

KERN ORL 94AL



Digital refractometer with pre-installed scales for refractive index measurements and applications in the alcohol industry



Category

| | |
|------------------|-----------------------|
| Brand | Optics |
| Product category | Refractometer |
| Product group | Digital refractometer |
| Product family | ORL-B |

Measuring System

| | |
|------------------------------------|--------------------------------|
| Measurement temperature [Min] (°C) | 0 °C |
| Percentage by volume | 0-80%(v/v) @ 1%(v/v) ± 1%(v/v) |
| Readout Oechsle France | 1 °Oe |
| Accuracy Oechsle France | ±2 °Oe |
| Measurement temperature [Max] (°C) | 40 °C |

| | |
|---|---------------|
| Precision | 0,0002 nD |
| | 0,1 % |
| | 2 °Oe |
| | 0,2 °KMW |
| | 1 %(w/w) |
| Measuring range volume percentage I [Max] | 1 %(v/v) |
| | 0,002 SG Wort |
| | 0,3 °P |

| | |
|---|------------------|
| Measuring range volume percentage I [Max] | 22 % |
| Readout volume percentage I | 0,1 % |
| Accuracy volume percentage I | ±0,2 % |
| Measuring method | Total reflection |
| Measuring range Brix [Min] | 0 % |

| | |
|--------|------------------|
| Scales | Refractive index |
| | Brix |
| | Oechsle |
| | KMW (Babo) |
| | Masspercentage |

| | |
|--|--|
| Measuring ranges | Volume percent Stammwürze (Bier) Plato |
| | 1,3330 nD - 1,5290 nD |
| | 0 % - 94 % |
| | 0,0 °Oe - 150,0 °Oe |
| | 0,0 °KMW - 25,0 °KMW |
| | 0 %(w/w) - 72 %(w/w) |
| | 0 %(v/v) - 80 %(v/v) |
| | 1,000 SG Wort - 1,130 SG Wort |
| | 0,0 °P - 30,5 °P |
| | |
| Readabilites [d] | 0,1 % |
| | 1 °Oe |
| | 0,1 °KMW |
| | 1 %(w/w) |
| | 1 %(v/v) |
| | 0,001 SG Wort |
| | 0,1 °P |
| Readout Brix | 0,1 % |
| Automatic temperature compensation (ATC) | ✓ |
| Accuracy Brix | ±0,1 % |
| Scale volume percentage | ✓ |
| Measuring range refractive index [Min] | 1,3330 nD |
| Measuring range refractive index [Max] | 1,5290 nD |
| Readout refractive index | 0,0001 nD |
| Accuracy refractive index | ±0,0002 nD |
| Scale for Refractive index | ✓ |
| Measuring range KMW (Babo) [Min] | 0 °KMW |
| Measuring range KMW (Babo) [Max] | 25 °KMW |
| Readout KMW (Babo) | 0,1 °KMW |
| Accuracy KMW (Babo) | ±0,2 °KMW |
| Scale KMW (Babo) | ✓ |
| Measuring range percent by mass [Min] | 0 % |
| Measuring range percent by mass [Max] | 72 % |
| Readout percent by mass | 1 % |
| Accuracy percent by mass | ±1 % |
| Measuring range Oechsle [Min] | 0 °Oe |
| Measuring range Oechsle [Max] | 150 °Oe |
| Readout Oechsle | 1 °Oe |
| Accuracy Oechsle | ±2 °Oe |
| Measuring range Plato [Min] | 0 °P |
| Scale percent by mass | ✓ |

KERN ORL 94AL

KERN

Digital refractometer with pre-installed scales for refractive index measurements and applications in the alcohol industry

| | |
|---|---------|
| Measuring range Plato [Max] | 31 °P |
| Readout Plato | 0,1 °P |
| Accuracy Plato | ±0,3 °P |
| Scale Oechsle | ✓ |
| Scale Plato | ✓ |
| Measuring range original hopped wort (specific gravity) [Min] | 1,000 |
| Measuring range original hopped wort (specific gravity) [Max] | 1,130 |
| Readout original hopped wort (specific gravity) | 0,001 |
| Accuracy original hopped wort (specific gravity) | ±0,002 |
| Scale original hopped wort (specific gravity) | ✓ |
| Measuring range volume percentage [Min] | 0 % |
| Measuring range volume percentage [Max] | 80 % |
| Readout volume percentage | 1 % |
| Accuracy volume percentage | ±1 % |
| Measuring range volume percentage I [Min] | 0 % |
| Scale Oechsle France | ✓ |
| Measuring range Oechsle France [Min] | 0 °Oe |
| Measuring range Brix [Max] | 94 % |
| Brix scale | ✓ |
| Area of application | Alcohol |

Construction

| | |
|----------------------|-----------------------|
| Dimension (W×D×H) | 180×100×55 mm |
| Refractometer type | Desktop refractometer |
| Scale - Display type | Digital |
| Prism lid | ✓ |
| Material prism | Sapphire |

Functions

| | |
|--|------------------|
| Color display | ✓ |
| Averaging measurement | ✓ |
| Averaging measurement amount | 15 |
| Automatic temperature compensation | ✓ |
| Supported operating systems | Win 10 Win 11 |
| IP protection - complete device | IP43 |
| Auto-off interval(s) in battery mode/rechargeable battery mode | 3 min |

| | |
|----------------------------------|--|
| System requirements CPU | Intel Core i3 or higher AMD Ryzen 5 or higher |
| System requirements clock speeds | 2.8 GHz |

Interface

| | |
|------------|---------|
| Interfaces | USB 2.0 |
|------------|---------|

Power Supply

| | |
|---|--------------------------------|
| Supplied power supply | Power supply unit |
| Power supply type | USB including power supply |
| Plug-in power supply / adapter for countries - included with the delivery | EURO |
| Plug-in power supply / adapter for countries - optional | EURO UK |
| Input voltage power supply / power [Max] | 100 - 240 V AC 50/60 Hz 0,35 A |
| Power supply cable removable | removable |
| Input voltage device / power [Max] | 5 V DC 2,0 A |
| Power socket for mains adapter | USB B |
| Battery connection | Pad + Spring |

Environmental conditions

| | |
|---------------------------|-------|
| Storage temperature [Min] | -5 °C |
| Storage temperature [Max] | 40 °C |

Approval

| | |
|---------|---|
| CE mark | ✓ |
|---------|---|

Services (optional)

| | |
|--|---------|
| Article number for factory calibration | 961-290 |
|--|---------|

Packing & Shipping

| | |
|--|----------------|
| Dimensions transport container (W×D×H) | 300×150×100 mm |
| Delivery time | 2 d |
| Dimensions packaging (W×D×H) | 300×150×100 mm |
| Shipping method | Parcel service |
| Net weight approx. | 0,40 kg |
| Gross weight approx. | 1,00 kg |
| Shipping weight | 1 kg |

Product information

| | |
|----------------------|--------------------------|
| GTIN/EAN number | 404576 1489431 |
| REACH classification | no prohibited substances |

KERN ORL 94AL



Digital refractometer with pre-installed scales for refractive index measurements and applications in the alcohol industry

Pictograms

STANDARD



OPTION

