

# **DZ** series

# **HIGHLIGHTS**

- · Binocular models with optional photo ports
- 9 standard configurations or customized configurations
- Ergonomic tilting head from 0 to 35° tilting or fixed 20° inclined head
- · EWF10x/22mm eyepieces
- 3 Magnification units from 4 to 320x
- Fields of view from 55 to 1.4 mm
- Ergonomic rack & pinion, universal stand or articulated arm stands
- · Transmitted and incident 3 W LED illumination
- 100 W epi-fluorescence
- Multihead versions
- · 10 years warranty

# TECHNICAL SPECIFICATIONS

## **EYEPIECES**

Pair of EWF 10x/22 mm eyepieces

#### HEAD

- Ergonomic binocular 0-35° tilting head
- Binocular 20° tilted head
- Diopter ± 5 adjustment on both eyepieces
- Interpupillary distance from 55 to 75 mm
- Optional photo ports for one or two cameras

### **CENTRAL ZOOM UNIT**

Three central zoom units are available:

- 1:6.3 for total magnifications from 8 to 50x
- 1:8 for total magnifications from 8 to 64x
- 1:10 for total magnifications from 8 to 80x

# **COMMON MAIN OBJECTIVE**

- Standard configurations are supplied with a 1x plan apochromatic
   Common Main Objective, WD 78 mm
- Other plan apochromatic Common Main Objectives 0.5x (WD 126 mm) and 2x (WD 33 mm) are also available

All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

### STAND

- Large ergonomic stand with ø 100 mm object plate and two object clamps
- · Coaxial coarse and fine adjustment



DZ.1100 / DZ.1600 / DZ.1800 DZ.1105 / DZ.1605 / DZ.1805 305 (h) x 330 (w) x 285 mm (d) | 6.0 kg 305 (h) x 330 (w) x 285 mm (d) | 5.2 kg

For weight of other products see table 'Models

- A universal stand and articulated arm stand without illumination are also available
- The multihead systems come with a 420 x 350 mm stage without illumination - and with a 254 x 254 mm glass plate

### ILLUMINATION

- Supplied with transmitted and incident 3 W LED illuminations with a built-in 100-240 V power supply
- Both illuminators can be used simultaneously and the light intensities can be adjusted separately

## PACKAGE CONTENT

- Supplied with power cord, dust cover, a spare fuse and user manual
- All packed in a polystyrene box





## STANDARD CONFIGURATIONS

- $\bullet \ \ \text{All 9 standard configurations are equipped with EWF10x/22mm eyepieces, 1x plan apochromatic Common Main Objective}$
- All 9 standard configurations are equipped with DZ.5040 rack & pinion stand with incident and transmitted LED illumination

# MODELS (STANDARD)

	Binocular 20° head	Binocular Ergo 0 to 35° tilting	Dual binocular 20° heads	Magnifications from 8 to 50x	Magnifications from 8 to 64x	Magnifications from 8 to 80x
DZ.1100		•				•
DZ.1104			•			•
DZ.1105	•					•
DZ.1800		•			•	
DZ.1804			•		•	
DZ.1805	•				•	
DZ.1600		•		•		
DZ.1604			•	•		
DZ.1605	•			•		

All equipped with EWF10x/22mm eyepieces



● Customized specification fluorescence model 

■ DZ.0800/DZ.2020/DZ.3010(2x)/DZ.4005/DZ.5040

DZ.1104/DZ.1804/DZ.1604

# MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

				0.5x objective	WD 126 mm	1.0x objective WD 78 mm standard outfit		2.0x objective WD 33 mm	
М	DDE	L	Zoom indication	Total magnification	Field of view	Total magnification	Field of view	Total magnification	Field of view
.1100 / DZ.1104/ DZ.1105			0.8x	4x	55	8x	27.5	16x	13.7
	20		1.0x	5x	44	10x	22	20x	11
	180	604/1605	1.5x	7.5x	29.3	15x	14.6	30x	7.3
	)Z.1804/DZ		2.0x	10x	22	20x	11	40x	5.5
		91/009	3.0x	15x	14.6	30x	7.3	60x	3.6
		160	4.0x	20x	11	40x	5.5	80x	2.7
		DZ.	5.0x	25x	8.8	50x	4.4	100x	2.2
			6.0x	30x	7.3	60x	3.6	120x	1.8
			6.4x	32x	6.8	64x	3.4	128x	1.7
			7.0x	35x	6.3	70x	3.1	140x	1.5
DZ.1			8.0x	40x	5.5	80x	2.75	160x	1.4

 $WD = working\ distance$ 



#### **BUILD YOUR OWN MICROSCOPE**

A customized DZ series stereo microscope can be configured to customer's specifications by choosing one of the three central zoom units DZ.0630, DZ.0800 or DZ.1000 and adding the necessary components for the application. Pair of eyepieces, an ergonomically 5 to 35° tilting head or fixed

20° inclined head, a 0.5x, 1x or 2x Common Main Objective (CMO), a large ergonomic LED stand, a boom or an articulated arm stand. Other accessories like a photo/camera unit or dual iris diaphragm can complete the configuration. Multihead versions are available for simultaneous viewing

# ACCESSORIES & SPARE PARTS

## **CENTRAL ZOOM UNITS**

DZ.0630 Central Zoom Unit 1:6.3 unit with magnifications from 8 to 50 times
 DZ.0800 Central Zoom Unit 1:8 unit with magnifications from 8 to 64 times
 DZ.1000 Central Zoom Unit 1:10 unit with magnifications from 8 to 80 times

### **HEADS**

DZ.2020 Ergonomic binocular 0-35° tilting head without eyepieces
 DZ.2025 Binocular 20° tilted head without eyepieces
 Interpupillary distance from 55 to 75 mm.

### **EYEPIECES**

DZ.3010 EWF 10x/22 eyepiece, 1 piece
DZ.3012 EWF 10x/22 eyepiece with cross hairs, 1 piece
DZ.3015 WF 15x/16 eyepiece, 1 piece
DZ.3020 WF 20x/12 eyepiece, 1 piece

### DIAPHRAGM

**DZ.9010** Double iris diaphragms for increased depth of field

DZ.5020 Universal stand without illumination.

## **OBJECTIVES**

DZ.4003 Plan Common Main Objective 0.3x. WD 276 mm
 DZ.4005 Plan apochromatic Common Main Objective 0.5x. WD 126 mm
 DZ.4010 Plan apochromatic Common Main Objective 1.0x. WD 78 mm
 DZ.4020 Plan apochromatic Common Main Objective 2.0x. WD 33 mm
 All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

### STANDS

DZ.5040 Ergonomic stand with transmitted and incident LED illumination.
Coaxial coarse and fine adjustments, 100 graduations, 0.015 mm per graduations

65.980 Articulated arm stand for mounting on table without head holder (65.981)

65.981 Head holder 76 mm for DZ series and black articulated arm stand (65.980)

NZ.9025 Articulated arm stand with table clamp (without DZ head holder 65.981)

NZ.9027 Articulated arm stand with heavy stand (without DZ head holder 65.981)

NZ.9042 Stand with rotating mirror and transmitted LED illumination
NZ.9030 Boom (double arm) stand with heavy stand (without head holder
NZ.9090)

NZ.9032 Boom (double arm) stand with table clamp (without head holder NZ.9090)

**NZ.9090** Head holder (for NZ.9020, NZ. 9030 and NZ.9032)

## **FLUORESCENCE ATTACHMENT**

DZ.9050 Attachment for fluorescence with 100 W mercury vapor illumination with GFP-B and GFP-LP filter sets and one 23.2 mm photo port.
Supplied with power supply

**DZ.9060** Filter cube with GFP-B for Blue excitation, EM band pass filter (EX 460-500, DM 505, EM 510-560)

**DZ.9061** Filter cube with GFP-L for Blue excitation,
EM long pass filter (EX 460-500, DM 505, EM 510)

Other fluorescence filters available on request

#### **MISCELLANEOUS**

**DZ.9020** Large 185 x 145 mm stage with mechanical X-Y 50 x 50 mm stage, to be moved by hand

**DZ.9040** Darkfield attachment for DZ.5040

**DZ.9045** Polarizer, 360° rotatable, to be mounted on Common Main Objectives of DZ series

**DZ.9047** Polarizer, 360° rotatable, to be placed on the stage **DZ.9005** Photo port attachment with one 23.2 mm tube

**DZ.9007** Photo port attachment with two 23.2 mm tubes

**DZ.9013** C-mount 1x objective for insertion into photo port attachments

**AE.1900** Glass object plate, ø 100mm

AE.1903 Acrylic white/black object plate ø 100 mm

**50.875** Adjustable GEM clamp

AE.5130 Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter

AE.5025 T2 adapter for Nikon D digital SLR cameras

AE.5040 T2 adapter for Canon EOS digital SLR cameras

Other T2 adapters on request

AE.1385 100 W HBO mercury vapor bulb for fluorescence

**SL.5520** LED replacement for incident LED illumination of DZ.5040 stand

AE.1112 Micrometer slide, 50 mm/50 divisions

PB.5245 Lens cleaning paper, 100 sheets per pack

**PB.5274** Isopropyl alcohol 99% (200 ml)

**PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

WD = working distance

