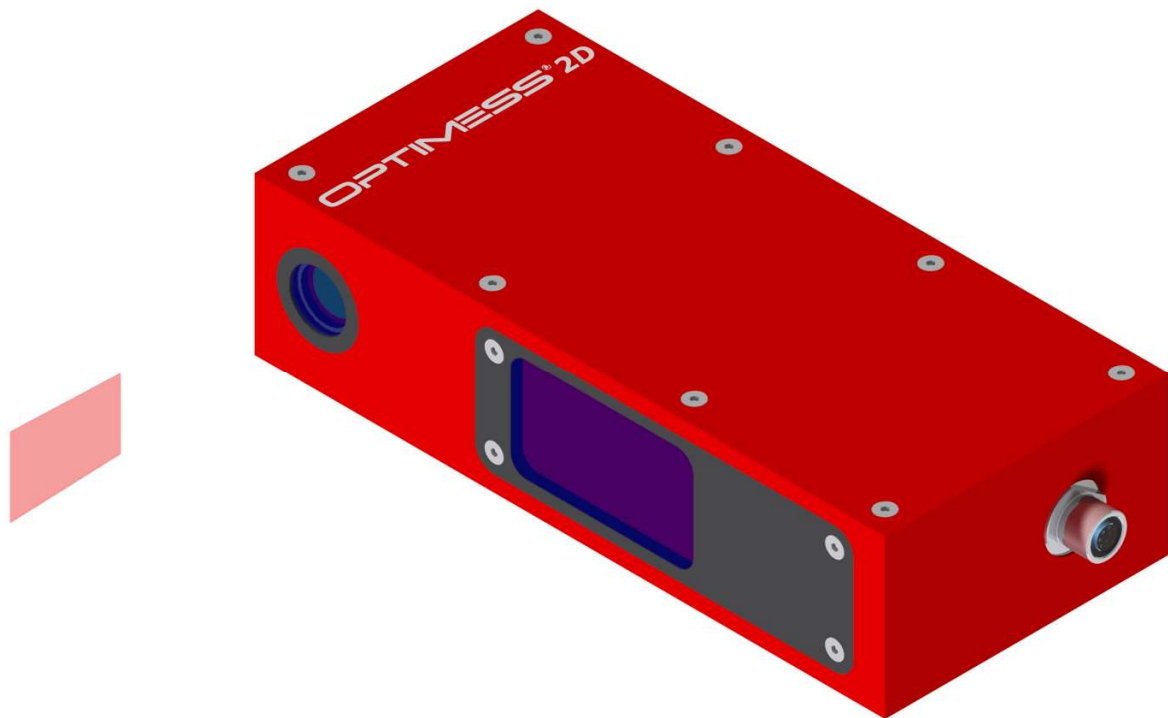


Non-contact Laser Measuring System

OPTImess 2D - 35



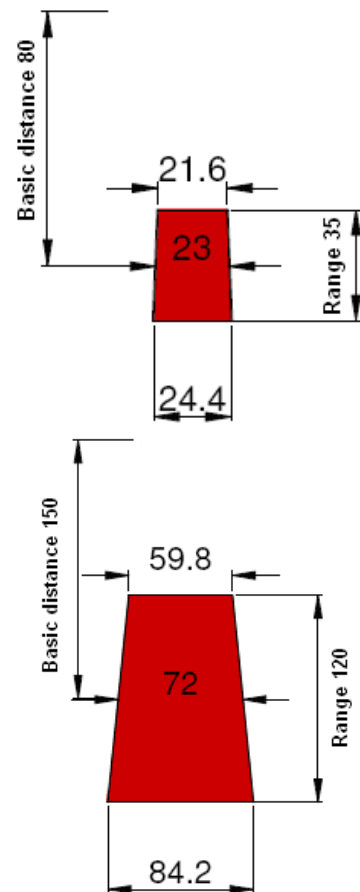
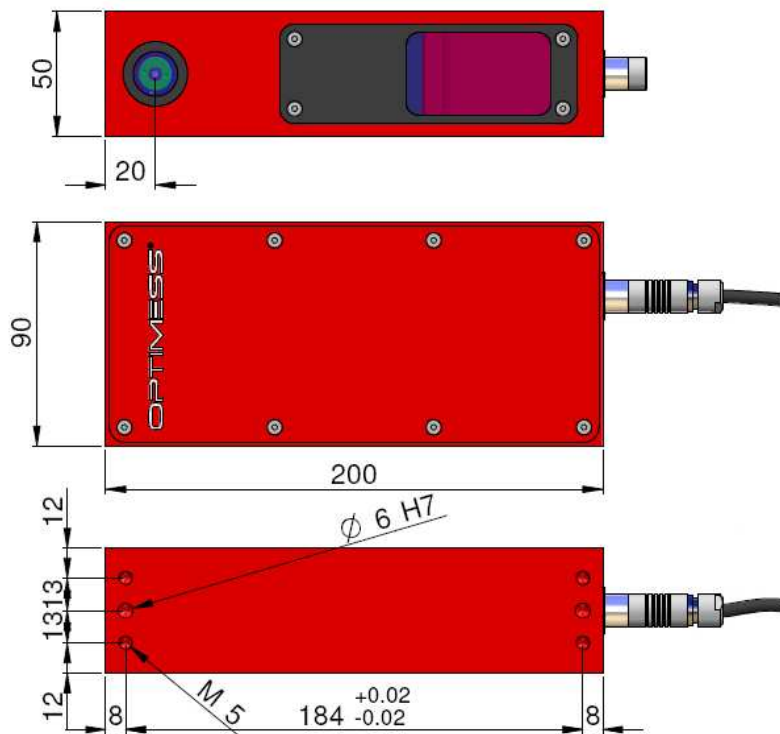
The non-contact operating, dimensional light section sensor **OPTImess 2D** is a special version of a punctiform **OPTImess** sensor.

In the **OPTImess 2D** sensor, the laser beam is projected as a line on the target by an optical system. This line is deflected to a high resolution CCD matrix by the receiver optic. The integrated controller reads out this projection and calculates X/Y c-ordinates from it. These are output on the CAN-bus interface.

By simple parameterisation with the enclosed PC software, the measuring field of the **OPTImess 2D** can be extended or limited so that an optimum ratio between the resolution and the scan frequency is always achieved. The software integrated in the measuring head enables pre-processing of the measured profile for various standard applications such as gap measurement, weld measurement, angle measurement, step and height measurement etc. The parameterisation also takes place with the enclosed PC program.

Typical applications for the **OPTImess 2D** are:

- Inspection of welds
- Profile measurements
- Geometry measurement
- Gap dimension determination
- Robot positioning and robot control



Technical data OPTmess 2D	035	120	Unit
Basic data			
Measuring range	35	120	mm
Basic distance	80	150	mm
Max. measuring field			
Line length start of range	21.6	59.8	mm
Line length centre of range	23	72	mm
Line length end of range	24.4	84.2	mm
Resolution, accuracy			
Theoretical resolution measuring range	0.007	0.025	mm
Accuracy	0.014	0.051	mm
Theoretical resolution line length	0.022	0.071	mm
Measuring frequency *			
Meas. field 1280x1024 pixels (max. res.)	27	27	Hz
Meas. field 500x500 pixels	120	120	Hz
Meas. field 100x100 pixels	3000	3000	Hz

The technical data above refer to measurement on white, diffusely reflecting surfaces.

The laser protection class can be specified with 2M, 3R or 3B. This is given by the respective application and is determined mainly by the surface to be measured and the implemented measuring frequency.

Dr. D. Wehrhahn

Meßsysteme für die Qualitätssicherung

Dr. D. Wehrhahn

Meßsysteme für die Qualitätssicherung

Hildesheimer Str. 140

D-30173 Hannover

Fon +49 511 51 26 65

Fax +49 511 52 21 52

Mail info@drwehrhahn.de

Web www.drwehrhahn.de

