

B-190 Series - Optical performance

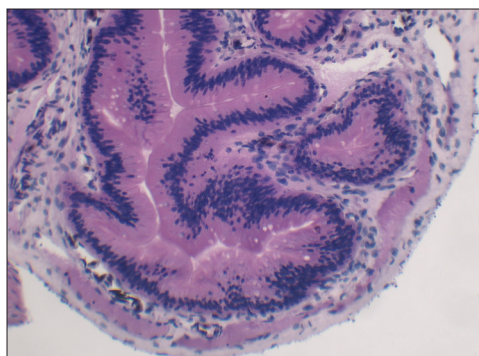
Eyepiece		10x (M-002.1)			16x (M-003)	
Field number (mm)		18			12	
Objective	N.A.	W.D (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
4x	0.1	15.2	40x	4.5	64x	3
10x	0.25	5.5	100x	1.8	160x	1.2
20x	0.4	3.5	200x	0.9	320x	0.6
40x	0.65	0.45	400x	0.45	640x	0.3
60x	0.85	0.45	600x	0.3	960x	0.2
100x	1.25 (oil/water)	0.13	1000x	0.18	1600x	0.12



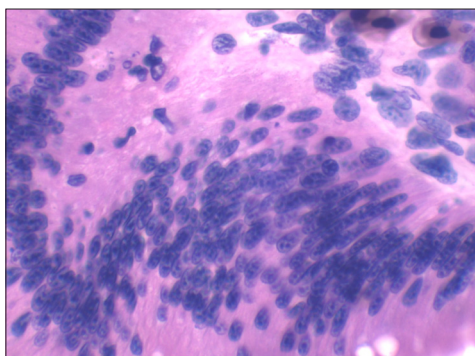
N-PLAN

OPTIKA N-PLAN objectives ensure bright, clear images with excellent flatness and compensation for chromatic aberration.

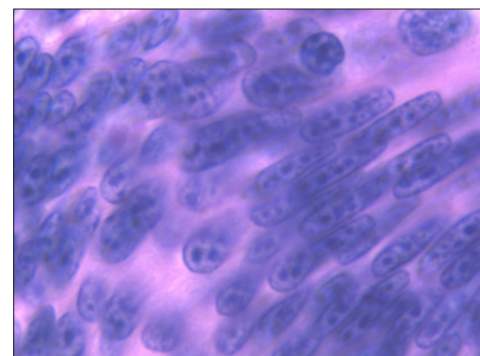
B-190 Series - Zoom comparison



Frog small intestine - B-193PL - 10x objective



Frog small intestine - B-193PL - 40x objective



Frog small intestine - B-193PL - 100x Oil objective

B-190 Series - Comparison chart

Model	Head	Eyepiece(s)	Nosepiece	Objectives	Stage	Focusing	Condenser	Illuminator
B-191sPL	Monocular, 360° rotating, 30° inclined	Wide Field 10x/18mm	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 60x	Double layer, 125x115 mm with 70x30mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with adjustable height and iris diaphragm	3 W X-LED ² , brightness control
B-191PL	Monocular, 360° rotating, 30° inclined	Wide Field 10x/18mm	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 100x	Double layer, 125x115 mm with 70x30mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with adjustable height and iris diaphragm	3 W X-LED ² , brightness control
B-192sPL	Binocular, 360° rotating, 30° inclined	Wide Field 10x/18mm	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 60x	Double layer, 125x115 mm with 70x30mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with adjustable height and iris diaphragm	3 W X-LED ² , brightness control
B-192PL	Binocular, 360° rotating, 30° inclined	Wide Field 10x/18mm	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 100x	Double layer, 125x115 mm with 70x30mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with adjustable height and iris diaphragm	3 W X-LED ² , brightness control
B-193PL	Trinocular, 360° rotating, 30° inclined	Wide Field 10x/18mm	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 100x	Double layer, 125x115 mm with 70x30mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with adjustable height and iris diaphragm	3 W X-LED ² , brightness control
B-190TBPL	Binocular, digital 360° rotating, 30° inclined	Wide Field 10x/18mm	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 100x	Double layer, 125x115 mm with 70x30mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with adjustable height and iris diaphragm	3 W X-LED ² , brightness control