Water Analysis

For swimming pools



PF-3 and VISOCOLOR®

The perfect team for swimming pools

- Compact photometer of the youngest generation
- Tough and water proof according to IP 68
- Fast and reliable water analysis
- Determination of chlorine, pH, cyanuric acid and total alkalinity
- Convenient handling



PF-3 and VISOCOLOR®

Addition to the MN family

The new compact photometer PF-3 is the smallest and youngest member of the MACHEREY-NAGEL photometer family. The instrument is able to read our proven *VISOCOLOR® ECO* tests and is perfectly suited for mobile analytics directly at the point of interest.

The PF-3 will be equipped with three different wavelengths which comprise the classic swimming pool parameters chlorine, pH, cyanuric acid and total alkalinity. The PF-3 and *VISOCOLOR*[®] *ECO* combine convenient handling for reliable test procedures and results as well as safe handling of daily water analysis.

PF-3 customer benefits at a glance







Small and tough

- · Handy and light weight
- · Glass-fibre reinforced housing
- Water proof according to IP 68
- Shock-resistant optics

Ideal for all your analysis needs in the lab and right at the swimming pool

Easy and convenient

- · Fully developed menu structure using just 4 buttons
- · Optional storage for just one 0-measurement
- Results in different units
- · Open cuvette slot
- Safe results and convenient operation

Smart and clever

- Runs on standard or rechargeable batteries
- Free of charge data export software
- · Add new tests and parameters anytime
- · Power supply and data transfer via USB port
- Flexible use and easy data administration

Technical data compact photometer PF-3

Туре:	LED photometer with 3 interference filters
Wavelengths:	Version A: 450 nm, 530 nm, 590 nm
Wavelength accuracy:	± 2 nm, bandwidth at half transmission 10–12 nm
Measuring modes:	Pre-programmed MN-tests
Cuvette holder:	Tubes 16 mm OD
Memory:	50 results
Display:	Backlit graphic display, result with unit
Operation:	Self-explanatory menu guidance, plastic foil keypad, test selection via parameter lists
Power supply:	3 AA batteries, rechargeable batteries, USB interface; optional internal accu-pack
Housing:	Water proof, IP 68 certified
Dimensions:	170 x 95 x 68 mm

This device complies with the following directives: 2006/95/EG - Low-Voltage Directive; 2004/108/EG - EMC Directive



PF-3 and VISOCOLOR®

VISOCOLOR® customer benefits at a glance







Reliable and accurate

- Highly accurate measurements due to photometric determination with PF-3
- · Simple chemical-analytical methods
- Reaction principles based on internationally acknowledged regulations (DIN, EN, ISO)
- Low susceptibility to interferences assures reliable results

High measurement safety for reliable water analysis

Comfortable and fast

- · Intuitive instructions with pictograms
- Colour-coded reagent bottles with clear dosing instructions
- Fast-dissolving reagents save time
- · Maximum safety for the user and easy disposal

Convenient handling for quick analysis without the need for time consuming training

Fair and economical

- · Individual combination of reagent bundles
- · Cost efficient refill packs available
- · Competent customer service by highly educated and experienced professionals
- · Fast replacement availability in case of repairs

Consistently fair concept with impressive price-performance ratio

VISOCOLOR® ECO tests running on the PF-3

VISOCOLOR [®] ECO Test	Measurement range	Test number	Version	No. of tests	REF
Alkalinity TA	5–250 mg/L CaCO $_{\rm 3}$	5-04	А	100	931 204
Chlorine 2, free and total*	0.05–2.00 mg/L Cl ₂	5-15	А	150	931 215
Free Chlorine 2*	0.05–2.00 mg/L Cl ₂	5-16	А	150	931 216
Chlorine 6, free and total*	0.05–6.00 mg/L Cl ₂	5-17	А	200	931 217
Free Chlorine 6*	0.05–6.00 mg/L Cl ₂	5-19	А	400	931 219
Cyanuric acid *	10–100 mg/L Cya	5-23	А	100	931 223
pH 6,0–8,2	pH 6.10–8.40	5-70	А	150	931 270

* This product contains harmful substances which must be specially labelled as hazardous. For detailed information please see MSDS.

Additional tests and versions will be launched successively.



PF-3 and VISOCOLOR®

VISOCOLOR® reagent cases

To provide maximum flexibility MACHEREY-NAGEL offers flexible case solutions for multiple applications. These mini-labs in rugged cases with premium foam inlays (available with or without photometer) can be equipped in an individual and highly flexible way with different test kits. Catering to our customer needs we offer a high range of pre-packed reagent cases including the PF-3, test kits and analytical accessories.



Ordering information reagent case with photometer PF-3

Chlorine tests with liquid reagents*

Reagent case	VISOCOLOR® ECO Tests	REF
PF-3 Cl ₂	Chlorine 2, free and total;	934 110
PF-3 Cl ₂ · pH	Chlorine 2, free and total; pH 6.0–8.2	934 112
PF-3 Cl₂ · pH · Cya	Chlorine 2, free and total; pH 6.0–8.2; cyanuric acid;	934 114
PF-3 Cl ₂ · pH · TA	Chlorine 2, free and total; pH 6.0–8.2; Alkalinity TA	934 116
PF-3 Cl₂ · pH · Cya · TA	Chlorine 2, free and total; pH 6.0–8.2; cyanuric acid; Alkalinity TA	934 118

Chlorine tests with solid reagents*

Reagent case	VISOCOLOR [®] ECO Tests	REF
PF-3 Cl ₂	Chlorine 6, free and total;	934 111
PF-3 Cl ₂ · pH	Chlorine 6, free and total; pH 6.0–8.2	934 113
PF-3 Cl₂ · pH · Cya	Chlorine 6, free and total; pH 6.0–8.2; cyanuric acid;	934 115
PF-3 Cl ₂ · pH · TA	Chlorine 6, free and total; pH 6.0–8.2; Alkalinity TA	934 117
PF-3 Cl ₂ · pH · Cya · TA	Chlorine 6, free and total; pH 6.0–8.2; cyanuric acid; Alkalinity TA	934 119

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