piezo motor (stick-slip).

- High resolution
- Stable positioning
- Self-locking when at rest
- Suitable for vacuum down to 10<sup>-6</sup> mbar

Applications:

- optical setup under vacuum conditions
- optical alignment where mounts are difficult to access
- optical beam paths in restricted areas

We also offer opto-mechanical components such as posts, post holders, pedestals, clamping forks etc.

Please ask us for detailed information!



Samples for bespoken design:





e.g. C-Mounts, Industrial Mirror Mounts, Linear Translation Stage, Breadboards, Prism holder...etc.

#







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