PCHIL013 | DATASHEET

OPTO ENGINEERING

Hole inspection lens for 1/2.9" sensors

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.

REACH DOSSIER PATENTED

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

SPECIFICATIONS

Optical specifications

Image circle	(mm)	3.6
Min sensor size		1/2.9”
Working distance with minimum object size[1]	(mm)	5.5
Working distance with maximum object size[1]	(mm)	69
Viewing angle	(°)	82
wf/N[2]		1.8-16

Mechanical specifications

Focusing		Manual
Mount		C
Length[3]	(mm)	123.4
Outer diameter	(mm)	29.0
Mass	(g)	132

[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.

FIELD OF VIEW

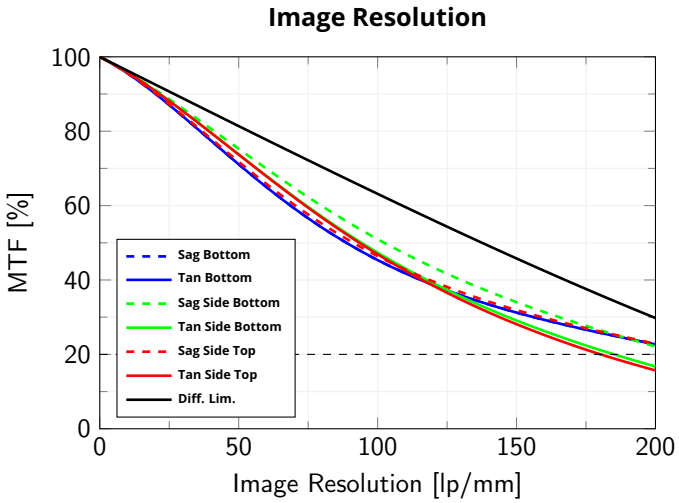
Field of view (diameter x height)

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.



Modulation Transfer Function (MTF) vs. Image Resolution (wavelength range 486 nm - 656 nm), wf/N= 5, 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.