Feather Touch 3000 Series Focuser

Newest Addition: Feather Touch® 3000 Series Focusers

We are pleased to announce the newest addition to our line of focusers - the Feather Touch® FTF3025 Focuser. The 3 inch diameter focuser has a draw tube travel length of 2.5 inches. This intermediate size focuser is perfect for applications that need something larger than our 2 inch Crayford-style, but smaller than our 3.5 inch refractor-style focusers.

The FTF3025 Series focuser is similar in design to the FTF3545, but incorporates advanced features that are ideal for applications which demand precision imaging while also managing a heavier weight capacity than the 2 inch models.

Currently on the drawing board are a variety of draw tube lengths, ranging from 1.5 inches to 3.5 inches of travel. Also in the works are tube adapter rings for special and semi-custom applications. If you have custom requirements and/or needs, please do not hesitate to contact us with details -- our precision machine shop can get your parts made to the most demanding tolerances!

This focuser comes with our Fine Focus Reduction Unit which allows very accurate focusing. It is typically a 9:1 planetary reduction assembly that makes focusing extremely precise and easy. We were the original developer of this type of system for telescope use and have been making and improving these for longer than any other manufacturer. These units have undergone continuous improvement and we believe they are, quite simply, the best in the industry.

The smooth and precise feel of our Fine Focus Reduction Unit is the key, and it allows our users to focus precisely with unparalleled accuracy, speed, and reliability.

The 3000 series focusers can be rotated easily relative to OTA via one Thumb screw. And, can be detached from the OTA via Thumb screws.

Our standard Tube Adapter Ring allows attachment to a 109mm x 1mm male thread. Other options will be available as the need arises within size limitations.

Rack and pinion design using a precision fine pitch ½ inch wide Brass rack and matched hardened Stainless Steel pinion.
Our original Brake Feature is included to allow for easy load adjustment of the weight on the focuser. This feature also allows locking the pinion/draw tube when needed.

The end of the draw tube uses a 75mm x 1mm thread to allow other End Cap Options.

And, as with our other focusers, the 3000 series uses internally machined light baffles for superior light-reducing.

<table>
<thead>
<tr>
<th>FTF3025 Focuser Specifications</th>
<th>Units (Metric)</th>
<th>Units (English)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw Tube Travel</td>
<td>63.50mm</td>
<td>2.50 In.</td>
</tr>
<tr>
<td>Distance from OTA to End of CR End Cap, Racked In</td>
<td>93.22mm</td>
<td>3.67 In</td>
</tr>
<tr>
<td>Distance from OTA to End of CR End Cap, Racked Out</td>
<td>156.72mm</td>
<td>6.17 In</td>
</tr>
<tr>
<td>Opening at entry side of draw tube</td>
<td>76.20 mm</td>
<td>3.00 In</td>
</tr>
<tr>
<td>Draw tube thread, used for accessories</td>
<td>75mm x 1mm</td>
<td></td>
</tr>
<tr>
<td>Draw Tune Drive Mechanism</td>
<td>Rack and Pinion</td>
<td>Rack and Pinion</td>
</tr>
<tr>
<td>Rack and Pinion Pitch</td>
<td>72 Pitch</td>
<td></td>
</tr>
<tr>
<td>Reduction Unit type</td>
<td>2.7 Inch Planetary Drive</td>
<td></td>
</tr>
<tr>
<td>Reduction Ratio</td>
<td>9:1 (Approximately)</td>
<td>9:1 (Approximately)</td>
</tr>
<tr>
<td>Linear distance per one revolution of pinion</td>
<td>17.60mm per Revolution</td>
<td>.693 In per Revolution</td>
</tr>
<tr>
<td>Linear distance per one revolution of Fine Focus knob</td>
<td>1.960mm per Revolution</td>
<td>.077 In per Revolution</td>
</tr>
<tr>
<td>Weight Lifting Capacity</td>
<td>5.5-6.8kg</td>
<td>12-15 lbs</td>
</tr>
<tr>
<td>Weight carrying capacity</td>
<td>5.5-6.8kg</td>
<td>12-15 lbs</td>
</tr>
<tr>
<td>Weight of focuser with standard TAR and EC</td>
<td>1570 Grams</td>
<td>3.46 lbs</td>
</tr>
<tr>
<td>Weight of focuser with out TAR and EC, Body only</td>
<td>1230 Grams</td>
<td>2.71 lbs</td>
</tr>
<tr>
<td>Weight of Tube Adapter Ring (TAR) 109mm x 1mm</td>
<td>200 Grams</td>
<td>.44 lbs</td>
</tr>
</tbody>
</table>
Weight of Compression Ring End Cap, (CREC) 144 Grams .32 lbs

VBAS purchased the FTF3025 with a 2.5” drawtube. Here’s a copy of the email announcing the purchase:

**From:** Delmas, Jeff  
**Sent:** Tuesday, May 04, 2010 10:08 AM  
**To:** 'DeMartino, Domenico'; 'Swift, Wesley R. (MSFC-EV44)[Raytheon - Jacobs]'  
**Cc:** Jeff Delmas  
**Subject:** RE: Focuser for the Swanson

I put in the order today. They offered a blemished model for a $50 discount and I got that. It’s either got mismatching anodized color or a manufacturing blemish that does not affect function. The total is:

- Focuser: $539  
- Motor sys: $524  
- Adapter plate: $49  
- Shipping: $28  
- Total: $1140

A part for the motor system is on backorder and they expect to get them within two weeks. Since I’m out of town next week, I asked them not to ship the order until all parts are included. He expected to ship it by May 18.

Jeff

**From:** DeMartino, Domenico [mailto:Domenico.DeMartino@meads.nato.int]  
**Sent:** Monday, May 03, 2010 3:16 PM  
**To:** Delmas, Jeff  
**Subject:** RE: Focuser for the Swanson

GREAT !!!!!

**Domenico (Mimmo) de Martino**

**From:** Delmas, Jeff [mailto:jeff.delmas@siemens.com]  
**Sent:** Monday, May 03, 2010 3:14 PM  
**To:** Swift, Wesley R. (MSFC-EV44)[Raytheon - Jacobs]  
**Cc:** mimmo.demartino@meads-llc.com  
**Subject:** RE: Focuser for the Swanson

I’ll put the order in tomorrow. I’m going out of town this Thursday for 11 days, so I’ll ask them to ship it out on the 14th and expect it will arrive May 17-20, in time for the weekend of the 20th. Maybe we can install it that weekend.

Jeff
From: Swift, Wesley R. (MSFC-EV44)[Raytheon - Jacobs] [mailto:wesley.swift@nasa.gov]
Sent: Monday, May 03, 2010 3:00 PM
To: Delmas, Jeff
Subject: RE: Focuser for the Swanson

I like it!

Wes

From: Delmas, Jeff [mailto:jeff.delmas@siemens.com]
Sent: Thursday, April 29, 2010 3:54 PM
To: mimmo.demartino@meads-llc.com; Swift, Wesley R. (MSFC-EV44)[Raytheon - Jacobs]; Richard Norman
Subject: Focuser for the Swanson

All,

I think I’m ready to put in an order for a new focuser for the Swanson. After talking to Adirondack, Astro-Physics, Starlight instruments, JMI, and researching other units on the web, here is the unit I recommend and believe will serve us very well now and in the future:

StarLight Instruments
FeatherTouch 3.0” Dual Speed Focuser with 2.5” draw tube travel            $589
This unit has a lifting capacity of 12-15lbs, which I think will be plenty for current and future use.
Read the specs for this bad boy here: http://starlightinstruments.com/News-History/index.cfm

The motor drive system is $524, is ASCOM compliant, and has temperature compensation and digital readout.
Check it out here: http://starlightinstruments.com/shop/product_info.php?products_id=240

In addition, we’ll need a flat adapter plate (with leveling screws) that sells for $49

The total will be:

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<table>
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<tbody>
<tr>
<td>Focuser</td>
<td>$589</td>
</tr>
<tr>
<td>Motor sys</td>
<td>$524</td>
</tr>
<tr>
<td>Adapter</td>
<td>$  49</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$1162</strong></td>
</tr>
</tbody>
</table>

The rep told me that he could sell me a blemished model at a discount that is 100% functional, but that he couldn’t sell to his distributors. I didn’t go into detail about this and he wasn’t specific about the discount. I think it would drop the total to about $1100, maybe including shipping.

A 2” focuser with motor control from the same company will cost about $800. It has an 8lb lifting capacity.

Please take a look and reply with any comments.

Jeff