Heat resistance Switches

HT series

1-signal plunger type

200°C Heat-resistance

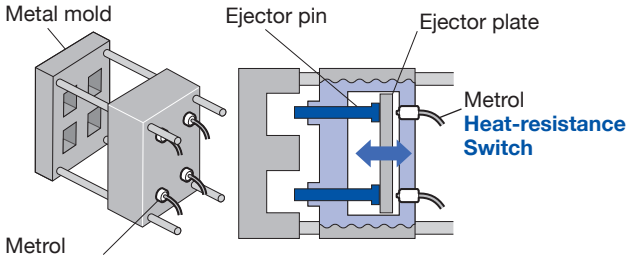
Features

■Operating upper limit temperature 200°C

Be made of heat resistance parts /
adhesives for a high temperature / heat resistance cord.

《Application》

Detects deterioration of metal mold



Detects deterioration of metal mold by confirming faulty return of ejector pin.

■Standard specification

unit : mm

Series	Product name	Upper limit temperature	Stroke	Pretravel	Contact force	Withstand load	Impact resistance
CS-Touch Switch	**HT-CS067A**	200°C	2.8	0.3	1N	–	–
Mini Stopper Switch	**HT-STM82A**	200°C	0.3	Middle of the stroke	1N	3000N	0.4J
Ball Plunger Switch	**HT-BP060A**	200°C	0.8	0.5 from the end face	min 6N max 13N	–	–

■Common specification

unit : mm

Switch structure	Dry contact
Output mode	A: Normally open
Repeatability	Both On→Off, Off→On/ 0.01 *1 (At operating speed 50～200mm/min) *2
Movement differential	0
Contact life time	3 million
Cable (Refer to P7-5)	Standard length 2m Heat resistant φ2.8 / 2 cores, AWG24,Tensile strength 30N, minimum bending R28
Temperature drift	0 (because of no amplifier)
Oscillation	10-55Hz total amplitude 1.5 for X,Y,Z each direction
Impact	300m/s^2 for X,Y,Z each direction
Contact rating	DC5V-DC24V Steady current : 10 mA or less (rush current: 20 mA or less)
Standard accessory	Refer to Outer dimension(P6-5)

***1 Numerical value, being used at normal temperature.**
*2 Operating speed slower than 10mm/min is not recommended.

■How to use

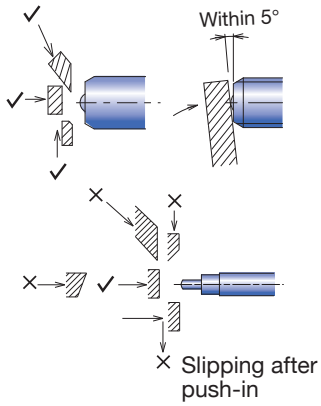
Ball Plunger Switches

Suitable for angled, sliding touch.

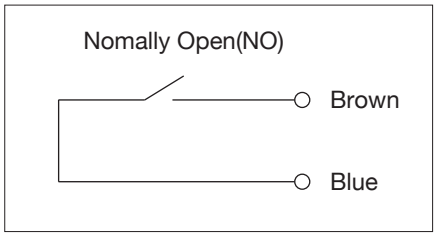
The degree required to turn on the switch when the detected object does not meet the switch end fully.

Other Switches

Make contact with detected objects at right angle (within deflection angle ±3°).



■Circuit diagram



Electrical specification / circuit diagram (refer to P7-2).

Heat resistance Switches

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《Application》

High Temperature Precision Limit Switches Specifications

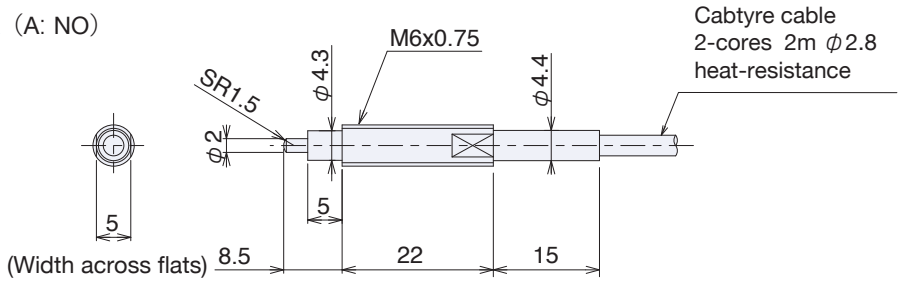
Part Number	*HT-CS067A*	*HT-BP060A*	*HT-STM82A*
Environmental			
Degree of Protection	IP65**	IP40**	IP67**
Temperature Range	Operating: 0 to 200°C [32 to 392°F] (Ice-free)		
Mechanical Ratings			
Enclosure Material	Stainless Steel		
Pretravel	0.3 mm (0.012 in)	0.5 mm [0.020 in] from end face	Middle of stroke
Torque (for nuts on threaded barrels, set screws on smooth barrels)	4 N·m	L1: 2.5 N•m [1.844 lb•ft] L2: 5 N•m [3.688 lb•ft] L3: 5 N•m [3.688 lb•ft]	10 N•m [7.376 lb•ft]
Oscillation	10–55 Hz total amplitude 1.5 for X, Y, Z each direction		
Impact	300 m/s² for X, Y, Z each direction		
Electrical Ratings			
Contact Life	3 million operations		
Repeat Accuracy	0.01 mm [0.00039 in] * **		
Recommended Minimum Operating Speed	10mm [0.394 in]/minute		
Contact Voltage	5-24 VDC		
Steady Current Rating	10mA or less		
Max In-rush Current Rating	20mA		
Connection Type	Cable: 2m [6.56 ft] heat-resistant Ø 2.8 2 cores, 24AWG	Cable: 2m [6.56 ft] heat-resistant Ø 2.8 2 cores, 24AWG	Cable: 2m [6.56 ft] heat-resistant Ø 2.8 2 cores, 26AWG
Indicating	N/A		

*** At operating speed 50-200 mm [1.97-7.87 in]/minute. Operating speed slower than 10mm [0.39 in]/min is not recommended.**
**** At normal temperature (0 to 80°C [32 to 176°F]).**

■Outer dimension

CS-Touch Switch
Heat-resistance type

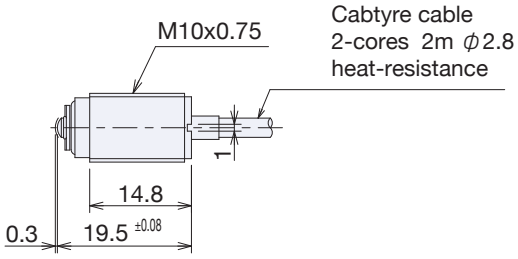
HT-CS067A (A: NO)



Accessories: two fixing nuts M6 x 0.75
(Width across corners: 9.2, Width across flats: 8, Thikness: 3.2)

Mini Stopper Switch
Heat-resistance type

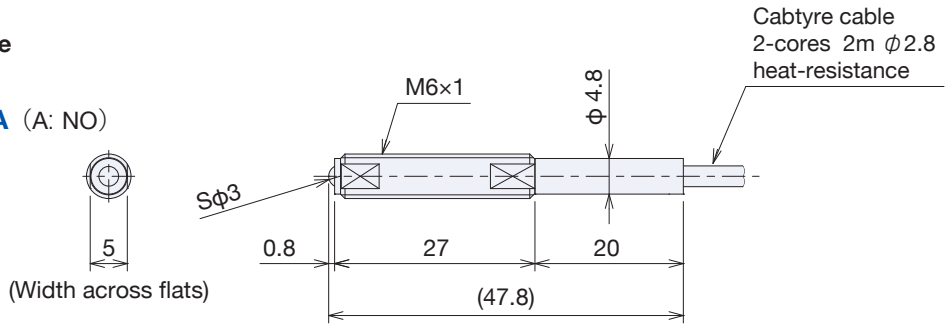
HT-STM82A (A : NO)



Accessories: two fixing nuts M10 x 0.75
(Width across corners: 15, Width across flats: 13, Thikness: 3)

Ball Plunger Switch
Heat-resistance type

HT-BP060A (A: NO)

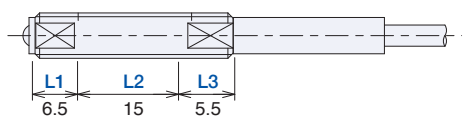


Accessories:
- two fixing nuts M6×1
  (Width across corners:11.5, Width across flats: 10, Thikness: 3.6)
- A toothed lock washer

■Tightening torque for case screws and nuts

	Screw / Nut	Tightening torque		
CS-Touch Switch	M6×0.75	4N·m		
Mini Stopper Switch	M10×0.75	10N·m		
Ball Plunger Switch	M6×1	L1 : 2.5N·m	L2 : 5N·m	L3 : 5N·m

Ball Plunger Switch
HT-BP060A



Caution
Use the lower torque (i.e. torque corresponding to L2) while tightening the bolt between the lengths L1 and L2 in the above picture.
Please make sure to use a locknut if the bolt is likely to shift in position due to the vibrational impacts.