

The PCM500 Fluid Cleanliness Monitor is a portable diagnostic monitoring device that provides a measurement of system fluid cleanliness.

As the successor to the popular PCM400, the new improved PCM500 uses proven mesh blockage technology to report accurate, reliable, 3 part ISO 4406 cleanliness codes for most types of fluids, in many types of environment.

With the PCM500 you can:

- Monitor contamination levels in mineral, synthetic, or water based fluids. Results are unaffected by the presence of water, air, or dark fluids
- Get accurate, 3 part* ISO 4406 cleanliness code results in under 6 minutes and to quickly take preventative action
- Upload real-time results directly to mobile devices for analysis and action
- 'Pass off' cleanliness of new builds quickly and confidently
- Protect your systems from catastrophic failure by detecting abnormal fluid cleanliness conditions quickly

The PCM500 can be permanently installed to monitor critical applications (including component test facilities) or used as a portable device for routine condition monitoring of various fluid systems

PCM500 Monitor Features

- Proven mesh blockage technology provides accurate 3-part* ISO 4406, AS 4059 Table 1 (NAS 1638) or AS 4059 Table 2 cleanliness codes
- Self cleaning procedure between each test ensures optimum accuracy of results
- Compact, robust, fully self contained portable design (fluid sampling pump included)
- Simple to use, color touch screen interface
- Long battery life for extended operation in remote locations
- Measurement of fluid cleanliness, temperature, viscosity, and optional water content.

 $^{*}3$ part code measured at 4 µm, 6 µm and 14 µm (c) per ISO 16889.

New: PCM500 Series Fluid Cleanliness Monitor



Operation

The color LCD touch screen allows simple menu driven input of sample identification, monitor configuration and data output.

The HD screen displays real time data and test results which are automatically stored for subsequent trending and evaluation. An optional bluetooth connected printer allows the operator to produce a hard copy of the test results if required.

All ancillary components for high and low pressure on-line sample monitoring are contained

within the unit, with sufficient internal power to complete up to 35 tests between charges. (AC power can be used if preferred).

For further protection and ease of transport, the PCM500 is supplied in a robust flight case.



Specifications

Power supply: 90-260 VAC or integral

12 VDC Lithium Ion battery

Battery life: Typically 35 samples

Temperature 10 °C to 80 °C (50 °F to 176 °F)

Range: (dependent on fluid type)

Compatibility: Water glycols, aqueous solutions.

Petroleum and synthetic oils (hydraulic lubricating, dielectric, etc.), fuels, industrial

phosphate esters.

Seals: Fluorocarbon

Operating Viscosity:

1.5 to 450 cSt (30 to 2,200 SUS)

Pressure: 0 to 315 bar (4570 psi) max

Monitoring range: ISO 4406: <11/9/7 to 23/21/17

SAE AS 4059 Table 1

Class 1 to 12 (derived from NAS 1638)

SAE AS 4059 Table 2

 $>4 \mu m$ 1A to 12A, $>6 \mu m$ 1B to

12B >14 μm 1C to 12C

Water in Oil % RH: ± 2% at 5 to 95% RH (PCM500W)

Accuracy: \pm 1/2 ISO 4406 Code

Communication

Ports:

3 x USB's (Data Acquisition, PC Setup, Printer), Ethernet and

RS232C (PLC Control)

Enclosure: IP 65 (NEMA 4)
Weight: 11 kg (24 lb)

Dimensions: 400 x 260 x 250 mm

(15.8 x 10.2 x 10 inches)



Real time data is displayed during test to show progress



Multiple test data can be stored and displayed for subsequent analysis and download

Ordering information

Please select from the following part number options only.

Without Water Sensor With Water Sensor

PCM500 M A
PCM500 W M B
PCM500 W M B
PCM500 W M D
PCM500 U B
PCM500 U C
PCM500 U C
PCM500 U C

References 12 refer to tables below.

Table 1: Fitting Type

Code	Description
М	1/4" BSPP Female Swivel fitting to metric test point
U	1/4" NPT fitting and end cap

Table 2: Power Lead

Code	Description
А	UK Power Lead
В	European Power Lead
С	USA Power Lead
D	Australian Power Lead

Printer Kit and Accessories

PCM500-PRT





Pall Corporation

Pall Machinery and Equipment

25 Harbor Park Drive
Port Washington, NY 11050
+1 516 484 3600 telephone
+1 800 289 7255 toll free US

Portsmouth - UK +44 (0)23 9233 8000 telephone +44 (0)23 9233 8811 fax industrialeu@pall.com



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