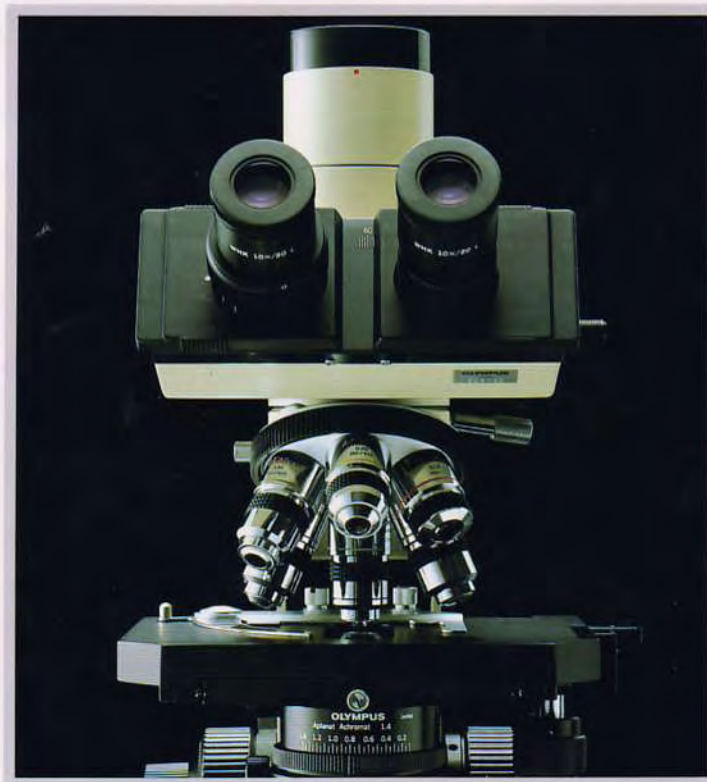


OLYMPUS®

BHS/BHT

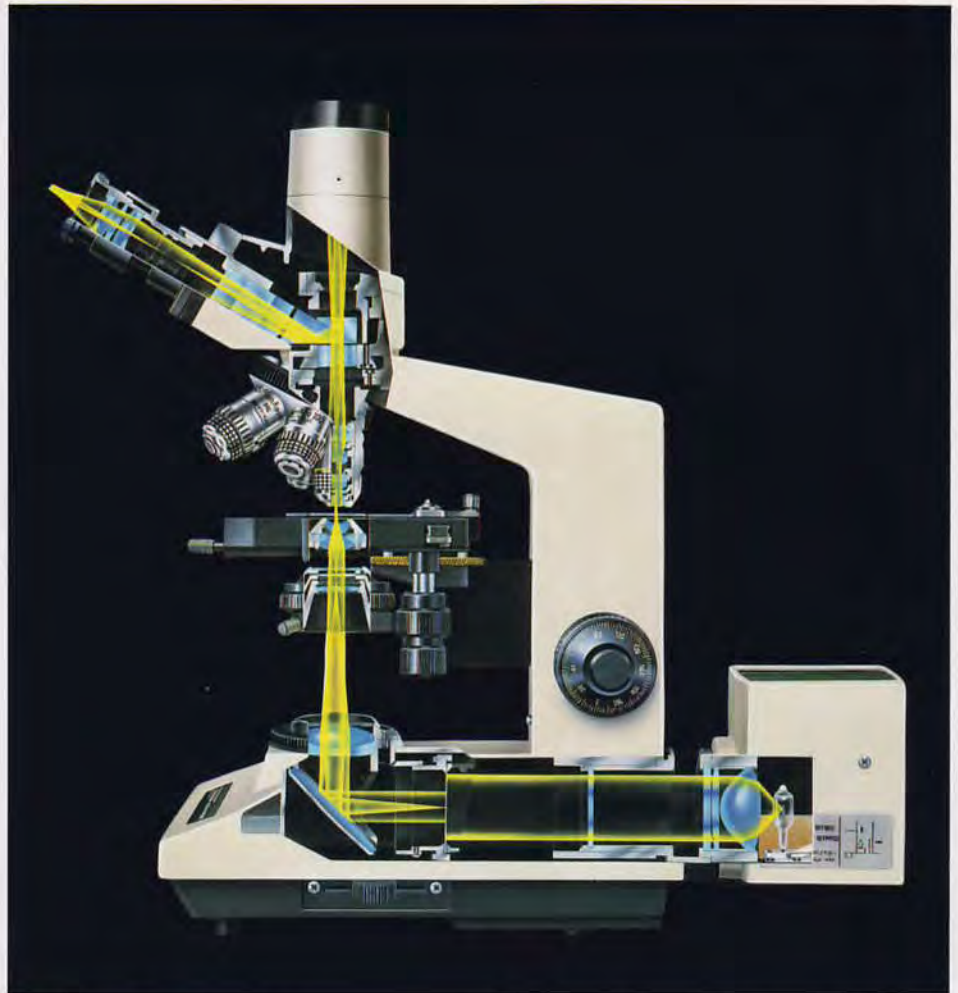
System Microscopes



BH2 Series System Microscope

The BH2 Series of top-quality microscopes facilitates the use of a wide range of microscopic techniques, depending on the choice of accessories. The Koehler-type illumination elicits the full performance of the LB Series objectives, yielding photomicrographs of the highest quality. This series of microscopes is suitable for a very wide range of applications, from routine laboratory work to educational and research investigations.





Outstanding Ergonometry

The design of the entire system—microscope stands, observation tubes, stages, etc.—bears witness to creative and inventive thinking. One example may be seen in the design of the coarse stage adjustment, in which movement is limited in the upward direction in order to prevent contact between objective and specimen. The coarse and fine focusing knobs are of coaxial design, and the minimum increment on the fine adjustment knob represents a stage movement of just two microns. The coaxial stage control knobs are located close to the focusing knobs, low enough to permit operation without having to raise the arm off the arm rest. In addition, the BH2-TR30 trinocular observation tube features constant tube length adjustment which allows camera focus

through the binocular tube in photomicrography, thereby adding significantly to ease of operation.

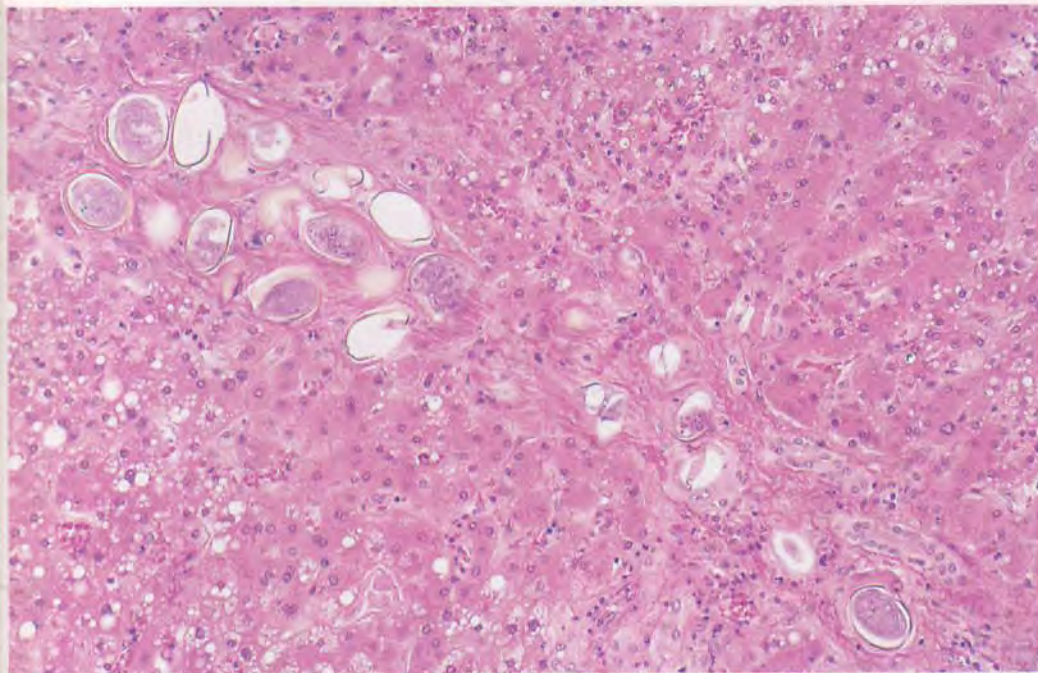
Improved Illuminating System

All BH2 Series microscopes employ the widely accepted LB Series objectives and WHK10X eyepieces (as standard equipment), providing F.N. 20 widefield observation. BH2 Series microscopes provide Koehler illumination to exploit the full benefits of the LB Series objectives. A wide choice of condensers provides uniform illumination from ultra low to high magnifications. These microscopes incorporate precentered halogen lamps, aspherical collectors and fully enclosed light paths designed to keep out dirt and dust.

BHS System Microscope

This top quality microscope features a long-life 12V, 100W halogen lamp which provides bright illumination for a wide range of applications. It is ideally suited for advanced research work and investigations requiring high precision.





Schistosomiasis japonica (liver, H-E stain). SPlan10X, NFK3.3XLD

BHS-F Microscope Stand

- The BHS-F stand is of a robust and stable design unaffected by vibration or shaking. Highly reliable, it is ideal for photomicrographic purposes.
- The stand incorporates a high-performance transformer which is unaffected by fluctuations in the line voltage and so always provides light of uniform brightness and color temperature.
- The ball bearing sextuple revolving nosepiece accepts low to high magnification objectives with 45mm parfocal distance. This feature contributes significantly to greater efficiency in microscopy.

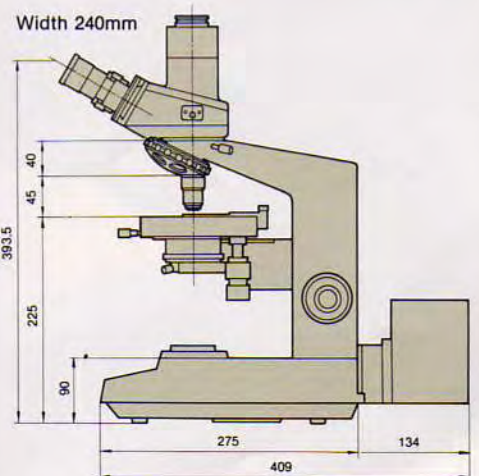
BHS-LSH Halogen Lamp Housing

The 12V 100W halogen lamp provides a bright light source suitable for many types of microscopy. The precentered lamp has an average life of around 2,000 hours, reducing significantly the time lost with troublesome bulb change.



Standard Outfits

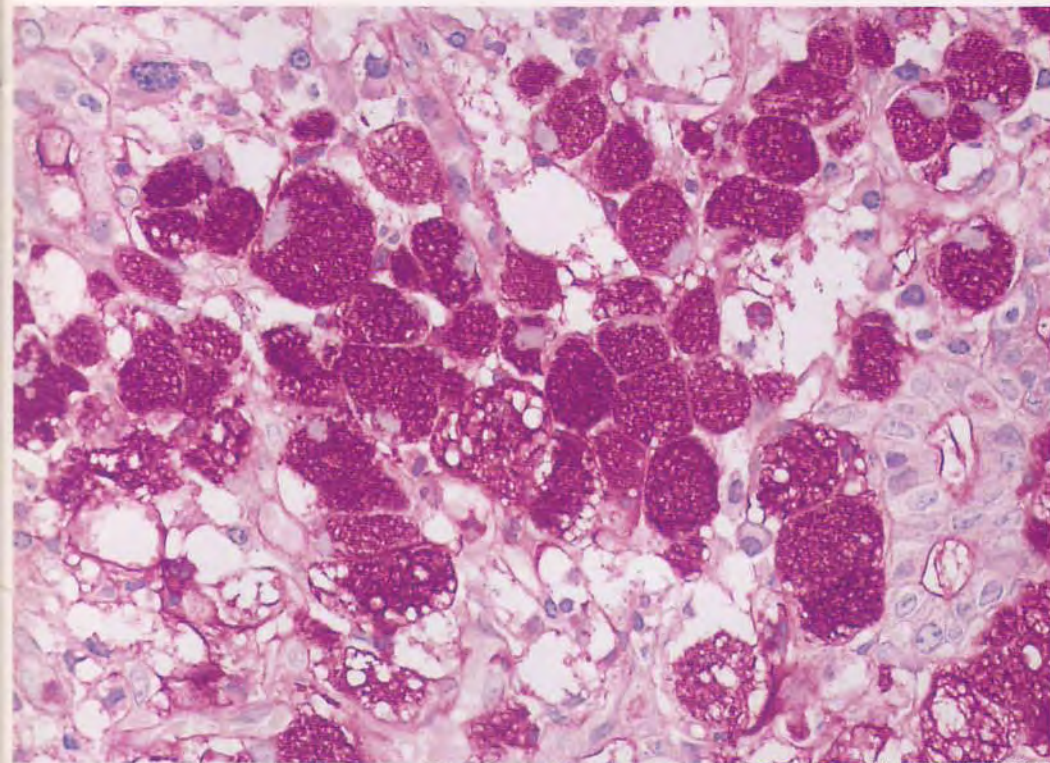
| Module | | BHS | | | |
|---------------------|--------------------------|----------|-----|-----|-----|
| | | 112 | 113 | 312 | 313 |
| Microscope Stand | BHS-F | ○ | ○ | ○ | ○ |
| Observation Tube | Binocular, 30° Inclined | ○ | ○ | | |
| | Trinocular, 30° Inclined | | | ○ | ○ |
| Revolving Nosepiece | Sextuple | | ○ | | ○ |
| | Quintuple | ○ | | ○ | |
| Mechanical Stage | Graduated | ○ | ○ | ○ | ○ |
| Condenser | Achromatic/Aplanatic | | ○ | | ○ |
| | Top Lens Swing-out/in | ○ | ○ | ○ | ○ |
| Lamp Housing | BHS-LSH | ○ | ○ | ○ | ○ |
| Bulb | 12V 100W Halogen | ○ | ○ | ○ | ○ |
| Power Cord | UYCP | ○ | ○ | ○ | ○ |
| Objective | D Plan Achromat | 4X | ○ | ○ | ○ |
| | | 10X | ○ | ○ | ○ |
| | | 20X | ○ | ○ | ○ |
| | | 40X | ○ | ○ | ○ |
| | | 100X oil | ○ | ○ | ○ |
| | S Plan Achromat | 4X | | ○ | ○ |
| | | 10X | | ○ | ○ |
| | | 20X | | ○ | ○ |
| | | 40X | | ○ | ○ |
| | | 100X oil | | ○ | ○ |
| Eyepiece | Viewing, Widefield, HEP | ○ | ○ | ○ | ○ |
| | For photomicrography | | | ○ | ○ |



BHT System Microscope

Employing the same revolving nosepieces, stages, observation tubes, etc., as the Model BHS, the Model BHT microscope uses a different type of illumination system and electrical components. A compact microscope, it offers excellent cost-performance.





Signet ring cell carcinoma (stomach, PAS stain). DPlan40X, NFK3.3XLD

BHT-F Microscope Stand

- Smaller than the BHS model, with a different transformer and light source. Extremely functional.
- The dust proof illuminating system keeps the light path clean.

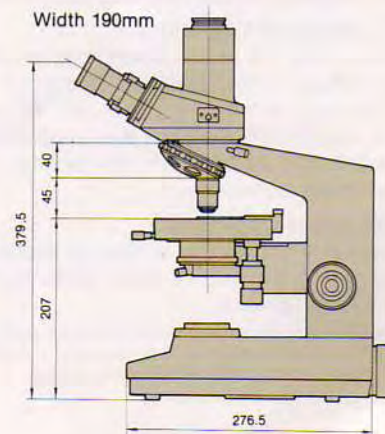
LS20H Lamp Housing

Encloses a precentered 6V 20W halogen bulb.



Standard Outfits

| Module | | | BHT | | |
|---------------------|--------------------------|------------------|--------------------------|--------------------------|--------------------------|
| | | | 111 | 112 | 312 |
| Microscope Stand | | BHT-F | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Revolving Nosepiece | Quintuple | BH2-5RE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Observation Tube | Binocular, 30° Inclined | BH2-BI30 | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Trinocular, 30° Inclined | BH2-TR30 | | | <input type="checkbox"/> |
| Mechanical Stage | Graduated | BH2-SVR | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Top Lens Swing-out/in | BH2-SC | | | <input type="checkbox"/> |
| Condenser | Abbe | BH2-CD | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | | | | |
| Lamp Housing | | LS20H | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bulb | 6V 20W Halogen | 6V20W HAL(2pcs.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Power Cord | | UYCP | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Objective | D Achromat | 4X | <input type="checkbox"/> | | |
| | | 10X | <input type="checkbox"/> | | |
| | | 40X | <input type="checkbox"/> | | |
| | | 100X oil | <input type="checkbox"/> | | |
| | D Plan Achromat | 4X | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 10X | | <input type="checkbox"/> | <input type="checkbox"/> |
| Eyepiece | Viewing, Widefield, HEP | WHK10X (2pcs.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | For photomicrography | NFK 3.3XLD | | | <input type="checkbox"/> |



LB (Long Barrel) Objectives

The LB (Long Barrel) Series ranges from inexpensive objectives to top quality and special-purpose objectives. This extensive selection enables the user to choose the ideal lens for the purpose intended.

In the design of LB objectives, OLYMPUS has drawn upon its extensive and renowned expertise in optical technology. The objectives offer the following features:

1. High resolution
2. Superior contrast
3. Excellent field flatness
4. F.N. 20 widefield observation (with WHK10X eyepiece)
5. Ultra-low magnification objectives are parfocal with high-magnification lenses.

S Plan Apochromat Objectives

These objectives are of the highest quality design. Chromatic aberration is thoroughly compensated, field flatness is superb and the high numerical aperture provides outstanding resolution.

S Plan Achromat Objectives

The S Plan objectives are the most popular high quality objectives in the LB series. Excellent optical correction across the entire lens surfaces makes them ideally suited for use in differential interference contrast microscopy and for super widefield observation.

S Plan FL Objectives

The ultra low magnifications (1X, 2X) of these objectives make them ideal for examination of large specimen areas. They are fully parfocal with other LB objectives. The SPlanFL2X objective is suitable for super widefield observations.

Note: These objectives perform best with the BH2-ULC ultra-low condenser.

D Plan Achromat Objectives

With D Plan objectives, field flatness is guaranteed up to F.N. 20. Ideal for photomicrographic purposes, they are widely used in research, educational and routine work.

D Achromat Objectives

These are the most economically priced objectives in the LB series. Resolution and flatness in the center portion of the field of view are excellent and they are particularly suitable for routine work, educational purposes or training.

No Cover Objectives

This type of objective is ideal for examination of specimens with no cover glass, such as blood smears.

*A variety of other types of objectives are available for different applications and requirements, including phase-contrast, reflected light fluorescence, or polarized light microscopy.



Eyepieces and Condensers

To complement the performance of our LB objectives, an extensive range of eyepieces and six types of condensers are available. To exploit the full performance of objectives with magnifications from 1X to 100X requires the choice of the proper condenser.



LB Series Eyepieces

Designed for use with LB Series objectives, WHK eyepieces are easy and comfortable to use and are of widefield design (F.N. 20 with the WHK10X eyepiece). The high eye point makes them easy to use by persons who wear glasses and enables fatigue-free observation over long periods of time. Other eyepieces in the series include the WHK8X, WHK15X, NK5X and NK20X.

NFK Series Photo Eyepieces

These photo eyepieces are specifically designed for photomicrography. They are available in 1.67X, 2.5X, 3.3X, 5X and 6.7X magnifications. NFK 1.67X is recommended to be used with TV camera.

Condensers

An extensive range of condensers is available, covering brightfield and darkfield observations.

The BH2-AAC is a top quality achromatic aplanatic brightfield condenser which permits full compensation for all aberrations. The swing-out BH2-SC condenser is suitable for a wide range of magnifications. Several other condensers are available, including the general-purpose BH2-CD and the BH2-ULC for ultra-low magnification.



| | BH2-AAC | BH2-SC | BH2-CD | BH2-ULC | BH2-DCW | BH2-DCCD |
|-------------------------|--------------------------------|------------------------|----------------------------|------------------------|-------------------------------|-------------------------|
| | Achromatic/Aplanatic Condenser | Swing-out Condenser | Abbe Condenser | Ultra Low Condenser | Immersion Darkfield Condenser | Dry Darkfield Condenser |
| N.A. | 1.40 | 0.9—0.16 | 1.25 | 0.16 | 1.40—1.20 | 0.92—0.80 |
| Focal Length | 9mm | 12mm | 13.4mm | 67.4mm | 7.65mm | 11.8mm |
| Optical Construction | 7 elements in 4 groups | 4 elements in 3 groups | 2 elements in 2 groups | 3 elements in 3 groups | 2 elements in 1 group | 1 element in 1 group |
| Objective Power | 10X—100X (S.W.) | 2X—100X (S.W.) | 4X—100X (S.W.) 10X—100X | 1X—4X (S.W.) 2X—4X | 10X—100X | 10X—40X |
| Aperture Iris Diaphragm | ○ | ○ | ○ | ○ | — | — |

Observation Tubes

All BH2 series observation tubes have constant tube length adjustment. This feature automatically maintains the optimum observation conditions when interpupillary distance is varied, without requiring troublesome adjustments.

BH2-BI30 Binocular Observation Tube

The BH2-BI30 is designed exclusively for visual observation.

Inclination: 30° to the horizontal
 Interpupillary distance: 53—75mm (with constant tube length adjustment)
 Maximum F.N.: 21

BH2-TR30 Trinocular Observation Tube

This tube increases the efficiency of photographic work since it permits camera focusing through the binocular section. The three-step light path selector allows photomicrography and observation at the same time.

Inclination: 30° to the horizontal
 Interpupillary distance: 53—75mm (with constant tube length adjustment)
 Maximum F.N.: 21

BH2-SW Super Widefield Attachment

The BH2-SW attachment presents the observer with a field of view about twice the size of that obtained with ordinary observation tubes, and thus reduces to a minimum the need to move the specimen around. This results in a significant increase in work efficiency. The 3-step light path selector and constant tube length adjustment allow camera focusing through the binocular section for photomicrography.

Inclination: 30° to the horizontal
 Interpupillary distance: 56—75mm (with constant tube length adjustment)
 Maximum F.N.: 26.5

Standard Outfits

| | Module | BH2-SW | |
|-----------------------------|-----------------|--------------------------|--------------------------|
| | | -1 | -2 |
| SW Trinocular Tube | BH2-SWTR30 | <input type="checkbox"/> | <input type="checkbox"/> |
| SW Eyepiece | SWHK10X (2pcs.) | <input type="checkbox"/> | <input type="checkbox"/> |
| Photo Eyepiece | NFK3.3XLD | <input type="checkbox"/> | <input type="checkbox"/> |
| S Plan Achromatic Objective | SPlan4X | <input type="checkbox"/> | <input type="checkbox"/> |
| | SPlan10X | <input type="checkbox"/> | <input type="checkbox"/> |
| | SPlan20X | <input type="checkbox"/> | <input type="checkbox"/> |
| | SPlan40X | <input type="checkbox"/> | <input type="checkbox"/> |
| | SPlan100X | <input type="checkbox"/> | <input type="checkbox"/> |

BH2-PT Vertical Phototube

This tube presents the most economical way of conducting photomicrography. The binocular observation tube must be removed in order to attach the vertical phototube and so observation is not possible at the same time as photomicrography.



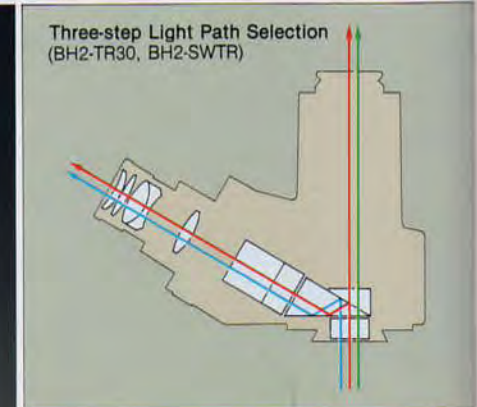
BH2-BI30



BH2-PT



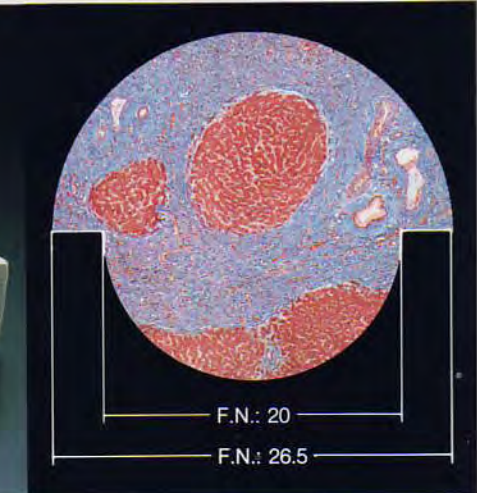
BH2-TR30



| | V | CV | C |
|------------------|------|-----|------|
| Observation | 100% | 20% | — |
| Photomicrography | — | 80% | 100% |



BH2-SW-2



Stages

A selection of stages is available, including those suitable for differential interference contrast and fluorescence microscopy.



BH2-SVR



BH2-SVL



BH2-SH



BH2-SRG



BH2-SVFR



Specimen Holders

BH2-SVR Mechanical Stage with Right-Hand Low Drive Controls

This is the most popular stage for many areas of research and testing. Covered ball races prevent contamination by dust and glass chips. Scanning area is 76mm (X) × 50mm (Y). A 270° rotation capability makes this stage highly suitable for photographic framing and for differential interference contrast purposes.

Note: Range of rotation is reduced to 65° when a differential interference contrast condenser is attached.

BH2-SVL Mechanical Stage with Left-Hand Low Drive Controls

Has the same features as the BH2-SVR, except that the controls are located on the left.

BH2-SH Mechanical Stage with Horizontal Drive Controls

The stage controls are horizontally located on the left- and right-hand sides. The stage can be rotated through 40° when the stage control knobs are on the far side, and through 180° when on the near side.

BH2-SRG Circular Rotatable Stage

This is the ideal stage for Nomarski differential interference contrast and polarized-light microscopy. It features a centering mechanism, and graduations at 1° intervals around the entire circumference. Stage diameter is 142mm. It accepts stage clips or KM and FM attachable mechanical stages.

BH2-SVFR Grooved Mechanical Stage with Right-Hand Low Drive Controls

The fluted design prevents slides sticking to the stage surface due to spilled immersion oil, thus eliminating interruptions in microscopic work. The X-axis excursion is 52mm, and Y-axis excursion is 76mm. The stage rotates through 270°.

BH2-PC/BH2-PCD Phase Contrast Attachment BH2-KPC Simple Phase Contrast Attachment

Phase-contrast is one of the most commonly used techniques in microscopy. It is employed in the examination of living micro-organisms, cells, etc., permitting observation of the internal structures of such specimens under different degrees of contrast.

BH2-PC/BH2-PCD* Phase Contrast Attachment

- Features an Abbe-type turret condenser with a numerical aperture of 1.25.
- Incorporates annular phase plate for 10X, 20X*, 40X and 100X phase objective.
- Incorporates an aperture diaphragm for use in brightfield. This diaphragm is automatically disengaged in phase-contrast observation.
- The CT-5 centering telescope with high eye point permits simple and accurate annulus alignment.
- The BH2-SW super widefield attachment use in conjunction with S Plan phase-contrast objectives enables observation of super widefield phase contrast images.
- Four types of contrast—PL, PLL, NH and NM—are available.

Two types of objectives are available for phase-contrast microscopy: S Plan Achromats and D Achromats. They come in magnifications of 10X, 20X*, 40X and 100X, and in both positive and negative contrast.

| | | |
|-----------------|-----|----------------------|
| S Plan Achromat | PL | 10X, 20X*, 40X, 100X |
| | NH | 10X, 20X*, 40X, 100X |
| D Achromat | PL | 10X, 20X*, 40X, 100X |
| | PLL | 10X, 20X*, 40X, 100X |
| | NH | 10X, 20X*, 40X, 100X |
| | NM | 10X, 20X*, 40X, 100X |

*PL = Positive Low
NH = Negative High
PLL = Positive Low-Low
NM = Negative Medium

* 20 objective can not be adapted to the BH2-PCD model.

BH2-KPC Simple Phase Contrast Attachment

Used in conjunction with a BH2-CD brightfield condenser and phase contrast objectives, this attachment presents phase contrast images easily and economically. Available in 10X, 20X and 40X magnifications.



BH2-PC-PB1

BH2-PC Standard Outfits

| Module | | BH2-PC | | | | | | | |
|--|--------------------|-----------------------------|------|------|------|------|------|------|------|
| | | PA-1 | PA-2 | PB-1 | PB-2 | PB-3 | PB-4 | PB-5 | PB-6 |
| Phase Contrast Turret Condenser* N.A. 1.25 | BH2-PC | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Centering Telescope | CT-5 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Phase Contrast Objective Set | PC S Plan Achromat | 10X, 20X, 40X, 100X oil PL | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | | 10X, 20X, 40X, 100X oil NH | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | D Achromat | 10X, 20X, 40X, 100X oil PL | | | | ○ | | | |
| | | 10X, 20X, 40X, 100X oil PLL | | | | | ○ | | |
| | | 10X, 20X, 40X, 100X oil NH | | | | | | ○ | |
| | | 10X, 20X, 40X, 100X oil NM | | | | | | | ○ |

•IF550 Interference filter included

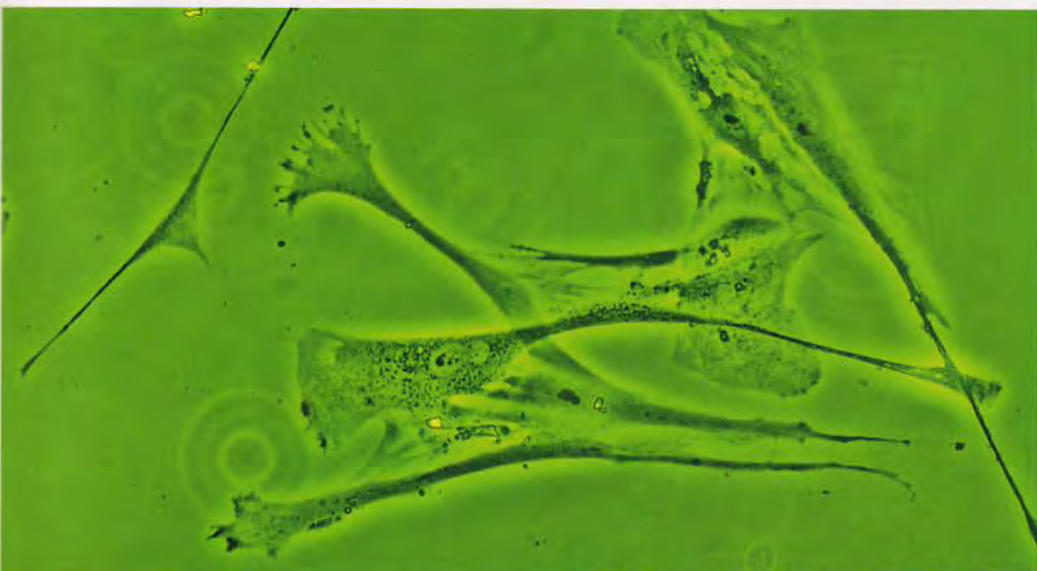


BH2-PCD-PA-1

BH2-PCD Standard Outfits

| Module | | BH2-PCD | | | | | | | |
|--|--------------------|------------------------|------|------|------|------|------|------|------|
| | | PA-1 | PA-2 | PB-1 | PB-2 | PB-3 | PB-4 | PB-5 | PB-6 |
| Phase Contrast Turret Condenser* N.A. 1.25 | BH2-PCD | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Centering Telescope | CT-5 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Phase Contrast Objective Set | PC S Plan Achromat | 10X, 40X, 100X oil PL | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | | 10X, 40X, 100X oil NH | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | D Achromat | 10X, 40X, 100X oil PL | | | | ○ | | | |
| | | 10X, 40X, 100X oil PLL | | | | | ○ | | |
| | | 10X, 40X, 100X oil NH | | | | | | ○ | |
| | | 10X, 40X, 100X oil NM | | | | | | | ○ |

•IF550 Interference filter included



Fibroblast (human embryo). SPlan20XPL, NFK2.5XLD



Fibroblast (human embryo). SPlan20XNM, NFK2.5XLD



PC S Plan Achromat PL



PC S Plan Achromat NH



PC D Achromat PL



PC D Achromat PLL



PC D Achromat NH



PC D Achromat NM



BH2-KPC-1

BH2-KPC Standard Outfits

| Module | | BH2-KPC | |
|--------------------------|------------|--------------------------|--------------------------|
| | | 1 | 2 |
| Abbe Condenser | BH2-Cd | <input type="checkbox"/> | <input type="checkbox"/> |
| Green Filter | 45G533 | <input type="checkbox"/> | <input type="checkbox"/> |
| Phase annular ring | BH2-PC10RS | <input type="checkbox"/> | <input type="checkbox"/> |
| | BH2-PC20RS | <input type="checkbox"/> | <input type="checkbox"/> |
| | BH2-PC40RS | <input type="checkbox"/> | <input type="checkbox"/> |
| Phase Contrast Objective | PCD10XPL | <input type="checkbox"/> | <input type="checkbox"/> |
| | PCD20XPL | <input type="checkbox"/> | <input type="checkbox"/> |
| | PCD40XPL | <input type="checkbox"/> | <input type="checkbox"/> |
| Centering Telescope | CT-5 | <input type="checkbox"/> | <input type="checkbox"/> |

BH2-UCD Universal Condenser

The BH2-UCD is a powerful universal condenser that is compatible with diverse microscopic techniques. Simply by changing the optical elements, a speedy changeover is possible between the brightfield, darkfield, phase contrast, Nomarski differential interference contrast (DIC) and polarizing observation methods. Its flexibility for combining different observations establishes the BH2-UCD as optimum for advanced research applications that require a combination of various microscopy methods.

- Specially designed for use with the BH-2 Series of System Microscopes, the BH2-UCD allows for observations under transmitted light illumination.
- Simply by replacing the optical element, the BH2-UCD permits a smooth and quick changeover between various microscopic techniques, thus performing the combined microscopy that meets your particular application.



- The BH2-UCD may be combined with the BH2-RFCA reflected light fluorescence illuminator, the BH2-NA Nomarski DIC intermediate tube, the BH2-KPA simple polarizing intermediate tube and other attachments provided with the BH-2 Series microscopes.
- The BH2-UCD employs a top lens swing-out system, enabling use of 2x through 100x magnification objectives.
- When combined with a reflected light fluorescence attachment, reflected light fluorescence microscopy and phase contrast or Nomarski DIC observation can be performed simultaneously.

Standard Configurations

| Module | Item | BH2-UCD | | | | | |
|---|--|---------|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| BH2 Universal Condenser Main Body (w/431F550-W45) | BH2-UCD | ○ | ○ | ○ | ○ | ○ | ○ |
| Optical Accessories | Phase Contrast Ring Attachment for 10x Objective | | | | ○ | ○ | ○ |
| | Phase Contrast Ring Attachment for 20x Objective | | | | ○ | ○ | ○ |
| | Phase Contrast Ring Attachment for 40x Objective | | | | ○ | ○ | ○ |
| | Phase Contrast Ring Attachment for 100x Objective | | | | ○ | ○ | ○ |
| | Nomarski Prism for SPlan 10x Objective | ○ | ○ | | ○ | ○ | ○ |
| | Nomarski Prism for SPlan 20x Objective | ○ | ○ | | ○ | ○ | ○ |
| | Nomarski Prism for SPlan 40x Objective | ○ | ○ | | ○ | ○ | ○ |
| | Nomarski Prism for SPlan Apo 60x (oil) Objective | ○ | ○ | | ○ | ○ | ○ |
| | Nomarski Prism for SPlan 100x or DPlan Apo 100x UV Objective | ○ | ○ | | ○ | ○ | ○ |
| | Nomarski Prism for DPlan Apo 10x UV Objective | | | ○ | ○ | ○ | ○ |
| | Nomarski Prism for DPlan Apo 20x UV Objective | | | ○ | ○ | ○ | ○ |
| | Nomarski Prism for DPlan Apo 40x UV (dry) Objective | | | ○ | ○ | ○ | ○ |
| | Nomarski Prism for DPlan Apo 40x UV (oil) or DApo 40x UV (oil) Objective | | | ○ | ○ | ○ | ○ |
| | Darkfield Ring Attachment | | | | | | ○ |
| | Nomarski DIC Intermediate Tube (for Transmitted Light) | BH2-NA | ○ | ○ | | ○ | ○ |
| Analyzer (for Reflected Light Fluorescence Attachment) | BH2-ANF | | | ○ | | ○ | |
| Nomarski Slider (for Reflected Light Fluorescence Attachment) | BH2-NAF | | | ○ | | ○ | |
| Centering Telescope | CT-5 | | | | ○ | ○ | |
| Objectives | SPlan 10x, 20x, 40x SPlan 100x oil | ○ | | | | | |

- ★ All the elements listed above, except those marked with "○" are optional.
- ★ Combination "3" in the above table is for use with a reflected light attachment.

Optical Elements and Compatible Objectives

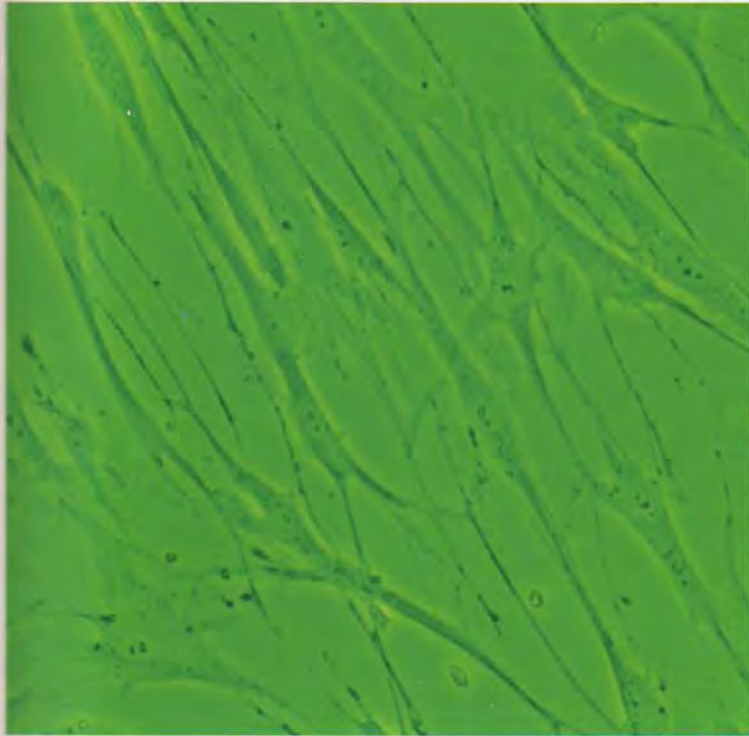
| Optical Element | Compatible Objectives |
|---|--|
| Phase Contrast Ring Attachment | URS10 PCSPlan 10x, PCDAch 10x, DPlan Apo 10xUN-PL |
| | URS20 PCSPlan 20x, PCDAch20x, LWDCDPlan20xPL, ULWDCDPlan20xPL |
| | URS40 PCSPlan40x, PCDAch40x, DPlan Apo20xUV-PL, LWDCDPlan40xPL, ULWDCDPlan40xPL |
| | URS100 PCSPlan100x (Oil), PCDAch 100x (Oil), DPlan Apo40x/100xUV-PL (Oil), DAPO40x/100xUV-PL (Oil), SPlan Apo60xPL (Oil) |
| Nomarski Prism | UNP10 SPlan10x |
| | UNP20 SPlan20x |
| | UNP40 SPlan40x |
| | UNP60oil SPlan Apo60x (Oil) |
| | UNP100 SPlan100x (Oil), DPlan Apo 100x (Oil) |
| | UNPD10 DPlan Apo 10xUV |
| UNPD20 DPlan Apo20xUV, DPlan Apo20xUV (Oil) | |
| UNPD40 DPlan Apo40xUV (Dry) | |
| UNPD40oil DPlan Apo40xUV (Oil), DAPO40x (Oil) | |
| Darkfield Ring Attachment | UDA SPlan10x/20x/40x, SPlan Apo10x/20x, NCSPPlan40x, EDACH10x/40x, DACH 10x/20x/40x, DPlan10x/20x/40x, DPlan50x (Oil), DPlan Apo10x/20xUV, LWDCDPlan20x/40x, ULWDCDPlan20x/40x |

Specifications

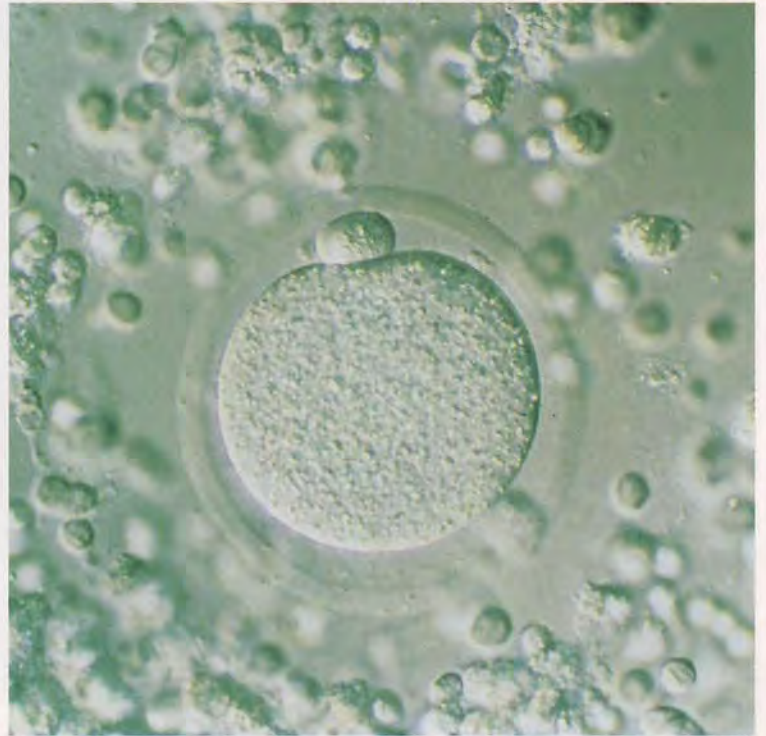
| Item | Description |
|----------------------------|---|
| Applicable microscope | BHS, BHT |
| Type | Achromatic/aplanatic condenser, top lens swing-out type |
| Numerical Aperture (N.A.) | 0.9 (top lens IN)/0.2 (top lens OUT) |
| Applicable slide thickness | 0.9—1.4mm |
| Working distance | 1.5mm (with 1.2mm slide) |
| Illuminating area | φ3mm (top lens IN)/φ14mm (top lens OUT) |
| Focal length | 13.1mm (top lens IN)/229mm (top lens OUT) |
| Turret | Upper turret |
| | Lower turret |
| Aperture iris diaphragm | Quintuple, optical elements may be attached |
| Mounting | Twin, aperture iris diaphragm with 360° rotatable polarizer |
| Dimensions | φ2.8—φ21mm |
| Mounting | Detachable circular dovetail, clamped with clamping screw |
| Dimensions | 105 (turret φ)×59 (height)mm |
| Weight | 550g (1.21 lb) |



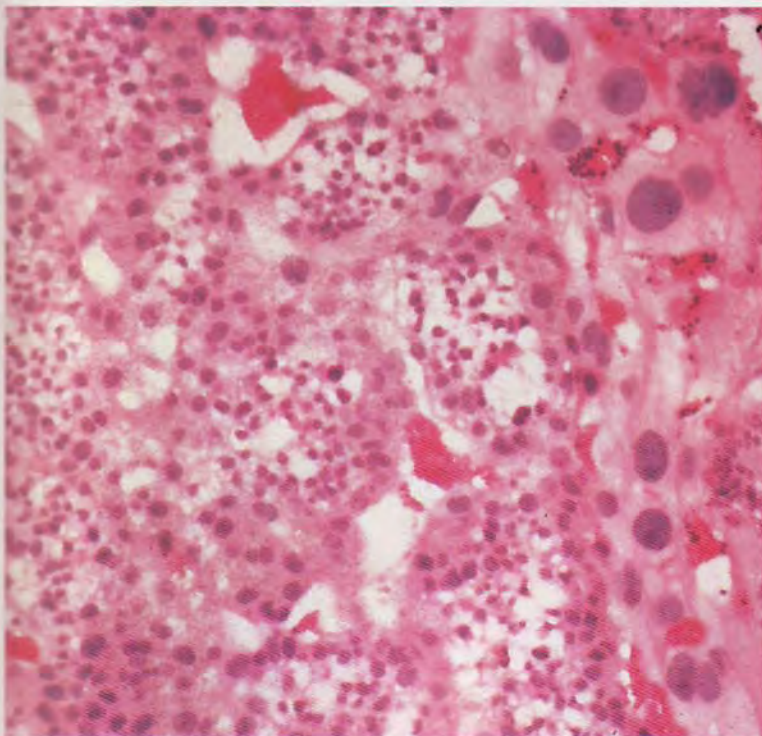
1. Fetal fibroblast. Phase-contrast.
2. A rat oocyte at metaphase of cell division II of meiosis. Nomarski DIC.
3. A rat placenta at 15th day of gestation. (3-a) Brightfield, (3-b) Darkfield.



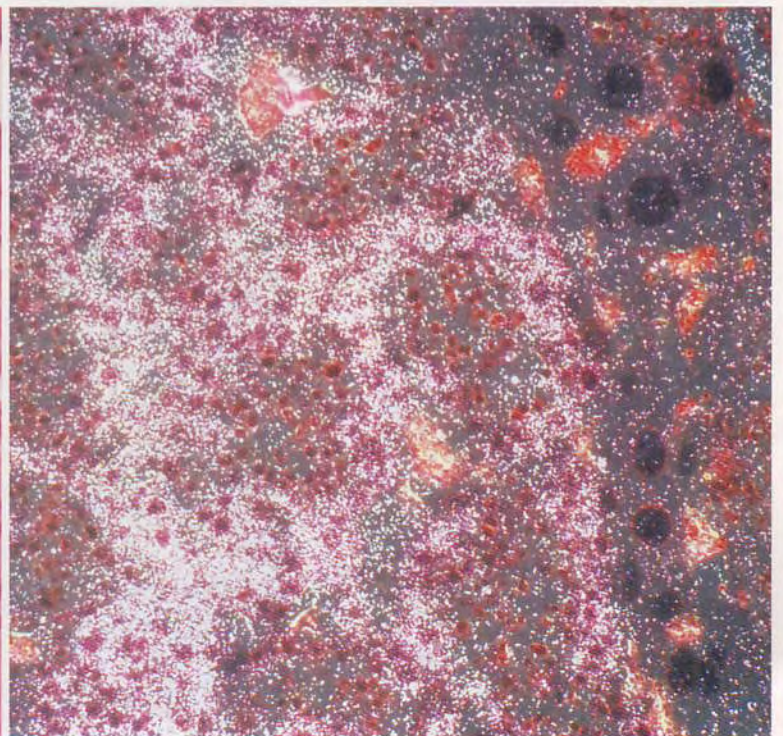
1



2



3-a



3-b

BH2-RFC Reflected Light Fluorescence Attachment

Reflected light fluorescence attachment expands scope of research through flexible combinations and simple switchover of multiple observation methods.

Illuminator

- Three levels of exciting light intensity are available: 100%, 25% and 0%
- An aperture diaphragm allows the precise regulation of exciting light intensity and fluorescence image contrast.
- Features a built-in field diaphragm with centering mechanism. This feature eliminates stray light which causes flares and reduces image clarity.

Cube Unit System

- Six cubic units are available for U, V, BV, B, G and IB excitations. Optimum cubic unit can be selected for each purpose of observation. Three of these units may be mounted simultaneously.
- A fluorescent cubic unit with built-in dichroic mirror, exciter and barrier filters accepts an additional barrier filter and a supplementary exciter filter. This allows the band to be adjusted for excitation. The exciter and barrier filters may also be replaced, giving the user greater flexibility.
- The IB excitation combination employs a newly developed dichroic mirror that produces exceptionally bright fluorescent images, and an interference barrier filter. This provides greater contrast when observing FITC-stained specimens than does the B excitation combination, meaning that it is possible to observe weakly fluorescing materials.
- The newly developed BH2-HMIGS unit enables IGS observation to be made when it is used in combination with D Plan Apo 40x/UV/100XUV objectives.

BH2-RFC-7

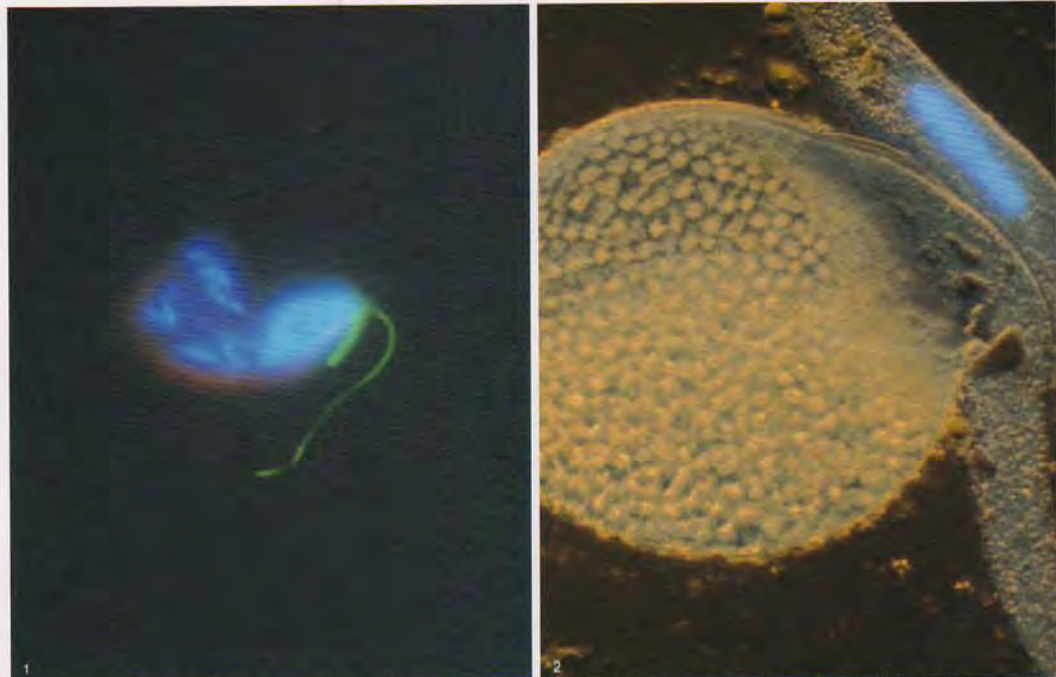
A reflected light fluorescence attachment with halogen light source, designed for B excitation.

D Plan Apo UV Series

- This Series objectives feature an apochromatic design to correct chromatic aberrations over a wide wavelength range. This design guarantees a sharp image and bright illumination in any excitation.

D Plan Apo UVPL Series

Olympus also offers a lineup of 4 types of fluorescent phase contrast objectives. When reflected light fluorescence and transmitted light phase contrast observation are performed simultaneously, an entire specimen image, including the non-fluorescent area, can be obtained.



1. Zoospores of physarum polycephalum; triple fluorescence-stained image (DAPI + Rhodamine-bonded phalloidin = FITC anti-tubulin antibody). DPlan Apo 100x, NFK5xLD
2. Nuclei in the pollen tube of a lillium longiflorum; Nomarski DIC/fluorescent image. DPlan Apo 40x, NFK5xLD
Photo courtesy of Dr. Tsuneyoshi Kuroiwa, University of Tokyo, Faculty of Science.

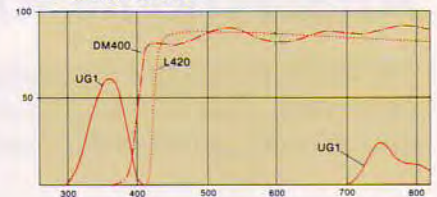


BH2-RFC-1

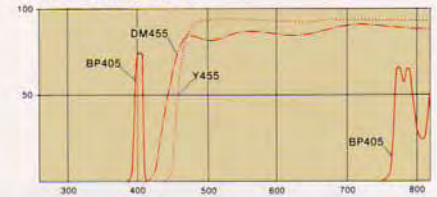
BH2-RFC Standard Outfits

| | | Item | BH2-RFC | | | | | | |
|--|------------------------------------|---------------|---------|----|----|----|----|----|----|
| | | | -1 | -2 | -3 | -4 | -5 | -6 | -7 |
| Fluorescence Illuminator, including UV Protective Shield, Immersion Oil 50cc and Dust Cover B071 | | BH2-RFCA | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Fluorescence Lamp Housing | | BH2-LSRF-2 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Power Supply | | BH2-RFL-T3 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Mercury Burner (2 pcs.) | | USH-102D | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Halogen Lamp Housing | | BH2-LSRH80/50 | | | | | | | ○ |
| Transformer | | TH3 | | | | | | | ○ |
| Halogen Bulb (2 pcs.) | | JC12V50WHAL-L | | | | | | | ○ |
| Power Cord | | UYCP | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Centering Screen | | BH2-SGRF | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Dichroic Mirrors Assembly | U Excitation | BH2-DMU | ○ | ○ | | | | | |
| | V Excitation | BH2-DMV | ○ | ○ | | | | | |
| | BV Excitation | BH2-DMBV | ○ | | | | | | |
| | B Excitation | BH2-DMB | | ○ | ○ | | ○ | ○ | ○ |
| | G Excitation | BH2-DMG | | ○ | ○ | | ○ | ○ | ○ |
| Brightfield Cube | IB Excitation | BH2-DMIB | ○ | | ○ | | | | |
| | BH2-BF | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Supplementary Exciting filter | B Excitation | 20EY455-W22 | | ○ | ○ | | ○ | ○ | ○ |
| | IB Excitation | 20EY475-W22 | | ○ | | ○ | | | |
| | G Excitation | 20EO515-W22 | | ○ | ○ | | ○ | | |
| | BV Excitation | 20EL420-W22 | | ○ | | | | | |
| Supplementary Barrier Filter | U Excitation | 20L435-W22 | | ○ | | | | | |
| | V Excitation | 20Y455-W22 | | ○ | ○ | | | | |
| | V, BV Excitation | 20Y495-W22 | | ○ | | | | | |
| | | 20O515-W22 | | ○ | ○ | | ○ | ○ | ○ |
| | | 20B460-W22 | | ○ | ○ | ○ | | ○ | ○ |
| | B, IB Excitation | 20G520-W22 | | | | ○ | | | |
| | | 20O530-W22 | | ○ | ○ | ○ | | ○ | ○ |
| | 20O570-W22 | | ○ | ○ | | ○ | ○ | ○ | |
| | 20O590-W22 | | ○ | ○ | ○ | ○ | ○ | ○ | |
| | 20R610-W22 | | | | | ○ | | | |
| Objective (for reflected light fluorescence) | DPLAPO10XUV | | ○ | ○ | ○ | ○ | | | |
| | DPLAPO20XUV/Oil | | ○ | ○ | ○ | ○ | | | |
| | DPLAPO40XUV/ Spring, Iris, Oil | | ○ | | | | | | |
| | DPLAPO100XUV/ Spring, Iris, Oil | | ○ | | | | | | |
| | DAPO40XUV/ Spring, Iris, Oil | | | ○ | ○ | ○ | | | |
| | DAPO100XUV/ Spring, Iris, Oil | | | ○ | ○ | | | | |

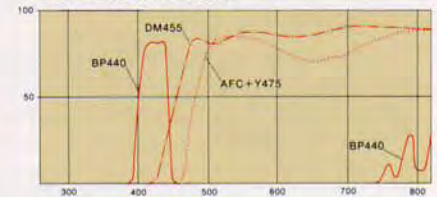
U Excitation



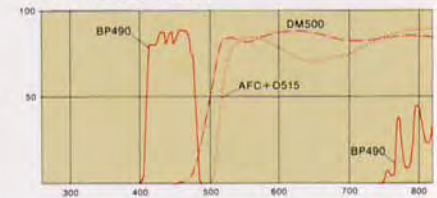
V Excitation



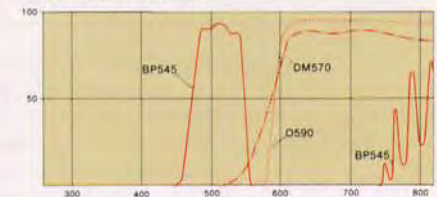
BV Excitation



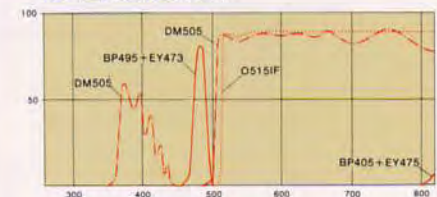
B Excitation



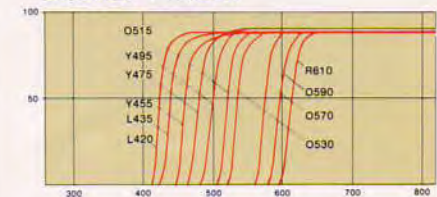
G Excitation



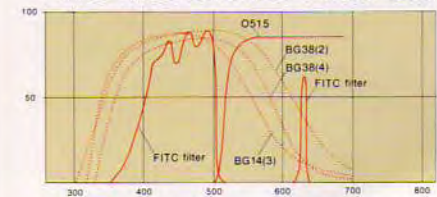
IB Excitation



Barrier Filters



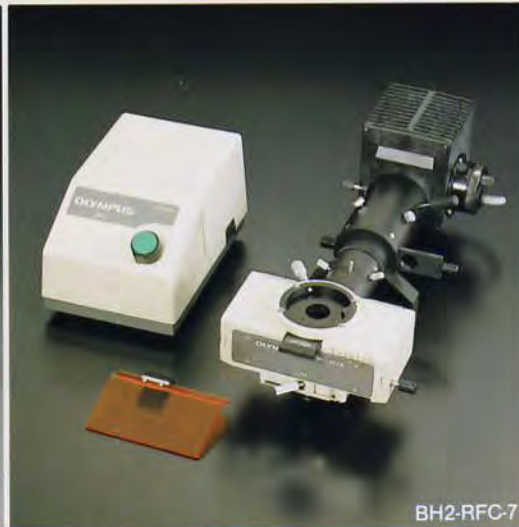
FITC Interference Filter Set



(Transmitted light)



3-Cubic Unit System



BH2-RFC-7



D Plan Apo UV Series



D Plan Apo UVPL Series

Attachments for Group Observation

Here is a group of very useful accessories which allow simultaneous viewing by several observers. This is a particularly convenient feature for discussions between researchers, and is indispensable for teaching purposes.

BH2-MDO Multi-viewing Attachment

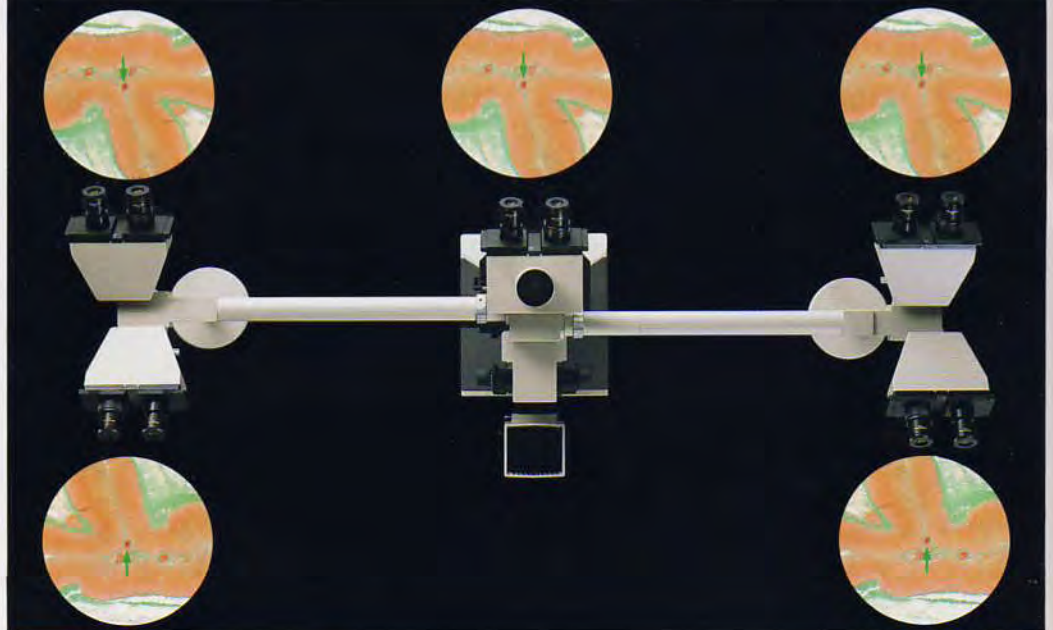
- Permits simultaneous observation of the same specimen image in the same orientation by up to five persons.
- The arrow pointer can be moved to indicate any area of the specimen. Pointer color (green or orange) can be changed, and brightness adjusted.

Standard Outfits

| Module | BH2-MDO | BH2-MDO | |
|--------------------------------------|------------|---------|------|
| | | 1 | 2 |
| Multi-viewing body | BH2-MDO-B | 1pc | 1pc |
| Optical relay unit | BH2-MDO-SV | 2pcs | 1pc |
| Binocular tube | BH2-BI30 | 4pcs | 2pcs |
| Transformer for pointer illumination | T-DO | 1pc | 1pc |
| Widefield eyepieces | WHK10X | 4pcs | 2pcs |
| | WHK10X-H | 4pcs | 2pcs |



BH2-MDO





BH2-DO

BH2-DO Dual-viewing Attachment

- The features are exactly the same as the BH2-MDO, except that it permits observation by two persons.
- There is ample distance between the observer positions, allowing relaxed viewing.
- The second observer may manipulate the pointer by means of an additional lever located on the opposite side from the main lever.

Standard Outfits

| Module | BH2-DO-1 |
|--------------------------------------|----------------------------------|
| Dual viewing body | BH2-DO-B <input type="radio"/> |
| Binocular tube | BH2-BI30 <input type="radio"/> |
| Transformer for pointer illumination | T-DO <input type="radio"/> |
| Widefield eyepieces | WHK10X <input type="radio"/> |
| | WHK10X-H <input type="radio"/> |
| Heat screen* | BH2-DO-HPS <input type="radio"/> |

*The heat screen is only required when this attachment is used on a BHS System microscope.

AH-SPS-W High Resolution Projection Screen

Eye strain is minimal even after long periods of viewing thanks to the high resolution presented by this screen.

Effective diameter: 155mm

Screen image magnification: Objective magnification \times NFK photo eyepiece magnification \times 3



AH-SPS-W

PM-10ADS/PM-10AD Photomicrographic and Cinemicrographic Systems

These fully automatic Photomicrographic systems are designed for exclusive use with microscopes. A built-in microcomputer assures easy and failure-free operation. They can also be operated manually, and both accept large format film.

PM-10ADS Automatic Photomicrographic System

- Features both spot (1%) and integrated (30%) metering.
- The built-in microcomputer automatically compensates for a film's reciprocity failure characteristics and controls exposure time correctly even during long exposures.
- An exposure adjustment feature allows the precise control of exposure time to match the specimen's characteristics.
- Incorporates an AE lock mechanism, useful when trimming with spot metering or to keep density uniform in continuous panoramic photography.
- Manual exposure control is also available.
- Accepts the following types of film: 35mm; 4" x 5" sheet; and 3 1/4" x 4 1/4" Polaroid.
- The multiple exposure mechanism enables a number of images to be recorded on the same frame of film.

PM-10AD Automatic Photomicrographic System

Has the same features as the PM-10ADS except that it provides only 60% metering with 35mm film.

Note: This system accepts practically all the accessories available for the PM-10ADS.

PM-CTR Color Temperature Module

The PM-CTR measures color temperatures from 2,500K to 10,000K. It provides greater accuracy in color temperature readings.

PM-VSB Brightframe viewfinder

This viewfinder is optionally available for the Olympus Photomicrographic Systems PM-10ADS and PM-10AD.

Focusing on the double crosslines and the film format frames when photographing dark specimens against a dark background is greatly facilitated by the fact that the frame reticle is illuminated and the color of the frame can be varied from black to red or yellow.



BH2-KP Simple Polarizing Attachment

This attachment enables polarized-light microscopy using ordinary LB objectives. A tint plate and other compensators can be used with it.

Standard Outfits

| Module | BH2-KP |
|--------------------------|--------------|
| Intermediate tube | BH2-KPA ○ |
| Circular Rotatable Stage | BH2-SRG ○ |
| Tint Plate | AH-TP530-2 ○ |

BH-POL Polarizing Filter Set

Consisting of a polarizer and an analyzer, this accessory is useful for detecting birefringent specimen details.

BH2-CA Magnification Changer

Magnification power can be increased without changing N.A. by using this unit. This feature will greatly enhance depth of focus. Magnification can be set at three levels: 1X, 1.25X and 1.5X. The phase-contrast annuli can be aligned with the built-in Bertrand lens.

BH2-DA Drawing Attachment

Very useful in the accurate sketching of a magnified specimen image seen through the microscope. Adjustable magnification.

BH2-FH Swing-out Filter Holder

Holds three filters at one time. Filters can be exchanged at the touch of a finger, resulting in more efficient observation and photomicrography.



BH2-KP



BH-POL



BH2-CA



BH2-DA

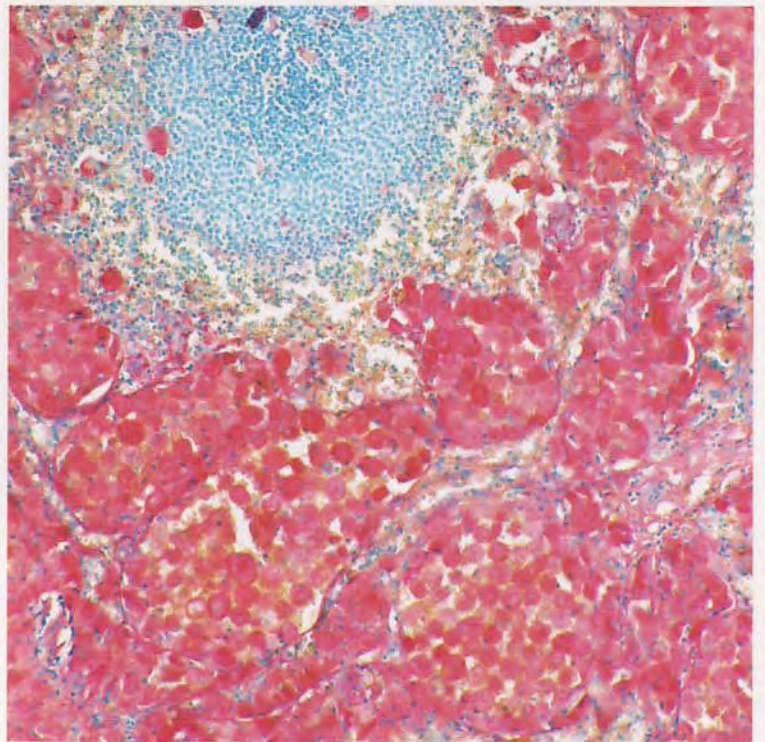


BH2-FH

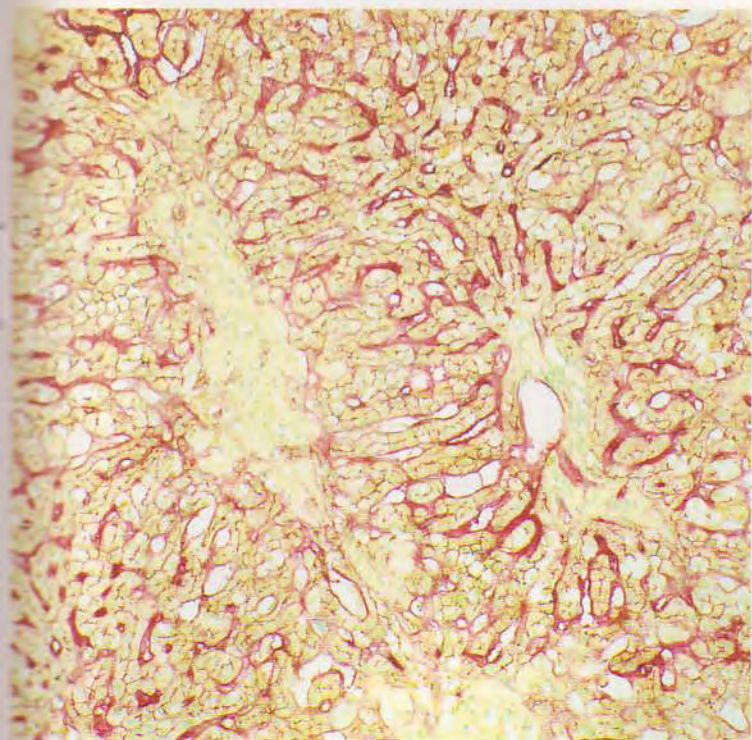
1. Candidiosis (duodenum, Grocott stain). SPlan2X, NFK2.5XLD
2. Alkaline phosphatase (liver). SPlan10X, NFK3.3XLD
3. Acid phosphatase (spleen of Gaucher's disease). SPlan10X, NFK3.3XLD
4. Nicotin amide adenine dinucleotide phosphate dehydrogenase (cell line derived from human malignant melanoma—SEK1). SPlan40X, NFK3.3XLD



1



3

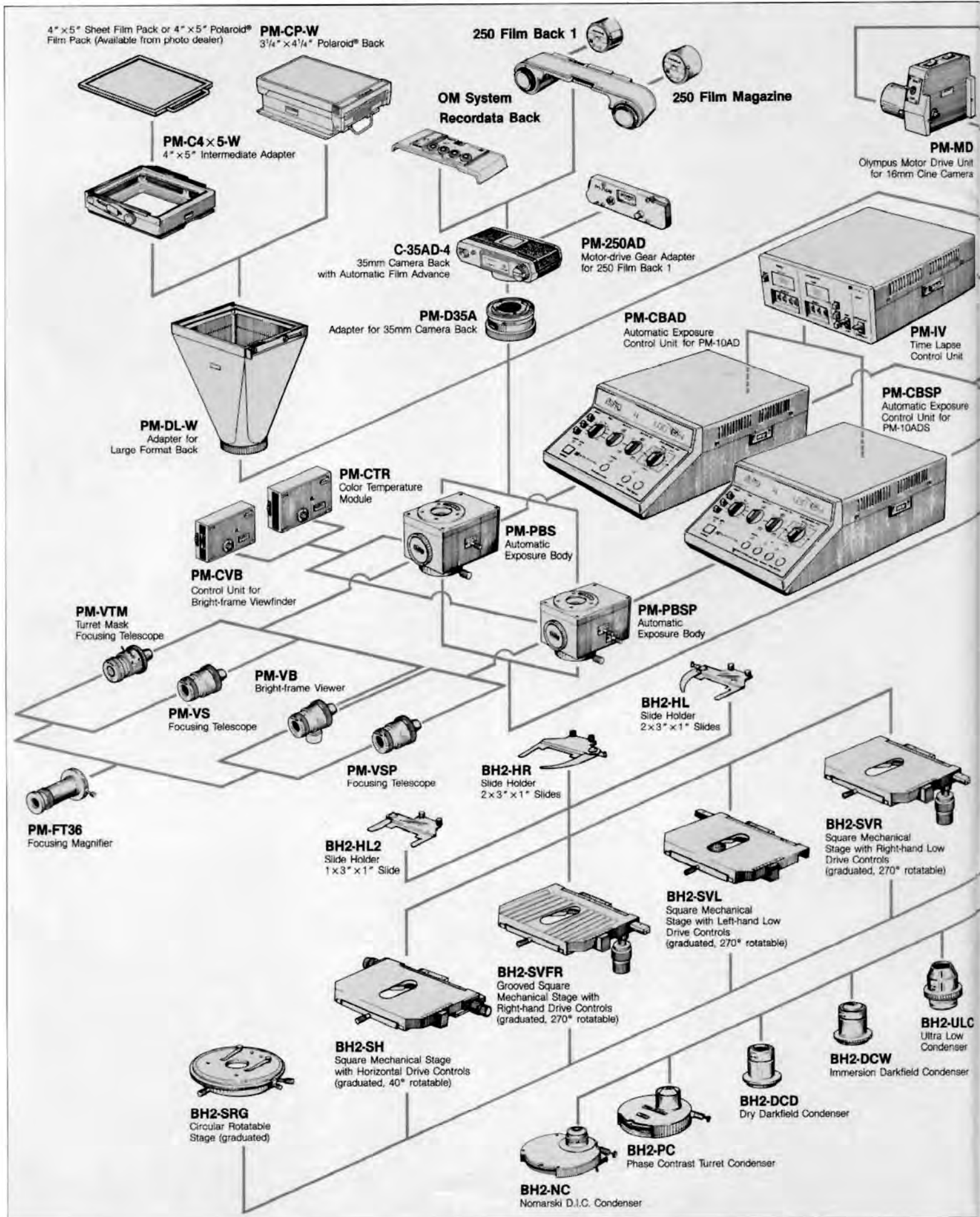


2



4

Diagram of the BHS, BHT and PM-10AD, PM-10ADS



System

Bolex 16mm Cine Camera (Available from Bolex and its representatives)



PM-D0.4X
Cine Adapter



PM-FS
Foot Switch

B-AN
Filter Analyzer



BH2-BI30
Binocular Tube (30°)



BH2-6RE
6X Revolving Nosepiece



BH2-5RE
5X Revolving Nosepiece



BH2-AAC
Achromatic/Aplanatic Condenser



BH2-SC
Swing-out Condenser



BH2-CD
Abbe Condenser



A-PO
Filter Polarizer

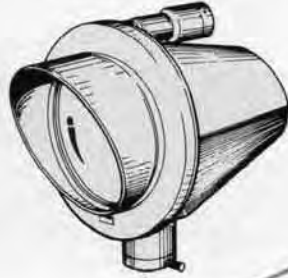


BH2-KPC
Simple Phase Contrast Attachment



BH2-FH
Filter Holder

AH-SPS-W
High-resolution
Projection Screen



AH-MPS-W
Projection Screen



BH-WP
Projection Prism



"NFK"
Photo Eyepiece



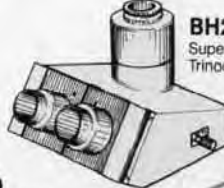
PM-ADF
Eyepiece Adapter
for "NFK" Eyepiece



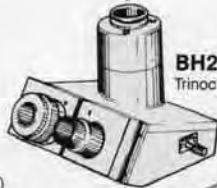
BH2-PT
Vertical Phototube



BH2-SWTR
Super Widefield
Trinocular Tube (30°)



BH2-TR30
Trinocular Tube (30°)



BH2-CA
Magnification Changer



BH2-DA
Drawing Attachment



BH2-NA
Nomarski D.I.C. Intermediate Tube
(for Transmitted Light)



BH2-KPA
Simple Polarizing
Intermediate Tube



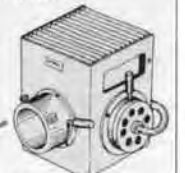
BH-FA
Barrier Filter
Attachment



BHS-LSH
100-watt Halogen
Lamp Housing

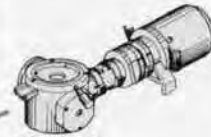


BH2-LSRF
Super High Pressure
Mercury Lamp Housing
(100W)



BH2-LSRH
Halogen Lamp Housing
(100W)

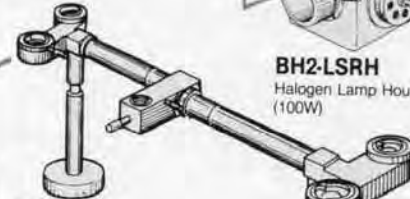
BH2-RFA
Vertical Fluorescence
Illuminator



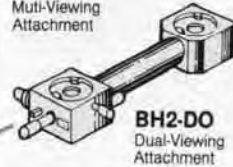
LS20H
20-watt Halogen
Lamp Housing



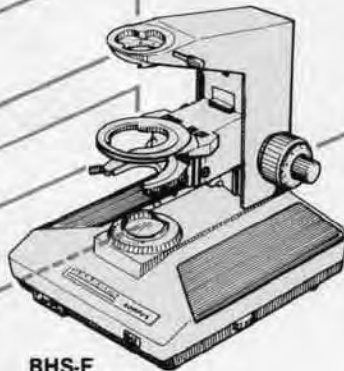
BH2-MDO
Multi-Viewing
Attachment



BH2-DO
Dual-Viewing
Attachment



BHS-F
Microscope Stand



BHT-F
Microscope Stand



"Polaroid" is a trademark registered by the Polaroid Corporation, Cambridge, Mass. U.S.A.

LB Objective Series for Biological Use

| Magnification | Numerical Aperture | Working Distance mm | Focal Length mm | Remarks | |
|---|-------------------------------------|---------------------|-----------------|---------|---|
| S Plan Apochromatic / D Plan Apochromatic Objectives | | | | | |
| S Plan Apo | 4X, dry * | 0.16 | 9.83 | 36.71 | S.W. |
| | 10X, dry | 0.40 | 0.55 | 16.92 | S.W., Spring-loaded. |
| | 20X, dry | 0.70 | 0.55 | 7.68 | S.W., Spring-loaded. |
| | 40X, dry | 0.95 | 0.13 | 4.18 | S.W., Correction collar ((0.11 – 0.23), Spring-loaded. |
| | 60X, oil * | 1.40 | 0.12 | 2.80 | S.W., Spring-loaded. |
| | 100X, oil | 1.40 | 0.15 | 1.62 | S.W., Iris diaphragm, Spring-loaded. |
| D Plan Apo | 60X, dry | 0.90 | 0.10 | 3.06 | Correction collar (0.11 – 0.23), Spring-loaded. |
| S Plan Fluorite Objectives | | | | | |
| S Plan FL | 1X, dry * | 0.04 | 2.2 | 137.90 | |
| | 2X, dry * | 0.08 | 5.5 | 73.42 | S.W. |
| S Plan Achromatic Objectives | | | | | |
| S Plan | 4X, dry * | 0.13 | 15.50 | 36.54 | S.W. |
| | 10X, dry | 0.30 | 7.50 | 18.98 | S.W., D.I.C. |
| | 20X, dry | 0.46 | 1.50 | 8.03 | S.W., D.I.C., Spring-loaded. |
| | 40X, dry | 0.70 | 0.50 | 4.13 | S.W., D.I.C., Spring-loaded. |
| | 100X, oil | 1.25 | 0.17 | 1.69 | S.W., D.I.C., Spring-loaded. |
| | 100X, dry | 0.95 | 0.20 | 1.68 | S.W., D.I.C., Correction collar (0.14 – 0.20), Spring-loaded. |
| | D Plan Achromatic Objectives | | | | |
| D Plan | 4X, dry * | 0.10 | 7.03 | 34.23 | |
| | 10X, dry | 0.25 | 7.40 | 17.69 | |
| | 20X, dry | 0.40 | 0.83 | 8.99 | Spring-loaded. |
| | 40X, dry | 0.65 | 0.47 | 4.61 | Spring-loaded. |
| | 50X, oil * | 0.90 | 0.23 | 3.80 | Spring-loaded, Iris diaphragm. |
| | 100X, oil | 1.25 | 0.17 | 1.75 | Spring-loaded. |
| D Achromatic Objectives | | | | | |
| D Ach | 4X, dry * | 0.10 | 18.23 | 30.03 | |
| | 10X, dry | 0.25 | 7.18 | 16.90 | |
| | 20X, dry | 0.40 | 1.63 | 8.63 | Spring-loaded. |
| | 40X, dry | 0.65 | 0.63 | 4.58 | Spring-loaded. |
| | 60X, dry | 0.80 | 0.23 | 3.14 | Spring-loaded. |
| | 100X, oil * | 1.30 | 0.20 | 1.66 | Spring-loaded. |
| Phase Contrast Objectives | | | | | |
| PC S Plan | 4X, dry PL NH * | 0.13 | 15.5 | 36.54 | S.W. |
| | 10X, dry PL NH | 0.30 | 7.50 | 18.98 | S.W. |
| | 20X, dry PL NH | 0.46 | 1.50 | 8.03 | S.W., Spring-loaded. |
| | 40X, dry PL NH | 0.70 | 0.50 | 4.13 | S.W., Spring-loaded. |
| | 100X, oil PL NH | 1.25 | 0.17 | 1.69 | S.W., Spring-loaded. |
| PC D Ach | 10X, dry PL PLL NH NM | 0.25 | 7.18 | 16.90 | |
| | 20X, dry PL PLL NH NM | 0.40 | 1.63 | 8.63 | Spring-loaded. |
| | 40X, dry PL PLL NH NM | 0.65 | 0.62 | 4.58 | Spring-loaded. |
| | 100X, oil PL PLL NH NM * | 1.30 | 0.20 | 1.66 | Spring-loaded. |
| Objectives (for reflected light fluorescence) | | | | | |
| D Plan Apo | 10XUV, dry | 0.40 | 1.10 | 15.69 | D.I.C., Spring-loaded. |
| | 20XUV, dry | 0.70 | 0.75 | 7.8 | D.I.C., Spring-loaded. |
| | 20XUV, oil * | 0.80 | 0.18 | 7.78 | D.I.C., Spring-loaded. |
| | 40XUV, dry | 0.85 | 0.25 | 4.04 | D.I.C., Correction collar (0.11 – 0.23), Spring-loaded. |
| | 40XUV, oil | 1.00 | 0.16 | 4.34 | D.I.C., Iris diaphragm, Spring-loaded. |
| | 100XUV, oil | 1.30 | 0.16 | 1.69 | D.I.C., Iris diaphragm, Spring-loaded. |
| D Apo | 40XUV, oil | 1.30 | 0.12 | 4.34 | D.I.C., Iris diaphragm, Spring-loaded. |
| | 100XUV, oil | 1.30 | 0.12 | 1.88 | Iris diaphragm, Spring-loaded. |
| D Plan Apo | 10XUVPL, dry | 0.40 | 1.10 | 15.69 | Spring-loaded. |
| | 20XUVPL, dry | 0.70 | 0.75 | 7.8 | Spring-loaded. |
| | 40XUVPL, oil | 1.00 | 0.16 | 4.34 | Iris diaphragm, Spring-loaded. |
| | 100XUVPL, oil | 1.30 | 0.16 | 1.69 | Iris diaphragm, Spring-loaded. |
| D Apo | 40XUVPL, oil | 1.30 | 0.12 | 4.34 | Iris diaphragm, Spring-loaded. |
| | 100XUVPL, oil | 1.30 | 0.12 | 1.88 | Iris diaphragm, Spring-loaded. |

| Magnification | Numerical Aperture | Working Distance mm | Focal Length mm | Remarks | |
|----------------------------|--------------------|---------------------|-----------------|---------|--------------------------------------|
| No Cover Objectives | | | | | |
| NC S Plan | 40X, dry | 0.70 | 0.45 | 4.19 | S.W., Spring-loaded. |
| | 100X, dry | 0.95 | 0.30 | 1.70 | S.W., Spring-loaded. |
| NC S Plan Apo | 60X, dry | 0.90 | 0.42 | 2.78 | S.W., Spring-loaded. |
| NC S Plan Apo | 100X, oil | 1.40 | 0.15 | 1.62 | S.W., Iris diaphragm, Spring-loaded. |

Strain-free Objectives (for transmitted polarized light)

| | | | | | |
|-----------|------------|------|-------|-------|----------------|
| PO D Plan | 4X, dry* | 0.10 | 7.03 | 34.23 | |
| | 10X, dry | 0.25 | 7.40 | 17.69 | |
| | 20X, dry | 0.40 | 0.83 | 8.99 | Spring-loaded. |
| | 40X, dry | 0.65 | 0.47 | 4.61 | Spring-loaded. |
| | 100X, oil | 1.25 | 0.17 | 1.75 | Spring-loaded. |
| PO D Ach | 4X, dry* | 0.10 | 18.23 | 30.03 | |
| | 10X, dry | 0.25 | 7.18 | 16.90 | |
| | 20X, dry | 0.40 | 1.63 | 8.63 | Spring-loaded. |
| | 40X, dry | 0.65 | 0.62 | 4.58 | Spring-loaded. |
| | 100X, oil* | 1.30 | 0.20 | 1.66 | Spring-loaded. |

Denote: S.W. = Super Widefield, PL = Positive Low Contrast, PLL = Positive Low-Low Contrast, NH = Negative High Contrast, NM = Negative Medium Contrast, D.I.C. = Nomarski Differential Interference Contrast. * = Can be used for specimens with/without cover.

LB Eyepiece Series

| Field Number min ϕ | Eyepoint mm | Focal Length mm | Remarks |
|-------------------------|-------------|-----------------|---------|
|-------------------------|-------------|-----------------|---------|

Widefield Eyepieces

| | | | | |
|----------------|----|------|-------|----------------------------------|
| GS-WHK 10X* | 20 | 18.7 | 25.0 | With built-in grain scale. |
| CWHK 10X | 18 | 18.8 | 25.0 | |
| WHK 8X | 20 | 18.7 | 31.25 | |
| WHK 10X | 20 | 18.7 | 25.0 | |
| WHK 10X H* | 20 | 18.7 | 25.0 | |
| WK 10X | 20 | 15.8 | 25.0 | |
| WK 10X H* | 20 | 15.8 | 25.0 | |
| WHK 12.5X | 16 | 15.5 | 20.0 | |
| WHK 12.5X H* | 16 | 15.5 | 20.0 | |
| WHK 15X | 14 | 16.3 | 16.7 | |
| Micro-WHK 10X* | 20 | 18.7 | 25.0 | Built-in 10/100 micrometer disc. |
| Cross-WHK 10X* | 20 | 18.7 | 25.0 | Built-in cross micrometer disc. |
| Micro-WK 10X* | 20 | 15.8 | 25.0 | Built-in 10/100 micrometer disc. |
| Cross-WK 10X* | 20 | 15.8 | 25.0 | Built-in cross micrometer disc. |

Compensation Eyepieces

| | | | | |
|--------|----|------|------|--|
| NK 5X | 21 | 16.4 | 50.0 | |
| NK 20X | 10 | 10.4 | 12.5 | |

Super Widefield Eyepiece

| | | | | |
|-----------|------|------|-------|--|
| SWHK 8X* | 26.5 | 17.0 | 31.25 | |
| SWHK 10X* | 26.5 | 15.6 | 25.0 | |

Finder Eyepieces

| | | | | | |
|-----------------|------|------|------|--|-----------------------------|
| 35-WHK 10X* | 20 | 18.7 | 25.0 | With built-in mask for 35mm camera. | |
| P-WHK 10X* | 20 | 18.7 | 25.0 | With built-in mask for 3 1/4" x 4 1/4" Polaroid. | to be matched with WHK 10X |
| 4 x 5-WHK 10X* | 20 | 18.7 | 25.0 | With built-in mask for 4" x 5" Polaroid | |
| 35-SWHK 10X* | 26.5 | 15.6 | 25.0 | With built-in mask for 35mm camera. | |
| P-SWHK 10X* | 26.5 | 15.6 | 25.0 | With built-in mask for 3 1/4" x 4 1/4" Polaroid. | to be matched with SWHK 10X |
| 4 x 5-SWHK 10X* | 26.5 | 15.6 | 25.0 | With built-in mask for 4" x 5" Polaroid. | |

Photo Eyepieces

| | | | | |
|-------------|---|---|--|--|
| NFK 1.67XLD | — | — | | |
| NFK 2.5XLD | — | — | | |
| NFK 3.3XLD | — | — | | |
| NFK 5XLD | — | — | | |
| NFK 6.7XLD | — | — | | |

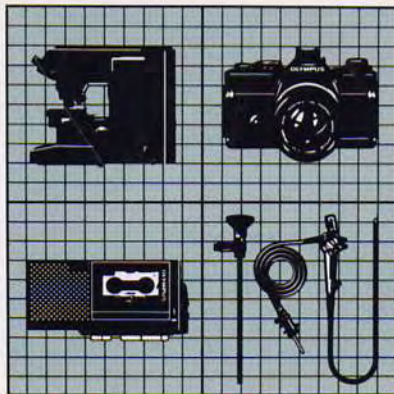
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