

SPECIALIST PRODUCTS

MERA IMS™ CCS

Component Condition Sensor

About the MERA CCS

The CCS is a component used within the IMS system. It is used to provide raw data to the IMS HUB. The data is then combined within the proprietary algorithm to allow the IMS to process and determine the condition of the oil.

This data driven approach utilises previous failure data and correlates the measured condition with known failures using pattern recognition techniques like clustering and neural networks.

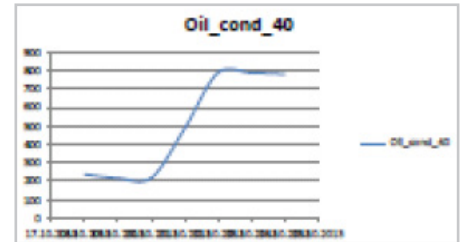
The CCS allows the end user to determine when to replace the oil based on condition instead of using set schedules. This reduces service intervals and has an environmental benefit by reducing volume of oil used in service.

Measured Parameters

- Particle contamination level
- Kinetic viscosity
- Humidity
- Conductivity
- Temperature
- Wear

Internal System Parameters

- Pressure
- Temperature
- CPU Status
- Pump Status



| Data | Description | Unit |
|------------------------|-------------|---------|
| Electrical | | |
| Power supply input | 24 | VDC |
| Power supply output | - | - |
| Current | <1 | A |
| Control signal | - | - |
| Com. interface | CanBus | CanOpen |
| Mechanical | | |
| Dimension ¹ | - | - |
| Material | Aluminium | |
| Protection Class | 67 | IP |
| Connection | 1" | BSP |
| Fluid type | Industrial | Mineral |
| Fluid operating temp. | - | - |
| Protection | 67 | IP |
| Other | | |
| Operation amb. temp. | -40...85 | °C |
| Storage temp. | -5...50 | °C |
| Ambient humidity | 0...90 | % |
| Max operating pressure | 20 | bar |
| Measuring range | 0-100 | % |
| Weight | 0.5 | Kg |
| Item number | | |
| CCS Module | | 101707 |

Key Benefits

- Real time data monitoring of oil condition
- Extend the life of oil by knowing the condition at all times
- Decrease unnecessary oil changes saving money and time
- Increase environmental benefits from reduction in oil changes
- Early identification of component degradation
- Planned maintenance as required instead of set schedule

¹ Dimension according to pipe/tube dimension