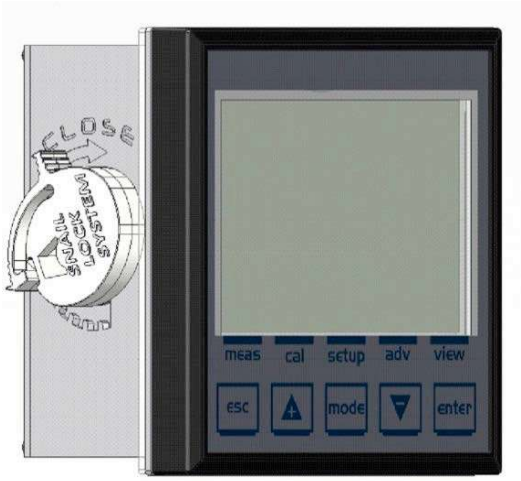
Controller Instrument
Kontrol 100 series



KONTROL 100

The Kontrol 100-series are advanced controllers designed for high-end applications.
The units feature and independent proportional control output, probe quality checking and a variety of outputs.
The user has full programming authority.

TECHNICAL CHARACTERISTICS

Graphic display and Keypad
128 by 128 pixel resolution monochrome display with graphic icons to show digital output status, washing cycle, alarms with red backlight.

Simultaneous flashing values for the measurement (numeric + bargraph) and temperature readings.

Five control keys for instrument calibration and configuration.

Enclosure Box and Power Supply
Wall mounting ABS plastic material IP65 full box (144x144x122)
Panel mounting ABS IP65 front panel only (96x96x42)
Universal Power Supply 100÷240 Vac 50/60 Hz
Low Power Supply 12÷32 Vdc or 24 Vac

Current outputs with Galvanic isolation
4÷20mA output
Two independent programmable Output Measures with Proportional routine regulation.

Relay Outputs
Two independent relais, two set points, alarm remote and back washing probe setting by software.
On/OFF, Timed and Proportional (PWM) routine function setting.

Solid State Relay (SSR)
Two Frequency output signal, two set points.

Snail Lock fixing system
Quick connection for panel mounting version.

APPLICATIONS

- Waste water
- Diary
- CIP
- Fish farming
- Drinking water
- Cooling towers
- Boilers
- Reverse osmosis
- Galvanic process
- Irrigation

PRODUCTS KEY

1	PRODUCT TYPE
K	Kontrol

2/3/4	INSTRUMENT TYPE
100	Kontrol 100

5/6	MEASURE
PR	pH/ORP
FX	Flow
CD	Conductivity

7	MOUNTING
P	box type 96X96
W	box type 144X144 (IP65)

8	POWER SUPPLY
M	100÷240 Vac
N	12÷32Vdc , 24 Vac

9	OPTIONAL
0	None
A	RS485 MODBUS

10/11/12	FREE

K	100	PR	P	M	0	000

MEASURE RANGE

Model	Range	Accuracy
pH	0 ÷ 14,00 pH	±0,01pH
ORP	± 2000 mV	±1 mV
Conductivity	0,054÷ 200.000 µS(*)	±2%
Flow Rate	0÷99.999 Liters/Sec.(**)	±0,5Hz
Temperature(***)	-50÷+150°C (-58÷+302 °F)	±0,2°C

(*) Conductivity Unit: µS, mS, KΩ, MΩ, ppm, ppb.
(**) Setting by software following unit measures: l/s, l/m, l/h, m^3/h, GPM
(***)Temperature measure by PT100/PT1000

TECHNICAL SPECIFICATIONS FOR THE pH MEASURE

Measure Range	0.00 ÷ 14.00pH
Resolution	± 0.01pH
Precision	0.01pH

TECHNICAL SPECIFICATIONS FOR THE ORP MEASURE

Measure Range	± 2000mV
Resolution	± 1mV
Precision	± 1mV

TECHNICAL SPECIFICATIONS FOR THE TEMPERATURE MEASURE (SECONDARY)

Sensor	PT100/PT1000
Measure Range	-50 ÷ +150°C
Resolution	± 0.1°C (°F)
Precision	PT100: ±0.5°C (±0.9°F) – PT1000: ±0.2°C (±0.4°F)

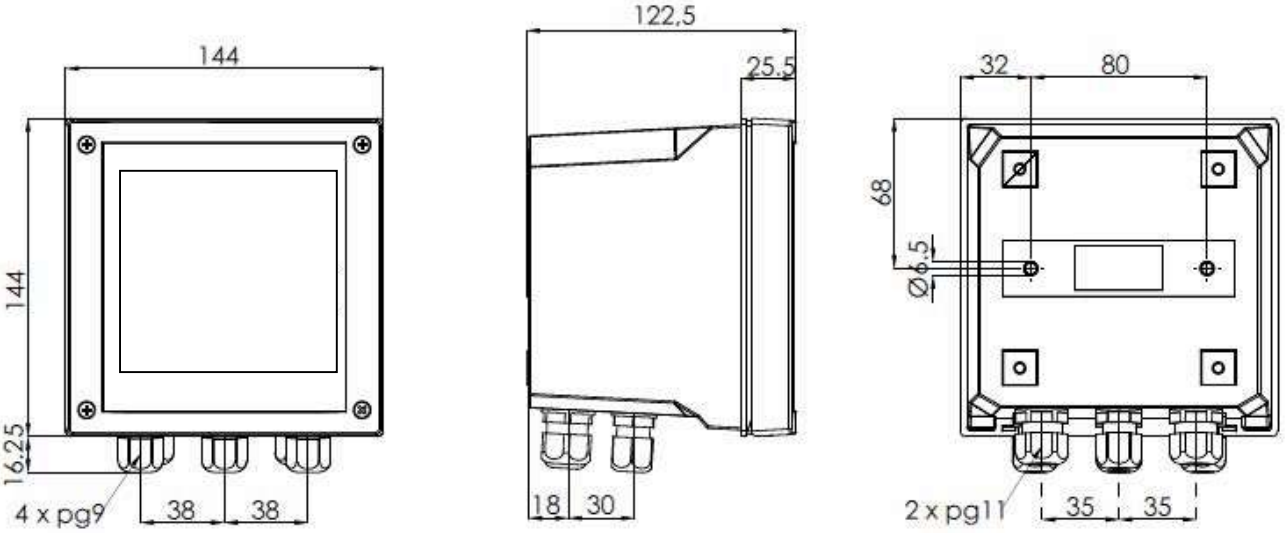
TECHNICAL SPECIFICATIONS FOR THE FLOWRATE MEASURE

Sensor	Hall, Reed or Push-Pull **Sensor (Padwell rotor)**
Measure Range	0,5 Hz at 1500 Hz
Resolution	± 0.5 Hz

OPERATING SPECIFICATIONS

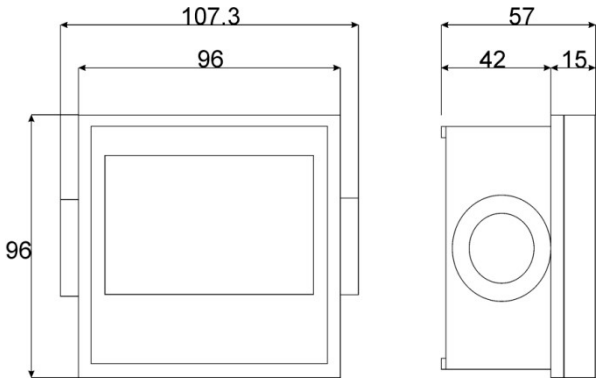
Power Supply	100÷240 Vac 50-60 Hz or 12÷32 Vdc / 24Vac
Power Consumption	< 5VA (@100÷240Vac) and <3.5W (@12÷32Vdc / 24 Vac
Relay Outputs:	mechanical 250 VAC/5A, 30 VCC/3 A
Alarms:	
Function	Delay, Faults and Min./Max
Delay time	1÷3600sec
Threshold disabling	Enable / Disable
Relay function	Closed / Open
Permanence Interval	0.00 ÷ 14.00pH / -2000 ÷ +2000 mV
Permanence Time	1÷3600sec
	For Alarm and Wash it is used the relay n. 2 with normally open contact, with maximum switching current of 5 Ampere at 230Vac. Maximum switching power on resistive load 230VA.
SSR (Solid State Relay)	2-SPST 400 VAC, max 125 mA, Bidirectional, NPN, PNP Frequency Output: 0 to 400 imp/min Pulse Duration: 100 mSec
Serial Port RS485:	Serial port RS485 with Modbus RTU/ASCII Protocol.
HOLD Digital Input:	
Input Voltage	12÷32 Vdc
Absorption	10mA max
Analog Outputs:	
Outputs	n.2 4-20mA Programmable
Maximum Load	800 Ohm
NAMUR Alarm Output	3.6 mA or 22 mA
Hold Alarm Value	

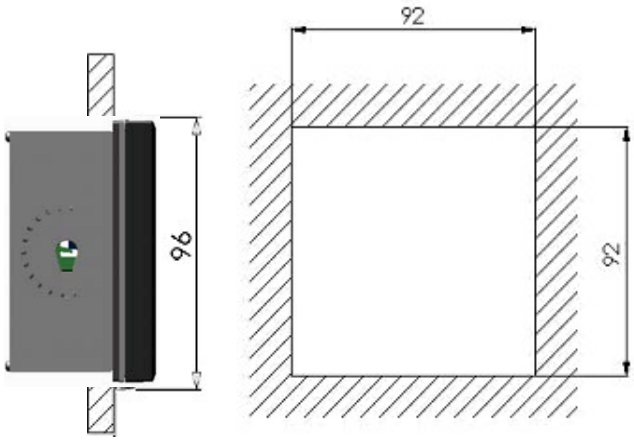
DIMENSIONS



(With accessory Box code: 9900107331)

Wall mounting size 144x144x122,5 mm





Panel mounting size 96x96x42mm