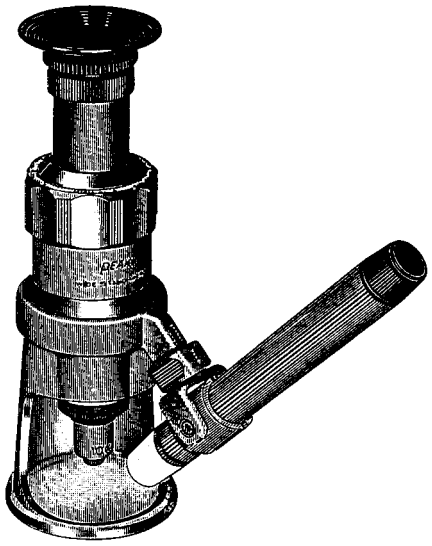

20× No.2034-20
40× No.2034-40
60× No.2034-60
100× No.2034-100
150× No.2034-150
200× No.2034-200
300× No.2034-300

20× No.2054-20
40× No.2054-40
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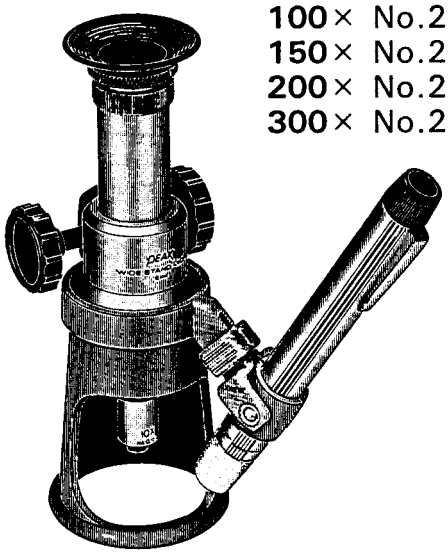


20× No.2054-20 EIM
40× No.2054-40 EIM
60× No.2054-60 EIM
100× No.2054-100 EIM

PEAK WIDE STAND MICROSCOPE

Peak Wide Stand Microscope is a simple measuring microscope designed to be compact and light weight like the Stand Microscope, but characterized by a wider field of view than that of the conventional ones. It allows not only to provide magnified view of fine pattern and contour of object, but also to measure length and compare dimension by using a scale included in the eye-piece.

Focusing by a smooth helicoid is provided with the 2034 series ever supplied and this time focusing by a smooth rack and pinion with knob on both sides of microscope is newly provided to the 2054 series. The optical system of erect image is also added to the 2054 series. (The word EIM=ERECT IMAGE WITH MEASURE is added to end of catalog no.)

Peak Wide Stand Microscope will be useful not only for the general observation but also for improving the accuracy in precision machining and securing uniform quality in the inspection process.

Item No.	2034-20 2054-20 2054-20 EIM	2034-40 2054-40 2054-40 EIM	2034-60 2054-60 2054-60 EIM
Magnification	20X	40X	60X
Field of view	7.2mmϕ	3.6mmϕ	2.4mmϕ
Min. scale division	No.54 0.05mm	No.64 0.05mm	No.74 0.02mm
Min. scale division	No.57 0.005″	No.67 0.002″	No.77 0.001″
Measuring range	6.0mm	3.0mm	2.0mm
Measuring range	0.236″	0.118″	0.078″
Working distance	36.0mm	18.7mm	10.8mm
Numerical aperture	0.06	0.12	0.15
Focal distance	35.0mm	22.0mm	16.5mm

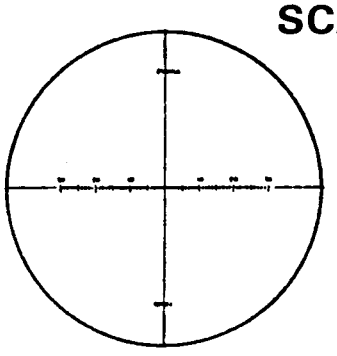
Sizes and Net weight of each item (accessories excluded)

Item No.	2034-20~300	2054-20~300	2054-20~100 EIM
Size	63ϕ×172mm	69ϕ×172mm	69ϕ×172mm
Net weight	237~241g	263~267g	260~264g

SCALES

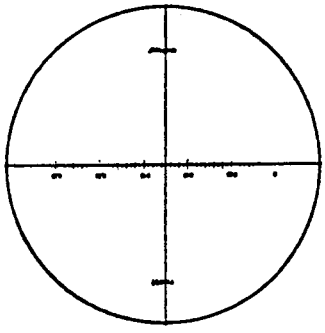
Standard (mm)

20× PS No.54
40× PS No.64
60× PS No.74
100× PS No.84
150× PS No.94
200× PS No.104
300× PS No.114



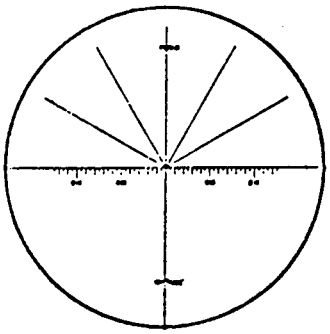
For tool (mm)

20× PS No.55
40× PS No.65



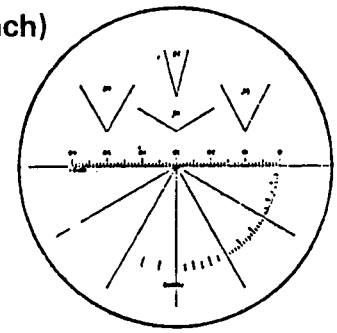
Standard (inch)

20× PS No.57
40× PS No.67
60× PS No.77
100× PS No.87
150× PS No.97
200× PS No.107



For printing (inch)

20× PS No.56
40× PS No.66



CONSTRUCTION OF MECHANICAL SYSTEM

The series of Peak Wide Stand Microscope are divided into three categories.

1) Helicoid Focus Mechanism (No.2034 series)
2) Focusing by a rack and pinion with knob on both sides of microscope. (No.2054 series)
3) Focusing by a rack and pinion, with prism built-in. (No.2054 EIM series = Erect Image with measure)

An objective is screwed in at the bottom end of the tube and an eye-piece is inserted to the top end. The length between the two ends (mechanical tube length) is 120mm and that of EIM model is 105.9mm.

The base of model 2054 series has been changed to sturdy aluminum die casting. A penlight is attached to every model so the object will be clearly illuminated.

OPERATIONAL INSTRUCTION

Turn on the penlight switch and adjust its position so that the object is illuminated.

Rotate the adjuster ring of the eye-piece until the scale becomes clearly visible.

While viewing through the eye-piece, turn the helicoid ring or knob to focus by moving the tube vertically until the image of object becomes clearly visible on the scale plane.

Finally, move the base horizontally so that the desired area of object is set in the field of view. If defocused, make the fine adjustment of helicoid ring or knob again to focus.

Use of rubber eye adapter

Soft rubber eye adapter is to cut out sidelight to help facilitate the observation. The person wearing glasses is to fold the outer margin of rubber adapter downward to adjust the eye point.

Penlight

Rotate and remove the milky-white portion at the tip of the penlight and insert two penlight batteries (SUM-3) with plus side oriented outward. The black plastic portion on the clip is the switch. Turn on the switch and adjust its position so that the object is clearly illuminated.

We are producing lenses, prisms, glasses, measuring instruments according to specifications by indivisual customers.

Item No.	2034-100 2054-100 2054-100 EIM	2034-150 2054-150	2034-200 2054-200	2034-300 2054-300
Magnification	100X	150X	200X	300X
Field of view	1.45mmϕ	0.96mmϕ	0.72mmϕ	0.48mmϕ
Min. scale division	No.84 0.01mm	No.94 0.005mm	No.104 0.002mm	No.114 0.001mm
Min. scale division	No.87 0.0005″	No.97 0.0002″	No.107 0.0001″	———
Measuring range	1.2mm	0.9mm	0.6mm	0.4mm
Measuring range	0.047″	0.035″	0.023″	———
Working distance	5.7mm	9.2mm	6.7mm	4.0mm
Numerical aperture	0.19	0.24	0.35	0.4
Focal distance	10.7mm	7.3mm	5.7mm	3.9mm

CONSTRUCTION OF OPTICAL SYSTEM

The optical system consists of an objective and an eye-piece. Since all the lens surfases are coated, bright and high contrast images can be obtained.

There are seven kinds of objectives, 2X, 4X, 6X, 10X, 15X, 20X and 30X. The magnification of the eye-piece is 10X, and a scale is provided on its focal plane. Owing to Huygens type construction with the focal plane inside the lens system, the contamination of scale with dust is excluded. The lens closest to the eye in the eye-piece system is movable by turning an adjuster ring, which allows to bring the scale to focus in accordance with the dioptric power of the user.

There are four kinds of scale, depending upon the magnification of objectives. You are able to pick out the design according to your application purposes.

The overall magnification of the optical system is equal to the magnification of objective magnified by that of eye-piece: 20X, 40X, 60X, 100X, 150X, 200X and 300X.

As to the 2054 model, there are four kinds of erect image type with prism built-in: 20X, 40X, 60X and 100X.