SWISS PRIME MEASURING SINCE 1957

Off-line Measuring Station for the Outside Diameter Measurement and Calculation of Inside Diameter and Wall Thickness of Hose and Tube Samples.
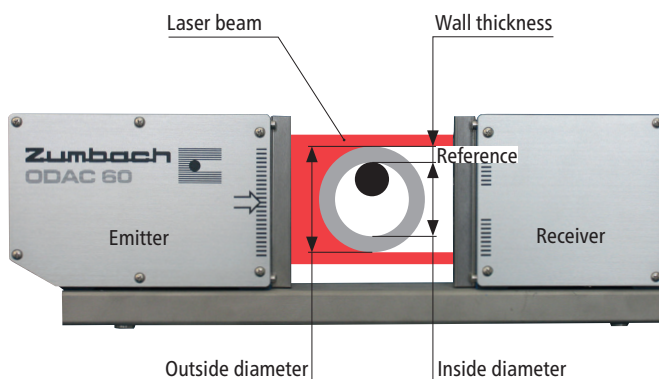
QC 4

The QC 4 system consists of a high precision diameter measuring head combined with a processor unit USYS 20 with special software evaluating the measured values. The system provides fast and accurate measurements of manufactured parts or cut samples of extruded products. QC 4 can be used either in quality control (QC) laboratories or on plant floors. It provides operators a simple and repeatable solution for measuring parts and immediate notification of meeting specification within the given tolerances.

Operating Principle

Accurate and User Friendly Method of Measurement

- The sample to be tested is placed on a reference pin.

- The operator is free to make as many measurements around the circumference of the sample as desired.

- 2 types of statistics:
  - 1 measurement over several samples
  - Several measurements over 1 sample

- By simply pressing one key the min., max., average and standard deviation of the sample measurements are calculated and are available to printout.

- The calculated values can be uploaded to a host computer for further processing.

Technical Data

Measuring Head ODAC 60J

Max. diameter	50 mm (1.97 in.)
Max. wall thickness	10 mm (.39 in.)
Repeatability (3 σ)	0.25 μm (+/- .0000098 in.)
Scan rate	1000/s (option 2000/s)
Scanning speed	157 m/s (option: 315.4 m/s)
Light source	Visible laser diode, laser class 2
Protection class	IP 65

Processor USYS 20

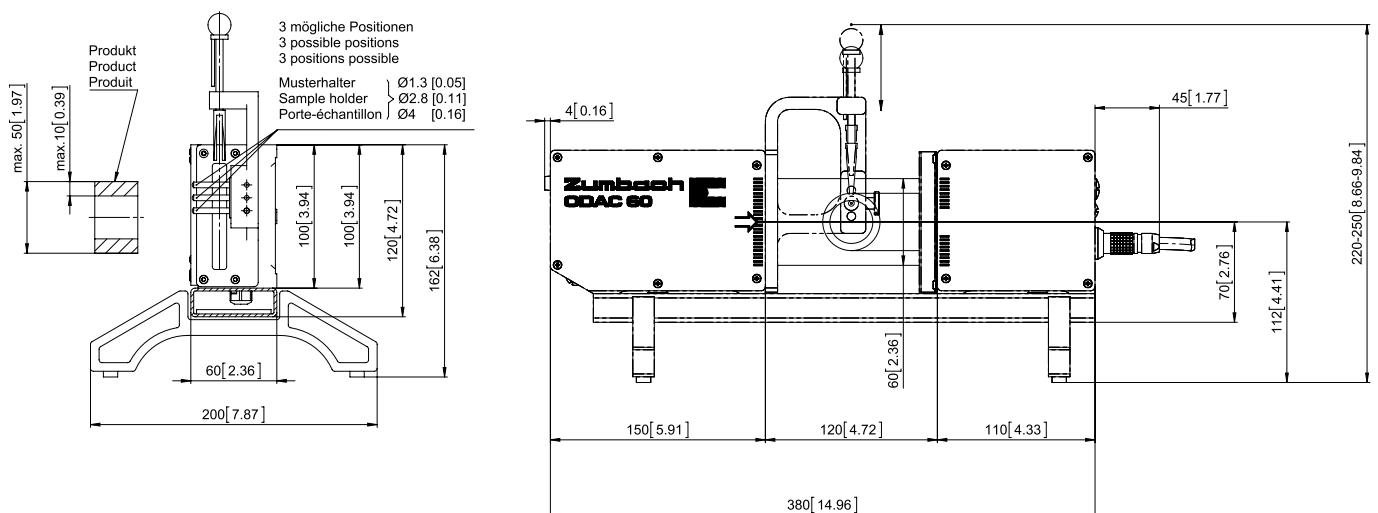|	
Display	• High contrast 4.2" LCD monochrome screen 240 x 128 pixels. Selectable resolution of up to 0.0001 mm (.000004 in.) of outside diameter, inside diameter, wall thickness. • 6 bright LED alarm displays (tolerance, pre-alarm and other limit exceedings).
Functions	• Display of measurement value • Communication with computer • Printing

Features	• 1 serial interface RS-232/-422/-485 (configurable for the printing of the statistics or remote display
	• 1 serial interface RS-232/-422/-485 (configurable, galvanic separated)
	• +/- tolerance alarms
	• I/O connector with the following inputs and outputs:
	  - 3 relay outputs for tolerance
	  - 4 digital inputs (e.g. Start/Stop and pause, statistics, signal for the logging of the indiviual measurements into the statistics)
	  - 5 digital outputs (tolerance alarms)
	  - 1 analogue output +/-

Protection class	IP 51
Versions	Table top or 19" rack mountable

• Technical specifications are subject to change without notice

Dimensions

Dimensions in mm (inch)