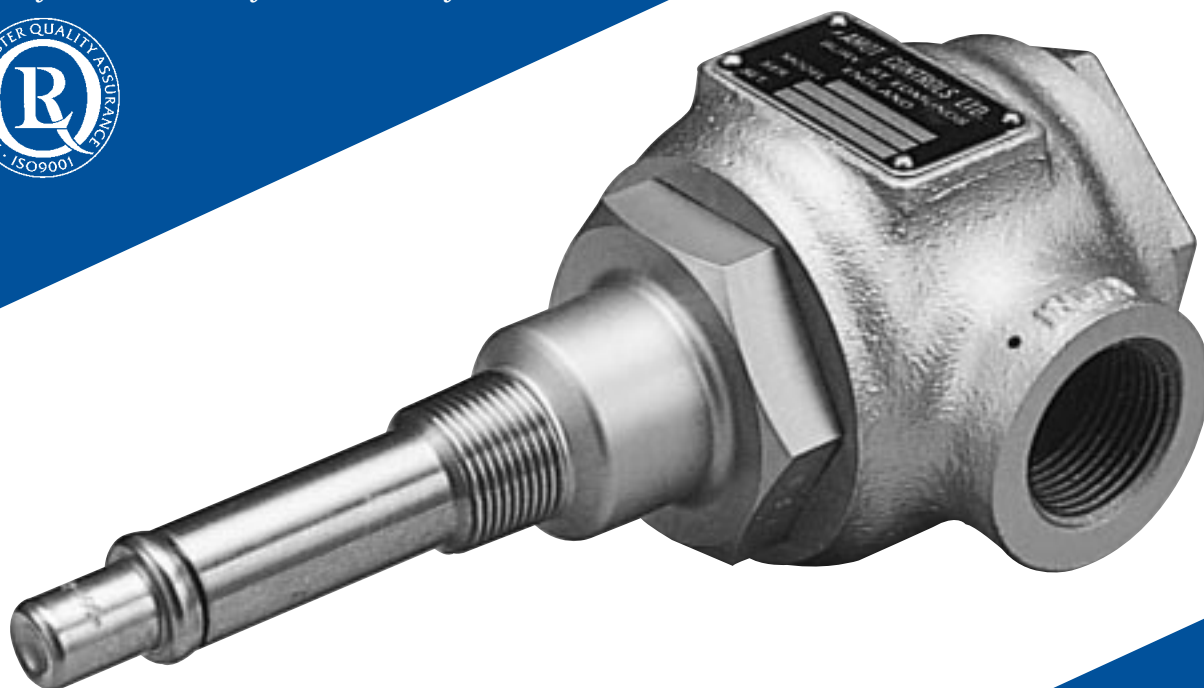


# AMOT CONTROLS

Quality and reliability for over 50 years



## Model 2470

### APPLICATIONS

The 2470 is a two way temperature regulating valve with remote sensing to modulate or shut off flow resulting from temperature changes. Can be used to sense the regulated medium or another fluid circuit.

Ideal for:

- Engine & Compressor Cooling Systems
- Cogeneration Heat Recovery Systems
- Lube Oil Systems
- Two Way Regulating of Cooling Circuits

### FEATURES

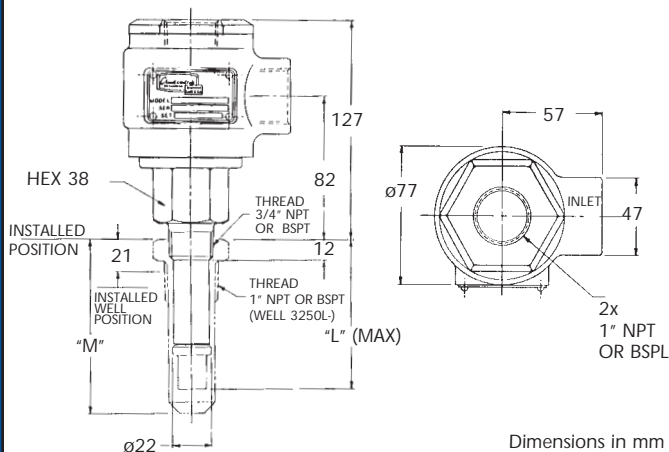
- Tamper-Proof Temperature Settings
- Remote Sensing Capabilities
- Simple Operation
- Virtually no maintenance

### SPECIFICATIONS

Housing:	Cast Iron
Seats and Sliding Valve:	Bronze
Temperature element & extension:	Brass
Adaptor Assembly:	316 Stainless Steel
Dynamic Seal:	Ethylene Propylene Rubber
Maximum Pressure on Temperature Element:	54 Bar (800 Psi)
Maximum Shutoff Pressure:	8.62 Bar (125 Psi)
Maximum Pressure on Well (if used):	*340 Bar (5000 Psi)
Net Weight:	2 Kg (4.6 lbs)

\* Pressure shown is maximum allowable. To obtain working pressure, factors of safety should be applied as required by appropriate codes or regulations.

## DIMENSIONS



Dimensions in mm

## OPERATION

The 2470 utilises a highly reliable expanding-wax element encased in a Bronze retaining cup. This produces exceptional valve travel per unit of temperature change.

Where additional element insertion length is required extensions can be added as shown in model coding table below. Stainless Steel wells are also available for use in corrosive environments or where fluid containment is necessary.

### Model 2470B(-)1

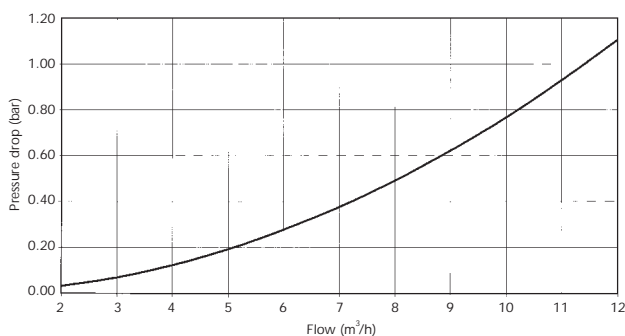
Opens with a rise in temperature above the setpoint and will close on falling temperature. With a valve seat of Nitrile rubber, this unit, when fully opened, will withstand 8.6 bar (125 psi) water pressure with no leaking.

### Model 2470B(-)3

Closes with a rise in temperature above the setpoint and will open on falling temperature. With a valve seat of Nitrile rubber, this unit, when fully closed, will withstand 8.6 bar (125 psi) water pressure without leaking.

To obtain maximum life from the temperature elements the valve must not be operated continuously at more than 30°C (50°F) above the opening point on the 2470B(-)1 or more than 18°C (30°F) above the closing point on the 2470B(-)3. If it is necessary to operate at a continuous over-temperature, consult the factory for alternative elements.

## 2470 FLOW RATE



## 2470 MODEL CODING

MODEL 2470B 3 1 G 3 N - AA NO SPECIAL REQUIREMENTS

CODE	PORT THREAD	INSTALLATION THREAD	CODE	THERMAL WELL CODE
1	1 INCH NPT	3/4 INCH NPT	N	NOT FITTED
3	1 INCH BSP PL	3/4 INCH BSPT	1	1" BSP TR
			2	1" NPT
			V	CALIBRATED IN A WELL NOT FITTED

CODE	FUNCTION	CODE	TEMPERATURE ELEMENT EXTENSION INSTALLED DEPTH (L)
1	OPENING ON RISING TEMPERATURE		INCHES
3	CLOSING ON RISING TEMPERATURE		MM

CODE	TEMPERATURE WITH THERMOWELL		TEMPERATURE WITHOUT THERMOWELL		CODE	TEMPERATURE ELEMENT EXTENSION INSTALLED DEPTH (L)		
	OPEN ON RISING DEG C	CLOSE ON RISING DEG F	OPEN ON RISING DEG C	CLOSE ON RISING DEG F		INCHES	MM	
B	35	95	46	115	29	85	40	105
C	46	115	52	125	40	105	46	115
D	52	125	60	140	46	115	54	130
E	57	135	66	150	52	125	60	140
F	63	145	72	160	57	135	66	150
G	68	155	77	170	63	145	72	160
H	74	165	83	180	68	155	77	170
K	80	175	88	190	74	165	83	180
M	83	180	91	195	77	170	85	185
N	91	195	99	210	85	185	93	200
P	99	210	108	225	93	200	102	215

## STAINLESS STEEL WELL

Models 3250L and 4038O Stainless Steel Wells are available for the 2470 Thermostatic Valve. If valves and wells are ordered at the same time, they will be assembled at the factory using AMOT 40081 Heat Transfer Compound. When ordered separately, AMOT 40081 Heat Transfer Compound should be ordered and inserted in the well before installing the 2470 Valve. Sufficient compound should be used to fully cover the valve element extension. Excess pressure due to compound expansion will be vented via the small relief hole in the 3250L Well. If compound is not used, an excessive temperature lag between the sensed fluid and valve operating point may be experienced.

Well Installed Depth Dimensions (mm)			
Temp. Element Extension Code No.	Element Installed Depth - L	Well Installed Depth - M	Well Part No.
0	50	Not Available	Not Available
3	87	100	3250L014 (NPT) 4038O014 (BSPT)
4	100	113	3250L015 (NPT) 4038O015 (BSPT)

## HOW TO ORDER

To order an Amot 2470 valve please construct the appropriate model number from the coding table above, or specify the following:

- 1) Amot Model 2470B
- 2) NPT or BSPT connections
- 3) To open or close on rising temperature
- 4) Temperature setting required with or without a thermowell
- 5) Element extension length required
- 6) Type of thermal well, if required.

For any other special requirements please contact your nearest Amot representative or the factory direct.

## ADDITIONAL INFORMATION

Additional information on the Amot range of externally and internally sensed Thermostatic Valves is available in a range of Sales and Technical Data sheets. Please contact Amot Controls or your nearest representative for further information.

This sheet is distributed for information purposes only. It is not to be construed as becoming part of any contractual or warranty obligations of Amot Controls Limited, unless expressly so stated in a sales contract. Amot Controls Limited reserves the right to make product design changes at any time without notice.

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