

Mechanical temperature switches

Type MT1H

with capillary

Features

- Single switch with remote sensor
- Explosion proof housing
- Terminal clip and set point adjustment in °C and °F under tamper protected cover
- Protection class: IP65, NEMA 4 / 13
- Optional:
 - Disconnection with manual reset, G (RD)-micro switch
 - Adjustable hysteresis (dead band), S-micro switch
- Approvals: Ex ia, UL, CSA

Adjustment ranges

-45 °C...+66 °C to +160 °C...+316 °C

Applications

Temperature monitoring in machine and machine tool industry, shipbuilding, railcars, power plants, antifreeze, heating systems, compressor monitoring



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Technical Data

Housing material:	Die-cast aluminium, anodized
Temperature sensor material:	304 stainless steel (1.4301)
Temperature sensor type:	Capillary, 1.8 m long (6 foot) (optional 3.6 m and 7,5 m) (12 foot and 25 foot), armoured If not equipped with thermowell the sensor may only be used up to 21 bar max.
Electrical values:	All models are equipped with SPDT contacts
Micro switch type:	H, M, GH, GM, G (RD), S
Electrical connection:	1/2" NPT female, internal screw terminal, cable gland in PA, for cable size 6...12 mm is included
Protection class:	IP65, NEMA 4 / 13

Set point adjustment:	Turn adjustment knob clockwise to increase the actuation point
Standards:	The equipment is in conformity with the following harmonised European standards: EN 60014 1977 + A1 to A4 and EN 500120 1977 + A1
Intrinsic safety:	The switches are also suitable for intrinsically safe applications. Add "Exi" in case of ordering. The following max. values are valid when using these switches: U _{max} =28 V I _{max} =50 mA
Approvals:	Ex ia, UL, CSA
Weight:	1.0 kg approx.

Adjustment ranges

Code adjustment range	Sensor temperature limits (°C)	Adjustment range (°C)	Hysteresis (°C)* for micro switch			
			H, GH	M, GM	S	G (RD)
						2.8...manual
154	-73 ... +93	-45...+66	0.5... 1.1	1.1...2.2	2.2... 8.3	
251	-73 ... +149	+10...+121	0.5... 1.1	1.1...2.2	2.2... 8.3	
351	-73 ... +205	+66...+177	0.5... 1.1	1.1...2.2	2.2... 8.3	
601	-18 ... +343	+149...+227	1.1...2.2	2.2... 3.3	3.9... 13.9	
603	-18 ... +343	+160..+316	1.1...2.2	2.2... 3.3	3.9... 13.9	

* Dependent on medium

Specifications are subject to changes without notice.

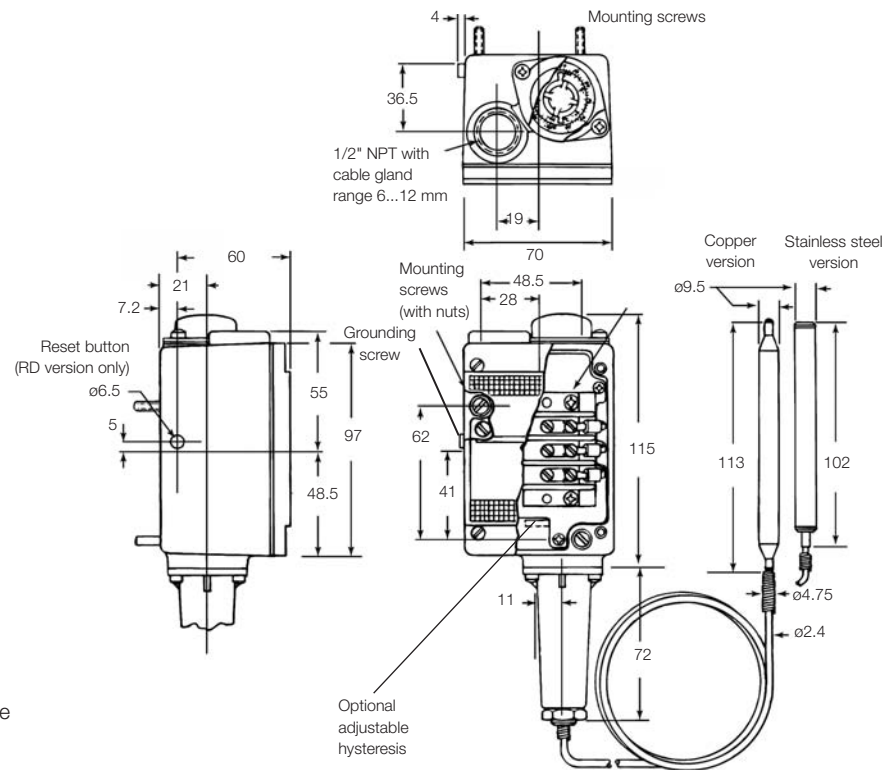
Temperature

Mechanical temperature switches

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Dimensions (in mm / inch)

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Contacts: color code and function

- C = Common = purple
- NC = Normally Closed Contact = blue
- NO = Normally Open Contact = red

Electrical ratings

Micro switch	Special features	Volt AC 50/60 Hz	Ind. load A	Res. load A	Volt DC	Ind. load A	Res. load A	Comments
H	Micro switch with silver contacts	125	10	10	6	0.50	0.5	Small hysteresis; High AC / low DC loads
		250	10	10	to 28			
		480	3	3				
M	Micro switch with silver contacts	125	10	10	12	5.00	15.0	Medium hysteresis; High AC and DC loads
		250	10	10	24	1.00	2.0	
		480	3	3	250	0.25	0.4	
GH	Micro switch with gold contacts for low voltage and low current	125	1	1	24	1.00	1.0	Small hysteresis
GM		30	0.1	0.1	30	0.10	0.1	Medium hysteresis
S	Micro switch with silver contacts	480	15	15	125	0.05	0.4	Adjustable hysteresis
G (RD)	Micro switch with silver contacts	480	10	10	125	0.4	0.75	Manual reset

Hermetically sealed micro switch (HMT1H) on request

Sensor lengths / Options

Sensor lengths		Options	
S-A	1.8 m, armoured, SS (6 foot)	RD	Manual reset
S-12-A	3.6 m, armoured, SS (12 foot)	EXI	for intrinsically safe application, Ex ia
S-25-A	7.5 m, armoured, SS (25 foot)		

Ordering

Example for order number

Type	Micro switch	Code	Adjustment range	Sensor length	Options
MT1H	H	251	S-A	EXI	

Your order number

MT1H			
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