

# PCHI023 | DATASHEET

## Hole inspection optics for 2/3" sensors



### SPECIFICATIONS

#### Optical specifications

Image circle	(mm)	6.6
Min sensor size		2/3"
Working distance with minimum object size <sup>1</sup>	(mm)	5
Working distance with maximum object size <sup>1</sup>	(mm)	62
Viewing angle	(°)	82
$wf/N^2$		8

#### Mechanical specifications

Focusing		Manual (lockring)
Mount		C
Length <sup>3</sup>	(mm)	108.5
Outer diameter	(mm)	40.0
Mass	(g)	243

<sup>1</sup> Working distance: distance between the front end of the mechanics and the object.

<sup>2</sup> Working f-number ( $wf/N$ ): the real f-number of a lens in operating conditions.

<sup>3</sup> Measured from the front end of the mechanics to the camera flange.

### KEY ADVANTAGES

#### Perfect focusing of holed objects

Both the walls and the bottom of a cavity are imaged in high resolution

#### Cavity inspection from the outside

No need to put an optical probe into the hole

#### Very high field depth

Objects featuring different shapes and dimensions can be imaged by the same lens

#### Wide viewing angle

Sample surfaces are acquired by the lens under a convenient perspective to clearly display their features

#### New focusing ring version available

Manually adjusting the focus is never been easier!

#### New integration with Optotune® liquid lens technology

PCHI AF allows for an extremely fast and repeatable change in focus

**PCHI Optics** have been developed by Opto Engineering® to easily inspect holes, cavities and containers.

### FIELD OF VIEW

#### Field of view (diameter x height)

Minimum	(mm x mm)	10.0 x 6.0
Maximum	(mm x mm)	120.0 x 190.0

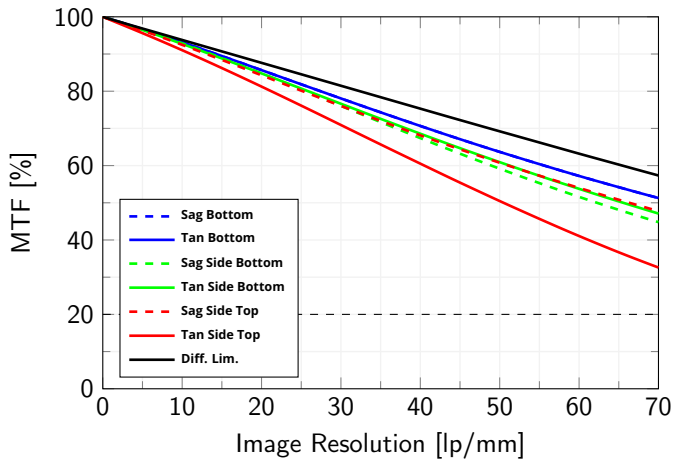
### COMPATIBLE PRODUCTS

Full list of compatible products available [here](#).



A wide selection of innovative machine vision components.

### Image Resolution



Modulation Transfer Function (MTF) vs. Image Resolution, wavelength range 486 nm - 656 nm of cylindrical object of diameter 30 mm and height of 20 mm

### PCHI IMAGING SETUP

PCHI optics can image cavities whose diameters and thicknesses span over a wide range of values. PCHI series features 82° view angle and can image both the inner walls and the bottom of cavities.

