

PRODUCT BROCHURE

OPTICS ORA 4FA

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ENGLISH



Refractive index measurement for laboratories and the industry

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PRODUCT SHOWCASE



DESCRIPTION

- The models in the KERN ORA-F range are universal, maintenance-free analogue manual refractometers
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- Manually calculated conversions and errors of the user are avoided by multiple selectable scales.
- These scales are especially developed, exactly calculated and checked. They are also characterized by their thin and clear lines.
- The optical system and the prism cover are made of special material which allows a low-tolerance measuring.
- NEW: With engraved serial number
- All models are fitted with an eyepiece which can be adjusted easily and smoothly to different visual capacities
- The temperature compensation ("ATC") enables accurate measurement at different ambient temperatures (10 °C to 30 °C)
- Included with the delivery:
 - Storage box
 - Calibration solution
 - Pipette

- Screwdriver
- Cleaning cloth
- Further accessories are available optionally.
- This model is particularly suitable for measuring and determining glycol concentration, battery fluid (BF) and measuring the freezing point of screen wash (CW). Furthermore, these models are suitable for measuring temperature-exchange systems.

SPECIFICATIONS

Article codes, product groups & Status information

Model article-code	ORA 4FA
Model-Serie	ORA-U
Assortment	Optics
Product Type	Refractometers
Product group	Analogue refractometers
Product usage type	Main article
EAN code (Model)	404576 1483 132
Predecessor Model	ORA 4FA-2022a; ORA 4FA-2023a
Customs tariff number	90275000
Country of Origin	CN

Technical data - Primary

Scales	EG PG CW BF
Scale Range	-50 °C - 0 °C -50 °C - 0 °C -40 °C - 0 °C 1,10 kg/l - 1,40 kg/l
ATC	yes

Technical data - Construction

Type	Handheld refractometer
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Display scale	Analogue
Dimensions (W×D×H)	160×40×40 mm

Technical data - Measuring system

Measuring method	Light refraction
Measuring Temp min	10 °C
Measuring Temp max	30 °C
Readout	1 °C 1 °C 5 °C 0.01 kg/l

Technical data - Environmental conditions

Storage Temp Min	-5 °C
Storage Temp Max	40 °C

Technical data - Packing & Shipping

Dimensions packaging (W×D×H)	215×94×65 mm
Gross weight	0.35 kg
Net weight	0.30 kg
Shipping method	Parcel service
Packaging component - by weight - cardboard	26.14 g

Packaging component - 26.14 g
by weight - plastics

Delivery time 1 d

Optional Services

ISO Calibration 961-290

FUNCTIONS

Standard



Option



ACCESSORIES

Model	Description
ORA-A1101	Prism cover ORA-A1101
ORA-A2103	Leather bag ORA-A2103
ORA-A1010	Liquid KERN ORA-A1010
OCS-A1101	Cleaning liquid KERN OCS-A1101

SERVICES

Model	Description
961-290	Factory calibration KERN 961-290
961-290R	Factory calibration KERN 961-290R

SPARE PARTS

Model	Description
ORA-A1001	Liquid KERN ORA-A1001
ORA-A2001	Prismatic flap ORA-A2001

Model	Description
ORA-A2002	Cover ORA-A2002
ORA-A2003	Eyepiece - rubber ORA-A2003
ORA-A2006	Rubber grip (53 mm) ORA-A2006
ORA-A2 101	Refractometer box ORA-A2 101
ORA-A2010	Pipette ORA-A2010

RELATED ARTICLES DATA

Model name	Scales	Scale Range	ATC
ORA 4FB	EG PG CW BF	-50 °C - 0 °C -50 °C - 0 °C -40 °C - 0 °C 1,10 kg/l - 1,40 kg/l	-
ORA 1UB	Urea	0 % - 40 %	-
ORA 1UA	Urea	0 % - 40 %	yes
ORA 4FA	EG PG CW BF	-50 °C - 0 °C -50 °C - 0 °C -40 °C - 0 °C 1,10 kg/l - 1,40 kg/l	yes
ORA 4UA	EG PG CW BF Urea	-50 °C - 0 °C -50 °C - 0 °C -40 °C - 0 °C 1,10 kg/l - 1,40 kg/l 30 % - 35 %	yes