

MINI LIMISTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for the 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 ... +40 to +70 ... +350°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval	EN60730-1/ EN60730-2-9: Typ 2.B.H

11/2015

Data sheet H72173i

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]							
	-30 ... 40	45	01	-10 ... 80	85	95			
	-10 ... 25	60	07	5 ... 95	105	20			
	0 ... 35	70	09	20 ... 110	115	23			
	10 ... 45	85	11	20 ... 150	165	31			
	10 ... 80	100	13	20 ... 230	250	24			
	15 ... 30	60	17	40 ... 300	330	53			
	-10 ... 35	70	94	70 ... 350	380	54			
Sensor ¹⁾	Range	Sensor diame- ter [mm]	Sensor material	Range	Sensor diame- ter [mm]	Sensor material			
	01, 07, 09, 11, 13, 17	Ø4.7	Copper	94, 95, 20, 23, 31	Ø7	Copper nickel plated	412	323	
	01, 07, 09, 11, 13, 17	Ø4.7	Copper nickel plated	94, 95, 20, 23, 31	Ø9	Stainless steel	413	331	
	01, 07, 09, 11, 13, 17	Ø7	Stainless steel	94, 95, 20, 23, 31	Ø9	Copper	421	332	
	01, 07, 09, 11, 13, 17	Ø7	Copper	94, 95, 20, 23, 31	Ø9	Copper nickel plated	422	333	
	01, 07, 09, 11, 13, 17	Ø7	Copper nickel plated	24, 53, 54	Ø4.7	Stainless steel	423	111	
	01, 07, 09, 11, 13, 17	Ø9	Copper	24, 53, 54	Ø4.7	Copper	432	112	
	01, 07, 09, 11, 13, 17	Ø9	Copper nickel plated	24, 53, 54	Ø4.7	Copper nickel plated	433	113	
	94, 95, 20, 23, 31	Ø4.7	Stainless steel	24, 53, 54	Ø7	Stainless steel	311	121	
	94, 95, 20, 23, 31	Ø4.7	Copper	24, 53, 54	Ø7	Copper	312	122	
	94, 95, 20, 23, 31	Ø4.7	Copper nickel plated	24, 53, 54	Ø7	Copper nickel plated	313	123	
	94, 95, 20, 23, 31	Ø7	Stainless steel	24, 53, 54	Ø9	Stainless steel	321	131	
	94, 95, 20, 23, 31	Ø7	Copper	24, 53, 54	Ø9	Copper	322	132	
	94, 95, 20, 23, 31	Ø7	Copper	24, 53, 54	Ø9	Copper nickel plated	322	133	
	Fixing ²⁾	Nut M10 (for remote sensing version)							10
		Console (for remote sensing version)							19
		Grubscrew locked, lateral (direct mounting version)							12
		Captive nut (for direct mounting version)							14
		Grubscrew locked with thermal distance piece (for direct mounting version)							18
	Protection tube	See data sheet H72114/H72163							XXXX.XXXX
Accessories	Set blocking	15	Condensators over Pin 1-2 / 1-3	23					
	Switchpoint fixed and sealed upon customer's request	88	Railway version (UIC 616)	28					
	Switchpoint preset upon customer's request, no guarantee on switching accuracy	83	Outdoor usage (aerated)	44					
	Switchpoint adjustment please indicate when ordering: - Switchpoint [bar]		Cover with window	77					
	- Increasing or decreasing		Capillary tube protection: Flexible metal tube, brass nickel plated	90					
	Condensator over Pin 1-2	12	Capillary tube protection: Flexible metal tube 1.4541/V2A	91					
	Condensator over Pin 1-3	13	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 H72114/H72163

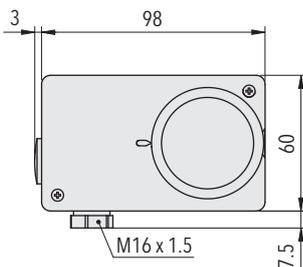
²⁾ See data sheet H72106

³⁾ Overlengths upon request

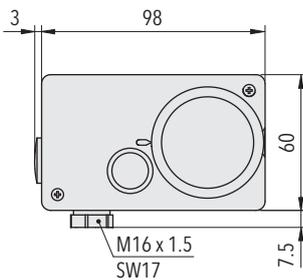
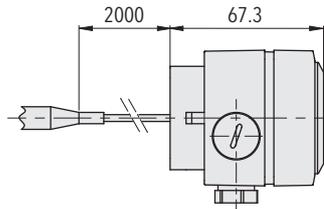
Standard products (extra short lead time)

Product No.	Type Code	Sensor material	Temperature range [°C]	Sensor max. [°C]
MS95R	632 1220 322 19	Cu	+5 ... +95	105
MS150R	632 1231 322 19	Cu	+20 ... +150	165
MS230SR	632 1224 121 19	1.4435/316L	+20 ... +230	250
MS350SR	632 1254 121 19	1.4435/316L	+70 ... +350	380

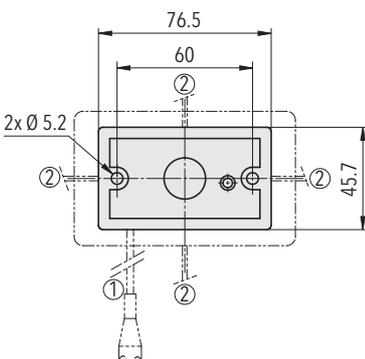
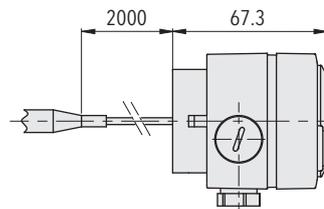
Dimensions



630.12XX.XXX.19...



632.12XX.XXX.19...



Fixation 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 $\leq +45^{\circ}\text{C}$: $-30\dots+50^{\circ}\text{C}$ Range $+45\dots+250^{\circ}\text{C}$: $-30\dots+70^{\circ}\text{C}$ Range $> +250^{\circ}\text{C}$: $-10\dots+70^{\circ}\text{C}$ (Important: Temperature at sensor may not exceed maximum sensor temperature)
	Storage temperature	Range $\leq +45^{\circ}\text{C}$: $-30\dots+50^{\circ}\text{C}$ Range $> +45^{\circ}\text{C}$: $-30\dots+85^{\circ}\text{C}$
	Protection	IP54
	Humidity	Max. 95 % relative
Mechanical Data	Housing	See ordering information
	Filling	Liquid
	Housing	PC/ABS-Blend V0
	Screwed cable gland	PA, Polyamid
	Installation	Any position
	Weight	~ 250 g
Microswitch	Rating	See table
	Resistance of insulation	> 2 M Ω
	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

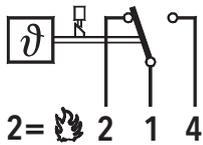
Switching differential typ.

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

Electrical data switch

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

Electrical connection



630/632