**Features and Benefits**

- Two contamination calibrations in one instrument (reversible)
- ISO 4406:1987; NAS 1638
- ISO 4406:1999; SAE AS 4059(D)
- Saturation and temperature measurement through the built-in TestMate® Water Sensor (TWS)
- Integrated pump for measurement in pressureless reservoirs
- Operation with 24 VDC network adaptor included in scope of delivery
- Data storage capabilities
- Interfaces: 5-pole plug, Bluetooth, USB data port

**Description**

The TestMate® Monitoring Unit TMU series combines the advantages of the portable contamination measurement units with the measurement technology of the Testmate® Contamination Monitor (TCM) and TWS (Testmate® Water Sensor).

The TMU is a portable service unit and is designed for measurement of solid particle contamination and water saturation in hydraulic systems. It is designed for temporary operation up to a maximum of 30 minutes followed by a rest period of 10 minutes and is not intended for continuous operation.

The TMU will measure contamination levels on mineral based hydraulic oils compatible with Viton® seals. The TMU is not compatible with water glycol fluids.

The integrated pump and the hoses with test point connections, which are included with the TMU, allow operation on pressureless reservoirs, control circuits, and high pressure circuits.

**Applications**

- Hydraulic systems
- Service for mobile hydraulics
- Maintenance
TestMate® Monitoring Unit

General Data:
- **Self-Diagnosis:** Continuously with error indication via status LED and display
- **Measured Value:** ISO code / SAE Class / NAS Class / Saturation level / Temperature
- **Measuring Range:** Display from ISO code 9/8/7 (MN) to ISO code 25/24/23 (MAX)
  - Calibrated within the range ISO 13/11/10 to 23/21/18
  - Saturation level 0 to 100 %
  - Temperature -13°F to 212°F (-25°C to 100°C)
- **Accuracy:** ± 1/2 ISO class in the calibrated range / ± 2 % Full scale max.
- **Material of Sealing:** FPM Viton seals
- **Ambient Temperature Range:** 32°F to 113°F (0°C to 45°C)
- **Storage Temperature Range:** -40°F to 176°F (-40°C to +80°C)
- **Dimensions (cover closed):** 9.06" H x 16.14" L x 13"D
- **IP Class:** IP50 in operation IP67 closed
- **Weight:** Approx. 29 lbs (13 kg)

Hydraulic Data:
- **Operating Pressure:**
  - IN: -7.25 to 650 psi (-0.5 to 45 bar)
  - OUT: 0 to 7.5 psi (0 to 0.5 bar)
- **Pressure Max.:** 5000 psi (345 bar) (using included high pressure adapter)
- **Maximum Suction Height:** 39 in (1 m)
- **Permissible Viscosity Range:** 46 to 1622 SUS (10 to 350 cSt)
- **Fluid Temperature Range:** 32°F to 158°F (0°C to +70°C)

Electrical Data:
- **Power Supply Voltage:** 24 VDC ± 20%, residual ripple < 10%
- **Max. Power / Current Consumption:** 100 Watt / 4 A
- **Interface:** Plug connection, 5-pole, male, M12x1 and USB

How to Build a Valid Model Number for a Schroeder TMU:

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
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</thead>
<tbody>
<tr>
<td>TMU</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1</td>
<td>AS</td>
<td>K</td>
<td>–</td>
</tr>
</tbody>
</table>

= TMU1ASK

Example: TMU – 1 – AS – K = TMU1ASK

Model Number Selection

Preferred order codes designate shorter lead times and faster delivery.

Specifications

BOX 1 BOX 2 BOX 3 BOX 4

TMU – – – –

Example:

TMU – 1 – AS – K = TMU1ASK

Model Contamination Code

ISO 4406:1999; SAE AS 4059(D) / > 4 µm(c)
> 6 µm(c) > 14 µm(c) > 21 µm(c)

Water Sensor

AS = TestMate® Water Sensor

Power Supply Adapter

K = 100-240 VAC / 50/60 Hz/1 Phase
(Europe, USA/Canada, UK, Australia, Japan)

We do not guarantee the accuracy or completeness of this information. The information is based on average working conditions. For exceptional operating conditions, please contact our technical department. All details are subject to technical changes.

**Items supplied with TMU-1-AS-K include:**
- TestMate® Monitoring Unit
- Power supply AC adapter with connecting cables to supply voltage for Europe, USA/Canada, UK, Australia, & Japan
- Adapter for pressure lines
- Inlet pressure hose with screw connection for 1620 test point, length = 2 meters (approx. 79 inches) in length
- Inlet suction hose, clear, open end, length = 0.3 meters (approx. 12 inches) in length
- Outlet return hose, open end, clear, length 1 meter (approx. 39 inches) in length
- USB Flash Drive

**Accessories:**
- Battery Pack (approx. 5 hours of use) Part No. 3504605
- Field Verification Startup Kit - Part No. 03443253
- Field Verification Kit (fluid only) - Part No. 03443249