

Motic®

SMZ-168 Series

1:6.7 Zoom Ratio Stereomicroscope



SMZ-168 STANDARD FEATURES

OPTICAL SYSTEM

- High Resolution Stereo Image
- Zoom Magnification Click Stops
- Standard Observation angle of 35°
SMZ-168-BL (60) Observation angle of 60°
- Diopter Adjustment on both eye tubes: ± 5
- Adjustable interpupillary distance: 52mm - 75mm
SMZ-168-BL (60) Adjustable interpupillary distance: 52.5mm ~ 75mm
- Zoom Magnification Range: 0.75X - 5X
- Zoom Ratio: 1 : 6.7
- Working Distance: 113mm
- Anti-Fungus Properties

EYEPIECES

- Widefield High Eye Point 10X/23

FOCUSING BLOCK

- Ball bearing focusing mechanisms
- 50mm focusing range
- 76mm inner head mount
- 12V/10W Halogen incident light

BASE STAND

- Streamlined base stand
- Large working area
- 12V/10W Halogen transmitted light [intensity control]
- Universal power input 110V - 220V



SMZ-168-BL
Binocular Stereomicroscope



SMZ-168-TL
Trinocular Stereomicroscope



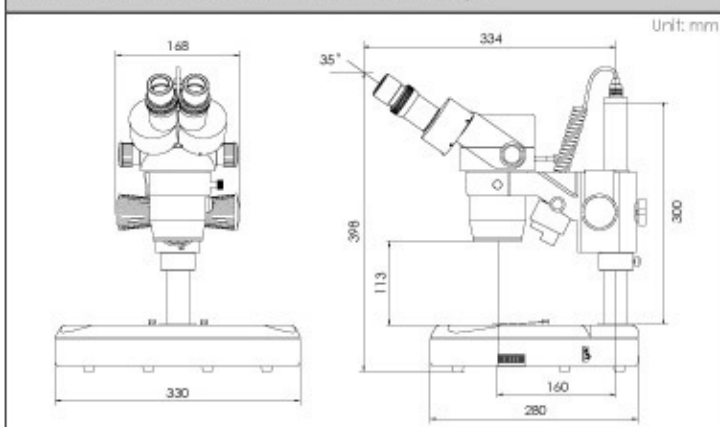
SMZ-168-BL (60)
Binocular 60° Observation
Stereomicroscope

SMZ-168 Series Advanced Zoom Stereo Microscopes Standard Configuration

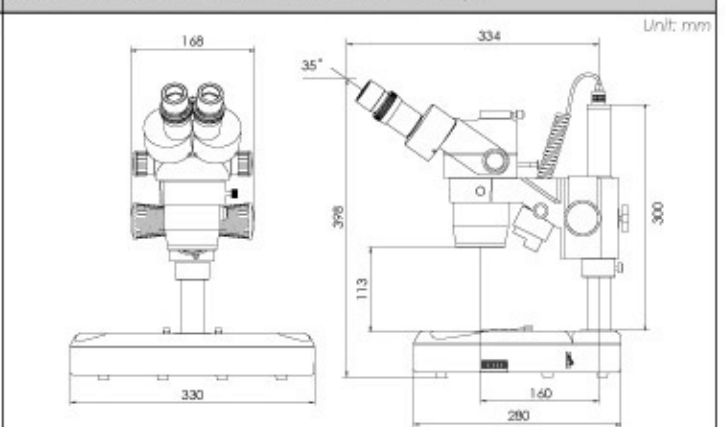
	Order Number	SMZ-168BL	SMZ-168TP	SMZ-168TL
Binocular zoom body	AX66.02601	●		
Trinocular zoom body	AX68.02601		●	●
Head holder with incident light halogen 12V/10W (**works only with AX40.00002**)	AX66.02605A	●		●
Head holder without incident light	AX66.02605B		●	
Streamlined base stand	SW01.09K3		●	
Streamlined base stand with transmitted light halogen 12V/10W	AK40.00007	●		●

SMZ-168 SCHEMATIC DIAGRAM

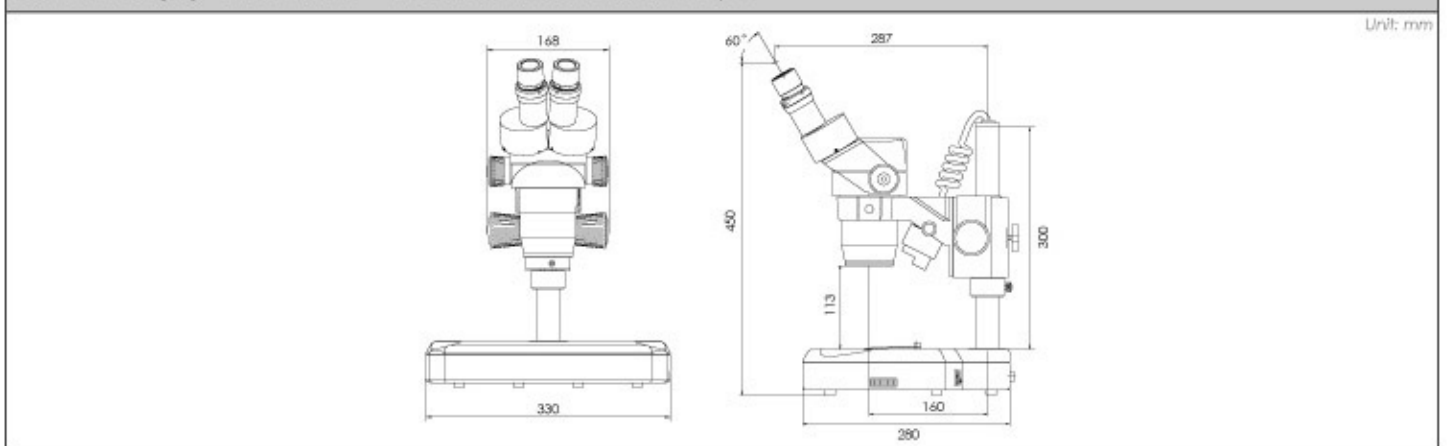
SMZ-168-BL Binocular Stereomicroscope



SMZ-168-TL Trinocular Stereomicroscope



SMZ-168-BL (60) Binocular 60° Observation Stereomicroscope



SMZ-168 SPECIFICATIONS

	SMZ-168 BL			SMZ-168 TL		SMZ-168 BL (60)		
Optical System	GREENOUGH							
Magnification Range	2.25X - 320X							
Zoom body magnification	0.75X - 5X							
Zoom Ratio	1 : 6.7							
Eyepieces	WF 10X/23 High eye point							
Interpupillary distance	52mm - 75mm							
Diopter adjustment	±5°							
Observation angle	35°					60°		
Working Distance	113mm							
Choice of eyepieces	5X/23	6.25X/23	10X/21	15X/17	20X/13	30X/8	32X/8	
Additional objectives available				0.3X	WD = 324mm			
				0.5X	WD = 192mm			
				0.63X	WD = 156mm			
				0.75X	WD = 127mm			
				1.5X	WD = 50 mm			
				2X	WD = 34.5 mm			
Max. Magnification	320X							
Max. field of view	102 mm							
Max. working distance	324 mm							
Top light	12V / 10W Halogen [Reflected]							
Bottom Light	12V / 10W Halogen							
Photo and Video adapters				2X Photo Adapter				
				0.35x CCD Adapter [for 1/3" CCD]				
				0.65x CCD Adapter [for 1/2" CCD]				

CAMERA ADAPTERS

		
2X Photo Adapter 35mm SLR Camera AX6602603	0.35X CCD Adapter 1/3" CCD Camera AX6602645	0.65X CCD Adapter 1/2" CCD Camera SW0113R5

AUXILIARY OBJECTIVES

		
		
0.3X W.D. 324mm AX6602607	0.5X W.D. 192mm AX6602608	0.63X W.D. 156mm AX6602643
0.75X W.D. 127mm AX6602609	1.5X W.D. 50mm AX6602610	2X W.D. 34.5mm AX6602611

GLIDING STAGE

- Base stand mountable - Hand movable 360° rotatable for various observations	 SW010308
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MECHANICAL STAGE

- Base stand mountable - Max. X distance: 75mm - Max. Y distance: 50mm - Dimension in mm: 222.8(w) x 170(l) x 29.5(h)	 SW010338K
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EYEPIECES

WF5X/23mm	SG02T0606
WF6.25X / 23mm	SG02T0103
WF10X/21mm	SG02T0219
WF10X / 23mm	SG02T0218
WF15X / 17mm	SG02T0318
WF20X / 13mm	SG02T0406
WF30X/8mm	SG02T0701
WF32X / 8mm	SG02T0502



MICROMETER EYEPIECES

			
360°:10° [SG02T0218A]	10mm:0.1mm [SG02T0403]	14mm:0.2mm [SG02T0218B]	14mm:0.1mm [SG02T0218C]

POLARISING EQUIPMENT

- Base stand mountable 1-piece set 360° independently rotatable polariser [bottom] 360° independently rotatable analyser [top]	 SW019936
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DARKFIELD ATTACHMENT

- Conical glossy central stop for diffracted light observation - Iris diaphragm for controlling the shape of light - Base stand mountable	 SP090001
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Mountable 2-Piece Polarising Set

- Base stand mountable 360° rotatable analyser - Zoom body screw mount polariser	 AX6602633
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JEWELLERY CLIP

- Easily attachable for jewellery or mineral observation - Movable upon attachment	 SW019936
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Eyepiece	Mag. (X)	Standard Objectives		Auxiliary Objectives											
				0.3X		0.5X		0.63X		0.75X		1.5X		2X	
		WD 113mm		WD 324mm		WD 192mm		WD 156mm		WD 127mm		WD 50mm		WD 34.5mm	
		Mag.	FD (mm)	Mag.	FD (mm)	Mag.	FD (mm)	Mag.	FD (mm)	Mag.	FD (mm)	Mag.	FD (mm)	Mag.	FD (mm)
5X/23	0.75	3.8	30.7	1.1	102.2	1.9	61.3	2.4	48.7	2.8	40.9	5.6	20.4	7.5	15.3
	1	5.0	23.0	1.5	76.7	2.5	46.0	3.2	36.5	3.8	30.7	7.5	15.3	10.0	11.5
	2	10.0	11.5	3.0	38.3	5.0	23.0	6.3	18.3	7.5	15.3	15.0	7.7	20.0	5.8
	3	15.0	7.7	4.5	25.6	7.5	15.3	9.5	12.2	11.3	10.2	22.5	5.1	30.0	3.8
	4	20.0	5.8	6.0	19.2	10.0	11.5	12.6	9.1	15.0	7.7	30.0	3.8	40.0	2.9
	5	25.0	4.6	7.5	15.3	12.5	9.2	15.8	7.3	18.8	6.1	37.5	3.1	50.0	2.3
6.25X/23	0.75	4.7	30.7	1.4	102.2	2.3	61.3	3.0	48.7	3.5	40.9	7.0	20.4	9.4	15.3
	1	6.3	23.0	1.9	76.7	3.1	46.0	3.9	36.5	4.7	30.7	9.4	15.3	12.5	11.5
	2	12.5	11.5	3.8	38.3	6.3	23.0	7.9	18.3	9.4	15.3	18.8	7.7	25.0	5.8
	3	18.8	7.7	5.6	25.6	9.4	15.3	11.8	12.2	14.1	10.2	28.1	5.1	37.5	3.8
	4	25.0	5.8	7.5	19.2	12.5	11.5	15.8	9.1	18.8	7.7	37.5	3.8	50.0	2.9
	5	31.3	4.6	9.4	15.3	15.6	9.2	19.7	7.3	23.4	6.1	46.9	3.1	62.5	2.3
10X/23	0.75	7.5	30.7	2.3	102.2	3.8	61.3	4.7	48.7	5.6	40.9	11.3	20.4	15.0	15.3
	1	10.0	23.0	3.0	76.7	5.0	46.0	6.3	36.5	7.5	30.7	15.0	15.3	20.0	11.5
	2	20.0	11.5	6.0	38.3	10.0	23.0	12.6	18.3	15.0	15.3	30.0	7.7	40.0	5.8
	3	30.0	7.7	9.0	25.6	15.0	15.3	18.9	12.2	22.5	10.2	45.0	5.1	60.0	3.8
	4	40.0	5.8	12.0	19.2	20.0	11.5	25.2	9.1	30.0	7.7	60.0	3.8	80.0	2.9
	5	50.0	4.6	15.0	15.3	25.0	9.2	31.5	7.3	37.5	6.1	75.0	3.1	100.0	2.3
10X/21	0.75	7.5	28.0	2.3	93.3	3.8	56.0	4.7	44.4	5.6	37.3	11.3	18.7	15.0	14.0
	1	10.0	21.0	3.0	70.0	5.0	42.0	6.3	33.3	7.5	28.0	15.0	14.0	20.0	10.5
	2	20.0	10.5	6.0	35.0	10.0	21.0	12.6	16.7	15.0	14.0	30.0	7.0	40.0	5.3
	3	30.0	7.0	9.0	23.3	15.0	14.0	18.9	11.1	22.5	9.3	45.0	4.7	60.0	3.5
	4	40.0	5.3	12.0	17.5	20.0	10.5	25.2	8.3	30.0	7.0	60.0	3.5	80.0	2.6
	5	50.0	4.2	15.0	14.0	25.0	8.4	31.5	6.7	37.5	5.6	75.0	2.8	100.0	2.1
15X/17	0.75	11.3	22.7	3.4	75.6	5.6	45.3	7.1	36.0	8.4	30.2	16.9	15.1	22.5	11.3
	1	15.0	17.0	4.5	56.7	7.5	34.0	9.5	27.0	11.3	22.7	22.5	11.3	30.0	8.5
	2	30.0	8.5	9.0	28.3	15.0	17.0	18.9	13.5	22.5	11.3	45.0	5.7	60.0	4.3
	3	45.0	5.7	13.5	18.9	22.5	11.3	28.4	9.0	33.8	7.6	67.5	3.8	90.0	2.8
	4	60.0	4.3	18.0	14.2	30.0	8.5	37.8	6.7	45.0	5.7	90.0	2.8	120.0	2.1
	5	75.0	3.4	22.5	11.3	37.5	6.8	47.3	5.4	56.3	4.5	112.5	2.3	150.0	1.7
20X/13	0.75	15.0	17.3	4.5	57.8	7.5	34.7	9.5	27.5	11.3	23.1	22.5	11.6	30.0	8.7
	1	20.0	13.0	6.0	43.3	10.0	26.0	126.0	20.6	15.0	17.3	30.0	8.7	40.0	6.5
	2	40.0	6.5	12.0	21.7	20.0	13.0	25.2	10.3	30.0	8.7	60.0	4.3	80.0	3.3
	3	60.0	4.3	18.0	14.4	30.0	8.7	37.8	6.9	45.0	5.8	90.0	2.9	120.0	2.2
	4	80.0	3.3	24.0	10.8	40.0	6.5	50.4	5.2	60.0	4.3	120.0	2.2	160.0	1.6
	5	100.0	2.6	30.0	8.7	50.0	5.2	63.0	4.1	75.0	3.5	150.0	1.7	200.0	1.3
30X/8	0.75	22.5	10.7	6.8	35.6	11.3	21.3	14.2	16.9	16.9	14.2	33.8	7.1	45.0	5.3
	1	30.0	8.0	9.0	26.7	15.0	16.0	18.9	12.7	22.5	10.7	45.0	5.3	60.0	4.0
	2	60.0	4.0	18.0	13.3	30.0	8.0	37.8	6.3	45.0	5.3	90.0	2.7	120.0	2.0
	3	90.0	2.7	27.0	8.9	45.0	5.3	56.7	4.2	67.5	3.6	135.0	1.8	180.0	1.3
	4	120.0	2.0	36.0	6.7	60.0	4.0	75.6	3.2	90.0	2.7	180.0	1.3	240.0	1.0
	5	150.0	1.6	45.0	5.3	75.0	3.2	94.5	2.5	112.5	2.1	225.0	1.1	300.0	0.8
32X/8	0.75	24.0	10.7	7.2	35.6	12.0	21.3	15.1	16.9	18.0	14.2	36.0	7.1	48.0	5.3
	1	32.0	8.0	9.6	26.7	16.0	16.0	20.2	12.7	24.0	10.7	48.0	5.3	64.0	4.0
	2	64.0	4.0	19.2	13.3	32.0	8.0	40.3	6.3	48.0	5.3	96.0	2.7	128.0	2.0
	3	96.0	2.7	28.8	8.9	48.0	5.3	60.5	4.2	72.0	3.6	144.0	1.8	192.0	1.3
	4	128.0	2.0	38.4	6.7	64.0	4.0	80.6	3.2	96.0	2.7	192.0	1.3	256.0	1.0
	5	160.0	1.6	48.0	5.3	80.0	3.2	100.8	2.5	120.0	2.1	240.0	1.1	320.0	0.8

Note : "WD" represents Working Distance, "Mag." represents Magnification, "FD" represents Field Diameter.

K2401 FLUORESCENT RING ILLUMINATOR

- Colour Temperature: 6400K
- Even white light
- 12W power consumption
- Specifically designed attachment for SMZ-168



MLC-150 COLD LIGHT SOURCE

- Colour Temperature Indication
- Colour Temperature Range: 2500K - 3200K
- Remote or local intensity control
- 21V / 150W switching power
- Filter holder

SP120070



LIGHT GUIDE OPTIONS



Flexible ring
light guide
SP990074



1 Arm gooseneck type
light guide
SP990075



Bifurcated gooseneck
type light guide
SP990076

SMZ-168 SERIES CHOICE OF BASE STANDS

Universal Stand



SW01.09K1

- Diameter of base 380mm
- Diameter of vertical pole 25mm
- Height of pole 200mm
- Diameter of pole for focusing mount 32mm

Special Universal Stand



SW01.09K4

- Length of base 250mm
- Height of pole 373mm
- Width of base 250mm
- Diameter of pole for focusing mount 32mm

Ball Bearing Boom Stand



SP99.0004

- Diameter of vertical pole 36mm
- Diameter of pole for focusing mount 32mm

Ball Bearing Boom Stand



SP99.0006

- Diameter of vertical pole 36mm
- Diameter of pole for focusing mount 32mm

Articulating Arm Boom Stand



SP99.0003

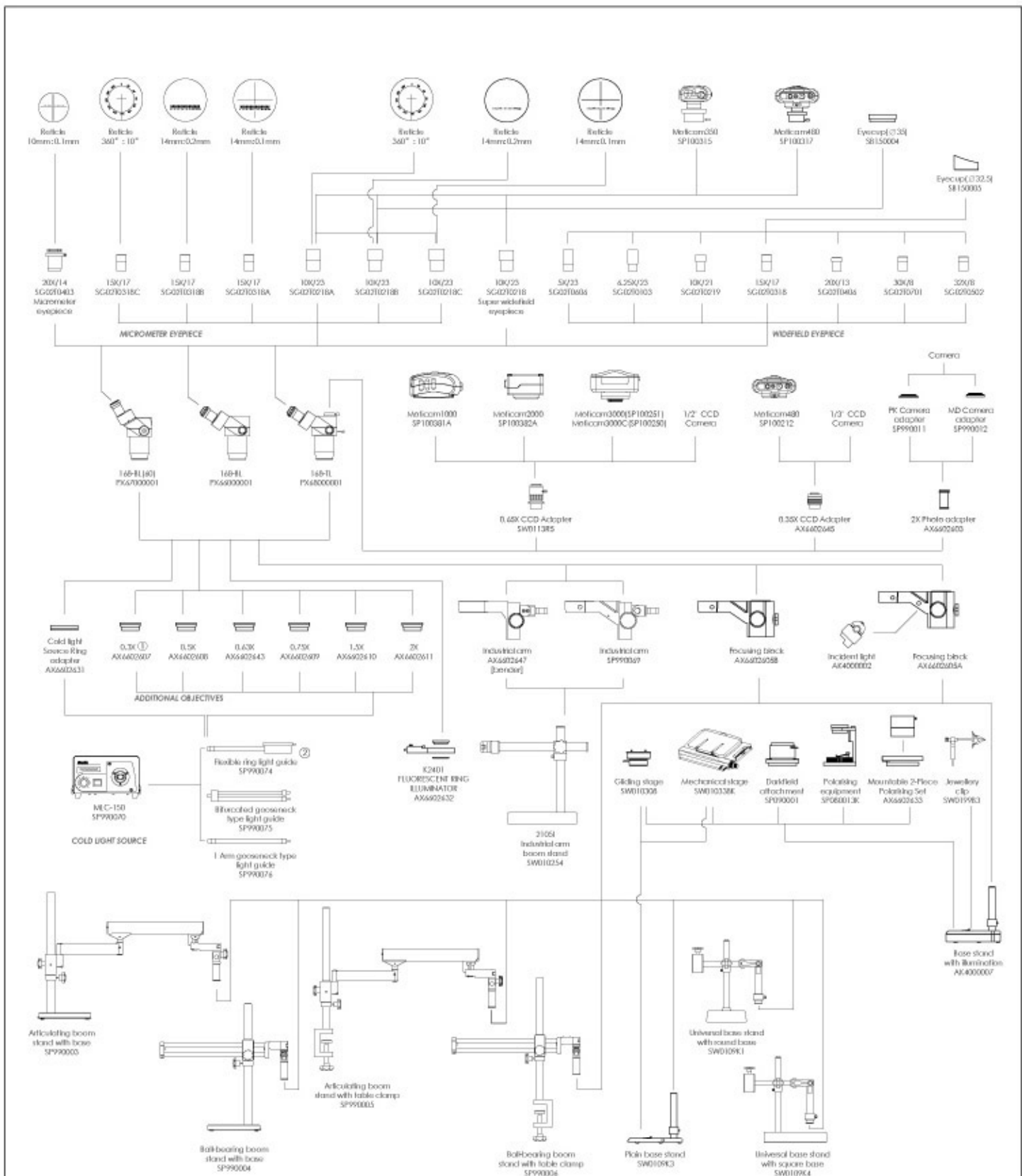
- Diameter of vertical pole 36mm
- Diameter of pole for focusing mount 32mm

Articulating Arm Boom Stand



SP99.0005

- Diameter of vertical pole 36mm
- Diameter of pole for focusing mount 32mm



① Special long pole of 450mm required to use with 0.3X objective.

② When using the cold light source ring light guide, you need to select item number AX6602631 for proper fit

• When selecting the fluorescent ring illuminator, please note the country plug and voltage required.

Motic® Microscopes

Motic®

www.motic.com

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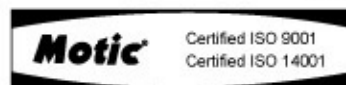
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