

KERN ORM 1CA

Digital measurement of refraction index for universal application



Category	
Brand	Optics
Product category	Refractometer
Product group	Digital refractometer
Product family	ORM-CA
Measuring System	
Measurement temperature [Min] (°C)	0 °C
Measurement temperature [Max] (°C)	40 °C
Precision	0,0003 nD
	0,2 %
	0,5 °C
	0,005 kg/l
Measuring method	0.2 %
	Total reflection
Measuring range Brix [Min]	0 %
Scales	Refractive index
	Brix
	CW
	BF
Measuring ranges	AdBlue®
	1,3330 nD - 1,4200 nD
	0,0 % - 50,0 %
	-60,0 °C - 0,0 °C
Readabilities [d]	1,000 kg/l - 1,500 kg/l
	0,0 % - 51,0 %
	0,0001 nD
	0,1 %
Readout Brix	0,1 °C
	0,001 kg/l
	0,1 %
Automatic temperature compensation (ATC)	0,1 %
Accuracy Brix	±0,2 %

Scale windshield washer fluid	✓
Measuring range AdBlue® [Min]	0 %
Measuring range AdBlue® [Max]	51 %
Readout AdBlue®	0,1 %
Accuracy AdBlue®	±0,2 %
Measuring range batterie fluid [Min]	1,000 kg/l
Measuring range batterie fluid [Max]	1,500 kg/l
Readout batterie fluid	0,001 kg/l
Accuracy batterie fluid	±0,005 kg/l
Scale for AdBlue®	✓
Measuring range refractive index [Min]	1,3330 nD
Scale batterie fluid	✓
Measuring range refractive index [Max]	1,4200 nD
Readout refractive index	0,0001 nD
Accuracy refractive index	±0,0003 nD
Scale for Refractive index	✓
Measuring range windshield washer fluid [Min]	-60 °C
Measuring range windshield washer fluid [Max]	0 °C
Readout windshield washer fluid	0,1 °C
Accuracy windshield washer fluid	±0,5 °C
Appropriate calibration liquid	0 % (distilled water)
Measuring range Brix [Max]	50 %
Brix scale	✓
Area of application	Automotive

Construction	
Dimension (W×D×H)	121×58×25 mm
Refractometer type	Handheld refractometer
Scale - Display type	Digital
Prism lid	✓
Material prism	ZLaF3 lanthanum flint glass nd=1.85544

Functions	
Averaging measurement	✓
Averaging measurement amount	15
IP protection - complete device	IP65
Auto-off interval(s) in battery mode/rechargeable battery mode	60 sec

Power Supply	
Supplied power supply	Battery

KERN ORM 1CA



Digital measurement of refraction index for universal application

Power supply cable removable	removable
Battery / accumulator type	Alkali(-Manganese)
Battery connection	Pad + Spring
Battery capacity	1.300 mAh
Battery voltage	1,5 V
Battery - Number of cells	1
Battery - Individual weight	11,5 g
Battery - Total weight	11,5 g
Battery - Construction	Individual cells
Battery capacity (Wh)	1,95 Wh
Battery - Lithium content	0 g
Battery/Accu connected	not connected, enclosed

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)	170×110×50 mm
Delivery time	1 d
Dimensions packaging (W×D×H)	170×110×50 mm
Shipping method	Parcel service
Net weight approx.	0,15 kg
Gross weight approx.	0,35 kg
Shipping weight	0,31 kg

Product information

GTIN/EAN number	4045761335462
Trade number	90275000
REACH classification	no prohibited substances

Pictograms

STANDARD

