

MINI LIMISTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature.



Applications

- Railways
- Machine tools
- HVAC
- Refrigeration
- Process technology

Features

- External or internal resetting
- Short response time
- Protection IP54
- Electrical connection on terminal screw

06/2021

Data sheet H72173q

Technical Data

Designation of application	Remote sensing thermostat with limiter	Switching differential	Not adjustable
Measuring range	-30°C ... +40°C to +70°C ... +350°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval / conformity	EN60730-1/ EN60730-2-9: Typ 2.B.H

Subject to change

Ordering information/type code

			XXX . XX	XX	XXX	XX	XXXXXXXXXX	XX	XX
Custom build code	For increasing temperatures, internal resetting			630 . 12					
	For increasing temperatures, external resetting			632 . 12					
Range	Range [°C]	Sensor max. [°C]		Range [°C]	Sensor max. [°C]				
	-30 ... 40	45	01	5 ... 95	105	20			
	-10 ... 25	60	07	20 ... 110	115	23			
	0 ... 35	70	09	20 ... 150	165	31			
	10 ... 45	85	11	20 ... 230	250	24			
	10 ... 80	100	13	40 ... 300	330	53			
	-10 ... 35	70	94	70 ... 350	380	54			
	-10 ... 80	85	95						
Sensor ¹⁾	See table "Ordering-no. for sensors"					XXX			
Fixing ²⁾	Nut M10 (for remote sensing version)					10			
	Mounting bracket (for remote sensing version)					19			
	Grubscrew locked, lateral (direct mounting version) ⁴⁾					12			
	Cap nut (for direct mounting version) ⁴⁾					14			
	Grubscrew locked with spacer (cooling element) (for direct mounting version)					18			
Protection tube	See data sheet www.trafag.com/H72114 and www.trafag.com/H72163					XXXX.XXXX			
Accessories	Switchpoint locking	15	Capacitors over Pin 1-2 / 1-3			23			
	Switchpoint fixed and sealed upon customer's request	88	Railway version IEC 61373, category 2			28			
	Switchpoint preset upon customer's request, no guarantee on switching accuracy	83	Outdoor application (vented)			44			
	Switchpoint adjustment please indicate when ordering: - Switchpoint [°C] - Increasing or decreasing		Cover with window			77			
	Capacitor over Pin 1-2	12	Capillary tube protection: Flexible metal tube, brass nickel-plated			90			
	Capacitor over Pin 1-3	13	Capillary tube protection: Flexible metal tube 1.4301 (AISI 304)			91			
			Capillary tube protection: PVC tube			92			
Capillary tube length	Capillary tube length up to 5000 mm (no specification required for direct mounting on protection tube) L=XXXX ³⁾								

¹⁾ See data sheet www.trafag.com/H72114 and www.trafag.com/H72163²⁾ See data sheet www.trafag.com/H72106³⁾ Overlengths upon request⁴⁾ Media max. 150°C in continuous operation

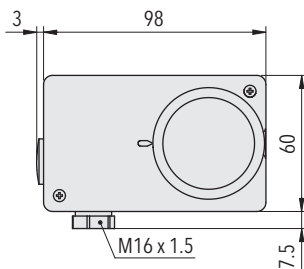
Ordering no. for sensors

Range	Sensor-Ø	Sensor material		
		Stainless steel	Copper	Copper nickel plated
01, 07, 09, 11, 13, 17	4.7 mm		412	413
	7.0 mm	421	422	423
	9.0 mm		432	433
94, 95, 20, 23	4.7 mm	311	312	313
	7.0 mm	321	322	323
	9.0 mm	331	332	333
31	4.7 mm	111	112	113
	7.0 mm	121	122	123
	9.0 mm	131	132	133
24, 53, 54	4.7 mm	011	012	013
	7.0 mm	021	022	023
	9.0 mm	031	032	033

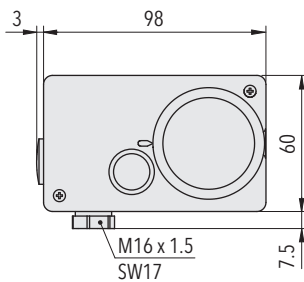
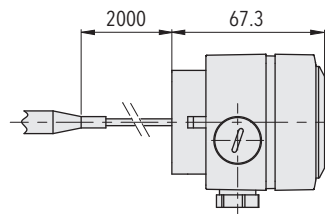
Standard products (extra short lead time)

Product No.	Type Code	Sensor material	Temperature range [°C]	Sensor max. [°C]
MS95R	632 1220 322 19	Copper	+5 ... +95	105
MS150R	632 1231 122 19	Copper	+20 ... +150	165
MS230SR	632 1224 021 19	1.4435 (AISI316L)	+20 ... +230	250
MS350SR	632 1254 021 19	1.4435 (AISI316L)	+70 ... +350	380

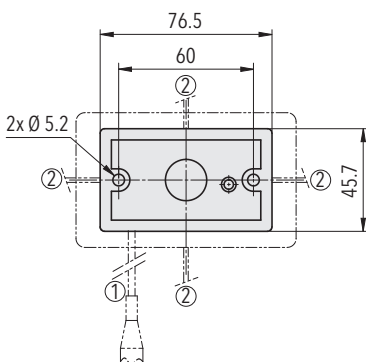
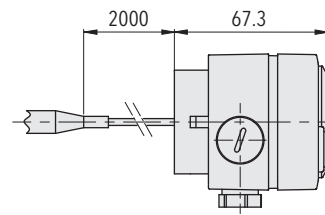
Dimensions



630.12XX.XXX.XX...



632.12XX.XXX.XX...



63X.12XX.XXX.19...

Specifications		
Accuracy	Repeatability	$\pm 0.5 \% \text{ FS typ.}$
	Scale accuracy typ.	$\pm 2 \% \text{ FS typ.}$
	Switching differential	See table
	Switching point	Temperature compensated with bimetal switch lever
Environmental conditions	Ambient temperature	Range $\leq +45^{\circ}\text{C}$: $-30^{\circ}\text{C} \dots +50^{\circ}\text{C}$ Range $+45^{\circ}\text{C} \dots +250^{\circ}\text{C}$: $-30^{\circ}\text{C} \dots +70^{\circ}\text{C}$ Range $> +250^{\circ}\text{C}$: $-10^{\circ}\text{C} \dots +70^{\circ}\text{C}$ (Important: Temperature at sensor may not exceed maximum sensortemperature)
	Storage temperature	Range $\leq +45^{\circ}\text{C}$: $-30^{\circ}\text{C} \dots +50^{\circ}\text{C}$ Range $> +45^{\circ}\text{C}$: $-30^{\circ}\text{C} \dots +85^{\circ}\text{C}$
	Protection	IP54
	Humidity	Max. 95 % relative
Mechanical Data	Sensor housing	See ordering information
	Filling	Liquid
	Housing	PC/ABS-Blend V0
	Screwed cable gland	Polyamide (PA)
	Installation	any position
	Weight	$\sim 250 \text{ g}$
Microswitch	Rating	See table
	Resistance of insulation	$> 2 \text{ M}\Omega$
	Dielectric strength	2 kV terminal ground
	Life time (mechanical)	0.3 Mio. cycles
Electrical connection	Cable gland	M16x1.5 Cable- $\varnothing$ 4...9 mm
	Terminal screw	3 x 1 ... 2.5 mm ²

Additional information		
Documents	Data sheet	www.trafag.com/H72173
	Instructions	www.trafag.com/H73624
	Flyer	www.trafag.com/H70956

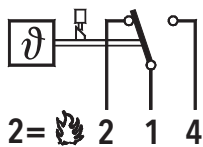
Switching differential typ.

Measuring range	[°C]	-30 ... +40 -10 ... +25 0 ... +35 +15 ... +30 +10 ... +45 +10 ... +80	-10 ... +35 -10 ... +80 +5 ... +95 +20 ... +110	+20 ... +150	+20 ... +230	+40 ... +300 +70 ... +350
Microswitch 12: Switching differential not adjustable	[°C]	2.0	6.0	7.5	9.0	12.0

Electrical data switch

		Rating Resistive Load (Inductive Load)	
Type	Features	AC	DC
12	Average switching differential, high vibration resistance	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.3 (0.2) A 125 V, 0.75 (0.4) A 30 V, 15 (1.5) A 14 V, 15 (1.5) A

Electrical connection



630/632