

Reducer Model	Model Name	Reducer Body length incl. Threads (mm)	Backfocuss to CCD center last flattener lens (mm)
M82 - APM/LZOS 100/800 w. 3" or bigger focuser	Model 2	62 mm	154,2 mm
M82 - APM/LZOS 105/650 w. 3" or bigger focuser	Model 1	70 mm	113,5 mm
M82 - APM 107/700 w. 3" or bigger focuser	Model 1	70 mm	111,84 mm
M82 - APM/LZOS 115/805 w. 3" or bigger focuser	Model 1	70 mm	109,6 mm
M82 - APM/LZOS 123/738 w. 3" or bigger focuser	Model 1	70 mm	111,00 mm
M82 - APM/LZOS 130/780 w. 3" or bigger focuser	Model 1	70 mm	110,00 mm
M82 - APM/LZOS 130/1200 w. 3" or bigger focuser	Model 2	62 mm	143,00 mm
M82 - APM/LZOS 152/1200 w. 3" or bigger focuser	Model 2	62 mm	142,26 mm
M82 - APM/LZOS 175/1400 w. 3.5" focuser	Model 2	62 mm	139,5 mm
M82 - APM/LZOS 180/1260 w. 3.5" focuser	Model 1	70 mm	119,50 mm
M82 - APM/LZOS 203/1420 w. 3.5" focuser	Model 2	62 mm	138,7 mm
M82 - APM/LZOS 203/1800 w. 3.5" focuser	Model 2	62 mm	134,49 mm
M82 - APM/LZOS 228/2050 w. 3.5" focuser	Model 2	62 mm	132,70 m
M82 - APM/LZOS 254/2250 w. 3.5" focuser	Model 2	62 mm	131,20 mm
M82 - APM/LZOS 304/2280 w. 3.5" focuser	Model 2	62 mm	130,86 mm
M82-Skywatcher Esprit 150 mm F/7	Model 2	62 mm	
M82-APM/LUNT 152/1200 doublet w. 3" focuser	Model 2	62 mm	142,75 mm
M82-APM- doublet 140/980 FPL53 with 3" focuser	Model 1	62 mm	106,63 mm
Z 600 mm F/3-f/8 RC	Model 2	62 mm	135,15
M82- Astro-Physics 155 F/7 EDF	Model 2	62 mm	

Important Info

Backfocus to CCD from thread end (mm)	Optical length from center last glass surface to end of reducer thread (mm)	Reducer thread at focuser side (metric)	Reducer thread length at focuser side	Reducer thread at CCD side (metric)
137,8 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
94,5 mm	19 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
92,8 mm	19 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
90,6 mm	19 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
92,0 mm	19 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
91,0 mm	19 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
126,6 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
125,9 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
123,1 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
103,10 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
122.3 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
119,1 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
116,3 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
114,8 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
114,5 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
	16,4 mm	M82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
126,35 mm	16,4 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
87,6 mm	19 mm	M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID
118,75 mm	16,4 mm	M 82 x 1 - OD		M 68 x 1 & M 77 x 0.75 - ID
		M 82 x 1 - OD	5 mm	M 68 x 1 & M 77 x 0.75 - ID

o: Back Focus from CCD to end of flattener mechanics change by 0.5 mm longer if you use a

Corrected image circle (mm)		backfocuse change due reducer	Total optical path of reducer body + backfocuse + focuse change (mm)
60 mm		8,2 mm longer	208,00 mm
60 mm		3,76 mm longer	168,26 mm
60 mm		3,65 mm longer	166,45 mm
60 mm		3,57 mm longer	164,17 mm
60 mm		3,58 mm longer	165,58 mm
60 mm		3,59 mm longer	164,59 mm
60 mm		6,51 mm longer	195,11 mm
60 mm		6,45 mm longer	194,35 mm
60 mm		6,31 mm longer	191,41 mm
60 mm		6,30 mm longer	179,4 mm
60 mm		6,27 mm longer	190,57 mm
60 mm		6,03 mm longer	187,13 mm
60 mm		5,95 mm longer	184,25 mm
60 mm		5,86 mm longer	182,66 mm
60 mm		6,5 mm longer	183,00 mm
60 mm			
60 mm		6,44 mm longer	194,8 mm
60 mm		3,42 mm longer	153,02 mm
3 mm thick filter			
60 mm			
60 mm			

**total optical
path of
reducer+
backfocuse
+focuse change
+ collimation
flange
(mm)**

$208+11 = 219 \text{ mm}$

$168,26+11 = 179,3 \text{ mm}$

$166,45 +11 = 177,5 \text{ mm}$

$164,17+11 = 175,2 \text{ mm}$

$165,58+11 = 176,6 \text{ mm}$

$164,59 +11 = 175,6 \text{ mm}$

$195,11+11 = 206,1 \text{ mm}$

$194,35+11 = 205,4 \text{ mm}$

$191,41+11 = 202,4 \text{ mm}$

$179,4+11 = 190,4 \text{ mm}$

$190.57+11 = 201,5 \text{ mm}$

$187,13+11 = 198,1 \text{ mm}$

$184,25+11 = 195,3 \text{ mm}$

$182,66+11 = 193,7 \text{ mm}$

$183,00+11 = 194,00 \text{ mm}$

$194,8+11= 205,8 \text{ mm}$

$153,02+11 =164,02 \text{ mm}$