PEAK Measuring Microscope 2054 Series



The 2054 series microscopes differ from the 2034 series in that they have an aluminium base and a modified focussing mechanism. Focussing is accomplished by moving the tube axially with a rack-and-pinion drive. The short light path through the microscope makes the object appear reversed. The optical system consists of a lens and an eye cup. All lenses are coated for sharp, high contrast images Seven types of lenses are available: 2x, 4x, 6x, 10x, 15x, 20x and 30x. The ocular has a magnification factor of 10x and the focal plane is equipped with a scale. Contamination of the scale with dust is not possible thanks to the Huygens design with focal plane in the lens system. The lens closest to the eye in the ocular can be moved by turning the adjustment ring, so that the scale can be adjusted to match the eye correction of the observer. The oculars associated with each magnification factor (object lens) can be replaced by simply pulling out. If additional lenses are to be used for visually checking purposes only, additional oculars are not required. The side illumination allows measurements on dark surfaces or in darkened rooms. Two 1.5 Volt AA batteries are required for operation. The microscope is supplied in a padded transport box offering secure transport space for four additional lenses available as accessories.

Optional use of the MKH tripod gives the 2054 series microscopes greater stability and is an essential accessory for reliably checking rollers. For further accessories see following pages. An eight megapixel miniature USB camera with integrated lens and autofocus feature can be attached simply to the eyepiece with the aid of an adapter. This allows images to be saved quickly on a laptop or PC. It is possible to use either the original camera driver software (in English only) or combine the system with the Metric BE (image visualisation and storage). The quality of the images obtained with this high end industrial camera are impressive.



Specification

	2054-20	2054-40	2054-60	2054-100	2054-150	2054-200	2054-300
Magnification factor	20 x	40x	60x	100x	150x	200x	300x
Focusable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scale focusable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Field of view	7.2 mm	3.6 mm	2.4 mm	1.45 mm	0.96 mm	0.72 mm	0.48 mm
Measuring length	6.0 mm	3.0 mm	2.0 mm	1.2 mm	0.9 mm	0.6 mm	0.4 mm
Scale	0.1 mm	0.05 mm	0.02 mm	0.01 mm	0.005 mm	0.002 mm	0.001 mm
Working distance	36.0 mm	18.7 mm	10.8 mm	5.7 mm	9.2 mm	6.7 mm	4 mm
Numerical aperture	0.06	0.12	0.15 mm	0.19 mm	0.24 mm	0.35 mm	0.4 mm
Focal length	35.0 mm	22.0 mm	16.5 mm	10.7 mm	7.3 mm	5.7 mm	3.9 mm
Dimensions	69 x 172 mm	69 x 172 mm	69 x 172 mm	69 x 172 mm	69 x 172 mm	69 x 172 mm	69 x 172 mm
Weight incl battery box	270 grams	270 grams	270 grams	270 grams	270 grams	270 grams	270 grams
Case	Included						
Standard scale	Included as standard feature						
Eyepiece	10 x	10 x	10 x	10 x	10 x	10 x	10 x
Lens	2 x	4x	6x	10x	15 x	20 x	30 x
Display	mirror image						

Prices

Order no.	Description	Price excl. VAT.
2054-20	2054-20 Measuring microscope with scale 0,1 mm, 20x	£300.00
2054-40	2054-40 Measuring microscope with scale 0,05 mm, 40x	£300.00
2054-60	2054-60 Measuring microscope with scale 0,02 mm, 60x	£323.00
2054-100	2054-100 Measuring microscope with scale 0,01 mm, 100x	£323.00
2054-150	2054-150 Measuring microscope with scale 0,005 mm, 150x	£377.00
2054-200	2054-200 Measuring microscope with scale 0,002 mm, 200x	£423.00
2054-300	2054-300 Measuring microscope with scale 0,001 mm, 300x	£545.00

PEAK accessories for measuring microscope 2054



Interchangeable Lenses

2034, 2054 and 2054-EIM series microscopes offer the possibility of changing the magnification factor by changing lenses. Four additional depressions are already present in the standard transport boxes for secure transportation of interchangeable lenses. The lenses have a screw thread for extremely simple changing. However the measuring scales require particular attention. If, for example, a microscope with a magnification factor of 100x is used with a 0.01 mm scale, the reading is incorrect when the lens is changed. For this reason, always order the additional lens you intend to use for measurement together with the associated eyepiece. It is not necessary to change the ocular for simple visual checking.

Order no.	Description	Price excl. VAT.
OJ-020	2x objective for magnification 20x	£64.00
OJ-040	4X objective for magnification 40x	£64.00
OJ-060	6x objective for magnification 60x	£82.00
OJ-100	10-x objective for magnification 100x	£82.00
OJ-150	15x objective for magnification 150x	£136.00
OJ-200	20x objective for magnification 200x	£218.00
OJ-300	30x objective for magnification 300x	£305.00



Interchangeable Eyepiece with millimetric graduation

All eyepiece have a magnification factor of 10x. The built in scale is calculated to match the lense. The scale can be focused separately in the eyepiece. The eye cup is already included with the stand microscope ordered.

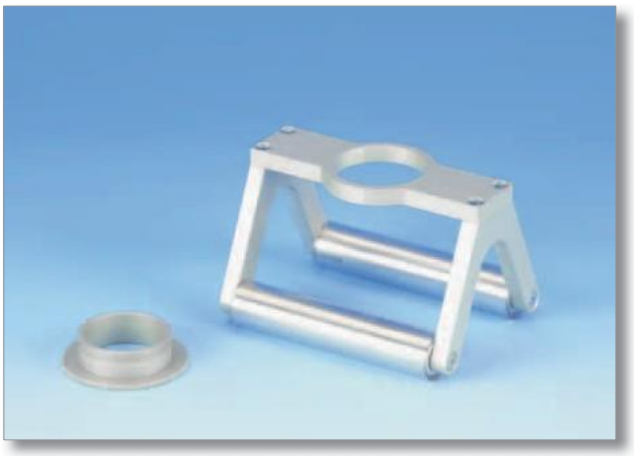
Order no.	Description	Price excl. VAT.
OKU-020	Eyepiece with scale 0,1 mm	£91.00
OKU-040	Eyepiece with scale 0,05 mm	£91.00
OKU-060	Eyepiece with scale 0,02 mm	£91.00
OKU-100	Eyepiece with scale 0,01 mm	£91.00
OKU-150	Eyepiece with scale 0,005 mm	£91.00
OKU-200	Eyepiece with scale 0,002 mm	£91.00
OKU-300	Eyepiece with scale 0,001 mm	£91.00



Interchangeable Eyepiece with inch graduation

All eyepiece have a magnification factor of 10x. The built in scale is calculated to match the lense. The scale can be focused separately in the eyepiece. The eye cup is already included with the stand microscope ordered.

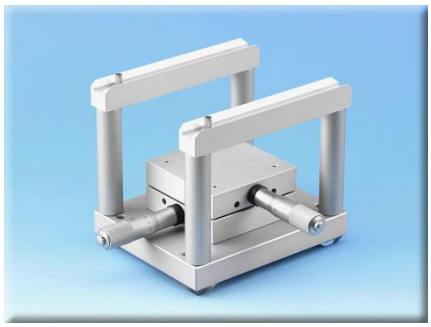
Order no.	Description	Price excl. VAT.
OKU-020	Eyepiece with scale 0.005”	£91.00
OKU-040	Eyepiece with scale 0.002”	£91.00
OKU-060	Eyepiece with scale 0.001”	£91.00
OKU-100	Eyepiece with scale 0.0005”	£91.00
OKU-150	Eyepiece with scale 0.0002”	£91.00
OKU-200-I	Eyepiece with scale 0.0001”	£91.00



Tripod MKH

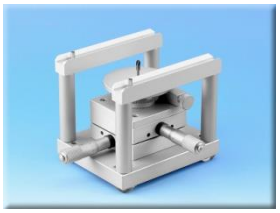
Special MKH tripod for 2034, 2054 and 2054-EIM series microscopes. Provides stability on rollers, curved surfaces or in combination with a digital camera. Support rollers coated with silicone-free material. The microscopes are screwed to the tripod with a union nut. The MKH is also available as a special model with rotating support rollers.

Order no.	Description	Price excl. VAT.
MKH	MKH Tripod for microscopes	£209.00
MKH-R	MKH Tripod with rotating support rollers	£482.00



Tripod ST-CIL

Precision tripod with segment columns, which can be installed to obtain the required distance. An X-Y table with two 25 mm measuring spindles with graduations of .01 mm is mounted in the tripod. The ST-CIL tripod can be used for combining microscopes 2034 or 2054 with the MST tripod. The MST tripod is also available with an additional rotating table.



Order no.	Description	Price excl. VAT.
ST-CIL	Tripod with X-Y Table	£810.00
ST-CIL-RT-85	Tripod with X-Y and rotating table	£1,170.00



USB Camera

An eight megapixel, miniature USB camera with integrated lens and autofocus feature can be attached simply to the eyepiece with the aid of an adapter. This allows images to be saved quickly on a laptop or PC. It is possible to use either the original camera driver software (in English only) or combine the system with the Metric BE software (image visualisation and storage), which offers significantly more convenient operation. The quality of the images obtained with this high end industrial camera are impressive.

Order no.	Description	Price excl. VAT.
1008-XS-ADP	USB 2.0 Camera with special adaptor	£680.00