

Tokina

Machine Vision Lens

Project the fact. Tokina does.

With extensive range of optics and filters,
Tokina supports automation industry
being the eyes to project the absolute fact.



Kenko Tokina

Machine Vision Lens

2/3" 3 Mega Pixel Fixed-focal Lenses

2/3" 3MP upto 4.5mm Macro

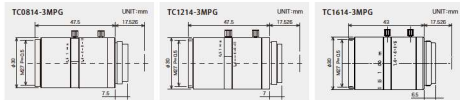
TC0814-3MPG



TC1214-3MPG



TC1614-3MPG



Model Name	TC0814-3MPG	TC1214-3MPG	TC1614-3MPG
Image Format	2/3"	2/3"	2/3"
Mount	C	C	C
Focal Length	8mm	12mm	16mm
Aperture Range	F1.4 - 16	F1.4 - 16	F1.4 - 16
Angle Of View (Horizontal/Vertical)	57.3° x 44.3°	39.8° x 30.2°	30.4° x 23.07°
M.O.D.	0.1m	0.1m	0.1m
Filter Size	M27mm P=0.5	M27mm P=0.5	M27mm P=0.5
Back Focal Length	11.4mm	11.2mm	11.2mm
Dimensions	φ30×47.5mm	φ30×47.5mm	φ30×43mm
Weight	75g	70g	70g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
Operating Iris	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Focus	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Note	3Mega Pixel	3Mega Pixel	3Mega Pixel

Combination with extension tube	Location focus-ring	TC0814-3MPG		TC1214-3MPG		TC1614-10MP	
		FOV (V/H)	W.D. Magnification	FOV (V/H)	W.D. Magnification	FOV (V/H)	W.D. Magnification
0.5mm	FAR	109.0x145.3	120.4 0.061	182.5x121.7	285.2 0.041	214.0x250.3	305 0.031
1mm	FAR	54.5x72.7	52.3 0.121	91.2x108.2	133.7 0.081	107.0x126.8	242 0.062
1.5mm (1+0.5)	FAR	36.3x48.4	39.5 0.182	54.1x72.2	83.3 0.122	71.3x91.1	154.4 0.093
5mm	FAR	-	-	16.2x21.7	12.7 0.406	21.4x28.5	31.8 0.308
10mm	FAR	-	-	-	-	10.7x14.3	5.5 0.617
15mm (10+5)	FAR	-	-	-	-	-	-
20mm	FAR	-	-	-	-	-	-
25mm (20+5)	FAR	-	-	-	-	-	-
30mm (20+10)	FAR	-	-	-	-	-	-
35mm (20+15)	FAR	-	-	-	-	-	-
40mm	FAR	-	-	-	-	-	-
45mm (40+5)	FAR	-	-	-	-	-	-
50mm (40+10)	FAR	-	-	-	-	-	-

Design and Specification are subject to change without notice.

Machine Vision Lens

2/3" & 1/1.8" 3 Mega Pixel Fixed-focal Lenses

2/3" & 1/1.8" 3MP upto 4.5mm Compact

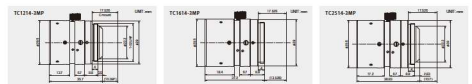
TC1214-3MP



TC1614-3MP



TC2514-3MP



Model Name	TC1214-3MP	TC1614-3MP	TC2514-3MP
Image Format	1/1.8"	2/3"	2/3"
Mount	C	C	C
Focal Length	12mm	16mm	25mm
Aperture Range	F1.4 - 22	F1.4 - 16	F1.4 - 16
Angle Of View (Horizontal/Vertical)	32.38° x 24.58°	30.99° x 23.43°	19.98° x 15.04°
M.O.D.	0.2m	0.25m	0.25m
Filter Size	M27mm P=0.5	M27mm P=0.5	M27mm P=0.5
Back Focal Length	11.4mm	11.5mm	11.5mm
Dimensions	φ29.5×37.2mm	φ29.5×37.2mm	φ29.5×38.9mm
Weight	57g	64g	56g
Operating Temperature Range	-20°C ~ +50°C	-20°C ~ +50°C	-20°C ~ +50°C
Operating Iris	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Focus	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Note	3Mega Pixel	3Mega Pixel	3Mega Pixel

Combination with extension tube	Location of focus-ring	TC1214-3MP		TC1614-3MP		TC2514-3MP	
		FOV (V/H)	W.D. Magnification	FOV (V/H)	W.D. Magnification	FOV (V/H)	W.D. Magnification
0.5mm	FAR	134.0x178.5	291 0.040	211.0x282.0	494 0.031	330.0x440.0	1242 0.020
1mm	FAR	67.8x91.1	139 0.080	105.0x141.0	227 0.063	165.0x220.0	616 0.040
1.5mm (1+0.5)	FAR	44.5x59.3	86 0.121	70.4x93.9	153.6 0.094	110.0x147.0	407 0.060
5mm	FAR	14.3x17.8	15.1 0.403	21.1x28.1	34.3 0.313	33.0x44.0	115.1 0.200
10mm	FAR	-	-	10.6x14.1	8.8 0.625	15.5x22.0	52.2 0.400
15mm (10+5)	FAR	-	-	-	-	11.0x14.7	31.7 0.603
20mm	FAR	-	-	-	-	8.3x11.0	21.3 0.800
25mm (20+5)	FAR	-	-	-	-	6.6x8.8	15 1.000
30mm (20+10)	FAR	-	-	-	-	-	-
35mm (20+15)	FAR	-	-	-	-	-	-
40mm	FAR	-	-	-	-	-	-
45mm (40+5)	FAR	-	-	-	-	-	-
50mm (40+10)	FAR	-	-	-	-	-	-

Design and Specification are subject to change without notice.

Machine Vision Lens

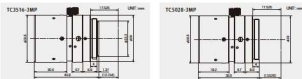
2/3" 3 Mega Pixel Fixed-focal Lens

2/3" 10MP up to 4.7mm Compact

TC3516-3MP



TC5028-3MP



Model Name	TC3516-3MP	TC5028-3MP
Image Format	2/3"	2/3"
Mount	C	C
Focal Length	35mm	50mm
Aperture Range	F1.6 - 16	F2.8 - 22
Angle Of View (Horizontal/Vertical)	14.7°x 11.0°	10.3°x 7.54°
M.O.D.	0.3m~	0.8m~
Filter Size	M27mm P=0.5	M27mm P=0.5
Back Focal Length	11.8mm	21.6mm
Dimensions	φ25.5x40.8mm	φ29.5x50.5mm
Weight	65g	50g
Operating Temperature Range	-30°C ~ +55°C	-20°C ~ +55°C
Operating Irs	Manual with Locking screw	Manual with Locking screw
Operating Focus	Manual with Locking screw	Manual with Locking screw
Note	3Mega Pixel	3Mega Pixel

Combination with extension tube	Location of focus-ring	TC3516-3MP	TC5028-3MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	450.0x600.0 2310 0.015	660.0x880.0 5940 0.010
1mm	FAR	223.0x297.0 1140 0.030	330.0x440.0 2547 0.020
1.5mm(1+0.5)	FAR	150.0x199.0 765 0.044	220.0x293.0 1713 0.030
5mm	FAR	44.8x59.2 223 0.147	66.0x88.0 146 0.100
10mm	FAR	22.5x29.9 107.5 0.294	33.0x44.0 296 0.200
15mm(10+5)	FAR	15.0x20.0 68.9 0.441	22.0x29.3 213 0.300
20mm	FAR	11.3x15.0 46.7 0.598	16.5x21.9 170.9 0.400
25mm(20+5)	FAR	9.0x12.0 38.2 0.735	13.2x17.6 145.9 0.500
30mm(20+10)	FAR	7.5x10.0 30.4 0.862	11.0x14.7 129.2 0.600
35mm(20+10+5)	FAR	6.4x8.6 25.4 1.000	9.4x12.6 117.3 0.700
40mm	FAR	- - -	8.3x11.0 108.4 0.800
45mm(40+5)	FAR	- - -	7.3x9.8 101.4 0.900
50mm(40+10)	FAR	- - -	6.6x8.8 95.9 1.000

Design and Specification are subject to change without notice.

Machine Vision Lens

2/3" 10 Mega Pixel Fixed-focal Lens

2/3" 10MP up to 2.7mm

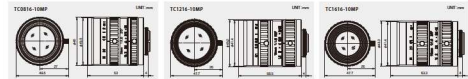
TC0816-10MP



TC1216-10MP



TC1616-10MP



Model Name	TC0816-10MP	TC1216-10MP	TC1616-10MP
Image Format	2/3"	2/3"	2/3"
Mount	C	C	C
Focal Length	8mm	12mm	16mm
Aperture Range	F1.6 - 22	F1.6 - 22	F1.6 - 22
Angle Of View (Horizontal/Vertical)	55.2°x 43.3°	38.2°x 30.4°	30.2°x 23.4°
M.O.D.	0.15m~	0.18m~	0.2m~
Filter Size	M42.5mm P=0.5	M37.5mm P=0.5	M37.5mm P=0.5
Back Focal Length	12.4mm	12.45mm	12.35mm
Dimensions	φ43.5x35mm	φ43.2x35.5mm	φ43.2x35.5mm
Weight	170g	170g	181g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
Operating Irs	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Operating Focus	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Note	10Mega Pixel	10Mega Pixel	10Mega Pixel

Combination with extension tube	Location of focus-ring	TC0816-10MP	TC1216-10MP	TC1616-10MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	108.3x161.6 115 0.062	159.3x212.9 270 0.042	208.6x278.5 480 0.032
1mm	FAR	55.1x74.5 48 0.123	80.5x107.8 125 0.083	103.5x138.0 225 0.064
1.5mm(1+0.5)	FAR	36.8x50.1 25 0.185	53.6x71.6 75 0.125	70.3x93.9 145 0.084
5mm	FAR	- - -	- - -	21.1x28.3 26 0.315
10mm	FAR	- - -	- - -	- - -
15mm(10+5)	FAR	- - -	- - -	- - -
20mm	FAR	- - -	- - -	- - -
25mm(20+5)	FAR	- - -	- - -	- - -
30mm(20+10)	FAR	- - -	- - -	- - -
35mm(20+10+5)	FAR	- - -	- - -	- - -
40mm	FAR	- - -	- - -	- - -
45mm(40+5)	FAR	- - -	- - -	- - -
50mm(40+10)	FAR	- - -	- - -	- - -

Design and Specification are subject to change without notice.

Machine Vision Lens

2/3" 10 Mega Pixel Fixed-focal Lens

2/3" 10MP up to 2.4mm

TC2514-10MP



TC3514-10MP



Model Name	TC2514-10MP	TC3514-10MP
Image Format	2/3"	2/3"
Mount	C	C
Focal Length	25mm	35mm
Aperture Range	F1.6 - 22	F1.6 - 22
Angle Of View (Horizontal/Vertical)	20°x 15°	14.3°x 10.8°
M.O.D.	0.3m~	0.3m~
Filter Size	M37.5mm P=0.5	M37.5mm P=0.5
Back Focal Length	12.78mm	12.82mm
Dimensions	φ43.2 x 54.5mm	φ43.2 x 54.5mm
Weight	145g	155g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C
Operating Irs	Manual with Locking screw	Manual with Locking screw
Operating Focus	Manual with Locking screw	Manual with Locking screw
Note	10Mega Pixel	10Mega Pixel

Combination with extension tube	Location of focus-ring	TC2514-10MP	TC3514-10MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	321.9x429.6 1200 0.021	459.3x607.3 2400 0.015
1mm	FAR	161.2x214.8 600 0.041	229.6x303.6 1200 0.029
1.5mm(1+0.5)	FAR	109.6x144.7 390 0.061	153.9x200.8 800 0.043
5mm	FAR	32.8x43.8 103 0.262	46.0x61.4 230 0.144
10mm	FAR	16.5x22.0 41.5 0.401	23.0x30.7 108 0.288
15mm(10+5)	FAR	11.1x14.7 27 0.598	15.4x20.5 68 0.429
20mm	FAR	- - -	11.5x15.4 47.5 0.575
25mm(20+5)	FAR	- - -	- - -
30mm(20+10)	FAR	- - -	- - -
35mm(20+10+5)	FAR	- - -	- - -
40mm	FAR	- - -	- - -
45mm(40+5)	FAR	- - -	- - -
50mm(40+10)	FAR	- - -	- - -

Design and Specification are subject to change without notice.

Machine Vision Lens

1" 5 Mega Pixel Fixed-focal Lens

1" 5MP up to 3.0mm

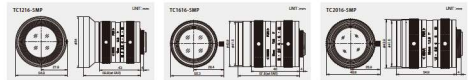
TC1216-5MP



TC1616-5MP



TC2016-5MP



Model Name	TC1216-5MP	TC1616-5MP	TC2016-5MP
Image Format	1"	1"	1"
Mount	C	C	C
Focal Length	12mm	16mm	20mm
Aperture Range	F1.6 - 22	F1.6 - 22	F1.6 - 22
Angle Of View (Horizontal/Vertical)	57.1°x 44.1°	44.2°x 33.3°	36.1°x 27.2°
M.O.D.	0.20m~	0.30m~	0.45m~
Filter Size	M42.5mm P=0.5	M37.5mm P=0.5	M37.5mm P=0.5
Back Focal Length	12.14mm	12.11mm	12.11mm
Dimensions	φ54.0 x 60.4mm	φ43.9 x 57.8mm	φ43.9 x 54.95mm
Weight	201g	163g	163g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
Operating Irs	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Operating Focus	Manual with Locking screw	Manual with Locking screw	Manual with Locking screw
Note	5Mega Pixel	5Mega Pixel	5Mega Pixel

Combination with extension tube	Location of focus-ring	TC1216-5MP	TC1616-5MP	TC2016-5MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	229.1x309.2 260 0.043	312.1x421.1 500 0.031	377.6x508.0 760 0.026
1mm	FAR	115.8x154.7 120 0.085	156.4x205.9 250 0.063	190.8x257.0 375 0.051
1.5mm(1+0.5)	FAR	77.2x103.8 79 0.128	104.1x140.7 150 0.084	127.8x172.2 240 0.078
5mm	FAR	- - -	31.7x42.9 35 0.309	38.9x52.5 62 0.251
10mm	FAR	- - -	- - -	19.4x26.2 22 0.503
15mm(10+5)	FAR	- - -	- - -	- - -
20mm	FAR	- - -	- - -	- - -
25mm(20+5)	FAR	- - -	- - -	- - -
30mm(20+10)	FAR	- - -	- - -	- - -
35mm(20+10+5)	FAR	- - -	- - -	- - -
40mm	FAR	- - -	- - -	- - -
45mm(40+5)	FAR	- - -	- - -	- - -
50mm(40+10)	FAR	- - -	- - -	- - -

Design and Specification are subject to change without notice.

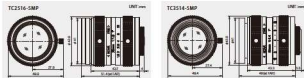
Machine Vision Lens

1" 5 Mega Pixel Fixed-focal Lens

1" 5MP up to 5.7µm

TC2516-5MP

TC3514-5MP



Model Name	TC2516-5MP	TC3514-5MP
Image Format	1"	1"
Mount	C	C
Focal Length	25mm	35mm
Aperture Range	F1.6 - 22	F1.4 - 22
Angle Of View (Horizontal/Vertical)	29.0° x 21.8°	20.7° x 15.6°
M.O.D.	0.45mm~	0.45mm~
Filter Size	M39mm P=0.5	M39mm P=0.5
Back Focal Length	12.63mm	12.63mm
Dimensions	φ43.9 x 51.30mm	φ43.9 x 49.56mm
Weight	157g	154g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C
Operating	Its Focus	Its Focus
Note	Manual with Locking screw 5Mega Pixel	Manual with Locking screw 5Mega Pixel

Combination with extension tube	Location of focus ring	TC2516-5MP	TC3514-5MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	470.8x321.9 1200 0.021	660.4x460.3 2400 0.015
1mm	FAR	239.0x231.0 600 0.041	331.2x441.5 1200 0.029
1.5mm (1+0.5)	FAR	158.0x212.2 300 0.061	221.4x295.2 800 0.043
5mm	FAR	48.2x44.9 100 0.202	66.4x48.5 200 0.145
10mm	FAR	24.1x23.5 44 0.404	33.5x44.8 116 0.287
15mm (10+5)	FAR	- - -	22.3x29.7 75 0.432
20mm	FAR	- - -	- - -
25mm (20+5)	FAR	- - -	- - -
30mm (20+10)	FAR	- - -	- - -
35mm (20+15)	FAR	- - -	- - -
40mm	FAR	- - -	- - -
45mm (40+5)	FAR	- - -	- - -
50mm (40+10)	FAR	- - -	- - -

Design and Specification are subject to change without notice.

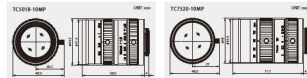
Machine Vision Lens

1" 10 Mega Pixel Fixed-focal Lens

1" 10MP up to 3.7µm

TC5018-10MP

TC7520-10MP



Model Name	TC5018-10MP	TC7520-10MP
Image Format	1"	1"
Mount	C	C
Focal Length	50mm	75mm
Aperture Range	F1.8 - 22	F2.0 - 22
Angle Of View (Horizontal/Vertical)	14.5° x 10.8°	9.7° x 7.3°
M.O.D.	0.45mm~	0.35mm~
Filter Size	M37.5mm P=0.5	M40.5mm P=0.5
Back Focal Length	13.63mm	13.79mm
Dimensions	φ43.3 x 55.5mm	φ45 x 71.7mm
Weight	173g	223g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C
Operating	Its Focus	Its Focus
Note	Manual with Locking screw 10Mega Pixel	Manual with Locking screw 10Mega Pixel

Combination with extension tube	Location of focus ring	TC5018-10MP	TC7520-10MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	646.9x462.5 4900 0.019	981.8x634.0 12500 0.007
1mm	FAR	323.4x431.3 2450 0.030	489.0x652.1 5000 0.014
1.5mm (1+0.5)	FAR	217.8x290.4 1650 0.030	326.2x439.1 3750 0.020
5mm	FAR	65.9x47.9 500 0.100	98.2x131.1 1160 0.067
10mm	FAR	32.9x43.9 250 0.201	49.4x65.9 605 0.134
15mm (10+5)	FAR	21.9x29.3 167 0.302	33.0x44.2 420 0.201
20mm	FAR	16.5x23.0 128 0.401	24.9x33.0 325 0.269
25mm	FAR	13.2x17.6 101 0.502	19.8x26.5 270 0.335
30mm (20+10)	FAR	- - -	- - -
35mm (20+15)	FAR	- - -	- - -
40mm	FAR	- - -	- - -
45mm (40+5)	FAR	- - -	- - -
50mm (40+10)	FAR	- - -	- - -

Design and Specification are subject to change without notice.

Machine Vision Lens

4/3" 12 Mega Pixel Fixed-focal Lens

4/3" 12MP up to 3.7µm

TC1220-12MP

TC1620-12MP

TC2520-12MP



Model Name	TC1220-12MP	TC1620-12MP	TC2520-12MP
Image Format	4/3"	4/3"	4/3"
Mount	C	C	C
Focal Length	12mm	16mm	25mm
Aperture Range	F2.0 - 22	F2.0 - 22	F2.0 - 22
Angle Of View (Horizontal/Vertical)	75.46°x51.08°	60.92°x47.28°	40.6°x31°
M.O.D.	0.15mm~	0.15mm~	0.15mm~
Filter Size	M7.7mm P=0.75	M8.5mm P=0.75	M10.5mm P=0.75
Back Focal Length	16.53mm	21.00mm	29.43mm
Dimensions	φ20.8 x 85.5mm	φ20.8 x 85.5mm	φ48 x 82.7mm
Weight	447g	303g	290g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C	-10°C ~ +50°C
Operating	Its Focus	Its Focus	Its Focus
Note	Manual with Locking screw 12Mega Pixel	Manual with Locking screw 12Mega Pixel	Manual with Locking screw 12Mega Pixel

Combination with extension tube	Location of focus ring	TC1220-12MP	TC1620-12MP	TC2520-12MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	339.2x457.2 260 0.042	441.7x594.7 480 0.032	676.6x903.8 1200 0.021
1mm	FAR	169.2x229.6 115 0.089	222.3x303.5 220 0.063	343.9x464.4 600 0.040
1.5mm (1+0.5)	FAR	112.7x153.5 68 0.127	148.6x200.5 145 0.095	232.9x311.2 400 0.060
5mm	FAR	- - -	45.4x61.9 27.5 0.314	69.5x92.9 105 0.200
10mm	FAR	- - -	- - -	34.9x46.3 42 0.402
15mm (10+5)	FAR	- - -	- - -	23.2x31.0 27.5 0.600
20mm	FAR	- - -	- - -	- - -
25mm (20+5)	FAR	- - -	- - -	- - -
30mm (20+10)	FAR	- - -	- - -	- - -
35mm (20+15)	FAR	- - -	- - -	- - -
40mm	FAR	- - -	- - -	- - -
45mm (40+5)	FAR	- - -	- - -	- - -
50mm (40+10)	FAR	- - -	- - -	- - -

Design and Specification are subject to change without notice.

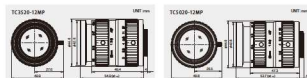
Machine Vision Lens

4/3" 12 Mega Pixel Fixed-focal Lens

4/3" 12MP up to 3.7µm

TC3520-12MP

TC5020-10MP



Model Name	TC3520-12MP	TC5020-10MP
Image Format	4/3"	4/3"
Mount	C	C
Focal Length	35mm	50mm
Aperture Range	F2.0 - 22	F2.0 - 22
Angle Of View (Horizontal/Vertical)	29.6°x22.4°	20.9°x15.7°
M.O.D.	0.2mm~	0.3mm~
Filter Size	M40.5mm P=0.5	M40.5mm P=0.5
Back Focal Length	19.65mm	20.39mm
Dimensions	φ44.6 x 53.7mm	φ44.6 x 53.7mm
Weight	179g	179g
Operating Temperature Range	-10°C ~ +50°C	-10°C ~ +50°C
Operating	Its Focus	Its Focus
Note	Manual with Locking screw 12Mega Pixel	Manual with Locking screw 12Mega Pixel

Combination with extension tube	Location of focus ring	TC3520-12MP	TC5020-10MP
		FOV (VxH) W.D. Magnification	FOV (VxH) W.D. Magnification
0.5mm	FAR	969.7x1295.1 2450 0.014	1374.8x1834.1 5000 0.010
1mm	FAR	482.7x648.1 1220 0.029	684.5x916.3 2500 0.020
1.5mm (1+0.5)	FAR	320.4x428.0 810 0.043	455.4x610.7 1670 0.030
5mm	FAR	96.6x129.0 245 0.144	136.4x182.1 515 0.102
10mm	FAR	48.3x64.5 123 0.287	68.6x91.7 270 0.502
15mm (10+5)	FAR	32.1x42.9 82 0.432	45.9x61.3 188 0.302
20mm	FAR	24.1x32.2 62 0.574	34.5x46.1 147 0.401
25mm (20+5)	FAR	- - -	27.6x36.8 122 0.502
30mm (20+10)	FAR	- - -	- - -
35mm (20+15)	FAR	- - -	- - -
40mm	FAR	- - -	- - -
45mm (40+5)	FAR	- - -	- - -
50mm (40+10)	FAR	- - -	- - -

Design and Specification are subject to change without notice.