



TEMPERATURE CONTROL TRAP

MODEL LEX8

Features

Compact bimetal-operated thermostatic trap for accurate control of condensate discharge temperature. Ideal for use with steam tracers, tank heaters, Space heaters and instruments tracer tubes.

1. Maintains temperature at preset levels between 50 and 130 °C by adjusting the valve closing temperature.
2. Saves energy by utilizing the sensible heat in condensate.
3. Rapid venting of initial air and fast discharge of cold condensate reduce start-up time.
4. Built-in, easy-to-clean screen guarantees trouble-free service.
5. Easy maintenance, without disconnecting the trap from the piping.
6. Can be used as an automatic non-freeze valve.
7. Overexpansion mechanism prevents damage to the bimetal element and ensures long service life.



Specifications

Model	LEX8	
Connection	Screwed	
Size (mm)	6, 8, 10	
Maximum Operating Pressure (MPaG) PMO	1.6	
Minimum Operating Pressure (MPaG)	0.05	
Maximum Operating Temperature (°C) TMO	250	
Condensate Temperature Setting Range (°C)	50 – 130	

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):

Maximum Allowable Pressure (MPaG) PMA: 4.6

Maximum Allowable Temperature (°C) TMA: 400

1 MPa = 10.197 kg/cm²

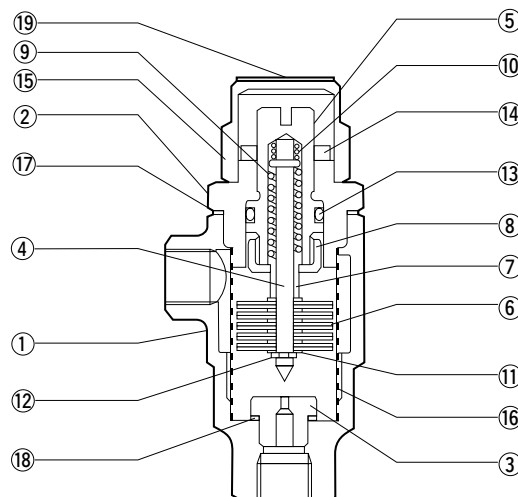


CAUTION

To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

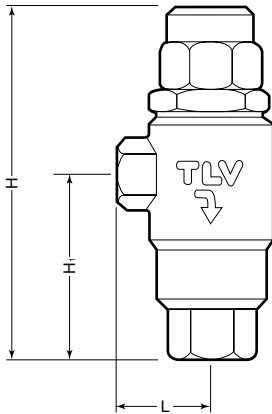
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Forged Carbon Steel	S25C	AISI1025
②	Cover	Forged Carbon Steel	S25C	AISI1025
③	Valve Seat	Stainless Steel	SUS420F	AISI420F
④	Valve Stem	Stainless Steel	SUS631J/303	AISI631/303
⑤	Adjusting Screw	Stainless Steel	SUS303	AISI303
⑥	Bimetal Element	Bimetal	—	—
⑦	Sleeve	Stainless Steel	SUS303	AISI303
⑧	Spring Holder	Stainless Steel	SUS420F	AISI420F
⑨	Return Spring	Stainless Steel	SUS304	AISI304
⑩	Overexpansion Spring	Stainless Steel	SUS304	AISI304
⑪	Plain Washer	Stainless Steel	SUS304	AISI304
⑫	Snap Ring	Stainless Steel	SUS304	AISI304
⑬	O-Ring	Flourine Rubber	FPM	D2000HK
⑭	Lock Nut	Carbon Steel	SS400	A6
⑮	Cap Nut	Carbon Steel	SS400	A6
⑯	Screen outer/inner	Stainless Steel	SUS304/430	AISI304/430
⑰	Cover Gasket	Copper	CuP	B152
⑱	Valve Seat Gasket	Copper	CuP	B152
⑲	Nameplate	Stainless Steel	SUS304	AISI304

* Equivalent



Dimensions

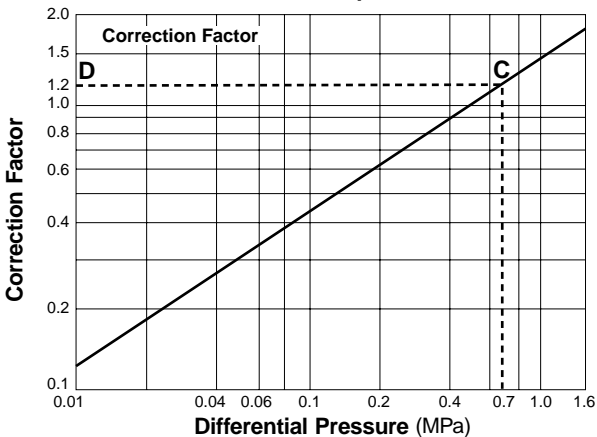
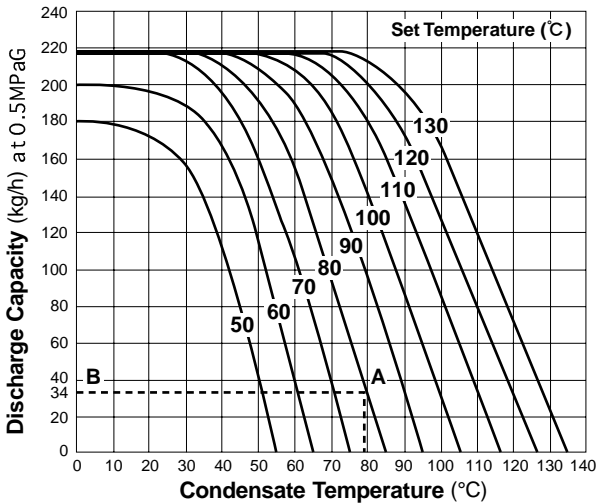
● LEX8
Screwed



LEX8 Screwed*		(mm)		
Size	L	H	H ₁	Weight (kg)
6	25	92	48	0.3
8				
10	30	97	53	

* Rc (PT), other standards available

Sizing Charts



Estimation of discharge capacity.

Example: The flow rate of condensate discharging from 0.7 MPaG to atmosphere from a trap set to 80 °C is determined as follows:

Step 1: Use the discharge capacity graph.

From the 80 °C condensate temperature on the horizontal axis, follow a vertical line until it intersects the 80 °C set temperature curve (point A).

From A, follow a horizontal line across to the vertical axis (point B), and read the discharge capacity, 34 kg/h.

Step 2: Use the correction graph.

Because the discharge capacity graph is based on a steam pressure of 0.5 MPaG, a correction factor must be used to adjust the discharge capacity value to the actual pressure differential the trap.

Read up from 0.7 MPaG on the horizontal axis to the diagonal line (point C), then across to the correction factor (point D). Multiply the discharge capacity obtained in step 1 by the correction factor to get the actual discharge capacity:

$$34 \times 1.2 = 40.8 \text{ kg/h.}$$

1 MPa = 10.197 kg/cm²

1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended safety factor: at least 2.

Manufacturer

ISO 9001/ISO 14001

TLV® CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

