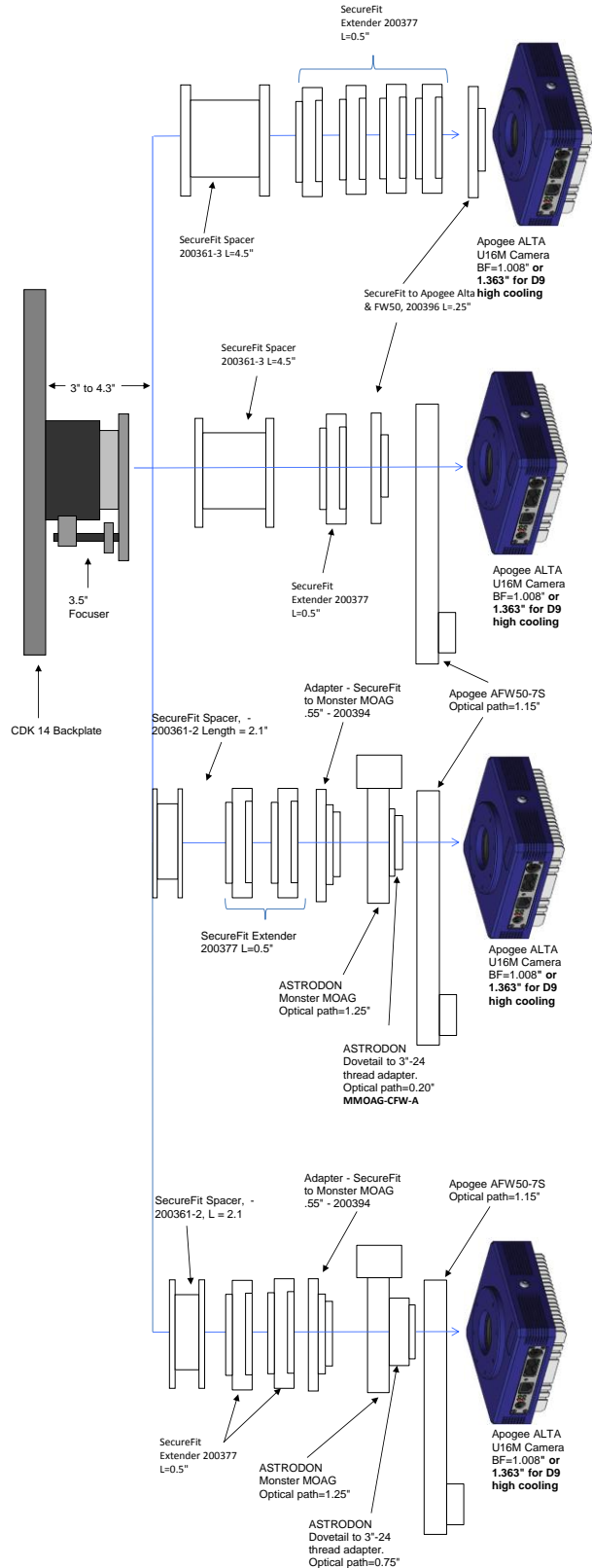


CDK14 - OPTICAL TRAIN: for Apogee Alta, FW50 and MMOAG



ALTA CCD		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.332</b>	8.09
SecureFit, 4.5" - 200361-3	4.5	7.758
SecureFit Extender - 200377	0.5	3.258
SecureFit Extender - 200377	0.5	2.758
SecureFit Extender - 200377	0.5	2.258
SecureFit Extender - 200377	0.5	1.758
SecureFit Extender - 200377	0.5	1.258
SecureFit to Apogee Alta & FW50 - 200396	0.25	1.008
Apogee Alta U16M CCD back focus	1.008	0

ALTA D9 High Cooling		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.447</b>	8.09
SecureFit, 4.5" - 200361-3	4.5	7.643
SecureFit Extender - 200377	0.5	3.143
SecureFit Extender - 200377	0.5	2.643
SecureFit Extender - 200377	0.5	2.143
SecureFit Extender - 200377	0.5	1.643
SecureFit to Apogee Alta & FW50 - 200396	0.25	1.393
Apogee Alta U16M High Cooling CCD back focus	1.363	0.03

ALTA CCD, FW50		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.682</b>	8.09
SecureFit, 4.5" - 200361-3	4.5	7.408
SecureFit CCD Extender - 200377	0.5	2.908
SecureFit to Apogee Alta & FW50 - 200396	0.25	2.408
Apogee AFW50-7S	1.15	2.158
Apogee Alta U16M CCD back focus	1.008	1.008

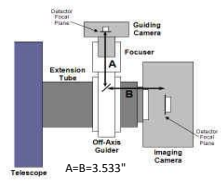
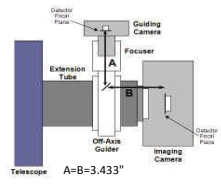
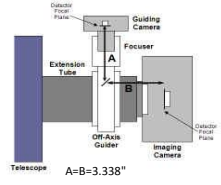
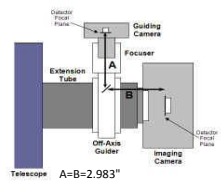
ALTA D9 High Cooling, FW50		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.327</b>	8.09
SecureFit, 4.5" - 200361-3	4.5	7.763
SecureFit CCD Extender - 200377	0.5	3.263
SecureFit to Apogee Alta & FW50 - 200396	0.25	2.763
Apogee AFW50-7S	1.15	2.513
Apogee Alta U16M High Cooling CCD back focus	1.363	1.363

MonsterMOAG, FW50, ALTA		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.832</b>	8.09
SecureFit Spacer - 3.8" - 200361-2	2.1	7.258
SecureFit CCD Extender - 200377	0.5	5.158
SecureFit CCD Extender - 200377	0.5	4.658
Adapter SecureFit to Monster MOAG - 200394	0.55	4.158
Monster MOAG - MMOAG	0.55	3.608
Monster MOAG - MMOAG	1.25	2.358
AstroDon Adapter - MMOAG-CFW-A	0.2	2.158
Apogee AFW50-7S	1.15	1.008
Apogee Alta U16M CCD back focus	1.008	0

MonsterMOAG, FW50, ALTA D9 High Cooling		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.477</b>	8.09
SecureFit Spacer - 200361-2	2.1	7.613
SecureFit CCD Extender - 200377	0.5	5.513
SecureFit CCD Extender - 200377	0.5	5.013
SecureFit CCD Extender - 200377	0.5	4.513
Adapter SecureFit to Monster MOAG - 200394	0.55	3.963
Monster MOAG - MMOAG	1.25	2.713
AstroDon Adapter - MMOAG-CFW-A	0.2	2.513
Apogee AFW50-7S	1.15	1.363
Apogee Alta U16M High Cooling CCD back focus	1.363	0

MonsterMOAG, FW50, ALTA		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.282</b>	8.09
SecureFit Spacer - 200361-2	2.1	7.808
SecureFit CCD Extender - 200377	0.5	5.708
SecureFit CCD Extender - 200377	0.5	5.208
Adapter SecureFit to Monster MOAG - 200394	0.55	4.708
Monster MOAG - MMOAG	0.55	4.158
Monster MOAG - MMOAG	1.25	2.908
Adapter, Astrodon dovetail to 3"-24 MMOAG-3-L	0.75	2.158
Apogee AFW50-7S	1.15	1.008
Apogee Alta U16M CCD back focus	1.008	0

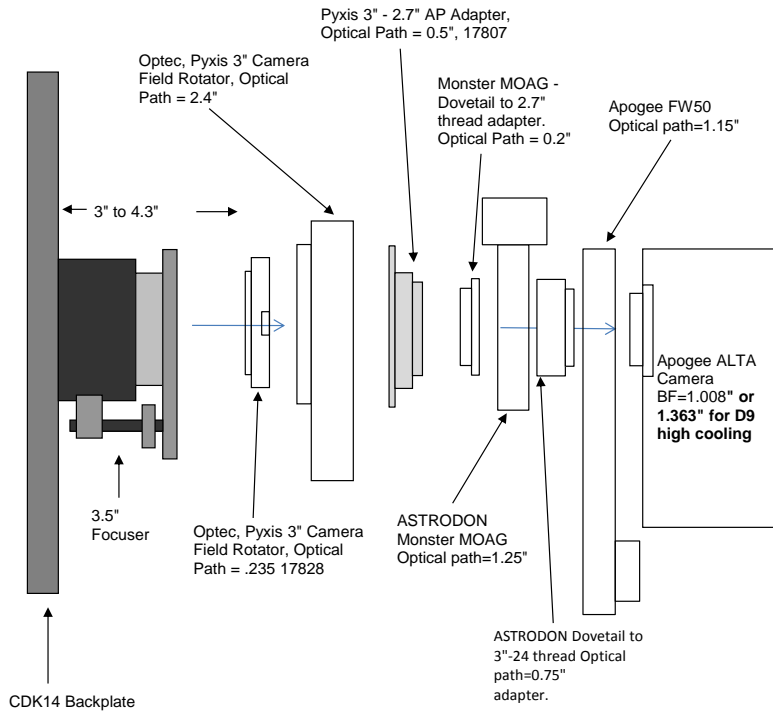
MonsterMOAG, FW50, ALTA D9 High Cooling		
3.5" Focuser (racked in)	3	11.09 remaining BF
<b>Focus position (0 to 1.3")</b>	<b>0.527</b>	8.09
SecureFit Spacer - 200361-2	2.1	7.563
SecureFit CCD Extender - 200377	0.5	5.463
SecureFit CCD Extender - 200377	0.5	4.963
Adapter SecureFit to Monster MOAG - 200394	0.55	4.413
Monster MOAG - MMOAG	1.25	3.163
Adapter, Astrodon dovetail to 3"-24 MMOAG-3-L	0.75	2.413
Apogee AFW50-7S	1.05	1.363
Apogee Alta U16M High Cooling CCD back focus	1.363	0



# CDK14 - OPTICAL TRAIN: for Apogee Alta and Pyxis Rotator

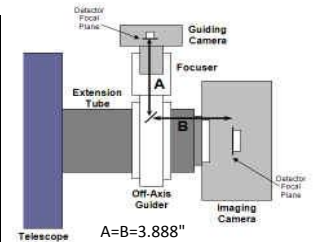
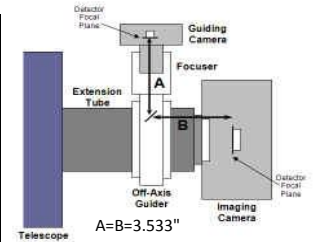
Distance to Focuser Mounting Surface

11.09

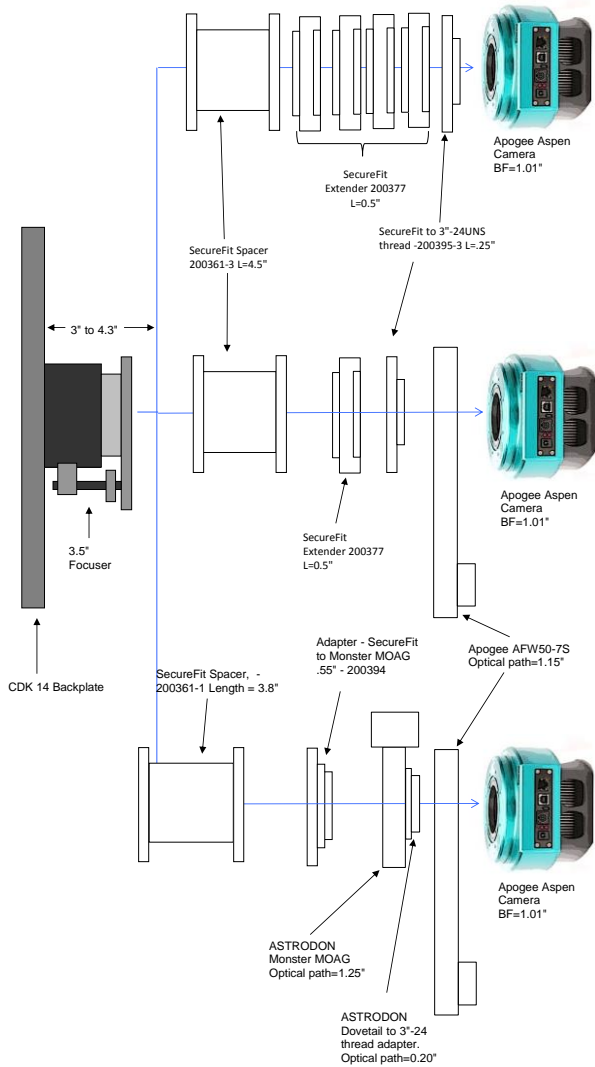


Alta, CCD, FW50, Pyxis & MMOAG		11.09 remaining BF
3.5" Focuser (racked in)	3	8.09
Focus position (0 to 1.3")	<b>0.597</b>	7.493
PW 14/17/20 to Optec-3600 dovetail adapter - <b>17828</b>	0.235	7.258
Optec Pyxis 3" Camera Rotator	2.4	4.858
Optec Pyxis 2.7" AP Adapter - <b>17807</b>	0.5	4.358
Monster MOAG -Dovetail to 2.7" adapter	0.2	4.158
Monster MOAG - <b>MMOAG</b>	1.25	2.908
Adapter, Astrodon dovetail to 3"-24 <b>MMOAG-3-L</b>	0.75	2.158
Apogee FW50	1.15	1.008
Apogee Alta U16M CCD back focus	1.008	0

Alta High Cooling, CCD, FW50, Pyxis & MMOAG		11.09 remaining BF
3.5" Focuser (racked in)	3	8.09
Focus position (0 to 1.3")	<b>0.242</b>	7.848
PW 14/17/20 to Optec-3600 dovetail adapter - <b>17828</b>	0.235	7.613
Optec Pyxis 3" Camera Rotator	2.4	5.213
Optec Pyxis 2.7" AP Adapter - <b>17807</b>	0.5	4.713
Monster MOAG -Dovetail to 2.7" adapter	0.2	4.513
Monster MOAG - <b>MMOAG</b>	1.25	3.263
Adapter, Astrodon dovetail to 3"-24 <b>MMOAG-3-L</b>	0.75	2.513
Apogee FW50	1.15	1.363
Apogee Alta U16M High Cooling CCD back focus	1.363	0



CDK14 - OPTICAL TRAIN: for Aspen, FW50 and MMOAG



Apogee Aspen CCD	11.09	remaining BF	
3.5" Focuser (racked in)	3	8.09	
Focus position (0 to 1.3")	<b>0.33</b>	7.76	
SecureFit, 4.5" - 200361-3	4.5	3.26	
SecureFit Extender - 200377	0.5	2.76	
SecureFit Extender - 200377	0.5	2.26	
SecureFit Extender - 200377	0.5	1.76	
SecureFit Extender - 200377	0.5	1.26	
SecureFit to 3"-24UNS - 200395-3	0.25	1.01	
Apogee Aspen CCD back focus	1.01	0	

Apogee Aspen CCD & FW50	11.09	remaining BF	
3.5" Focuser (racked in)	3	8.09	
Focus position (0 to 1.3")	<b>0.68</b>	7.41	
SecureFit, 4.5" - 200361-3	4.5	2.91	
SecureFit CCD Extender - 200377	0.5	2.41	
SecureFit to 3"-24UNS - 200395-3*	0.25	2.16	
Apogee AFW50-75	1.15	1.01	
Apogee Aspen CCD back focus	1.01	0	

\*200396 adapter can also be used to mount to AWF50 filter wheels

Apogee ASPEN CCD, MonsterMOAG, FW50	11.09	remaining BF	
3.5" Focuser (racked in)	3	8.09	
Focus position (0 to 1.3")	<b>0.13</b>	7.96	
SecureFit Spacer - 3.8" - 200361-1	3.8	4.16	
Adapter SecureFit to Monster MOAG - 200394	0.55	3.61	
Monster MOAG - MMOAG	1.25	2.36	
AstroDon Adapter - MMOAG-CFW-A	0.2	2.16	
Apogee AFW50-75	1.15	1.01	
Apogee Aspen CCD back focus	1.01	0	

