

GALVANOSTAT

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



Applications

- Process technology

Features

- Short response time
- Protection IP54
- Electrical connection on terminal screw

01/2015

Data sheet H72179g

Technical Data

Designation of application	Remote sensing thermostat	Switching differential	Not adjustable
Measuring range	+5 ... +95 and +20 ... +150°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval	EN60730-1/ EN60730-2-9: Typ 2.B.H

Subject to change

Ordering information/type code

		XXX	XX	XX	XXX	XX	XX	XX
Custom build code	External adjustment	657						
	Internal adjustment	658						
Microswitch	Small switching differential, not adjustable		10					
	Average switching differential, not adjustable		11					
	With gold plated contacts, not adjustable		21					
Range	Range [°C]							
	+5 ... +95		105		20			
	+20 ... +150		165		31			
Sensor	Copper with protection tube Teflon FEP				326			
Fixing	Angle PVC					26		
Accessories	Set blocking							15
	Condensator over Pin 1-2							12
	Condensator over Pin 1-3							13
	Condensators over Pin 1-2 / 1-3							23
	Outdoor usage (aerated)							44
	Cover with window							77
Capillary tube length	Capillary tube length up to 5000 mm (no specification required for direct mounting on protection tube) L=XXXX ¹⁾							

¹⁾ Overlengths upon request

Standard products (extra short lead time)

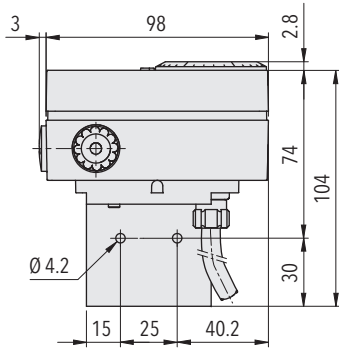
Product No.	Type Code	Temperature range [°C]	Switching differential [°C]	Sensor max. [°C]
GS95	658 1120 326 26	+5 ... +95	2.5 (fix)	105
GS150	658 1131 326 26	+20 ... +150	3.0 (fix)	165

Specifications		
Accuracy	Repeatability	$\pm 0.5 \% \text{ FS typ.}$
	Scale accuracy typ.	$\pm 3 \% \text{ FS typ.}$
	Switching differential	See table
	Switching point	Temperature compensated with bimetal switch lever
Environmental conditions	Ambient temperature	$-30^{\circ}\text{C} \dots 70^{\circ}\text{C}$
	Storage temperature	$-30^{\circ}\text{C} \dots 85^{\circ}\text{C}$
	Protection	IP54
	Humidity	Max. 95 % relative
Mechanical Data	Sensor housing	See ordering information
	Filling	Liquid
	Housing	PC/ABS-Blend V0
	Screwed cable gland	PE, Polyethylene
	Installation	Any position
	Weight	$\sim 380 \text{ g}$
Microswitch	Rating	See table
	Resistance of insulation	$> 2 \text{ M}\Omega$
	Dielectric strength	$U \leq 250\text{V}: 1.45 \text{ kV}$ $U \leq 500\text{V}: 2 \text{ kV}$ terminal ground
	Life time (mechanical)	Microswitch 10/11: 20 Mio. cycles Microswitch 21: 0.5 Mio. cycles
Electrical connection	Cable gland	M16x1.5 Cable- \varnothing 4...9 mm
	Terminal screw	3 x 1...2.5 mm ²

Additional information

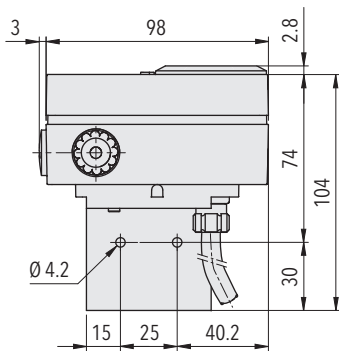
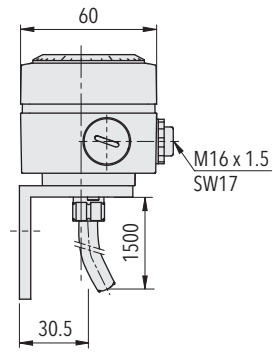
Documents	Data sheet	www.trafag.com/H72179
	Instructions	www.trafag.com/H73624
	Flyer	www.trafag.com/H70959

Dimensions



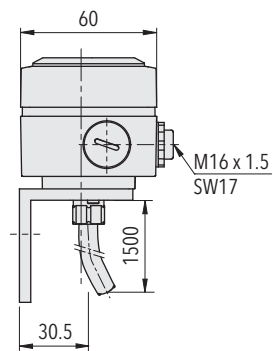
657.XXXX.326.26...

G...



658.XXXX.326.26...

GS...



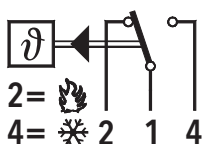
Switching differential typ.

Range	[°C]	+5 ... +95	+20 ... +150
Microswitch 10 Switching differential (fixed value, not adjustable)	[°C]	0.3	0.8
Microswitch 11/21 Switching differential (fixed value, not adjustable)	[°C]	2.5	3.0

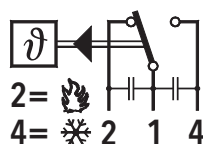
Electrical data switch

Type	Features	Rating	
		Resistive Load (Inductive Load)	
		AC	DC
10	Small switching differential, not adjustable	125 V, 10 (1.5) A 250 V, 10 (1.25) A	250 V, 0.2 (0.02) A 125 V, 0.4 (0.03) A 30 V, 2 (1) A 14 V, 15 (2.5) A
11	Average switching differential, not adjustable	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25(0.03) A 125 V, 0.5(0.05) A 30 V, 6 (1.5) A 14 V, 15 (1.5) A
21	Gold plated contacts, not adjustable	24 V, 0.1 (0.1) A 12 V, 1 (1) A 5 V, 2 (2) A	24 V, 0.1(0.1) A 12 V, 1 (1) A 5 V, 2 (2) A

Electrical Connection



657/658



with accessory 23

Modifications

Index	Date	Description
a	11/2005	redesigned data sheet
b	12/2009	Page 2,3,4: Big switching differential 06 removed
c	06/2010	Page 4: contact rating of microswitch 21 increased from 0.01A to 0.1A (24 AC & 24 DC) Page 4: Switch 21: advise „suitable for intrinsically safe control circuit“ removed, because „simple apparatus“ devices are available
d	10/2011	Page 3: Dielectric strength changed to $U \leq 250 \text{ V}: 1.45 \text{ kV} / U \leq 500 \text{ V}: 2 \text{ kV}$
e	04/2012	Phase out: type 658
f	07/2012	Product relaunch: type 658
g	01/2015	New layout Page 5: Switch 11 DC rating corrected: old 14V 15(2.5)A, new 14V 15(1.5)A