

Long working distance standard machine vision lenses (S-WH series)

LS-FA-S-WH series · Machine vision lenses · 288 models



Models

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-12WH012X250W	0.12	250	8(1/2")	12.2	Non-telecentric	0.53	0.00497
LS-S-12WH012X300W	0.12	300	8(1/2")	10	Non-telecentric	0.025	0.006
LS-S-12WH012X340W	0.12	340	8(1/2")	10	Non-telecentric	0.17	0.006
LS-S-12WH012X650W	0.12	650	8(1/2")	8	Non-telecentric	0.1	0.00749
LS-S-12WH0155X350W	0.155	350	8(1/2")	6	Non-telecentric	0.1	0.0129
LS-S-12WH015X355W	0.15	355	8(1/2")	9	Non-telecentric	0.1	0.01
LS-S-12WH016X525W	0.16	525	8(1/2")	18.3	Non-telecentric	<0.1	0.00437
LS-S-12WH018X240W	0.18	240	8(1/2")	11.2	Non-telecentric	0.02	0.00806
LS-S-12WH018X300W	0.18	300	8(1/2")	8.7	Non-telecentric	0.2	0.01034
LS-S-12WH022X145W	0.22	145	8(1/2")	11.5	Non-telecentric	0.6	0.01033

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LS-S-12WH022X150W	0.22	150	8(1/2")	10	Non-telecentric	0.05	0.01101
LS-S-12WH022X150WIR	0.22	150	8(1/2")	8	Non-telecentric	0.1	0.01379
LS-S-12WH022X160W	0.22	160	8(1/2")	13.4	Non-telecentric	0.15	0.00824
LS-S-12WH025X340W	0.25	340	8(1/2")	9	Non-telecentric	0.02	0.01379
LS-S-12WH027X220W	0.27	220	8(1/2")	8.3	Non-telecentric	0.1	0.01626
LS-S-12WH02X180W	0.2	180	8(1/2")	10.6	Non-telecentric	0.08	0.00952
LS-S-12WH02X650W	0.2	650	8(1/2")	10	Non-telecentric	0.05	0.01
LS-S-12WH03X130W	0.3	130	8(1/2")	11.3	Non-telecentric	0.3	0.01333
LS-S-12WH03X180W	0.3	180	8(1/2")	11.3	Non-telecentric	0.3	0.01333
LS-S-12WH03X240W	0.3	240	8(1/2")	9	Non-telecentric	0.03	0.01669
LS-S-12WH03X530W	0.3	530	8(1/2")	8	Non-telecentric	0.01	0.01875
LS-S-12WH05X300WC	0.5	300	8(1/2")	25	Non-telecentric	0.13	0.01
LS-S-12WH1X250WCS	1	250	8(1/2")	20	Non-telecentric	0.4	0.025
LS-S-12WH2X300W	2	300	8(1/2")	27.2	Non-telecentric	0.2	0.03331
LS-S-13WH044X120WC	0.44	120	6(1/3")	12	Non-telecentric	0.1	0.02
LS-S-13WH046X65W	0.46	65	6(1/3")	10	Non-telecentric	0.1	0.02306
LS-S-13WH05X550W	0.5	550	6(1/3")	14.3	Non-telecentric	0.3	0.01727
LS-S-13WH05X580W	0.5	580	6(1/3")	14	Non-telecentric	0.01	0.01786
LS-S-13WH06X220WC	0.6	220	6(1/3")	12.5	Non-telecentric	0.03	0.024
LS-S-13WH4X250W	4	250	6(1/3")	47	0.2	0.2	0.03612
LS-S-14WH032X98W	0.32	98	4.4(1/4")	6.7	Non-telecentric	0.05	0.02387
LS-S-17WH009X660W	0.09	660	9.4(1/1.7")	8	Non-telecentric	0.04	0.00563
LS-S-17WH0125X580W	0.125	580	9.4(1/1.7")	10	Non-telecentric	0.01	0.00627
LS-S-17WH0126X875W	0.126	875	9.4(1/1.7")	5	Non-telecentric	0.1	0.01257
LS-S-17WH0142X630W	0.142	630	9.4(1/1.7")	10	Non-telecentric	0.05	0.00711
LS-S-17WH02X330W	0.2	330	9.4(1/1.7")	9.4	Non-telecentric	0.2	0.01068

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-17WH0385X485W	0.385	485	9.4(1/1.7")	11.5	Non-telecentric	0.02	0.01671
LS-S-17WH03X550W	0.3	550	9.4(1/1.7")	12	Non-telecentric	0.005	0.01246
LS-S-17WH03X640W	0.3	640	9.4(1/1.7")	10.8	Non-telecentric	0.005	0.01383
LS-S-17WH04X650W	0.4	650	9.5(1/1.7")	11.4	Non-telecentric	0.03	0.01744
LS-S-17WH06X200W	0.6	200	9.4(1/1.7")	9	Non-telecentric	0.05	0.03337
LS-S-17WH07X480W	0.7	480	9.4(1/1.7")	18	Non-telecentric	0.2	0.01952
LS-S-18WH025X200W	0.25	200	9(1/1.8")	13.7	Non-telecentric	0.3	0.00917
LS-S-18WH025X285W	0.25	285	9(1/1.8")	9.5	Non-telecentric	0.1	0.01314
LS-S-18WH025X330W	0.25	330	9(1/1.8")	14.4	Non-telecentric	0.1	0.00912
LS-S-18WH025X400W	0.25	400	9(1/1.8")	9.6	Non-telecentric	0.1	0.01306
LS-S-18WH025X415W	0.25	415	9(1/1.8")	9.9	Non-telecentric	0.1	0.0127
LS-S-18WH02X155W	0.2	155	9(1/1.8")	11	Non-telecentric	0.7	0.00913
LS-S-18WH03X260W	0.3	260	9(1/1.8")	9.2	Non-telecentric	0.02	0.01635
LS-S-18WH045X48W	0.45	48	9(1/1.8")	11.7	Non-telecentric	0.35	0.01936
LS-S-18WH05X130W	0.5	130	9(1/1.8")	21.1	Non-telecentric	0.6	0.01181
LS-S-18WH05X260WC	0.5	260	9(1/1.8")	13.1	Non-telecentric	0.05	0.01909
LS-S-18WH1X565W	1	565	9(1/1.8")	29.8	Non-telecentric	0.3	0.01679
LS-S-18WH1X565WC	1	565	9(1/1.8")	29.8	Non-telecentric	0.6	0.01687
LS-S-18WH4X250WC	4	250	9(1/1.8")	46.7	Non-telecentric	0.3	0.03617
LS-S-23WH015X450W	0.15	450	7.9(1/2.3")	8.3	Non-telecentric	0.1	0.009
LS-S-23WH015X680W	0.15	680	11(2/3")	10.5	Non-telecentric	0.05	0.00715
LS-S-23WH025X210W	0.25	210	7.9(1/2.3")	9	Non-telecentric	0.2	0.01393
LS-S-23WH028X380W	0.28	380	7.2(1/2.5")	8	1.5	0.01	0.01751
LS-S-23WH03X193W	0.3	190	11(2/3")	10.1	Non-telecentric	0.5	0.01497

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-23WH03X745W	0.3	745	7.9(1/2.3")	12	Non-telecentric	0.01	0.01249
LS-S-23WH05X150W	0.5	150	11(2/3")	9.6	Non-telecentric	0.05	0.02608
LS-S-25WH0092X330W	0.092	330	7.2(1/2.5")	12.2	Non-telecentric	1	0.00376
LS-S-25WH0095X580W	0.095	580	7.2(1/2.5")	8.4	Non-telecentric	0.1	0.00567
LS-S-25WH014X150W-D54	0.14	150	7.2(1/2.5")	8	Non-telecentric	0.25	0.00881
LS-S-25WH014X300W	0.14	300	7.2(1/2.5")	10	Non-telecentric	0.1	0.007
LS-S-25WH014X420W	0.14	420	7.2(1/2.5")	8	Non-telecentric	0.1	0.00876
LS-S-25WH014X460W	0.14	460	7.2(1/2.5")	7	Non-telecentric	0.03	0.00996
LS-S-25WH015X200W	0.15	200	7.2(1/2.5")	8.5	Non-telecentric	0.43	0.00886
LS-S-25WH015X260W	0.15	260	7.2(1/2.5")	16	Non-telecentric	0.2	0.00471
LS-S-25WH018X130W	0.18	130	7.2(1/2.5")	9	Non-telecentric	0.3	0.01017
LS-S-25WH018X156W	0.18	156	7.2(1/2.5")	9	Non-telecentric	0.25	0.01017
LS-S-25WH018X160W	0.18	160	7.2(1/2.5")	9	Non-telecentric	0.3	0.01017
LS-S-25WH019X345W	0.19	345	7.2(1/2.5")	8.3	Non-telecentric	0.1	0.0115
LS-S-25WH019X435W	0.19	435	7.2(1/2.5")	8.2	Non-telecentric	0.1	0.0115
LS-S-25WH022X280W	0.22	280	7.2(1/2.5")	13.3	Non-telecentric	0.35	0.0082
LS-S-25WH022X820W	0.22	820	7.2(1/2.5")	10.6	Non-telecentric	0.01	0.01034
LS-S-25WH026X110W	0.26	110	7.2(1/2.5")	8.1	Non-telecentric	0.6	0.01219
LS-S-25WH02X113W	0.2	113	7.2(1/2.5")	10	Non-telecentric	0.4	0.01
LS-S-25WH02X140W	0.2	140	7.2(1/2.5")	8.8	Non-telecentric	<0.1	0.0115
LS-S-25WH02X150W	0.2	150	7.2(1/2.5")	10	Non-telecentric	0.4	0.01
LS-S-25WH035X330	0.35	330	7.2(1/2.5")	10	Non-telecentric	0.003	0.01749
LS-S-25WH0375X80W	0.375	80	7.2(1/2.5")	8	3.1	0.01	0.02337
LS-S-25WH03X560W	0.3	560	7.2(1/2.5")	10.8	Non-telecentric	0.01	0.01393
LS-S-25WH03X650W	0.3	650	7.2(1/2.5")	21.2	Non-telecentric	0.2	0.00701
LS-S-25WH04X113W	0.4	113	7.2(1/2.5")	13.4	Non-telecentric	0.25	0.01503
LS-S-25WH04X190W	0.4	190	7.2(1/2.5")	8.5	Non-telecentric	0.1	0.02354

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LS-S-25WH04X300W	0.4	300	7.2(1/2.5")	7	Non-telecentric	0.005	0.02857
LS-S-25WH04X900W	0.4	900	7.2(1/2.5")	16.3	Non-telecentric	0.3	0.01172
LS-S-25WH05X170W	0.5	170	7.2(1/2.5")	9.3	Non-telecentric	0.2	0.02675
LS-S-25WH05X200W	0.5	200	7.2(1/2.5")	11.2	Non-telecentric	0.1	0.02227
LS-S-25WH05X820W	0.5	820	7.2(1/2.5")	22.2	Non-telecentric	0.3	0.0128
LS-S-25WH08X570W	0.8	570	7.2(1/2.5")	23.9	Non-telecentric	0.3	0.01674
LS-S-25WH13X390WC	1.3	390	7.2(1/2.5")	27.5	Non-telecentric	0.3	0.02307
LS-S-2WH05X1330WCIR	0.5	330	8(1/2")	11.9	Non-telecentric	0.1	0.02102
LS-S-5WH05X2225W	0.5	225	7.2(1/2.5")	9	Non-telecentric	0.1	0.02779
LS-S-WH001X290W	0.1	290	11(2/3")	11.9	Non-telecentric	0.1	0.00447
LS-S-WH004X740W	0.04	740	11(2/3")	11.6	Non-telecentric	0.5	0.00174
LS-S-WH011X580W	0.11	580	11(2/3")	12	Non-telecentric	0.1	0.00458
LS-S-WH011X660W	0.11	660	11(2/3")	11.2	Non-telecentric	0.18	0.00489
LS-S-WH0125X270W	0.125	270	11(2/3")	12.2	Non-telecentric	0.2	0.00514
LS-S-WH012X455W	0.12	455	11(2/3")	12.9	Non-telecentric	0.2	0.00467
LS-S-WH012X650W	0.12	650	11(2/3")	8.4	Non-telecentric	0.05	0.00714
LS-S-WH014X250W	0.14	250	11(2/3")	11	Non-telecentric	0.1	0.00638
LS-S-WH014X600W	0.14	600	11(2/3")	17	Non-telecentric	0.25	0.00412
LS-S-WH014X700W	0.14	700	11(2/3")	9.3	Non-telecentric	<0.1	0.00751
LS-S-WH015X205W	0.15	205	11(2/3")	12.5	Non-telecentric	1	0.00605
LS-S-WH016X210W	0.16	210	11(2/3")	11.4	Non-telecentric	0.1	0.00702
LS-S-WH016X360W	0.16	360	11(2/3")	10	Non-telecentric	0.2	0.008
LS-S-WH016X525W	0.16	525	11(2/3")	18.3	Non-telecentric	<0.1	0.00437
LS-S-WH016X600W	0.16	600	11(2/3")	11.8	Non-telecentric	0.1	0.00683
LS-S-WH0185X350W	0.185	350	11(2/3")	9.5	Non-telecentric	0.05	0.00975
LS-S-WH018X150W	0.18	150	11(2/3")	12.6	Non-telecentric	0.6	0.00713
LS-S-WH018X680W	0.18	680	11(2/3")	10.5	Non-telecentric	0.15	0.0086
LS-S-WH018X750W	0.18	750	11(2/3")	10	Non-telecentric	0.05	0.009
LS-S-WH0195X550WS	0.195	550	11(2/3")	9.2	Non-telecentric	0.1	0.0106
LS-S-WH01X1405W	0.1	1405	11(2/3")	9.6	Non-telecentric	0.05	0.00524
LS-S-WH021X520WIR	0.21	520	11(2/3")	14.5	Non-telecentric	1.3	0.00719
LS-S-WH022X135W	0.22	135	11(2/3")	11.9	Non-telecentric	0.25	0.00929
LS-S-WH022X145W	0.22	145	11(2/3")	11.9	Non-telecentric	0.25	0.00929

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LS-S-WHO22X235W	0.22	235	11(2/3")	14.1	Non-telecentric	0.4	0.00783
LS-S-WHO22X275W	0.22	275	11(2/3")	11.3	Non-telecentric	0.1	0.008
LS-S-WHO22X300W	0.22	300	11(2/3")	10.4	Non-telecentric	0.1	0.01055
LS-S-WHO22X580W	0.22	580	11(2/3")	12.5	Non-telecentric	0.15	0.0088
LS-S-WHO24X490W	0.24	490	11(2/3")	10	Non-telecentric	0.1	0.012
LS-S-WHO25X650W	0.25	650	11(2/3")	9.3	Non-telecentric	0.02	0.01346
LS-S-WHO25X760W	0.25	760	11(2/3")	10	1.4	0.02	0.01251
LS-S-WHO27X120W	0.27	120	11(2/3")	14.3	Non-telecentric	0.9	0.00941
LS-S-WHO28X295W	0.28	295	11(2/3")	8.8	Non-telecentric	0.03	0.01598
LS-S-WHO2X1000W	0.2	1000	11(2/3")	10.7	Non-telecentric	0.01	0.00929
LS-S-WHO2X140W	0.2	140	11(2/3")	14.4	Non-telecentric	0.1	0.007
LS-S-WHO2X170W	0.2	170	11(2/3")	12.6	Non-telecentric	0.13	0.00795
LS-S-WHO2X180W	0.2	180	11(2/3")	12.5	Non-telecentric	0.1	0.00804
LS-S-WHO2X300W	0.2	300	11(2/3")	9.8	Non-telecentric	0.18	0.01
LS-S-WHO2X390W	0.2	390	11(2/3")	15.6	Non-telecentric	0.1	0.00642
LS-S-WHO2X620W	0.2	620	11(2/3")	13.4	Non-telecentric	0.1	0.00746
LS-S-WHO2X625W	0.2	625	11(2/3")	13.5	Non-telecentric	0.1	0.0074
LS-S-WHO33X490W	0.33	490	11(2/3")	11	Non-telecentric	0.05	0.01502
LS-S-WHO33X560W	0.33	560	11(2/3")	24.9	Non-telecentric	0.05	0.00658
LS-S-WHO33X560WL	0.33	560	11(2/3")	11.7	Non-telecentric	0.02	0.01414
LS-S-WHO33X800W	0.33	800	11(2/3")	13.1	Non-telecentric	0.03	0.01241
LS-S-WHO35X430W	0.35	430	11(2/3")	12.3	Non-telecentric	0.2	0.01426
LS-S-WHO38X120W	0.38	120	11(2/3")	11.6	Non-telecentric	0.7	0.01707

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LS-S-WHO3X140W	0.3	140	11(2/3")	11.7	Non-telecentric	0.25	0.01296
LS-S-WHO3X168W	0.3	168	11(2/3")	9	Non-telecentric	0.3	0.01671
LS-S-WHO3X240W	0.3	240	11(2/3")	9.5	Non-telecentric	0.1	0.01582
LS-S-WHO3X260WS	0.3	260	11(2/3")	13.4	Non-telecentric	0.4	0.01106
LS-S-WHO3X300W	0.3	300	11(2/3")	11.3	Non-telecentric	0.15	0.01335
LS-S-WHO3X300WIR	0.3	300	11(2/3")	11.3	Non-telecentric	0.15	0.01335
LS-S-WHO3X420W	0.3	420	11(2/3")	13.9	Non-telecentric	0.1	0.0108
LS-S-WHO3X450WIR	0.3	450	11(2/3")	9.2	Non-telecentric	0.15	0.0164
LS-S-WHO3X460W	0.3	460	11(2/3")	11.6	Non-telecentric	0.17	0.01293
LS-S-WHO3X600W	0.3	600	11(2/3")	16	7.3	0.6	0.00933
LS-S-WHO44X240W	0.44	240	11(2/3")	10	Non-telecentric	0.1	0.02216
LS-S-WHO45X160W	0.45	160	11(2/3")	9.4	Non-telecentric	0.1	0.02404
LS-S-WHO47X270W	0.47	270	11(2/3")	9	Non-telecentric	0.01	0.02611
LS-S-WHO48X240W	0.48	240	11(2/3")	10.6	Non-telecentric	0.03	0.02265
LS-S-WHO4X150W	0.4	150	11(2/3")	8.5	Non-telecentric	0.1	0.02354
LS-S-WHO4X230W	0.4	230	11(2/3")	13.8	Non-telecentric	0.15	0.01455
LS-S-WHO4X240WIR	0.4	240	11(2/3")	12.1	Non-telecentric	0.15	0.01659
LS-S-WHO4X300W	0.4	300	11(2/3")	8.5	Non-telecentric	0.02	0.0234
LS-S-WHO4X310W	0.4	310	11(2/3")	15	Non-telecentric	0.1	0.01334
LS-S-WHO4X350W	0.4	350	11(2/3")	11	Non-telecentric	0.05	0.01821
LS-S-WHO4X400W	0.4	400	11(2/3")	14.3	Non-telecentric	0.13	0.01402
LS-S-WHO4X600W	0.4	600	11(2/3")	19.9	Non-telecentric	0.6	0.00995
LS-S-WHO4X65W	0.4	65	11(2/3")	14.4	Non-telecentric	0.4	0.01394

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LS-S-WHO52X280W	0.52	280	11(2/3")	18	Non-telecentric	1.7	0.01421
LS-S-WHO55X100W	0.55	100	11(2/3")	23.1	Non-telecentric	0.4	0.01209
LS-S-WHO5X270W	0.5	270	11(2/3")	13.2	0.05	0.1	0.01896
LS-S-WHO5X300W	0.5	300	11(2/3")	13.7	Non-telecentric	<0.1	0.01818
LS-S-WHO5X330W	0.5	330	11(2/3")	12.2	Non-telecentric	0.14	0.02046
LS-S-WHO5X330WD	0.5	330	11(2/3")	9.8	Non-telecentric	<0.1	0.02548
LS-S-WHO5X385W	0.5	385	11(2/3")	10.3	Non-telecentric	0.03	0.02382
LS-S-WHO5X390W	0.5	390	11(2/3")	18.1	Non-telecentric	1.8	0.01328
LS-S-WHO5X390WD	0.5	390	11(2/3")	13.7	Non-telecentric	<0.1	0.0183
LS-S-WHO5X430W	0.5	430	11(2/3")	15.2	0.9	0.01	0.01643
LS-S-WHO5X500W	0.5	500	11(2/3")	18	Non-telecentric	0.3	0.01372
LS-S-WHO5X65W	0.5	65	11(2/3")	13.1	Non-telecentric	0.6	0.01926
LS-S-WHO5X750W	0.5	750	11(2/3")	21.7	Non-telecentric	0.8	0.01147
LS-S-WHO67X600W	0.67	600	11(2/3")	20	Non-telecentric	0.05	0.0168
LS-S-WHO6X100W	0.6	100	11(2/3")	12.5	Non-telecentric	0.1	0.0241
LS-S-WHO6X125W	0.6	125	11(2/3")	15	Non-telecentric	0.1	0.02006
LS-S-WHO6X300W	0.6	300	11(2/3")	19.9	Non-telecentric	1.8	0.01505
LS-S-WHO6X300WIR	0.6	300	11(2/3")	19.9	Non-telecentric	1.8	0.01485
LS-S-WHO6X450W	0.6	450	11(2/3")	20.8	Non-telecentric	0.6	0.01435
LS-S-WHO6X450WD	0.6	450	11(2/3")	15	Non-telecentric	0.05	0.01989
LS-S-WHO6X510W	0.6	510	11(2/3")	23.5	Non-telecentric	0.4	0.01267
LS-S-WHO6X600W	0.6	600	11(2/3")	27.7	Non-telecentric	0.2	0.01083
LS-S-WHO75X220WC	0.75	220	11(2/3")	15.2	Non-telecentric	0.3	0.02477

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-WH07X100W	0.7	100	11(2/3")	18.2	Non-telecentric	0.1	0.01925
LS-S-WH07X200W	0.7	200	11(2/3")	17.4	Non-telecentric	1.8	0.0197
LS-S-WH07X250W	0.7	250	11(2/3")	12	Non-telecentric	0.1	0.02917
LS-S-WH07X250WD	0.7	250	11(2/3")	10.6	Non-telecentric	0.05	0.03281
LS-S-WH07X270W	0.7	270	11(2/3")	28.2	Non-telecentric	0.9	0.01215
LS-S-WH07X460W	0.7	460	11(2/3")	24.5	Non-telecentric	0.4	0.01404
LS-S-WH08X150WIR	0.8	150	11(2/3")	22.3	Non-telecentric	2.1	0.0179
LS-S-WH08X225W	0.8	225	11(2/3")	16.5	Non-telecentric	2	0.02383
LS-S-WH08X230W	0.8	230	11(2/3")	14.7	Non-telecentric	0.1	0.02724
LS-S-WH08X250W	0.8	250	11(2/3")	13.9	Non-telecentric	0.1	0.02875
LS-S-WH08X250WC	0.8	250	11(2/3")	20	0.1	0.13	0.02003
LS-S-WH08X300W	0.8	300	11(2/3")	24	Non-telecentric	1.8	0.01641
LS-S-WH08X350WIR	0.8	350	11(2/3")	15.5	Non-telecentric	0.7	0.02579
LS-S-WH08X470W	0.8	470	11(2/3")	31.3	Non-telecentric	1.5	0.01268
LS-S-WH08X650W	0.8	650	11(2/3")	32.2	Non-telecentric	0.5	0.01245
LS-S-WH1X150WIR	1	150	11(2/3")	15	Non-telecentric	1.9	0.03244
LS-S-WH1X155W	1	155	11(2/3")	18	Non-telecentric	1.8	0.02706
LS-S-WH1X200W	1	200	11(2/3")	24.8	Non-telecentric	1.7	0.0197
LS-S-WH1X238W	1	238	11(2/3")	23.8	Non-telecentric	0.17	0.021
LS-S-WH1X330WCIR	1	330	11(2/3")	15.6	Non-telecentric	0.52	0.03152
LS-S-WH1X330WIR	1	330	11(2/3")	15.6	Non-telecentric	0.52	0.03152
LS-S-WH2X250W	2	250	11(2/3")	29	Non-telecentric	0.35	0.03198
LS-S-WH2X250WC	2	250	11(2/3")	29	Non-telecentric	0.35	0.03198
LS-S-11WH011X1030W	0.11	1030	18(1.1")	6	Non-telecentric	0.15	0.00913
LS-S-11WH02X965W	0.2	965	18(1.1")	11	Non-telecentric	0.04	0.00903
LS-S-11WH035X560W	0.35	560	18(1.1")	12.5	Non-telecentric	0.02	0.01397
LS-S-11WH03X400W	0.3	400	18(1.1")	11.3	Non-telecentric	0.1	0.01326
LS-S-11WH03X650W	0.3	650	18(1.1")	10.5	Non-telecentric	0.002	0.01264
LS-S-11WH047X270W	0.47	270	18(1.1")	13.3	Non-telecentric	0.01	0.01763

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-11WH047X290W	0.47	290	18(1.1")	13.3	Non-telecentric	0.1	0.01765
LS-S-11WH047X400W	0.47	400	18(1.1")	12.7	Non-telecentric	0.1	0.01856
LS-S-11WH04X320W	0.4	320	18(1.1")	12.4	Non-telecentric	0.1	0.01618
LS-S-11WH04X550W	0.4	550	18(1.1")	13.2	Non-telecentric	0.01	0.01508
LS-S-11WH04X582W	0.4	582	18(1.1")	10	Non-telecentric	0.1	0.02
LS-S-11WH07X300W	0.7	300	18(1.1")	17.9	Non-telecentric	0.02	0.01948
LS-S-11WH1X370W	1	370	18(1.1")	25	0.15	0.03	0.01995
LS-S-1WH014X600W	0.14	600	16(1")	15	Non-telecentric	0.25	0.00467
LS-S-1WH014X700W	0.14	700	16(1")	12	Non-telecentric	0.03	0.00584
LS-S-1WH016X350W	0.16	350	16(1")	15.5	Non-telecentric	0.2	0.00518
LS-S-1WH016X696W	0.16	696	16(1")	5	Non-telecentric	0.04	0.016
LS-S-1WH0175X640W	0.175	640	16(1")	10.9	Non-telecentric	0.2	0.00801
LS-S-1WH017X1050W	0.17	1050	16(1")	10.6	Non-telecentric	0.01	0.00804
LS-S-1WH018X330W	0.18	330	16(1")	18.7	Non-telecentric	0.27	0.00482
LS-S-1WH018X630W	1.18	630	16(1")	5.6	Non-telecentric	0.02	0.016
LS-S-1WH022X380W	0.22	380	16(1")	12.3	Non-telecentric	0.1	0.00898
LS-S-1WH022X445W	0.22	445	16(1")	12.3	Non-telecentric	0.1	0.00898
LS-S-1WH022X530W	0.22	530	16(1")	10.9	Non-telecentric	0.1	0.01004
LS-S-1WH024X760W	0.24	760	16(1")	11.2	Non-telecentric	0.05	0.01067
LS-S-1WH025X465W	0.25	465	16(1")	10	Non-telecentric	0.1	0.01249
LS-S-1WH026X186W	0.26	186	16(1")	9.5	Non-telecentric	0.01	0.01367
LS-S-1WH027X425W	0.27	425	16(1")	10	Non-telecentric	0.1	0.01349
LS-S-1WH028X680W	0.28	680	16(1")	11.8	Non-telecentric	<0.1	0.01187

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-1WH029X200W	0.29	200	16(1")	9.5	Non-telecentric	0.01	0.01526
LS-S-1WH029X225W	0.29	225	16(1")	9.5	Non-telecentric	0.01	0.01526
LS-S-1WH02X550W	0.2	550	16(1")	13.6	Non-telecentric	0.05	0.00736
LS-S-1WH02X59W	0.2	590	16(1")	13.5	Non-telecentric	0.1	0.00742
LS-S-1WH02X750W	0.2	750	16(1")	12	Non-telecentric	0.1	0.00832
LS-S-1WH036X1252	0.36	125	16(1")	14.9	Non-telecentric	0.4	0.01223
LS-S-1WH03X193W	0.3	190	16(1")	16.8	Non-telecentric	0.5	0.00898
LS-S-1WH03X216W	0.3	216	16(1")	8	Non-telecentric	0.02	0.01879
LS-S-1WH03X300W	0.3	300	16(1")	10	Non-telecentric	0.05	0.01500
LS-S-1WH03X340W	0.3	340	16(1")	14.1	Non-telecentric	0.1	0.01068
LS-S-1WH03X360W	0.3	360	16(1")	12.9	Non-telecentric	<0.1	0.01165
LS-S-1WH03X380W	0.3	380	16(1")	10	Non-telecentric	0.03	0.015
LS-S-1WH03X510W	0.3	510	16(1")	11	Non-telecentric	0.06	0.01363
LS-S-1WH04X136W	0.4	136	16(1")	14.4	Non-telecentric	0.7	0.01381
LS-S-1WH04X250W	0.4	250	16(1")	11	Non-telecentric	0.01	0.0182
LS-S-1WH04X650W	0.4	650	16(1")	14	Non-telecentric	0.05	0.01429
LS-S-1WH055X140W	0.55	140	16(1")	19.6	Non-telecentric	0.35	0.01411
LS-S-1WH055X300W	0.55	300	16(1")	13.9	Non-telecentric	0.25	0.01976
LS-S-1WH05X240W	0.5	240	16(1")	12.5	Non-telecentric	0.1	0.02006
LS-S-1WH05X375W	0.5	375	16(1")	11	Non-telecentric	0.05	0.02267
LS-S-1WH05X660W	0.5	660	16(1")	32.8	Non-telecentric	0.3	0.00762
LS-S-1WH05X730W	0.5	730	16(1")	35.8	Non-telecentric	0.3	0.00696
LS-S-1WH06X195W	0.6	195	16(1")	14.4	Non-telecentric	0.1	0.02084

Model	Magnification (x)	Working distance (mm)	Max sensor size (dia. mm)	Image-side F/#	Object-side telecentricity (deg max)	Image-side distortion (% max)	Numerical aperture NA
LS-S-1WH06X220W	0.6	220	16(1")	12.9	Non-telecentric	0.1	0.0233
LS-S-1WH071X260W	0.71	260	16(1")	17	Non-telecentric	0.25	0.02082
LS-S-1WH078X240W	0.78	240	18(1.1")	17.5	Non-telecentric	0.2	0.02227
LS-S-1WH07X135W	0.7	135	16(1")	15.5	Non-telecentric	0.6	0.02255
LS-S-1WH08X160W	0.8	160	16(1")	18.2	0.1	0.15	0.022
LS-S-1WH08X200W	0.8	200	16(1")	14	0.1	0.15	0.02848
LS-S-1WH09X120W	0.9	120	16(1")	14.8	Non-telecentric	0.1	0.0305
LS-S-1WH1X220W	1	220	16(1")	17.9	Non-telecentric	0.2	0.02772
LS-S-1WH1X270WD	1	270	16(1")	17.8	Non-telecentric	0.1	0.02809
LS-S-1WH1X620W	1	620	16(1")	38.7	Non-telecentric	0.3	0.01321
LS-S-43WH025X330W	0.25	330	22.5(4/3")	41.1	Non-telecentric	0.5	0.00309
LS-S-43WH025X415W	0.25	415	22.5(4/3")	24.6	Non-telecentric	0.35	0.00508
LS-S-43WH025X695W	0.25	695	24(4/3")	12.56	Non-telecentric	0.1	0.01
LS-S-43WH02X570W	0.2	570	24(4/3")	20	Non-telecentric	0.3	0.00499
LS-S-43WH033X522W	0.33	522	23(4/3")	12	Non-telecentric	0.1	0.01382
LS-S-43WH035X330W	0.35	330	24(4/3")	15.4	Non-telecentric	0.1	0.01137
LS-S-43WH04X300W	0.4	300	22.5(4/3")	15	Non-telecentric	0.1	0.01334
LS-S-43WH04X500W	0.4	500	22.5(4/3")	13.2	Non-telecentric	0.02	0.01519
LS-S-43WH05X360W	0.5	360	22.5(4/3")	38.3	Non-telecentric	2.6	0.00647
LS-S-43WH065X360W	0.65	360	22.5(4/3")	36.3	Non-telecentric	3.7	0.00895
LS-S-43WH075X160W	0.75	160	22.5(4/3")	18.2	Non-telecentric	0.3	0.02067
LS-S-43WH075X168W	0.75	168	22.5(4/3")	13.5	Non-telecentric	0.4	0.02781
LS-S-43WH075X168WD	0.75	168	22.5(4/3")	13.5	Non-telecentric	0.2	0.02781
LS-S-WH05X515W	0.5	515	16(1")	13.9	Non-telecentric	0.02	0.01796

More values per model (Object-side resolution (μm), Theoretical depth of field (mm), Image-side MTF30 (lp/mm), Outer diameter O.D (mm), Total length TTL (mm), Front filter thread, Mount, Measured depth of field as shipped (mm), Mount (derived)) are on each product page.