

HF8XA-1F

Working Distance [mm]	Optional Magnification	Extension Ring	Field of View [mm]																	
			1.1"		1"		1/1.2"		2/3"		1/1.8"		1/2"		1/2.5"		1/3"			
			H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V		
1000	0.008x	-	-	-	-	-	-	1130.2	830.3	899.9	664.9	803.8	595.3	711.7	529.0	595.3	443.2			
950	0.008x	-	-	-	-	-	-	1074.4	789.3	855.5	632.1	764.1	565.9	676.6	502.9	565.9	421.3			
900	0.009x	-	-	-	-	-	-	1018.5	748.3	811.0	599.2	724.3	536.5	641.4	476.7	536.5	399.4			
850	0.010x	-	-	-	-	-	-	962.7	707.2	766.5	566.4	684.6	507.1	606.2	450.6	507.1	377.5			
800	0.010x	-	-	-	-	-	-	906.8	666.2	722.1	533.5	644.9	477.7	571.1	424.5	477.7	355.6			
750	0.011x	-	-	-	-	-	-	851.0	625.2	677.6	500.8	605.2	448.3	535.9	398.3	448.3	333.7			
700	0.012x	-	-	-	-	-	-	795.1	584.2	633.1	467.8	565.5	418.8	500.7	372.2	418.8	311.8			
650	0.013x	-	-	-	-	-	-	739.3	543.1	588.7	434.9	525.8	389.4	465.5	346.0	389.4	289.9			
600	0.014x	-	-	-	-	-	-	683.5	502.1	544.2	402.1	486.0	360.0	430.4	319.9	360.0	268.0			
550	0.015x	-	-	-	-	-	-	627.6	461.1	499.7	369.2	446.3	330.6	395.2	293.8	330.6	246.1			
500	0.016x	-	-	-	-	-	-	571.8	420.0	455.3	336.4	406.6	301.2	360.0	267.6	301.2	224.2			
450	0.018x	-	-	-	-	-	-	515.9	379.0	410.8	303.5	366.9	271.7	324.9	241.5	271.7	202.3			
400	0.020x	-	-	-	-	-	-	460.1	338.0	366.3	270.6	327.2	242.3	289.7	215.3	242.3	180.4			
350	0.023x	-	-	-	-	-	-	404.3	297.0	321.9	237.8	287.5	212.9	254.5	189.2	212.9	158.5			
300	0.027x	-	-	-	-	-	-	348.4	255.9	277.4	204.9	247.7	183.5	219.4	163.1	183.5	136.6			
250	0.032x	-	-	-	-	-	-	292.6	214.9	232.9	172.1	208.0	154.1	184.2	136.9	154.1	114.7			
200	0.039x	-	-	-	-	-	-	236.7	173.9	188.5	139.2	168.3	124.7	149.0	110.8	124.7	92.8			
150	0.051x	-	-	-	-	-	-	180.9	132.8	144.0	106.4	128.6	95.2	113.9	84.6	95.2	70.9			
100	0.074x	-	-	-	-	-	-	125.0	91.8	99.5	73.5	88.9	65.8	78.7	58.5	65.8	49.0			

HF12XA-1F

Working Distance [mm]	Optional Magnification	Extension Ring	Field of View [mm]																	
			1.1"		1"		1/1.2"		2/3"		1/1.8"		1/2"		1/2.5"		1/3"			
			H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V		
1000	0.012x	-	-	-	-	-	-	912.7	673.4	740.3	548.7	593.5	441.6	531.6	396.1	472.0	352.6	396.1	296.0	
950	0.013x	-	-	-	-	-	-	867.7	640.2	703.8	521.7	564.2	419.8	505.4	376.6	448.8	335.2	376.6	281.4	
900	0.014x	-	-	-	-	-	-	822.7	607.0	667.3	494.6	535.0	398.0	479.2	357.1	425.5	317.8	357.1	266.8	
850	0.014x	-	-	-	-	-	-	777.7	573.8	630.8	467.6	505.7	376.3	453.0	337.5	402.2	300.5	337.5	252.2	
800	0.015x	-	-	-	-	-	-	732.8	540.6	594.3	440.5	476.5	354.5	426.8	318.0	379.0	283.1	318.0	237.6	
750	0.016x	-	-	-	-	-	-	687.8	507.4	557.8	413.5	447.2	332.7	400.6	298.5	355.7	265.7	298.5	223.0	
700	0.017x	-	-	-	-	-	-	642.8	474.2	521.3	386.4	417.9	311.0	374.4	279.0	332.4	248.3	279.0	208.5	
650	0.019x	-	-	-	-	-	-	597.8	441.1	484.9	359.4	388.7	289.2	348.2	258.4	309.2	230.9	258.4	193.9	
600	0.020x	-	-	-	-	-	-	552.8	407.9	448.4	332.4	359.4	267.4	322.0	239.9	285.9	213.6	239.9	179.3	
550	0.022x	-	-	-	-	-	-	507.8	374.7	411.9	305.3	330.2	245.7	295.8	220.4	262.6	196.2	220.4	164.7	
500	0.024x	-	-	-	-	-	-	462.9	341.5	375.4	278.3	300.9	223.9	269.6	200.9	239.4	178.8	200.9	150.1	
450	0.027x	-	-	-	-	-	-	417.9	308.3	338.9	251.2	271.7	202.1	243.4	181.3	216.1	161.4	181.3	135.5	
400	0.030x	-	-	-	-	-	-	372.9	275.1	302.4	224.2	242.4	180.4	217.2	161.8	192.8	144.0	161.8	120.9	
350	0.034x	-	-	-	-	-	-	327.9	241.9	265.9	197.1	213.2	158.6	191.0	142.3	169.6	126.7	142.3	106.3	
300	0.039x	-	-	-	-	-	-	282.9	208.7	228.4	170.1	183.9	136.9	164.8	122.8	146.3	109.3	122.8	91.7	
250	0.047x	-	-	-	-	-	-	237.9	175.5	192.9	143.0	154.7	115.1	138.6	103.2	123.0	91.9	103.2	77.1	
200	0.058x	-	-	-	-	-	-	193.0	142.3	156.5	116.0	125.4	93.3	112.3	83.7	99.8	74.5	83.7	62.6	
150	0.075x	-	-	-	-	-	-	148.0	109.1	120.0	88.9	96.2	71.6	86.1	64.2	76.5	57.1	64.2	48.0	
100	0.108x	-	-	-	-	-	-	103.0	75.9	83.5	61.9	66.9	49.8	59.9	44.7	53.2	39.8	44.7	33.4	

HF16XA-1F

Working Distance [mm]	Optional Magnification	Extension Ring	Field of View [mm]																	
			1.1"		1"		1/1.2"		2/3"		1/1.8"		1/2"		1/2.5"		1/3"			
			H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V		
1000	0.016x	-	-	-	-	-	-	701.7	522.0	572.6	426.9	461.1	344.4	413.7	309.3	367.9	275.5	309.3	231.5	
950	0.016x	-	-	-	-	-	-	667.3	496.4	544.5	405.9	438.5	327.5	393.4	294.1	349.8	262.0	294.1	220.1	
900	0.017x	-	-	-	-	-	-	632.9	470.7	516.4	385.0	415.8	310.6	373.1	278.9	331.8	248.4	278.9	208.7	
850	0.018x	-	-	-	-	-	-	598.4	445.1	488.3	364.0	393.2	293.7	353.8	263.7	313.7	234.9	263.7	197.4	
800	0.019x	-	-	-	-	-	-	564.0	419.5	460.2	343.0	370.6	276.8	332.5	248.5	295.6	221.4	248.5	186.0	
750	0.021x	-	-	-	-	-	-	529.6	393.9	432.1	322.1	347.9	259.8	312.2	233.3	277.6	207.9	233.3	174.6	
700	0.022x	-	-	-	-	-	-	495.2	368.2	404.0	301.1	325.3	242.9	291.9	218.1	259.5	194.3	218.1	163.3	
650	0.024x	-	-	-	-	-	-	460.7	342.6	375.9	280.2	302.6	226.0	271.5	202.9	241.4	180.8	202.9	151.9	
600	0.026x	-	-	-	-	-	-	426.3	317.0	347.8	259.2	280.0	209.1	251.2	187.8	223.4	167.3	187.8	140.5	
550	0.028x	-	-	-	-	-	-	391.9	291.4	319.7	238.2	257.4	192.2	230.9	172.6	205.3	153.7	172.6	129.2	
500	0.031x	-	-	-	-	-	-	357.5	265.8	291.6	217.3	234.7	175.3	210.6	157.4	187.3	140.2	157.4	117.8	
450	0.034x	-	-	-	-	-	-	323.0	240.1	263.5	196.3	212.1	158.4	190.3	142.2	169.2	126.7	142.2	106.4	
400	0.038x	-	-	-	-	-	-	288.6	214.5	235.4	175.4	189.5	141.5	170.0	127.0	151.1	113.1	127.0	95.1	
350	0.043x	-	-	-	-	-	-	254.2	188.9	207.2	154.4	166.8	124.6	149.7	111.8	133.1	99.6	111.8	83.1	
300	0.050x	-	-	-	-	-	-	219.8	163.3	179.1	133.5	144.2	107.6	129.3	96.6	115.0	86.1	96.6	72.3	
250	0.059x	-	-	-	-	-	-	185.3	137.6	151.0	112.5	121.5	90.7	109.0	81.5	96.9	72.6	81.5	61.0	
200	0.073x	-	-	-	-	-	-	150.9	112.0	122.9	91.5	98.9	73.8	88.7	66.3	78.9	59.0	66.3	49.6	
150	0.094x	-	-	-	-	-	-	116.5	86.4	94.8	70.6	76.3	56.9	68.4	51.1	60.8	45.5	51.1	38.2	
100	0.135x	-	-	-	-	-	-	82.0	60.8	66.7	49.6	53.6	40.0	48.1	35.9	42.7	32.0	35.9	26.9	

HF25XA-1F

Working Distance [mm]	Optional Magnification	Extension Ring	Field of View [mm]																	
			1.1"		1"		1/1.2"		2/3"		1/1.8"		1/2"		1/2.5"		1/3"			
			H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V		
1000	0.025x	-	-	-	-	-	-	436.5	327.0	358.0	268.2	289.4	216.9	260.1	194.9	231.6	173.8	194.9	146.2	
950	0.026x	-	-	-	-	-	-	415.1	310.9	340.4	255.1	275.2	206.3	247.3	185.4	220.2	165.3	185.4	139.0	
900	0.027x	-	-	-	-	-	-	393.7	294.8	322.8	241.8	261.0	195.6	234.5	175.8	208.8	156.7	175.8	131.8	
850	0.029x	-	-	-	-	-	-	372.2	278.8	305.3	228.7	246.8	184.9	221.7	166.2	197.4	148.2	166.2	124.6	
800	0.031x	-	-	-	-	-	-	350.8	262.7	287.7	215.5	232.6	174.3	209.0	156.6	186.1	139.6	156.6	117.4	
750	0.033x	-	-	-	-	-	-	329.4	246.7	270.1	202.3	218.3	163.6	196.2	147.0	174.7	131.1	147.0	110.2	
700	0.035x	-	-	-	-	-	-	307.9	230.6	252.5	189.2	204.1	153.0	183.4	137.5	163.3	122.5	137.5	103.1	
650	0.038x	-	-	-	-	-	-	286.5	214.5	234.9	176.0	189.9	142.3	170.6	127.9	151.9	114.0	127.9	95.9	
600	0.041																			