

# DUROMAT<sup>®</sup> Professional Fe (Iron)



## Analysis of iron in water ( $\text{Fe}^{++}/\text{Fe}^{+++}$ ) (with graphic display)

Multifunctional microprocessor analyzer for the analysis of the amount of iron in water with measuring range from:

**0,01 – 0,5 mg/l or 0,2 – 10 mg/l**

The DUROMAT<sup>®</sup> Professional Iron analyser qualitatively controls the iron removal system or the amount of iron present in the water and this avoid problems or damage caused by the chemical itself, saving water, time and chemicals that would be required for any anticipated regeneration of the softening system.

The display shows the exact amount of iron present in water.

The analyser is complete with:

**4 programmable relay outputs:** maximum value one, maximum value two (or minimum value and maximum value), command for a cooler, for a washing valve, pump, error, missing indicator, remote signal.

**1 output 0 (4) -20mA:** analysis result (linear hardness) and operation

**2 programmable digital inputs:** water meter, turbine water meter (Hall), flow meter, external start or stop commands.

**MODBUS RTU connection.**

**CANBUS connection (optional).**

**SD card connection:** data/results/error saving and transfer with date and time, software update.

**A bad analysis can be repeated** (just exceeded the maximum value, without giving an alarm signal).

**Extensive function control program,** relay drive, Leeds drive, accessory control.

**Steps of an analysis cycle:** opening an inlet solenoid valve - washing the measuring chamber for a settable time - checking the transparency of the water (zero point) - dosing the indicator by a peristaltic pump – result of the measured iron (by display) - final washing of the measuring chamber - the equipment stops waiting for the next analysis (timed, volumetric, manual or external signal start).

#### **Certifications / instructions:**

- CE certification
- documentation in English (on request: Italian, French, German etc.)

#### **Technical data DUROMAT® professional Fe (Iron):**



Electrical connection:	230V 50-60Hz (exactly: 85-264V, 47-63 Hz) 24V AC/DC
Power consumption:	25 VA
Degree of protection on plate:	IP 43
Degree of protection in box:	IP 56
Mounted on a plate:	2,5 Kg
Mounted in box:	3,0 Kg
Dimensions mounted on plate:	width x height x depth 280x360x113 mm
Dimensions mounted in box:	width x height x depth 300x390x130 mm
Indicator quantity in the bottle	500 ml
Outputs:	4 relay outputs 1 analogue output 0 (4) - 20mA 1 SD card 1 MODBUS (CANBUS optional) 2 digital inputs
Inputs:	
<b>Water quality requirements:</b>	
Temperature:	5° - 40° C
Optically:	transparent, without colour, without suspended substances, without air bubbles and CO2
Chemically:	pH 4 –10.5, iron <3ppm, copper <0.2ppm, aluminium <0.1ppm, manganese <0.2ppm acid capacity K S4.3 <5mmol/l
Water pression:	0,2-6 bar (2x104 – 6x105 Pa)
Drain:	without pressure (funnel)
Inlet/drain water connection:	flexible tube 6 mm external diameter

### Available reagents (one reagent needed):

Art	Type	Measuring range (Fe <sup>++</sup> + Fe <sup>+++</sup> )				
				ppm	mg/l	
200896	Low iron			0,01 – 0,5	0,01 – 0,5	
200897	High iron			0,2 – 10,0	0,2 – 10,0	

#### Optional:

Art		
201600	Dilution unit up to 1:10 to dilute the sample with iron concentrations above 10 mg / l.	

<b>DUROMAT®</b> professional Fe Mounted in box  0,2 - 6 ate (2x10 <sup>4</sup> – 6x10 <sup>5</sup> Pa)  (reagent not included)		85 – 264V 47-63Hz
		200161
<b>DUROMAT®</b> professional Fe Mounted on a plate  0,2 - 6 ate (2x10 <sup>4</sup> – 6x10 <sup>5</sup> Pa)  (reagent not included)		85 – 264V 47-63Hz
		200160
<b>Accessories (not necessary for operation):</b>		
Output	CanBus	<b>200157</b>
Output	WiFi (in work)	<b>200158</b>
Cleaning set	For road transport	200013
	For air transport	<b>200013S</b>
Aerator, 230V 50-60Hz	To remove CO2 in water	200020
Coolers	for water temperatures from 40 to 80 ° C	200030
	for water temperatures from 80 to 120 ° C	200031
	for water temperatures up to 200 ° C	200045

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