How efficient is your temperature control?

Prime movers need reliable temperature control to enable fast warm up, accurate control and efficient operation, minimising emissions and maximising output.

Thermostatic Valve Solutions
Overview

amot
The AMOT Temperature Control Solution

AMOT Thermostatic Valves offer many advanced features:

• No external power source required - simple, low cost installation
• Rugged, robust construction
• No user setting needed - ‘fit and forget’ solution
• Very low friction characteristics
• Easy installation - operates in any mounting position
• Tamperproof temperature settings

Positive Acting Temperature Control

AMOT Thermostatic Valves provide reliable control of fluid temperatures in cooling systems, heat recovery and many other temperature control applications. They are also suitable for process control and industrial applications where fluids must be mixed or diverted depending upon temperatures.

All AMOT internally sensed valves have positive 3-way action. This ensures that on process start up all of the flow is through the bypass line, giving the fastest possible warm-up time.

Operation and flow control is established by the temperature element, which constantly monitors and regulates the medium to the exact specified temperature setting.

When required the valve will positively shut off the bypass line to give full cooling.

The 3-way valve ensures constant volume flow in the system and gives no restriction during the warm-up cycle, ensuring maximum performance.

Typical Applications

Diverting Applications

When valves are used for diverting service, the inlet is Port A (temperature sensing port), with Port C being connected to the cooler, and Port B connected to the cooler by-pass line.

Mixing Applications

When valves are used for mixing service, Port C is the cold fluid inlet port from the cooler, Port B is the hot by-pass fluid inlet, and Port A the common outlet. Port A is the temperature sensing port and will mix the hot and cold fluids in the correct proportion so as to produce the desired outlet temperature leaving Port A.
Marine
**Engines** - lube oil, high temperature (HT), low temperature (LT) water
**Compressors and Gearboxes** - lube oil
**Heat Recovery and Water Makers** - water circuits

Power Generation
**Engines and Turbines** - lube oil, high temperature (HT), low temperature (LT) water
**Heat Recovery** - water circuits

Offshore
**Oil and Water Circuits** - steel and stainless steel valve configurations
NACE or NORSOK certified

Nuclear
**Emergency Diesel Generators (EDG)**
**Cooling Circuits** - lube oil, high temperature (HT), low temperature (LT)

Renewable Energy
**Wind Turbines** - lubricating and hydraulic oil temperature control
**Solar Panels**
**Tidal / Wave Energy** - lubricating oil temperature control

Refrigeration
High pressure steel valves - flanged or welded connections for refrigerant contaminated lube oil circuits

Custom Engineered Valves
AMOT designs and manufactures thermostatic valves to meet specific engine and application requirements. Contact us for more information.
Selecting the right Thermostatic Control Valve

Selecting the right thermostatic control valve requires specific information about the application and engine:

- Application
- Fluid and flow rate
- Control temperature
- Body material and connection
- Maximum working pressure (MWP)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sizes and Connections</th>
<th>Flow Rate</th>
<th>Body Material</th>
<th>Control Temperature</th>
<th>Maximum Working Pressure (MWP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>DN40 to DN50 (1½&quot; to 2&quot;) threaded DN40 to 200 (1½&quot; to 8&quot;) flanged</td>
<td>15 to 400 m³/hr (68 to 1750 US gpm)</td>
<td>Cast iron, ductile iron, aluminium, steel, stainless steel</td>
<td>13 to 116°C 55 to 240°F</td>
<td>Up to 45 bar (655 psi)</td>
</tr>
<tr>
<td>C</td>
<td>DN15 to DN40 (½&quot; to 1½&quot;) threaded DN 40 (1½&quot;) flanged</td>
<td>1.4 to 12 m³/hr (6 to 54 US gpm)</td>
<td>Cast iron, bronze, aluminium, steel or stainless steel</td>
<td>18 to 113°C 65 to 230°F</td>
<td>Up to 72 bar (1050 psi)</td>
</tr>
<tr>
<td>E</td>
<td>DN40 (1½&quot;) threaded or flanged</td>
<td>8 to 18.3 m³/hr (35 to 79 US gpm)</td>
<td>Cast iron, bronze, steel or stainless steel housings</td>
<td>29 to 114°C 85 to 237°F</td>
<td>Up to 69 bar (1000 psi)</td>
</tr>
<tr>
<td>H</td>
<td>DN100 to DN150 (4&quot; to 6&quot;) flanged</td>
<td>75 to 280 m³/hr (330 to 1232 US gpm)</td>
<td>Steel or stainless steel housings</td>
<td>13 to 116°C 55 to 240°F</td>
<td>Up to 45 bar (655 psi)</td>
</tr>
<tr>
<td>J</td>
<td>DN20 (¾&quot;) threaded</td>
<td>2 to 8 m³/hr (9 to 35 US gpm)</td>
<td>Aluminium or bronze housings</td>
<td>18 to 113°C 65 to 230°F</td>
<td>Up to 24 bar (350 psi)</td>
</tr>
<tr>
<td>R</td>
<td>DN20 to DN80 (½&quot; to 3&quot;) weld</td>
<td>3 to 60 m³/hr (13 to 264 US gpm)</td>
<td>Steel</td>
<td>35 to 82°C 95 to 180°F</td>
<td>Up to 35 bar (500 psi)</td>
</tr>
</tbody>
</table>

Contact us for more information

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