PEAK Measuring Microscope 2054-EIM Series



The 2054 series microscopes differ from the 2034 series in that they have an aluminium base, modified focusing mechanism and non-reversed view of the object. An additional prism reverses the light path inside the microscope. The upright view of the test point makes it easier to spot defects. The 2054-EIM series microscopes are particularly suitable for inspecting paint finishes in the automotive industry. Quick focusing with hand wheel and rack-and-pinion drive provides a significant advantage on active production lines. A sturdy aluminium base ensures stability even for the standard version. If desired an acrylic base is available to improve the visibility of the point to be checked. The optical system is identical with the 2034 and 2054-EIM series stand microscopes.

Seven types of lenses are available: 2x, 4x, 6x, 10x, 15x, 20x and 30x. The eyepiece 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 eyepieces 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 then additional eyepiece are not required, otherwise it is important to order the associated eyepiece with each additional lense.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), which offers significantly more convenient operation. The quality of the images obtained with this high end industrial camera are impressive.



Specification

	2054-EIM-20	2054-EIM-40	2054-EIM-60	2054-EIM-100
Magnification factor	20 x	40x	60x	100x
Focusable	Yes	Yes	Yes	Yes
Scale focusable	Yes	Yes	Yes	Yes
Field of view	7.2 mm	3.6 mm	2.4 mm	1.45 mm
Measuring length	6.0 mm	3.0 mm	2.0 mm	1.2 mm
Scale	0.1 mm	0.05 mm	0.02 mm	0.01 mm
Working distance	36.0 mm	18.7 mm	10.8 mm	5.7 mm
Numerical aperture	0.06	0.12	0.15 mm	0.19 mm
Focal length	35.0 mm	22.0 mm	16.5 mm	10.7 mm
Dimensions	69 x 172 mm	69 x 172 mm	69 x 172 mm	69 x 172 mm
Weight	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
Lens	2 x	4x	6x	10x
Display	Non-reversed image			

Prices

Order no.	Description	Price excl. VAT.
2054-EIM-20	2054-EIM-20 Measuring microscope with scale 0,1 mm, 20x	£345.00
2054-EIM-40	2054-EIM-40 Measuring microscope with scale 0,05 mm, 40x	£345.00
2054-EIM-60	2054-EIM-60 Measuring microscope with scale 0,02 mm, 60x	£364.00
2054-EIM-100	2054-EIM-100 Measuring microscope with scale 0,01 mm, 100x	£364.00

PEAK accessories for measuring microscope 2054-EIM



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



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.

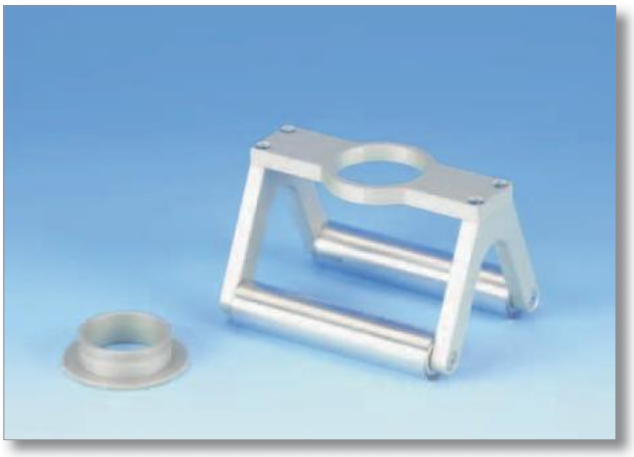
Order no.	Description	Price excl. VAT.
OKU-020	Eyepiece with scale 0,1 mm	£91.00
OKU-040	Eyepiece with scale 0,05 mm	£91.00
OKU-060	Eyepiece with scale 0,02 mm	£91.00
OKU-100	Eyepiece with scale 0,01 mm	£91.00
OKU-150	Eyepiece with scale 0,005 mm	£91.00



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



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



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