

KERN ORM 1CA

Digital measurement of refraction index for universal application

KERN



Category

Brand	Optics
Product category	Refractometer
Product group	Digital refractometer
Product family	ORM-CA

Measuring System

Area of application	Automotive
Measuring method	Total reflection
Automatic temperature compensation (ATC)	✓

Scales	Refractive index
	Brix
	CW
	BF
	AdBlue®
	1,3330 nD - 1,4200 nD
Measuring ranges	0,0 % - 50,0 %
	-60,0 °C - 0,0 °C
	1,000 kg/l - 1,500 kg/l
	0,0 % - 51,0 %

Readabilities [d]	0,0001 nD
	0,1 %
	0,1 °C
	0,001 kg/l
	0,1 %

Precision	0,0003 nD
	0,2 %
	0,5 °C
	0,005 kg/l
	0,2 %

Appropriate calibration liquid	0 % (distilled water)
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Measurement temperature [Min] (°C)	0 °C
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Measurement temperature [Max] (°C)	40 °C
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Brix scale	✓
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Measuring range Brix [Min]	0 %
Measuring range Brix [Max]	50 %
Readout Brix	0,1 %
Accuracy Brix	±0,2 %
Scale for AdBlue®	✓
Measuring range AdBlue® [Min]	0 %
Measuring range AdBlue® [Max]	51 %
Readout AdBlue®	0,1 %
Accuracy AdBlue®	±0,2 %
Scale batterie fluid	✓
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 Refractive index	✓
Measuring range refractive index [Min]	1,3330 nD
Measuring range refractive index [Max]	1,4200 nD
Readout refractive index	0,0001 nD
Accuracy refractive index	±0,0003 nD
Scale wash water	✓
Measuring range wash water [Min]	-60 °C
Measuring range wash water [Max]	0 °C
Readout wash water	0,1 °C
Accuracy wash water	±0,5 °C

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
Battery / accumulator type	Alkali(-Manganese)
Battery connection	Pad + Spring

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Battery capacity	1.300 mAh
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Battery voltage	1,5 V
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Environmental conditions

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

CE mark	✓
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Services (optional)

Article number for factory calibration	96 1-290
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Packing & Shipping

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

STANDARD

