

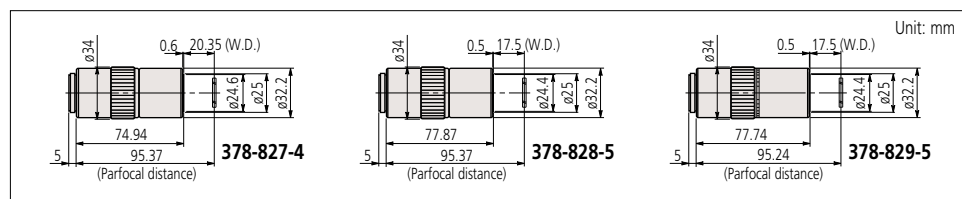
**Note:**

These near-infrared ( $\lambda = 1800$  nm) corrected objectives are designed for observing a workpiece through LCD glass (thickness = 1.1 mm (**378-827-5**, **378-828-5**) or 0.7 mm (**378-829-5**, **378-754-5**) and for laser repair.

## Near-Infrared and LCD Glass Thickness ( $t = 1.1$ mm or 0.7 mm) Corrected LCD Plan Apo NIR for Bright Field Observation

| Code No.         | Magnification | Numerical aperture | Working distance (mm) | Focal distance (mm) | Resolving power ( $\mu\text{m}$ ) | Focal depth ( $\mu\text{m}$ ) | View field 1*1 (mm) | View field 2*2 (mm) | Mass (g) | Price           |
|------------------|---------------|--------------------|-----------------------|---------------------|-----------------------------------|-------------------------------|---------------------|---------------------|----------|-----------------|
| <b>378-827-5</b> | 20X           | 0.40               | 19.98                 | 10                  | 0.7                               | 1.7                           | $\phi 1.2$          | 0.24 x 0.32         | 305      | <b>£1830.00</b> |
| <b>378-828-5</b> | 50X           | 0.42               | 17.13                 | 3.9                 | 0.7                               | 1.6                           | $\phi 0.48$         | 0.10 x 0.13         | 320      | <b>£2280.00</b> |
| <b>378-829-5</b> | 50X           | 0.42               | 17.26                 | 3.9                 | 0.7                               | 1.6                           | $\phi 0.48$         | 0.10 x 0.13         | 320      | <b>£3600.00</b> |
| <b>378-752-5</b> | 100X          | 0.50               | 12.13                 | 2                   | 0.6                               | 1.1                           | $\phi 0.24$         | 0.05 x 0.06         | 335      | <b>£3950.00</b> |
| <b>378-754-5</b> | 100X          | 0.50               | 11.76                 | 2                   | 0.6                               | 1.1                           | $\phi 0.24$         | 0.05 x 0.06         | 335      | <b>£3950.00</b> |

\*1 Field of view when using  $\phi 24$  mm eyepiece, \*2 Field of view when using 1/2" CCD camera.



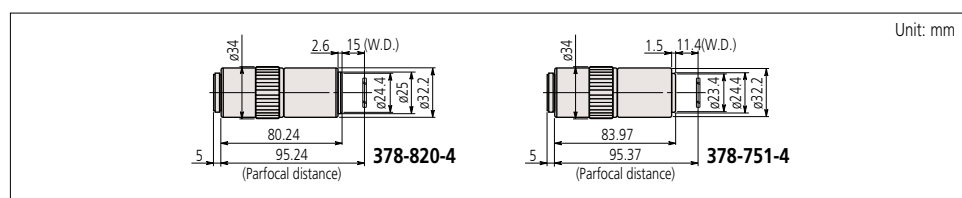
## Near-Ultraviolet and LCD Glass Thickness ( $t = 0.7$ mm) Corrected LCD Plan Apo NUV for Bright Field Observation

**Note:**

These near-infrared ( $\lambda = 355$  nm) corrected objectives are designed for observing a workpiece through LCD glass (thickness = 1.1 mm (**378-753-4**, **378-751-4**) or 0.7 mm (**378-820-4**) and for laser repair.

| Code No.         | Magnification | Numerical aperture | Working distance (mm)*3 | Focal distance (mm) | Resolving power ( $\mu\text{m}$ ) | Focal depth ( $\mu\text{m}$ ) | View field 1*1 (mm) | View field 2*2 (mm) | Mass (g) | Price           |
|------------------|---------------|--------------------|-------------------------|---------------------|-----------------------------------|-------------------------------|---------------------|---------------------|----------|-----------------|
| <b>378-820-4</b> | 50X           | 0.42               | 14.76                   | 4                   | 0.7                               | 1.6                           | $\phi 0.48$         | 0.10 x 0.13         | 310      | <b>£3620.00</b> |
| <b>378-753-4</b> | 50X           | 0.42               | 14.53                   | 4                   | 0.7                               | 1.6                           | $\phi 0.48$         | 0.10 x 0.13         | 310      | <b>£5970.00</b> |
| <b>378-751-4</b> | 100X          | 0.50               | 11.03                   | 2                   | 0.6                               | 1.1                           | $\phi 0.24$         | 0.05 x 0.06         | 380      | <b>£5970.00</b> |

\*1 Field of view when using  $\phi 24$  mm eyepiece, \*2 Field of view when using 1/2" CCD camera, \*3 In air.



## Ultraviolet Corrected M Plan UV for Bright Field Observation

**Note:**

These ultraviolet corrected objectives are designed so that a workpiece's image can be focussed within the focal depth even when the wavelength used is changed anywhere from the visible range ( $\lambda = 550$  nm) to the ultraviolet range ( $\lambda = 266$  nm). Therefore the M Plan UV Series are suitable for laser repair using a high frequency laser beam.

| Code No.         | Magnification | Numerical aperture | Working distance (mm) | Focal distance (mm) | Resolving power ( $\mu\text{m}$ ) | Focal depth ( $\mu\text{m}$ ) | View field 1*1 (mm) | View field 2*2 (mm) | Mass (g) | Price            |
|------------------|---------------|--------------------|-----------------------|---------------------|-----------------------------------|-------------------------------|---------------------|---------------------|----------|------------------|
| <b>378-844-5</b> | 10X           | 0.25               | 20                    | 20                  | 1.1                               | 4.4                           | $\phi 2.4$          | 0.48 x 0.64         | 310      | <b>£POA</b>      |
| <b>378-837-5</b> | 20X           | 0.36               | 15                    | 10                  | 0.8                               | 2.1                           | $\phi 1.2$          | 0.24 x 0.32         | 330      | <b>£9840.00</b>  |
| <b>378-838-5</b> | 50X           | 0.40               | 12                    | 4                   | 0.7                               | 1.7                           | $\phi 0.48$         | 0.10 x 0.13         | 400      | <b>£9840.00</b>  |
| <b>378-839-5</b> | 80X           | 0.55               | 10                    | 2.5                 | 0.5                               | 0.9                           | $\phi 0.3$          | 0.06 x 0.08         | 380      | <b>£10900.00</b> |

\*1 Field of view when using  $\phi 24$  mm eyepiece, \*2 Field of view when using 1/2" CCD camera.

