

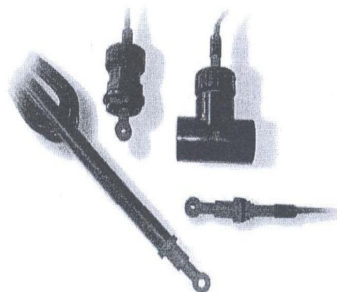
COMPLETE CONDUCTIVITY MEASUREMENT SYSTEM AND MAKE UP CLEANING SOLUTION

A complete conductivity measurement system consists of :

- Process control instruments
- Inductive electrode
- Pumps
- Level electrode

The choice of process control and pump depends on :

- The volume of the tank required to measure the conductivity of the solution. For larger tanks, two pumps are used in parallel. One with constant flow to achieve the desired conductivity in a short time and which stops working when we reach near the desired point and the second pump to achieve the exact conductivity value.
- For the process control instrument we can choose between two alternatives, which differ in the variety of their options and the cost.





1st solution: Advanced control with 2 pumps
for large units

| PIECE | CODE | DESCRIPTION |
|-------|-------------|--|
| 1 | 31181805027 | Instruments for process analysis NEXUS 5.000 CD RANGE IND 144 x 144 |
| 1 | 31181805023 | Inductive electrode, for NEXUS 1000 CD RANGE 0-12 MICRO S |
| 1 | 31181805005 | Dosing pump ATAM4 20 LT/H 5 BAR EPDM PVDF CERAMICA |
| 1 | 31181805006 | Dosing pump ATBL4 20 LT/H 5 BAR EPDM PVDF |
| 2 | 31181805004 | Level electrode AC.SL |



2nd solution: Advanced control with 1 pump
for unit small units

| PIECE | CODE | DESCRIPTION |
|-------|-------------|--|
| 1 | 31181805027 | Instruments for process analysis NEXUS 5.000 CD RANGE IND 144 x 144 |
| 1 | 31181805023 | Inductive electrode, for NEXUS 1000 CD RANGE 0-12 MICRO S |
| 1 | 31181805005 | Dosing pump ATAM4 20 LT/H 5 BAR EPDM PVDF CERAMICA |
| 1 | 31181805004 | Level electrode AC.SL |



3rd solution: Economical control instrument
with 2 pumps for large units

| PIECE | CODE | DESCRIPTION |
|-------|-------------|--|
| 1 | 31181805002 | Process control instruments NIKE SYSTEM 6 (with inductive electrode to 100 mS) |
| 2 | 31181805006 | Dosing pump ATBL4 20 LT/H 5 BAR EPDM PVDF |
| 2 | 31181805004 | Level electrode AC.SL |



4th solution: Economical control unit with 1 pump
for small units

| PIECE | CODE | DESCRIPTION |
|-------|-------------|--|
| 1 | 31181805002 | Process control instruments NIKE SYSTEM 6 (with inductive electrode to 100 mS) |
| 1 | 31181805006 | Dosing pump ATBL4 20 LT/H 5 BAR EPDM PVDF |
| 1 | 31181805004 | Level electrode AC.SL |

INSTRUMENTS FOR PROCESS ANALYSIS

NEXUS 5000

Main Characteristics

- Removable Electrical connections
- Positions of the numbered connections
- Plastic box ABS
- Universal power supply 100- 240 Vac 50/60 Hz
- Low Power 12 -32 Vdc or 24 Vac
- CE Conformity
- Output configuration: All relay outputs, output frequency and mA output can be configured with primary and second measurement.
- Wall mounting, IP65, size (H x W x D) 144 x 144 x 120 mm
- Panel mounting, IP65 frontal Box and IP40 Rear box, size (H x W x D) 96 x 96 x 133 mm

| CODE | DESCRIPTION | Measuring Range |
|-------------|--|--------------------|
| 31181805027 | INSTRUMENTS FOR PROCESS ANALYSIS NEXUS 5000 | 0,054 ÷ 200.000 µS |



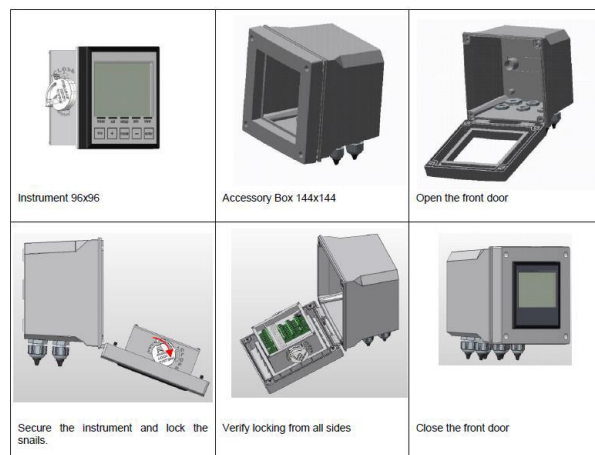
Parameters

Measuring Range

- Ph: 0 ÷ 14
- ORP: ± 2000 mV
- Conductivity: 0,054 ÷ 200.000 µS
- Flow rates: 0,0000 ÷ 99,999 l/sec
- Input 4-20 mA: 0 ÷ 99,999 ppm
- Temperature: 50-150 °C (58-302 °F ± 0,4 °F)

| Magnitude Measurement | Range | Deviation |
|-----------------------|--------------------------------|------------|
| Ph | 0 ÷ 14 | ± 0,01 pH |
| ORP | ± 2000 mV | ± 1 mV |
| Conductivity | 0,054 ÷ 200.000 µS | ± 2 % |
| Flow rates | 0,0000 ÷ 99,999 l/sec. | ± 0,5 Hz |
| Input 4-20 mA | 0 ÷ 99,999 ppm | ± 0,01 ppm |
| Temperature | 50-150 °C (58-302 °F ± 0,4 °F) | ± 0,2 °C |

IP65 box (as accessory for the panel mounting version)



Display

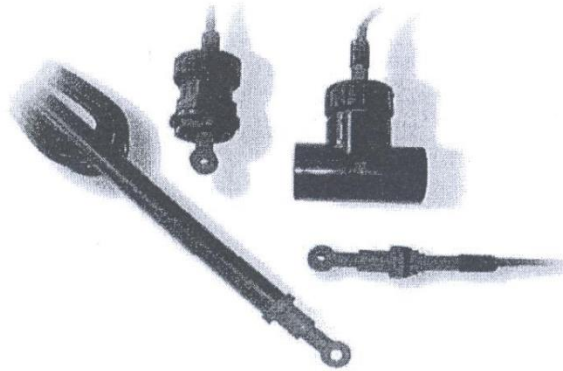
Four different backlight colors to emphasize the different functions.
In the standard view of the tools we have three areas, as follows:

- ✓ Service Icons: danger, maintenance, waiting time, transmission of data.
- ✓ Text message for alarms and operating information or temperature measured by an external sensor or entered manually.
- ✓ Name of the menu associated with the icon on the status bar.



Inductive electrode for NEXUS 5000

| CODE | DESCRIPTION | Measuring Range |
|-------------|--|-----------------|
| 31181805023 | Inductive electrode for NEXUS 5000 CD 1000 NEXUS 1000 CD RANGE 0-12 MICRO S | Από 0 – 12 mS |



Level Electrode Ac. SI

| CODE | DESCRIPTION |
|-------------|-----------------------|
| 31181805004 | Level Electrode AC.SL |



DOSING PUMP AT.BL4 ATHENA SERIES

- ATBL 4: to quickly fill the chemical in the tank when the tank is empty with the second pump.
- PVDF pump head * Quick connections * Power voltage 100-240 Vac * Degree of protection IP65 * Manual filling valve
- Proportional with constant flow
- 0-20% 0-100% dual flow adjustment by the operator
- Fast connection of the level electrode



| CODE | DESCRIPTION | Pressure | Flow rates | Cc/ Stroke | Connections | Strokes/ min |
|-------------|---|----------|------------|------------|-------------|--------------|
| 31181805006 | Dosing Pump ATBL4 20 LT/H 5 BAR EPDM PVDF (for caustic soda) | 5 bar | 30 l/h | 1,67 | 8 x 12 mm | 300 |
| | | 4 bar | 40 l/h | 2,22 | | |
| | | 2 bar | 55 l/h | 3,05 | | |
| | | 0,1 bar | 110 l/h | 6,11 | | |

| CODE | DESCRIPTION | Pressure | Flow rates | Cc/ Stroke | Connections | Strokes/ min |
|-------------|--|----------|------------|------------|-------------|--------------|
| 31181805008 | Dosing Pump ATBL4 20 LT/H 5 BAR PVDF CERAMICA (for acid) | 5 bar | 30 l/h | 1,67 | 8 x 12 mm | 300 |
| | | 4 bar | 40 l/h | 2,22 | | |
| | | 2 bar | 55 l/h | 3,05 | | |
| | | 0,1 bar | 110 l/h | 6,11 | | |

NOTE : All pumps are equipped with PVDF pump head and PVDF installation kits.

For sealing rings, note the following:

- FPM rings are used for nitric acid and sodium hypochlorite
- EPDM rings are used for peracetic acid + phosphoric acid
- EPDM rings are used for caustic soda

DOSING PUMP AT.AM4 ATHENA SERIES

- ATAM 4: analog dosing pump according to conductivity deviation. This is the first pump to be activated to compensate for the mS value and will work with the ATBL 4 pump when large flow is required.
- PVDF pump head * Quick connections * Power voltage 100-240 Vac * Degree of protection IP65 * Manual filling valve
- Analog with analogue flow
- With a digital signal (flow meter) capable of multiplying or dividing incoming pulses
- With an analogue signal (4-20 mA) with the capability of adjusting it as a percentage of maximum flow.
- 0-100% flow adjustment by the operator.



| Code | Description | Pressure | Flow Rates | Cc/ Stroke | Connections | Stroks/ Min |
|-------------|--|----------|------------|------------|-------------|-------------|
| 31181805005 | Dosing pump ATAM4 20 LT/H 5 BAR EPDM PVDF CERAMICA | 5 bar | 30 l/h | 1,67 | 8 x 12 mm | 300 |
| | | 4 bar | 40 l/h | 2,22 | | |
| | | 2 bar | 55 l/h | 3,05 | | |
| | | 0,1 bar | 110 l/h | 6,11 | | |

NOTE: All pumps are equipped with PVDF pump head and PVDF installation kits.

For sealing rings, note the following:

- FPM rings are used for nitric acid and sodium hypochlorite
- EPDM rings are used for peracetic acid + phosphoric acid
- EPDM rings are used for caustic soda



ECONOMICAL CONTROL INSTRUMENT

NIKE SYSTEM 6

The Nike System 6 is high-conductivity based on Nike System 6 technology but with a higher conductivity range of up to 100 mS, and operation with an induction electrode technology.

| Code | Description |
|-------------|-------------------------------------|
| 31181805002 | Control Instrument NIKE SYSTEM 6 |

This option includes one or two electromagnetic ATBL pumps. We do not offer analog pumps as this system does not work in 4-20 mA mode, like the Nexus 4000 but just on / off.

Temperature reduction:

Measuring conductivity from an inductive electrode automatically reduces the temperature, so no special temperature electrode is needed.