

PCHIL013 | DATASHEET

Hole inspection lens for 1/3" sensors



SPECIFICATIONS

Optical specifications

Image circle	(mm)	3.4
Min sensor size		1/3"
Working distance with minimum object size ¹	(mm)	5
Working distance with maximum object size ¹	(mm)	62
Viewing angle	(°)	82
wf/N^2		1.4-close

Mechanical specifications

Focusing		Manual
Mount		C
Length ³	(mm)	120.2
Outer diameter	(mm)	36.0
Mass	(g)	144

¹ Working distance: distance between the front end of the mechanics and the object.

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

³ Measured from the front end of the mechanics to the camera flange.

KEY ADVANTAGES

High-resolution imaging of holed objects **from the outside**.

Simultaneous view of both the **side walls and the bottom of cavities**.

Variable iris and large aperture.

Wide range of object **diameters and thicknesses**.

Wide viewing angle.

Easy and precise **manual focusing**.

Liquid lens models for fast and remote autofocus.

Opto Engineering® PCHIL series features hole inspection lenses for the inner inspection of cavities and containers in perfect focus.

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

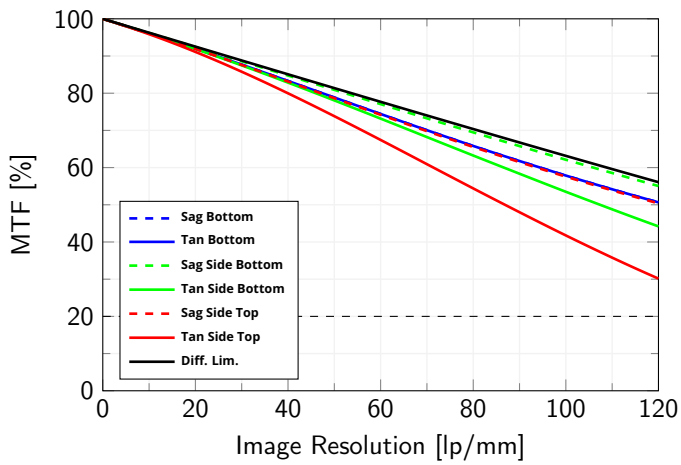
COMPATIBLE PRODUCTS

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

PCHIL IMAGING SETUP

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

