

# Temperature Sensing Valve

## Model 4155A

### Typical applications

- Monitors liquid temperature in engines and other industrial plant
- Can be used as a single component or as part of a complete safety shutdown system for monitoring:
  - Jacket water
  - Lube oil
  - Bearing lube oil temperature
  - Gear box oil



**Model 4155A  
Temperature Sensing Valve**

### Key features and benefits

- Fast response
- Easy installation
- Adjustable 16°C - 120°C (61°F - 248°F)
- Virtually no maintenance

### Accreditations available

- PED Suitable for Group 1 & 2 liquids (Ensure materials are compatible)
- ATEX  II 2G TX X
-  Complies with all relevant EU directives

# Temperature Sensing Valve - Model 4155A

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# Temperature Sensing Valve - Model 4155A

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## Overview

AMOT Model 4155 comprises a temperature sensing element which operates a pushrod in response to increasing temperature. At a predetermined temperature, the valve assembly is lifted from its seating, allowing the sensing medium to vent and reduce pressure within the control circuit.

The temperature at which the valve opens is determined by the setting of the adjusting screw.

## Operation

At a predetermined temperature, the valve assembly is lifted from its seating, allowing the sensing medium from the inlet port to pass through to the vent port, and reduce pressure within the control circuit.

When the sensed temperature falls below the set point, the valve closes.

## Installation

- AMOT Model 4155 is supplied set to the required temperature, which is stamped on the attached nameplate.
- Use the model code in How to Order table on page 4 to determine the type of installation thread, and fit into the required threaded hole, using suitable thread sealant or Teflon tape.
- Connect the process fluid pipework to the inlet and vent ports, using suitably rated ¼" NPT fittings, again using suitable thread sealant or Teflon tape. Both ports must be connected, and checked for leakage before start up.
- Since the set point adjustment screw is inside the unit, it is not possible to adjust it with a pipe connected to the inlet port. If adjustment is required, the unit must be returned to AMOT.

### Set point verification procedure

- To verify that the valve operates at the correct temperature, connect pressure to the inlet port, and a pipe to the vent port. Place the sensing end of the valve into water at slightly less than the set point temperature, and allow to rest for a minimum of 5 minutes, whilst checking that the valve has not operated.
- Gradually increase the temperature, leaving a suitable dwell time after each increase, until a temperature is reached where the valve operates – indicated by pressure from the inlet port being connected to the vent port.

# Temperature Sensing Valve - Model 4155A

## How to Order

Use the table below to select the unique specification of your Model 4155 Temperature Sensing Valve.

Example	4155A	1	2	1	A	-AA	Code description	Comments	
							<b>Basic model number (A)</b>		
<b>Basic model number (A)</b>	4155A								
							<b>Thread and finish (B)</b>		
							<b>Installation</b>	<b>Inlet and vent</b>	
<b>Thread and finish (B)</b>		1					3/8" NPT	1/4" NPT	
		2					3/8" BSP (TR)	1/4" NPT	UK ONLY
							<b>Seal material (C)</b>		
<b>Seal material (C)</b>			2				Viton		
							<b>Temperature element extension (D)</b>		
							<b>Installed depth</b>		
							<b>Inches</b>	<b>mm</b>	
<b>Temperature element extension (D)</b>		0					1.030"	26 mm	
		1					1.621"	41 mm	
							<b>Temperature range (E)</b>		
							<b>°C</b>	<b>°F</b>	<b>Max. cont. temp.</b>
<b>Temperature range (E)</b>					A		16 - 50	61 - 122	88°C (190°F)
					B		50.6 - 65	123 - 149	93°C (200°F)
					C		65.6 - 82.2	150 - 180	102°C (215°F)
					D		82.8 - 100	181 - 212	110°C (230°F)
					E		100.6 - 120	213 - 248	128°C (262°F)
							<b>Customer special requirements (F)</b>		
<b>Customer special requirements (F)</b>						-AA	Standard	May be omitted	
						-***	Made-to-order	Contact AMOT	

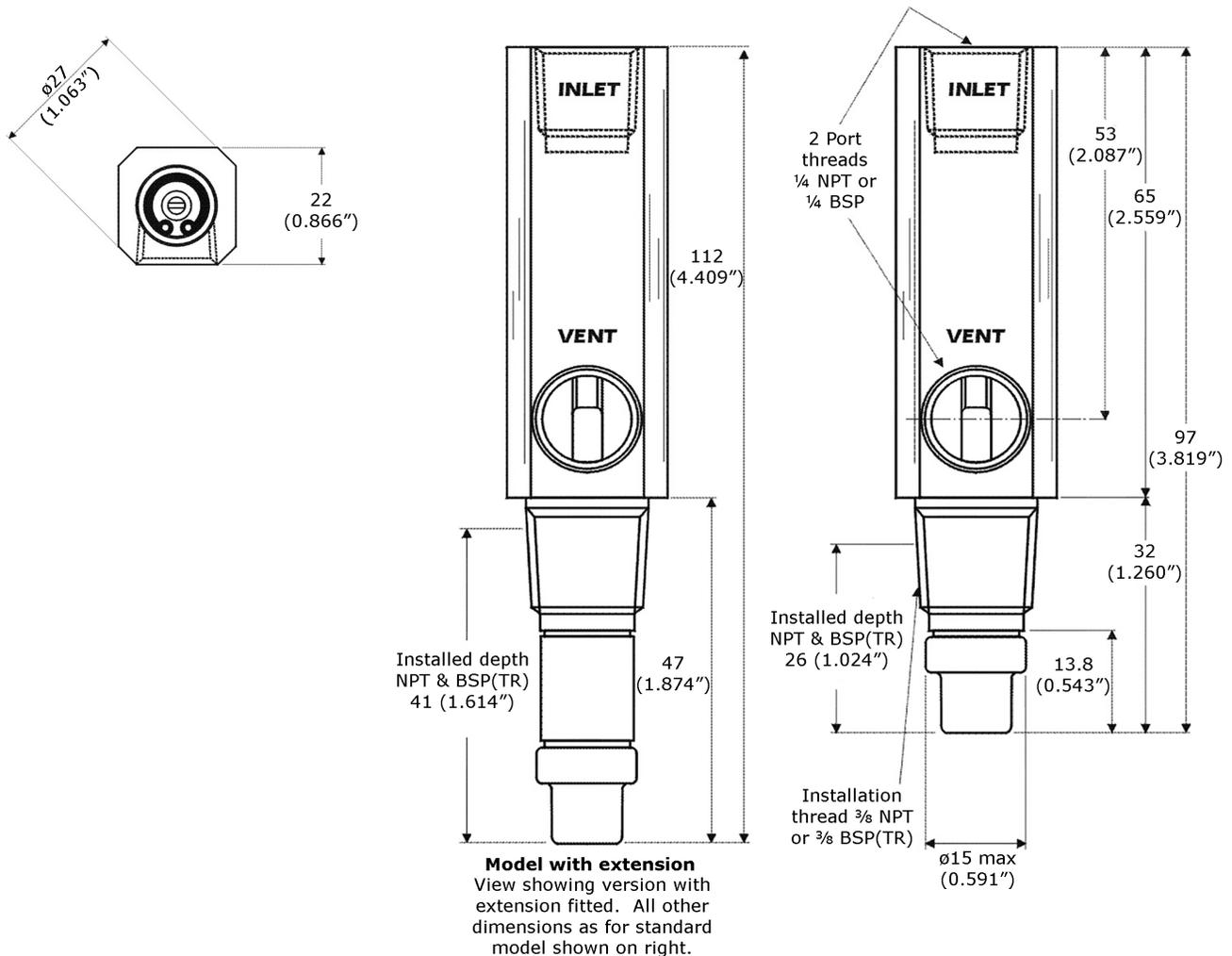
## Specification

		Metric units	English units
<b>Housing material</b>	Brass		
<b>Standard seals</b>	Viton		
<b>Sensor type</b>	Wax mixture		
<b>Medium sensed</b>	Liquids		
<b>Adjustable temperature range</b>		16°C - 120°C	61°F - 248°F
<b>Maximum element temperature range</b>		54°C - 120°C	129°F - 248°F
<b>Maximum continuous temperature</b>		88°C - 128°C	190°F - 262°F
<b>Maximum control pressure</b>		7 bar	100 psi
<b>Net weight</b>		0.56 kg	1 ¼ lbs
<b>Accreditations available</b>	PED	Suitable for Group 1 & 2 liquids (Ensure materials are compatible)	
	ATEX	 II 2G TX X	
	CE	Complies with all relevant EU directives	

# Temperature Sensing Valve - Model 4155A

## Dimensions

Dimensions - mm (inches)



## Maintenance

AMOT Model 4155 Temperature Sensing Valves maintenance is limited to operational checks and calibration adjustments. Please refer to the set point verification procedure on page 3.

**AMOT recommends checking any safety control system every FEW months to ensure optimum valve performance.**

There are no user serviceable components for the 4155 Temperature Sensing Valves.

# Temperature Sensing Valve - Model 4155A

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## Contact

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### Americas

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AMOT USA  
8824 Fallbrook Dr.  
Houston, TX 77064  
USA

Tel: +1 (281) 940 1800  
Fax: +1 (713) 559 9419  
Email: [customer.service@amot.com](mailto:customer.service@amot.com)

### Europe, Middle East and Africa

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AMOT UK  
Western Way  
Bury St. Edmunds  
Suffolk, IP33 3SZ  
England

Tel: +44 1284 715739  
Fax: +44 1284 760256  
Email: [info@amot.com](mailto:info@amot.com)

AMOT Germany  
Rondenbarg 25  
22525 Hamburg  
Germany

Tel: +49 40 8537 1298  
Fax: +49 40 8537 1331  
Email: [germany@amot.com](mailto:germany@amot.com)

### Asia Pacific

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AMOT Shanghai  
Bd. 7A, No. 568, Longpan Rd., Malu Jiading  
Shanghai 201801  
China

Tel: +86 21 5910 4052  
Fax: +86 21 5237 8560  
Email: [shanghai@amot.com](mailto:shanghai@amot.com)