

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

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

06/2024

Data sheet H72173s

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 ⁵⁾	60	07	20 ... 110	115	23		
	0 ... 35	70	09	20 ... 150	165	31		
	10 ... 45 ⁵⁾	85	11	20 ... 230	250	24		
	10 ... 80 ⁵⁾	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	Capacitor over Pin 1-3	13				
	Switchpoint fixed and sealed upon customer's request	88	Capacitors over Pin 1-2 / 1-3 ⁵⁾	23				
	Switchpoint preset upon customer's request, no guarantee on switching accuracy	83	Railway version IEC 61373, category 2	28				
	Switchpoint adjustment please indicate when ordering: - Switchpoint [°C]		Capillary tube protection: Flexible metal tube, brass nickel-plated	90				
	- Increasing or decreasing		Capillary tube protection: Flexible metal tube 1.4301 (AISI 304)	91				
	Capacitor over Pin 1-2 ⁵⁾	12	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/H72163

²⁾ See data sheet www.trafag.com/H72106

³⁾ Overlengths upon request

⁴⁾ Media max. 150°C in continuous operation

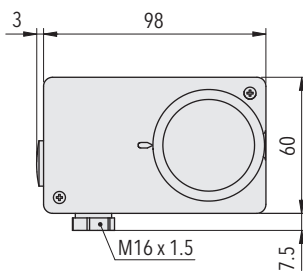
⁵⁾ Do not use for new designs. Will be phased out in 2024.

Ordering no. for sensors

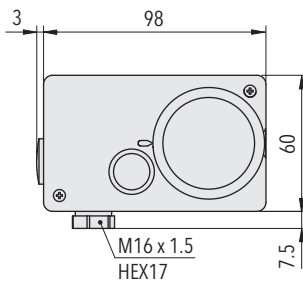
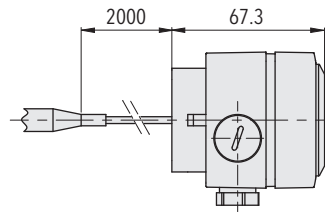
Range	Sensor-Ø	Sensor material		
		Stainless steel	Copper	Copper nickel plated
01, 07, 09, 11, 13, 17	4.7 mm		412 ¹⁾	413 ¹⁾
	7.0 mm	421	422	423 ¹⁾
	9.0 mm		432	433 ¹⁾
94, 95, 20, 23	4.7 mm	311 ¹⁾	312 ¹⁾	313 ¹⁾
	7.0 mm	321	322	323 ¹⁾
	9.0 mm	331 ¹⁾	332	333 ¹⁾
31	4.7 mm	111 ¹⁾	112 ¹⁾	113 ¹⁾
	7.0 mm	121	122	123 ¹⁾
	9.0 mm	131 ¹⁾	132	133 ¹⁾
24, 53, 54	4.7 mm	011 ¹⁾	012 ¹⁾	013 ¹⁾
	7.0 mm	021	022	023 ¹⁾
	9.0 mm	031 ¹⁾	032	033 ¹⁾

¹⁾ Do not use for new designs. Will be phased out in 2024.

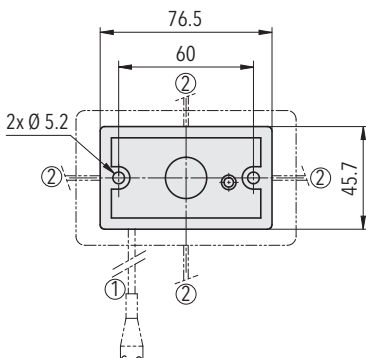
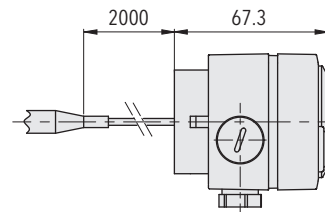
Dimensions



630.12XX.XXX.XX...



632.12XX.XXX.XX...



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

Specifications		
Accuracy	Repeatability	± 0.5 % FS typ.
	Scale accuracy typ.	± 2 % FS typ.
	Switching differential	See table
	Switching point	Temperature compensated with bimetal switch lever
Environmental conditions	Ambient temperature	Range ≤ +45°C: -30°C ... +50°C Range +45°C ... +250°C: -30°C ... +70°C Range > + 250°C: -10°C ... +70°C (Important: Temperature at sensor may not exceed maximum sensor temperature)
	Storage temperature	Range ≤ +45°C: -30°C ... +50°C Range > +45°C: -30°C ... +85°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	~ 250 g
Microswitch	Rating	See table
	Resistance of insulation	> 2 MΩ
	Dielectric strength	2 kV terminal ground
	Life time (mechanical)	0.3 Mio. cycles
Electrical connection	Cable gland	M16x1.5 Cable-Ø 4...9 mm
	Terminal screw	3 x 1 ... 2.5 mm ²

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

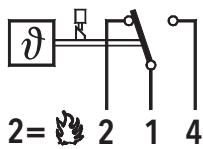
Switching differential typ.

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

Type	Features	Rating	
		Resistive Load (Inductive Load)	
		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

Additional information

Documents	Data sheet	www.trafag.com/H72173
	Instructions	www.trafag.com/H73624