

# EXspect 231 NIR absorption sensor in compact design



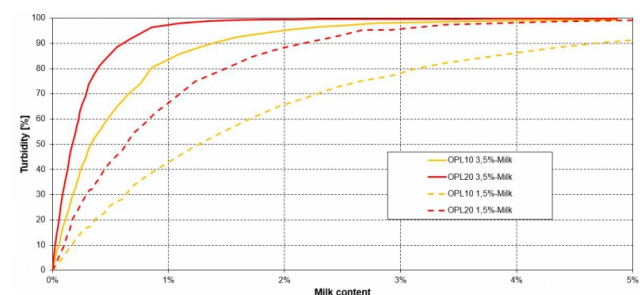
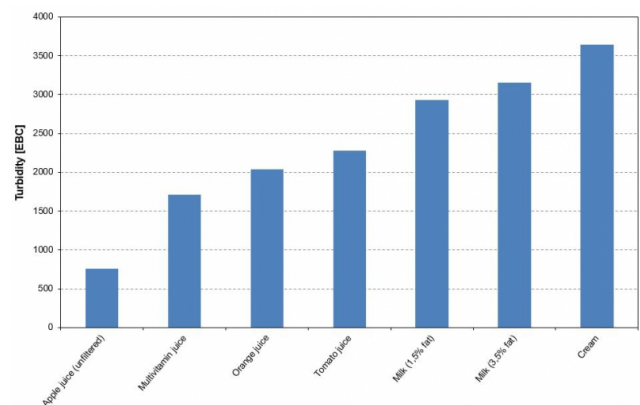
- » Compact design with integrated amplifier and touch display
- » %-Absorption / EBC / FAU / mg/L / AU / OD or customer defined unit
- » Durable sapphire window
- » Hygienic Design, CIP/SIP-capable
- » LED light source guarantees a durable and stable signal
- » Easy parameterization via display or software EXpert

EXspect 231 is a high-precision NIR compact sensor for monitoring production processes in the food and pharmaceutical industries as well as in many other areas of process application, which can be optimally adapted to the respective measuring task

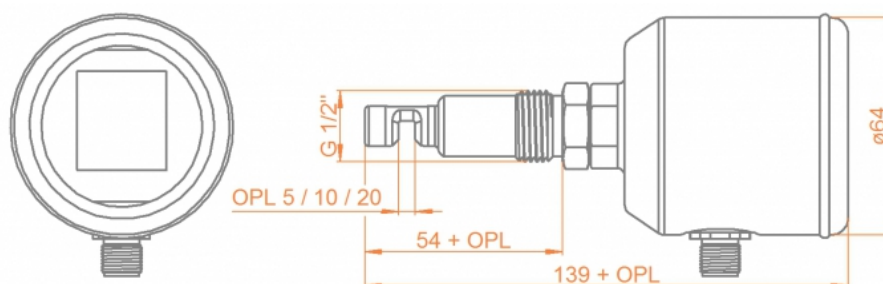
## Specifications

|                        |                                                        |
|------------------------|--------------------------------------------------------|
| Measuring range max.:  | 0-100 % / 0...6 AU / 0...6600 EBC                      |
| Resolution:            | 0,1 % or 0,01 AU                                       |
| Accuracy:              | ± 1 % from measurement value                           |
| Reproducibility:       | ≤ 1 % from final value                                 |
| Wavelength:            | 850 nm                                                 |
| Light source:          | LED                                                    |
| Optical path length:   | 5, 10 or 20 mm                                         |
| Material:              | Stainless steel 1.4435 (316L)                          |
| Surface:               | Ra <0,37 µm                                            |
| Window:                | Sapphire                                               |
| Supply voltage:        | 24 V DC                                                |
| Contact:               | NO or NC configurable 150 mA                           |
| Input contact:         | zeroing                                                |
| Process connection:    | Thread G1/2"                                           |
| Process temperature:   | -10... 90 °C, 135 °C max. 1 hour (SIP cycle)           |
| Process pressure:      | max. 16 bar (232 psi)                                  |
| Electrical connection: | M12 connector 5-pin or 8-pin (digital parameterizable) |
| Interfaces:            | 4 ... 20 mA                                            |
| Parameterization:      | Software EXpert                                        |
| Protection class:      | IP69                                                   |

## Typical Measurements



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## Order code

| Code | Measuring range                      | Delivery time |
|------|--------------------------------------|---------------|
| A    | 0...100 % Absorption                 | 3 Weeks       |
| B    | 0...3,5 AU / 0...3850 EBC / 0...7 OD | 3 Weeks       |
| C    | 0...6 AU / 0...6600 EBC / 0...12 OD  | 3 Weeks       |

| Code | Optical path length | Delivery time |
|------|---------------------|---------------|
| 05   | 5 mm                | 3 Weeks       |
| 10   | 10 mm               | 3 Weeks       |
| 20   | 20 mm               | 3 Weeks       |

| Code | Material (wetted parts)       | Delivery time |
|------|-------------------------------|---------------|
| 4435 | Stainless steel 1.4435 / 316L | 3 Weeks       |

| Code | Sealing material (wetted sealings) | Delivery time |
|------|------------------------------------|---------------|
| MET  | Metal sealing (without elastomer)  | 3 Weeks       |

| Code | Process connection | Delivery time |
|------|--------------------|---------------|
| G12  | Thread G1/2"       | 3 Weeks       |

| Code | Interface                                                  | Delivery time |
|------|------------------------------------------------------------|---------------|
| AS   | Analogue 4...20 mA / M12 5-pin                             | 3 Weeks       |
| AD   | Analogue 4...20 mA / digitally parameterisable / M12 8-pin | 3 Weeks       |

| Code | Display                 | Delivery time |
|------|-------------------------|---------------|
| 1    | With integrated display | 3 Weeks       |

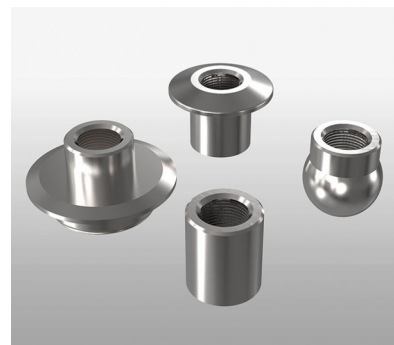
## Accessories



EXcap 110 - Set of optical reference filters



Optical reference filter for checking absorption sensors



Weld-in socket and process adapters