

# MANUAL ZOOM LENSES

# High Speed Lens

Part No.	TSZS-08048	TSZK-08551	TSZK-11110	TSZS-11569	TSZK-12575	TSZK-16160
Focal Length	8-48mm	8.5-51.0mm	11.0-110.0mm	11.5-68mm	12.5-75.0mm	16.0mm-160.0mm
CCD Size	1/2"-1/4"	1/2"-1/3"	2/3"-1/3"	2/3"-1/4"	2/3"-1/3"	1"-1/3"
Relative Aperture	1:1.0	1:1.2	1:1.8	1:1.4	1:1.8	1:2.0-2.4
Zoom Ratio	6x	6x	10x	6x	6x	10x
Operation	Manual	Manual	Manual	Manual	Manual	Manual
Iris	Manual	Manual	Manual	Manual	Manual	Manual
Aperture	1.0-Close	1.2-Close	1.8-Close	1.4-Close	1.8-Close	2.0(2.4)-Close
Operation	Manual	Manual	Manual	Manual	Manual	Manual
Focus	Manual	Manual	Manual	Manual	Manual	Manual
Zoom	Manual	Manual	Manual	Manual	Manual	Manual
Field of View Angle (DxHxV)	Wide	40.3°x32.2°x24.1°	30.0°x24.2°x18.3°	29.2°x23.3°x17.5°	26.6°x21.2°x16.1°	20.8°x16.7°x12.5°
	1/3"	6.9°x5.6°x4.2°	6.8°x3.1°x4.1°	5.0°x4.0°x3.0°	4.5°x3.6°x2.7°	2.2°x1.8°x1.3°
	Wide	53.8°x43.0°x32.2°	50.7°x41.2°x31.3°	40.0°x32.4°x24.6°	34.9°x28.3°x21.4°	27.7°x22.1°x16.7°
	1/2"	9.0°x7.3°x5.6°	8.9°x7.2°x5.5°	4.2°x3.3°x2.5°	6.7°x5.3°x4.0°	3.0°x2.4°x1.8°
Min. Object Distance	Wide	** ** *	** ** *	** ** *	** ** *	** ** *
	Tele	** ** *	** ** *	** ** *	** ** *	** ** *
Back Focal Length	14.56mm	12.55mm	17.58mm	17.93mm	17.19mm	34.94mm
Clear Aperture	20.0mmφ	44.0mmφ	59.0mmφ	40.0mmφ	44.0mmφ	63.0mmφ
Filter Size	18.4mmφ	11.7mmφ	16.5mmφ	17.3mmφ	13.0mmφ	20.0mmφ
Mount/Fringe Back	M 46mm / P = 0.75	M 52mm / P = 0.75	M 67mm / P = 0.75	M 46mm / P0.75	M 49mm / P = 0.75	M 67mm / P = 0.75
Dimensions	58.0mmφx102.4mm	58.8mmφx93.4mm	70.8mmφx140.5mm	46.0mmφx107.8mm	54.4mmφx100.5mm	70.4mmφx165.0mm
Weight	395g	440.0g	724.0g	410g	368.0g	829.0g
Operation Temperature	-10°C--+50°C	-10°C--+50°C	-10°C--+50°C	-10°C--+50°C	-10°C--+50°C	-10°C--+50°C

Part No.	TS L - 1 7 0 9 5	TS L - 2 5 0 9 5	TS L - 5 0 0 9 5
CCD Size	1/4"-2/3"	1/3"-1"	1/3"-1"
Focal Length	17.0mm	25.0mm	50.0mm
Relative Aperture	1:0.95	1:0.95	1:0.95
Operation	Manual	Manual	Manual
Iris	0.95-close	0.95-16	0.95-close
Operation	Manual	Manual	Manual
Focus	500mm-∞	500mm-∞	500mm-∞
Aperture	1/3"	13.7°x11.0°x9.2°	6.9°x5.5°x4.1°
Diagonal x Horizontal x Vertical	15.1°x12.1°x9.1°	20.0°x16.1°x12.1°	9.1°x7.3°x5.5°
1"	26.5°x21.3°x16.1°	35.5°x26.7°x21.7°	12.6°x10.1°x7.6°
Min. Object Distance	0.5m	0.5m	0.5m
Back Focal Length	13.89mm	13.89mm	25.82mm
Clear Aperture	27mmφ	26.3mmφ	53mmφ
Filter Size	17.5mmφ	17.5mmφ	32.5mmφ
Mount	M 40.5 / P = 0.5	M 40.5 / P = 0.5	M 60 / P = 0.75
Dimensions	42mmφx63.2mm	41.8mmφx45.2mm	65mmφx71.1mm
Weight	165g	125g	470g