Pixscope Imaging Units

Pixscope imaging units produce microscope-quality image data from the process. The smallest versions of the Pixscope product family are designed for laboratory use and they fit to a variety of laboratory equipment, such as reactors and beakers. Combined with Pixstation LAB main unit they are portable and can be used for multi-location work or as a shared device for user groups.



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Instal	lation

Pixscope 14/19/24 models can be installed to the reactor through standard and custom inlets.







1" Ingold fitting

DN40p

PTFE lining for glass reactors

Examples of installation accessories available to Pixscope 14/19/24



Pixscope models	14-250	19-300	24-300
A Wet part diameter mm	14	19	24
B Wet part length to window <i>mm</i>	232	260	268
C Wet part total mm	250	284	295
D Total length mm	432	466	480

Mechanical specification	
Measurement gap mm	3 or 5
Wet part material	AISI316L/1.4404 Hastelloy C22
Window material	Sapphire
Sealing material	PFA
Probe weight kg	1.4-1.5

Process & Environment specification	
Process temperature °C	Standard: 10-120 Ext-temp : -50-120
Process pressure Bar	Standard: 8 Optional: 30
Ambient temperature °C	0-45
Laser class	3R
Housing protection	IP65

Optical specification	14-250	19-300	24-300
Image resolution μm	1.2	1.7	1.7
Image area <i>mm</i>	3.7 x 2.5	3.9 x 3.3	4.2 x 3.5
Mesurement range μm	5-1000	5-1500	3-2000



Pixscope Imaging Units

Pixscope imaging units produce microscope quality image data from the process. The imaging unit flange type and probe wet length are customizable, allowing installation for a variety of industrial process equipment. Below are presented some typical installation options, but the designs are fully customizable.





Installation

Preferred installation location for the *Pixscope* 48/64 is a flange on the reactor or on the tank side wall. If side inlet is not available, longer version of *Pixscope* can be built to reach the suspension from the flange on top of the reactor.



The imaging unit can also be equipped with a washing nozzle to flush the measurement gap when needed.



Mechanical specification	
Wet part diameter mm	Pixscope 48: 48.3 Pixscope 64: 63.5
Wet part length to window <i>mm</i>	Pixscope 48: 50-140 Pixscope 64: 50-200
Measurement gap mm	3, 5 or 10
Wet part material	AISI316L/1.4404 AISI904L/1.4539 Super duplex/1.4410 Hastelloy C22
Window material	Sapphire
Sealing material	Standard: EPDM, FFKM, VMQ, NBR Ext. temp 1: EPDM, FFKM Ext. temp 2: EPDM
Probe weight <i>kg</i>	3-8

Process & Environment specification		
Process temperature °C	Standard: 10-85/ 120 short.t. Ext-temp 1: -40-120 Ext-temp 2: -55-120	
Process pressure Bar	Standard: 8 Optional: 30	
Ambient temperature °C	0-45	
Laser class	3R	
Housing protection	IP65	
Optical specification		
Image resolution μm	M10: 3.5 M20: 1.7	
Image area <i>mm</i>	M10: 8.4 × 7.1 M20: 4.2 × 3.5	
Mesurement range μm	M10: 4-4000 M20: 2-2000	

