

Online Phenolphthalein Alkalinity Analyser

PACON 4900

PACON 4900 is a compact, easy to operate and accurate on-line analyser from JENSPRIMA for the automatic on-line measurement of phenolphthalein alkalinity and quality control of boiler water. The titrimetric colour change principle allows the measurement of high and low ranges by selecting different reagents. Low maintenance and low reagent consumption for long continuous operation. Standard 4-20mA and RS485 Modbus outputs for easy integration into your existing control system.



Measurement parameters

Phenolphthalein alkalinity (p-value)

Applications

Boiler Feedwater, Boiler Water, Cooling Water

Features

- Durable, accurate analyser method (titration for colour change)
- Automatic on-line monitoring, only one reagent required
- Special material measuring bath, no condensation on optics
- Stable measurements, generally no calibration required
- 4-20mA/RS485 Modbus outputs
- 4 programmable relay outputs
- External signal input function (can be linked with external devices)
- Compact design for easy installation
- Low maintenance and low reagent consumption

Two different measurement ranges of reagents are available:

TP5050 Phenolphthalein alkalinity: 0.2~5mmol/L

TP5200 Phenolphthalein alkalinity: 0.8~20mmol/L



Technical parameter

Reagents selected:	TP5050 : 0.2 - 5mmol/L 、 TP5200 : 0.8 - 20mmol/L
Accuracy:	±5% of the maximum value of the selected reagent
Repeatability:	±2.5% of the maximum value of the selected reagent Titrimetric colour change method
Reagent consumption:	0.05-0.6ml/per analysis
Reagent expiry:	2 years from the factory
Analysis time:	ca. 3 min depending on phenolphthalein alkalinity concentration and set rinse time
Measurement interval:	5-360 min optional
Automatic cleaning:	The instrument is automatically rinsed after each measurement
Calibration:	Service menu manual calibration
Ambient temperature:	10-45°C
Water sample temperature:	5-40°C
Water sample pressure:	0.5-5 bar, 1-2 bar recommended
Water quality requirements:	Clear, colourless, no suspended matter, no air bubbles, pH>8.2
Power supply:	100-240VAC, 50/60Hz
Power consumption:	20W (at work) , 3.5W (at standby)
Inlet/outlet:	6mm hose, open discharge no back pressure discharge
Current output:	0/4-20mA
Relay output:	4 passive NC/NO relay outputs, 250VAC/1A
External input:	2 programmable input contacts
Protection class:	IP65
Dimensions:	300×300×200mm
Weight:	ca. 4Kg

Measurement is by titration and the colour changes markedly from red to yellow. Phenolphthalein alkalinity measurements are commonly used in boiler feed water and boiler furnace water to estimate corrosion behaviour and are measured in mmol/L.

Order Guide

Order No.	Description
33-4900-00	PACON 4900 online Phenolphthalein Alkalinity Analyser
50-4905-01	TP5050 phenolphthalein alkalinity
50-4920-01	TP5200 phenolphthalein alkalinity
50-5000-10	Spare Parts Kit Including pump head (including pump tube), all seals, stirrups, connection pipe of reagent bottle, recommend to exchange every year.