

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 |

06/2021

Data sheet H72173q

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] | | Cover with window | | | | | | | | 77 |
| | - Increasing or decreasing | | Capillary tube protection: Flexible metal tube, brass nickel-plated | | | | | | | | 90 |
| | Capacitor over Pin 1-2 | 12 | Capillary tube protection: Flexible metal tube 1.4301 (AISI 304) | | | | | | | | 91 |
| | Capacitor 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 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

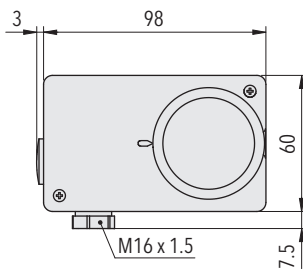
Ordering no. for sensors

| 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 |

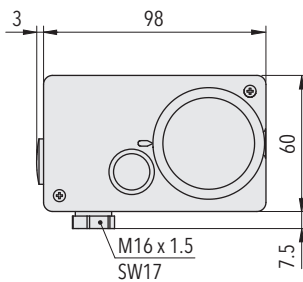
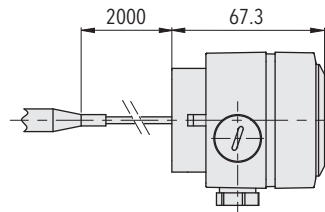
Standard products (extra short lead time)

| 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 |

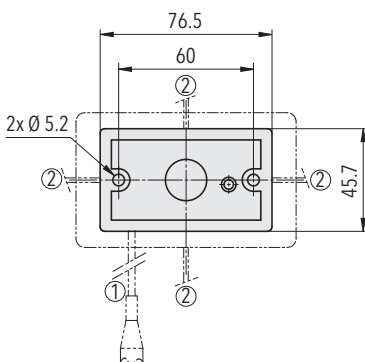
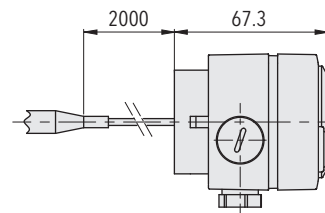
Dimensions



630.12XX.XXX.XX...



632.12XX.XXX.XX...



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

| Specifications | | |
|---------------------------------|--------------------------|--|
| Accuracy | Repeatability | ± 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 sensortemperature) |
| | 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 |

Additional information

| | | |
|------------------|--------------|--|
| Documents | Data sheet | www.trafag.com/H72173 |
| | Instructions | www.trafag.com/H73624 |
| | Flyer | www.trafag.com/H70956 |

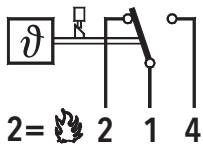
Switching differential typ.

| | | | | | | |
|---|-------------|--|--|--------------|--------------|------------------------------|
| 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

| 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



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