Systematic oil care is of great importance to operators of fluid power and lubrication systems who wish to minimize maintenance costs and optimize the durability of both the oil and system components.

Checking both cleanliness and chemical composition is made easier by having a dedicated sampling port. Topping off the system through a dedicated G1/2 port fitted with a quick release coupling ensures cleanliness and facilitates the use of filter carts.

By incorporating the above features with a level control, temperature control and breather filter with condition indicator, BUHLER has designed an integrated solution giving cost savings on installation. It should be noted that the filler port is totally isolated from the float tube in order to prevent incorrect level readings while filling/topping off.

The fluidcontrol terminal FC-T G1/2-75-DC 75BMW in the configuration shown complies with BMW requirements. It provides two M12 connector sockets, a temperature display and preset level contacts.

Please note that our product line contains many more options.

- Level controls
- Temperature controls
- DIN - flange
- Filling port G1/2
- 3 µm breather filter including fill prevention insert
- Clogging indicator
- Compact dimensions
- Easy installation
**Technical Data**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. operating pressure</td>
<td>1 bar (14.5 psi)</td>
</tr>
<tr>
<td>Max. operating temperature</td>
<td>80 °C (176 °F)</td>
</tr>
<tr>
<td>Min. density of fluid min.</td>
<td>0.8 kg/dm³ (0.029 lb/in³)</td>
</tr>
</tbody>
</table>

**Material:**
- Float SK 610: hard PU
- Switch tube: brass
- Stilling tube: brass
- Flange: galvanized steel
- Breather: PA
- Retention rate: SM-L = 3 µm

**Level contact**
- K101 and K102
- Min. distance between contacts: 1.57”
- Max. voltage: 24 V
- Max. current: 0.5 A
- Max. contact load: 10 VA

**Thermotronic 71**
- Range of temperature display: from 4° to 248 °F (-20 to +120 °C)
- Range of alarm indication: 32° to 210 °F (0 to +99 °C)
- Programmable set points: 2
- Material housing: PA, IP65
- Display: four digit seven segment LED display and three light emitting diodes for level status display
- Current consumption at power up: about 140 mA for 100 ms
- Operating current consumption: approx 30 - 50 mA
- Supply voltage: 24 VDC ±10 %
- Output: PNP
- Ambient temperature: 0 - 70 °C (32 -158 °F)
- Accuracy: 1 % of full range
- Resolution: 2 °F / 1 °C
- Programming: 3 button keypad
- Temperature sensor: PT 100

**General description of Thermotronic 71**
The Thermotronic 71 is a combined microprocessor controlled digital display and control unit for monitoring and stabilizing the operating temperature in fluid power systems.

The actual temperature is displayed on a high-visibility LED display. The status of the entire unit (output, sensor, broken wire) is indicated by separate LED's. Temperature unit can be set to °Celsius or °Fahrenheit. Programming is by touch keys. The settings are protected against unauthorized operation by key lock.

**Wiring Diagram**
Normal position: float on top = filled reservoir

**Order Information**

<table>
<thead>
<tr>
<th>Part-no</th>
<th>Connector</th>
<th>Display</th>
<th>L =</th>
<th>L1=</th>
<th>L2=</th>
<th>Temperature-contact T1</th>
<th>Temperature-contact T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1175900401</td>
<td>2xM12</td>
<td>yes</td>
<td>9.84°</td>
<td>5.91° NO*</td>
<td>7.09° NC*</td>
<td>122°F / NC*</td>
<td>140°F / NC*</td>
</tr>
<tr>
<td>1175900402</td>
<td>2xM12</td>
<td>yes</td>
<td>14.57°</td>
<td>5.91° NO*</td>
<td>7.87° NC*</td>
<td>122°F / NC*</td>
<td>140°F / NC*</td>
</tr>
<tr>
<td>1175900403</td>
<td>2xM12</td>
<td>yes</td>
<td>20.47°</td>
<td>7.87° NO*</td>
<td>11.81° NC*</td>
<td>122°F / NC*</td>
<td>140°F / NC*</td>
</tr>
</tbody>
</table>

*NC= normally closed / NO= normally open

**Accessories**
- Part No. 9144050018 Connecting cable M12x1 with 1 x 5 pole M12 plug cable length: 9.8ft

we reserve the right to amend specifications