

# THALES Fixed Mag. Optical System with Optem & Mitutoyo Objectives

Infinity Objective	Stand Mini	N/A FTM #120	FT #140 FTM #140	FT #160 FTM #160	FT #180 FTM #180	FT #200 FTM #200	N/A FTM #250	N/A FTM #300	N/A FTM #350	N/A FTM #400	N/A FTM #450	N/A FTM #500
<b>Optem Super 10X</b> W.D.=19	NA	0.20	0.23	0.26	0.30	0.325	0.325	0.325	0.325	0.325	0.325	0.325
	MAG	6.0X	7.0X	8.0X	9.0X	10.0X	12.5X	15.0X	17.5X	20.0X	22.5X	25.0X
	DOF	0.014	0.01	0.008	0.006	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052
	F. 1/4"	.455 X .608	.390 X .521	.341 X .456	.303 X .405	.273 X .365	.218 X .292	.182 X .243	.156 X .208	.136 X .182	.121 X .162	.109 X .146
	O. 1/3"	.600 X .800	.514 X .685	.450 X .600	.400 X .533	.360 X .480	.288 X .384	.240 X .320	.205 X .274	.180 X .240	.160 X .213	.144 X .192
	V. 1/2" mm 2/3"	NR NR	.685 X .914 NR	.600 X .800 .825 X 1.10	.533 X .711 .733 X .977	.480 X .640 .660 X .880	.384 X .512 .528 X .704	.320 X .426 .440 X .586	.274 X .365 .377 X .502	.240 X .320 .330 X .440	.213 X .284 .293 X .391	.192 X .256 .264 X .352
<b>Optem Super 20X</b> W.D.=13	NA	0.40	0.46	0.525	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	MAG	12.0X	14.0X	16.0X	18.0X	20.0X	25.0X	30.0X	35.0X	40.0X	45.0X	50.0X
	DOF	0.0035	0.0026	0.0020	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
	F. 1/4"	.227 X .304	.195 X .260	.170 X .228	.151 X .202	.136 X .182	.109 X .146	.091 X .121	.078 X .104	.068 X .091	.060 X .081	.054 X .073
	O. 1/3"	.300 X .400	.257 X .342	.225 X .300	.200 X .266	.180 X .240	.144 X .192	.120 X .160	.102 X .137	.090 X .120	.080 X .106	.072 X .096
	V. 1/2" mm 2/3"	.400 X .533 .550 X .733	.342 X .457 .471 X .628	.300 X .400 .412 X .550	.266 X .355 .366 X .488	.240 X .320 .330 X .440	.192 X .256 .264 X .352	.160 X .213 .220 X .293	.137 X .182 .188 X .251	.120 X .160 .165 X .220	.106 X .142 .146 X .195	.096 X .128 .132 X .176
<b>Mitutoyo 10X</b> W.D.=33	NA	0.20	0.23	0.26	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
	MAG	6.0X	7.0X	8.0X	9.0X	10.0X	12.5X	15.0X	17.5X	20.0X	22.5X	25.0X
	DOF	0.014	0.01	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
	F. 1/4"	.455 X .608	.390 X .521	.341 X .456	.303 X .405	.273 X .365	.218 X .292	.182 X .243	.156 X .208	.136 X .182	.121 X .162	.109 X .146
	O. 1/3"	.600 X .800	.514 X .685	.450 X .600	.400 X .533	.360 X .480	.288 X .384	.240 X .320	.205 X .274	.180 X .240	.160 X .213	.144 X .192
	V. 1/2" mm 2/3"	NR NR	.685 X .914 NR	.600 X .800 .825 X 1.10	.533 X .711 .733 X .977	.480 X .640 .660 X .880	.384 X .512 .528 X .704	.320 X .426 .440 X .586	.274 X .365 .377 X .502	.240 X .320 .330 X .440	.213 X .284 .293 X .391	.192 X .256 .264 X .352
<b>Mitutoyo 20X</b> W.D.=20	NA	0.40	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
	MAG	12.0X	14.0X	16.0X	18.0X	20.0X	25.0X	30.0X	35.0X	40.0X	45.0X	50.0X
	DOF	0.0035	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031
	F. 1/4"	.227 X .304	.195 X .260	.170 X .228	.151 X .202	.136 X .182	.109 X .146	.091 X .121	.078 X .104	.068 X .091	.060 X .081	.054 X .073
	O. 1/3"	.300 X .400	.257 X .342	.225 X .300	.200 X .266	.180 X .240	.144 X .192	.120 X .160	.102 X .137	.090 X .120	.080 X .106	.072 X .096
	V. 1/2" mm 2/3"	.400 X .533 .550 X .733	.342 X .457 .471 X .628	.300 X .400 .412 X .550	.266 X .355 .366 X .488	.240 X .320 .330 X .440	.192 X .256 .264 X .352	.160 X .213 .220 X .293	.137 X .182 .188 X .251	.120 X .160 .165 X .220	.106 X .142 .146 X .195	.096 X .128 .132 X .176
<b>Mitutoyo 50X</b> W.D.=13	NA	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	MAG	30.0X	35.0X	40.0X	45.0X	50.0X	62.5X	75.0X	87.5X	100.0X	112.5X	125.0X
	DOF	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018
	F. 1/4"	.091 X .121	.078 X .104	.068 X .091	.060 X .081	.054 X .073	.043 X .058	.036 X .048	.031 X .041	.027 X .036	.024 X .032	.021 X .028
	O. 1/3"	.120 X .160	.102 X .137	.090 X .120	.080 X .106	.072 X .096	.057 X .076	.048 X .064	.041 X .054	.036 X .048	.032 X .042	.028 X .038
	V. 1/2" mm 2/3"	.160 X .213 .220 X .293	.137 X .182 .188 X .251	.120 X .160 .165 X .220	.106 X .142 .146 X .195	.096 X .128 .132 X .176	.076 X .102 .105 X .140	.064 X .085 .088 X .117	.054 X .073 .075 X .100	.048 X .064 .066 X .088	.042 X .056 .058 X .078	.038 X .051 .052 X .070
<b>Mitutoyo 50X UL</b> W.D.=20	NA	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
	MAG	30.0X	35.0X	40.0X	45.0X	50.0X	62.5X	75.0X	87.5X	100.0X	112.5X	125.0X
	DOF	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031
	F. 1/4"	.091 X .121	.078 X .104	.068 X .091	.060 X .081	.054 X .073	.043 X .058	.036 X .048	.031 X .041	.027 X .036	.024 X .032	.021 X .028
	O. 1/3"	.120 X .160	.102 X .137	.090 X .120	.080 X .106	.072 X .096	.057 X .076	.048 X .064	.041 X .054	.036 X .048	.032 X .042	.028 X .038
	V. 1/2" mm 2/3"	.160 X .213 .220 X .293	.137 X .182 .188 X .251	.120 X .160 .165 X .220	.106 X .142 .146 X .195	.096 X .128 .132 X .176	.076 X .102 .105 X .140	.064 X .085 .088 X .117	.054 X .073 .075 X .100	.048 X .064 .066 X .088	.042 X .056 .058 X .078	.038 X .051 .052 X .070
<b>Mitutoyo 100X</b> W.D.=6	NA	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	MAG	60X	70X	80X	90X	100X	125X	150X	175X	200X	225X	250X
	DOF	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	F. 1/4"	.045 X .060	.039 X .052	.034 X .045	.030 X .040	.027 X .036	.021 X .029	.018 X .024	.015 X .020	.013 X .018	.012 X .016	.010 X .014
	O. 1/3"	.060 X .080	.051 X .068	.045 X .060	.040 X .053	.036 X .048	.028 X .038	.024 X .032	.020 X .027	.018 X .024	.016 X .021	.014 X .019
	V. 1/2" mm 2/3"	.080 X .106 .110 X .146	.068 X .091 .094 X .125	.060 X .080 .082 X .110	.053 X .071 .073 X .097	.048 X .064 .066 X .088	.038 X .051 .052 X .070	.032 X .042 .044 X .058	.027 X .036 .037 X .050	.024 X .032 .033 X .044	.021 X .028 .029 X .039	.019 X .025 .026 X .035

NR Not Recommended, vignetting will occur.