



## SENSOR ADAPTERS, HOUSINGS & NIR OPTICAL SENSORS



## Contact Information

Name	<input type="text"/>	Phone	<input type="text"/>
Company	<input type="text"/>	Fax	<input type="text"/>
Address	<input type="text"/>	E-Mail	<input type="text"/>
		Installation Address	<input type="text"/>
No. of Units reqd./Tag No.	<input type="text"/>		
Product Interest	<input type="checkbox"/> EXstatic	<input type="checkbox"/> EXtract-M	<input type="checkbox"/> EXtract (check all that apply)

## Process Information and Data

Fluid Stream Information/Fluid Name:

What parameter is being measured? ☐ pH ☐ ORP ☐ DO ☐ Optical  
☐ Other:

The Length of the sensor  ☐ Liquid filled ☐ Gel filled

Pressure Units:  Min:  Norm:  Max:  Design:

Temperature Units:  Min:  Norm:  Max:  Design:

Solids? ☐ No ☐ Yes Specify Size & %Wt/%Vol:

Process Characteristics

Does the process coat the pipe wall? ☐ Yes ☐ No

Does the sensor need protection cage? ☐ Yes ☐ No

Is the process hygienic? ☐ Yes ☐ No

## Mechanical Requirements

For Pipe Install	Line Size: <input type="text"/>	Pipe Entry height: <input type="text"/>
	15° entry? <input type="checkbox"/> Yes <input type="checkbox"/> No	Retractable required? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Flow cell reqd? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Straight through <input type="checkbox"/> 90°
For Vessel Install	<input type="checkbox"/> Top mount <input type="checkbox"/> Side mount	Internal clearance: <input type="text"/>
	15° entry? <input type="checkbox"/> Yes <input type="checkbox"/> No	Retractable required? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Immersion Depth/Length: <input type="text"/>	
For Sensor Removal	Clearance behind mounting point: <input type="text"/>	
Process Connection Type	<input type="checkbox"/> New Install – not determined yet	
	<input type="checkbox"/> Ingold DN25 (G1¼") socket	O-ring position: <input type="text"/>
	<input type="checkbox"/> Ingold DN25 (G1¼") HYCIP	O-ring position: <input type="text"/>
	<input type="checkbox"/> TriClamp	Size: <input type="text"/>
	<input type="checkbox"/> DIN 11851 DN50 (dairy connection)	
	<input type="checkbox"/> Varivent N DN40-125	
	<input type="checkbox"/> NEUMO BioControl D50	
	<input type="checkbox"/> Male NPT Thread	Size: <input type="text"/>
	<input type="checkbox"/> DIN Flange	Size: <input type="text"/>
	<input type="checkbox"/> ANSI Flange	Size: <input type="text"/>
	<input type="checkbox"/> Housing suspended with wire/chain	
	<input type="checkbox"/> Other – please state: <input type="text"/>	



# About EXNER



## PREMIUM SENSOR HOUSING TECHNOLOGY

The team at Exner Process Equipment have more experience in the field of liquid analysis sensor installation than any one else in the world. For more than 15 years, E-P-E has designed, developed and manufactured the most innovative and effective adapters, retractable housings and sensor insertion control systems available for installing process sensors such as pH/ORP, oxygen, conductivity and optical technologies into a wide range of applications across every industrial sector. Built to the highest possible quality, Exner probe housings are found in water treatment, chemical, power, food and beverage, pharmaceutical and biotech plants globally.

## NIR ABSORBANCE AND TURBIDITY SENSORS

As acknowledged experts in hygienic design, E-P-E have applied their expertise to their range of NIR process absorbance and turbidity sensors, developing instruments with no elastomer seals – the primary cause of failure and maintenance in many products – while maintaining a fully hygienic measurement solution. A truly unique approach to the design of the optical interface to the process has ensured a robust, reliable measurement with the highest repeatability and accuracy, even in the presence of large thermal changes. All Exner sensors are autoclavable and certified for use in processes requiring CIP. Exner NIR probes are completely compatible with EXtract manual and automatic retractable sensor housings. A fully automated measurement and cleaning solution can be supplied using Exner sensors, housings and controllers for processes with a tendency to coat and blind other optical sensors – a ultra-low maintenance option with the advantage of high up-time when online.

Exner Process Equipment NIR Sensors are used extensively in the food and beverage, chemical, pharmaceutical and biotech industries.

# Exner

## PROBE HOUSINGS

Fixed or retractable, for all Ø12mm probes and sensors, hygienic solutions available.

Exner Process Equipment have 15 years of experience in developing and manufacturing high quality adapters, housings and control systems for installing process electrodes and sensors – pH/ORP, oxygen, conductivity, optical and others – into every industrial sector including water treatment, chemical, power, food and beverage, biotech and pharmaceutical.



### EXstatic

Static sensor housings are designed to adapt all Ø12mm sensors to a variety of process entries on tanks and pipelines.



### EXtract-M

Manually operated retractable Ø12mm sensor housings with a unique rotary drive and automatic safety interlocking system.



### EXtract

Pneumatically operated range of retractable sensor housings in a variety of entry port types with dedicated ports for sensor cleaning.



### EXmatic

Manual and automatic control stations used with Extract housings for hands free operation of sensor cleaning cycles.



### EXdip

Sensor housings designed for installation of sensors and electrodes into tanks, pits and open channels applications.



### EXflow

Inline flow cells designed to locate sensors in static and retractable housings in perfect measurement position in flowing pipelines.



### EXstatic 340

Static sensor adapter allows Ø12mm x 120mm sensors to be installed in place of older ¾" and 1" NPT sensors and electrodes.



### EXconnect

A convenient color coded pneumatic tube bundle for foolproof connectivity to EXtract retractable housings and cleaning valves.





Product Highlight

## EXtract 810M

**EXtract 810M** is a manual retractable sensor housing installed directly on process vessels or into piping. The rotary action drive unit is used to insert the sensor into the process medium and retract it back into the integral cleaning chamber. At each of its travel, a safety interlock prevents further movement without depression of an "insert" or "retract" button on the housing. The housing cannot be operated when no sensor is installed. EXtract 810M allows cleaning, rinsing and calibration of the installed sensor while the process is running.

# Improving measurability in your process

Custom materials and seals are available through our engineered product services.



### Your advantages

- » Robust design with integrated process scraper
- » Position locking system with indicators
- » Automatic safety lock while sensor is removed
- » Operates safely under high process pressures
- » Stainless steel AISI 316L / 1.4404 or Alloy C22
- » Choice of elastomer seal types
- » Immersion length up to 107mm
- » Suitable for use in hazardous areas
- » Wide variety of process connections
- » Up to 16 bar / 230 psi and 140°C / 285°F
- » Maintenance free rotary action drive unit

more information: [www.southforkinstruments.com](http://www.southforkinstruments.com)

# Exner OPTICAL PROCESS SENSORS

Turbidity and Haze, NIR Absorbance,  
Biomass Density.

Exner Process Equipment optical process sensors are designed for measuring absorbance in liquids. Utilizing light in the NIR region, the unique monolithic structure of the optical unit provides unrivalled repeatability and measurement accuracy. Exner optical sensors are found installed in food and beverage applications, in chemical plants, and in biotech and pharmaceutical processes.



## EXpect 230

Compact sensor for general process monitoring. Ideal for CIP and filter performance and breakthrough applications.



## EXspect 240

Extended length general process monitoring probe designed to fit in manual and automatic retractable housings.



## EXspect 250

Compact turbidity sensor for advance process monitoring. Features FNU, EBC and user defined units and scaling.



## EXspect 260

Extended length turbidity sensor designed to fit in manual and automatic retractable housings for in-process cleaning operations.



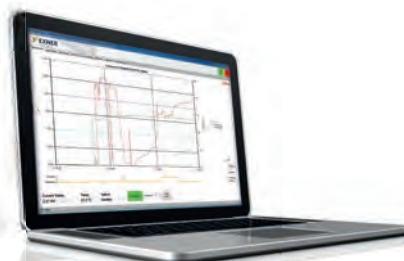
## EXcell

Advanced Ø12mm NIR sensor designed for biomass and cell growth applications. EXcell is suitable for autoclave and CIP.



## EXcap

Traceable hard media verification and calibration filter set for all Exner NIR optical sensors. Complete with certification.



## EXpert

Fully featured software package for configuration and operation of EXcell biomass probes. Runs on Windows PC with USB connection.



Product Highlight

## EXcell 230

EXcell 230 is a unique, high precision digital NIR absorbance sensor in a 12mm hygienic probe design for monitoring biomass measurement in biotech, food and pharmaceutical applications. Applicable to both laboratory scale and industrial production process, the EXcell 230 is a highly reliable, cost efficient and maintenance free measuring device. It is manufactured from high quality stainless steel and non-scratching sapphire windows and utilizes LED technology with integrated advanced digital electronics. A variety of measurement units for absorbance, turbidity and mass (AU / OD / FAU / EBC / mg/l) are available as standard with the ability to configure user defined measuring units for further flexibility.

# Ultimate repeatability and accuracy

Custom materials and seals are available  
through our engineered product services.



### Your advantages

- » EBC / FAU / mg/l / AU / OD or customer defined units
- » High precision measurement up to 12 OD
- » Standardized 12mm design with integrated electronics
- » No traditional transmitter necessary
- » Non-scratching sapphire windows and hygienic design
- » Maintenance free LED light source
- » Configuration via USB and EXpert software
- » Modbus RS485 and 0...20mA current output interface
- » Intuitive PC interface for easy setup
- » Fits Exner retractable housings for automated sensor cleaning

more information: [www.southforkinstruments.com](http://www.southforkinstruments.com)

# Southfork Instruments

**Service you can trust.**

South Fork Instruments has been providing unique, high quality instrumentation across the Americas since 2004. Our goal is to develop long-term business relationships with our customers to provide win-win solutions through our product portfolio and dedication to support using knowledge and integrity.

Integrity is key when it comes to maintaining long-term business relationships and SFI is committed to intentionally exhibit this crucial – and often rare – character quality in every aspect of our interaction with you.

Our customers trust us to deliver high-quality products and services that provide high value, reliable solutions to their measurement needs. Contact us with your needs and experience the South Fork Instruments difference.

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