



Pall Corporation

Remaining Life Indicator

DIAGNOSTIC AND MONITORING EQUIPMENT



Remaining Life Indicator Features and Benefits

- Measures and displays the percentage remaining life of the filter element
- LCD provides continuous 'real time' condition monitoring
- User defined operation, extensive data storage and analysis software included
- Sensor interface to a PLC with 4-20 mA output
- Can be fitted to any existing Pall installation

The 'Pall' 'DeltaLog' differential pressure monitor is the next generation in planned filter maintenance. The **Pall** 'DeltaSense' sensor measures the differential pressure across the filter element and displays the reading as the % remaining element life on the **DeltaLog** module display. Maintenance can be planned, days or weeks in advance, when the filter is close to blocking and when it is convenient.

Analysis

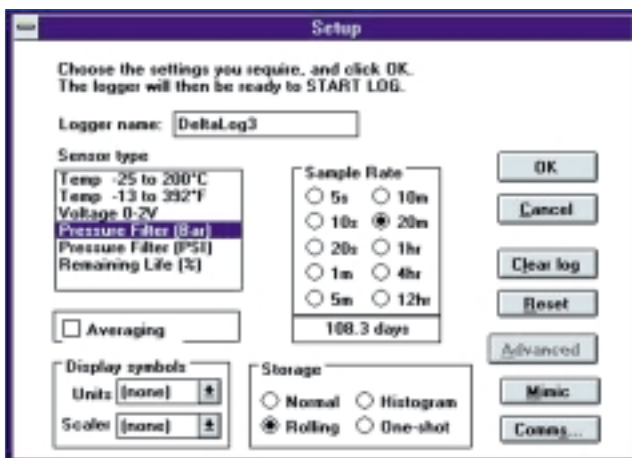
Up to 8,000 readings can be stored by the **DeltaLog** for subsequent downloading to a PC when required. This data can be plotted on a graph using the software supplied or taken into spreadsheet software packages for further analysis. Comparison against previous filter element usage can help predict typical maintenance periods. A change in filter element blockage rate, for example, could signify that increased contamination is being generated which requires investigation.

Installation

The **DeltaSense** sensor screws directly into any Pall filter indicator port and is then connected to a **DeltaLog** module positioned nearby. Data can be exported using the communications port allowing accurate data transmission locally or over long distances from source.

Simple Operation

Based on user selection the **DeltaLog** module displays either % remaining element life or differential pressure, in bar differential or psid. Readings can be taken immediately or at specified intervals. Configuration of the **DeltaLog** module is carried out using the 'Windows'™ based software supplied once installed on a PC.



Remaining Life Indicator Features and Benefits

Applications

- Hydraulic Fluids
- Lubricating Fluids
- Dielectric Fluids
- Fuel Oils

Flexibility

The **DeltaSense** sensor and **DeltaLog** module can be configured to suit any application for the most effective and economic monitoring solution.

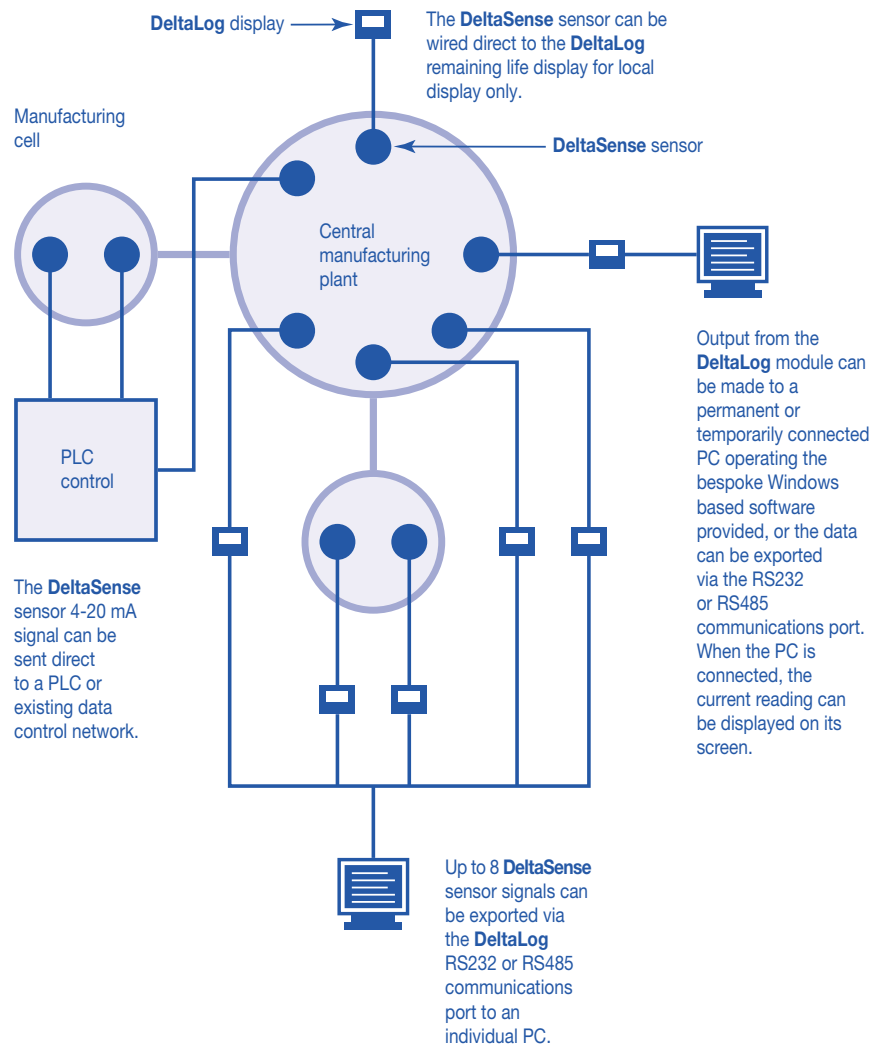
Up to 8 **DeltaSense** sensor signals can be linked to an individual PC for analysis of results exported via the **DeltaLog** communications port.

The **DeltaLog** module can take readings at pre-set intervals of between 5 seconds and 12 hours to suit user requirements. Each **DeltaLog** module is identified by its serial number or can be given its own name at set-up i.e. DeltaLog 3. Each **DeltaSense** sensor is identified by its serial number.

Meaningful results

Data may be analysed using the 'Windows' based software supplied with the **DeltaLog** module. Results can be stored as a text file, plotted using the graphing facility or exported to another software application (ie, spreadsheet, SPC programme or database type package).

Where sudden fluctuations in differential pressure occur the **DeltaLog** module can average the previous 5 readings to provide a consistent and relevant output. High and low alarm limits can also be set to suit the application requirements.



*The **DeltaSense** differential pressure sensor*

Remaining Life Indicator Specifications

DeltaLog differential pressure logger

Dimensions:	100 mm H x 100 mm W x 70 mm D
Power supply:	90 – 240VAC, 50/60 Hz or 24 – 36 VDC
Display:	LCD
Data Interface:	RS232 for local data transmission RS485 for data transmission over long distances from source
Rating:	IP65
Material:	Polycarbonate & GRP connector

DeltaSense differential pressure sensor

Range:	0.1 to 4.0 bar and 0.2 to 8.0 bar
Pressure rating:	450 bar maximum operating Rated fatigue pressure: 415 bar to NFPA/T2.6.1.R1 1991 Cat B/90.
Temperature:	-10°C to 90°C
Fluid compatibility:	Petroleum, water-oil, emulsions, water glycol, specified synthetics, aerospace phosphate esters
Output:	2 wire, 4 – 20 mA (4 mA = 0 bar, 20 mA = 4 or 8 bar)
Rating:	IP65
Material:	304 S15 stainless steel
Cable:	2 metres

Ordering information

Part Number	Description
HC0691C20	DeltaLog module with RS232 interface
HC0691C40	DeltaLog module with RS485 interface
H□0855K40	DeltaSense device to 4 bar differential pressure
H□0855K80	DeltaSense device to 8 bar differential pressure

□ See table 1.

Table 1. Seal Type

Code	Seal Material	Fluid Service
Z	Flourocarbon	Petroleum, water-oil, emulsions, water glycol and specified synthetics



Pall Corporation

Pall Machinery and Equipment

A Division of Pall Europe Limited
Europa House, Havant Street
Portsmouth PO1 3PD, England

(023) 9230 3303 telephone
(023) 9230 2507 fax
m&e_sales@pall.com

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