

# Filled System Electric Contact Thermometers (411T (H), 412T (L), 413T (H&L), 414T (H&HH) & 415T (L&LL) Series)

## Applications

- Where signal is required (audible or visual alarm)
- System Control for power plant, chemical plant
- Corrosive or non-corrosive media
- Heating and plumbing
- Varying ambient conditions

## Temperature Element

- Gas Filled System (-200 ~ 700°C) / SAMA CLASS IIIB

## Working Range

- Maximum scale value



## Special Notes

1. "0" adjustable : None

## Standard Specification Overview

### Dial Size

- 100mm, 125mm, 150mm

### Reference Accuracy

- $\pm 2.0\%$  of Full Scale

### Scale Ranges

- -200 ~ 0 ~ 700°C

\* For more information, see the ordering information table.

### Process Connection

- PT ("R" in ISO) 1/2", NPT 1/2"

### Electric Contacts

- AC 125V, 0.5A / 250V, 0.25A
- DC 24V, 0.25A

### Material

- Case : 304 SS
- Ring (Cover) : 304 SS
- Connection : 304 SS
- Stem : 304 SS
- Window : Polycarbonate
- Dial : White Aluminum with Black Graduations
- Pointer : Aluminum Alloy, Black Finished

### Optional Extra

- Test Report by Manufacturer
- Test Report by KOLAS (ILAC-MRA)
- Stem Material (316 SS)
- OEM Service for a specific customer
- High Accuracy ( $\pm 1.0\%$  of F.S.) Calibration
- Electric Connection Type : Pin Type

## Ordering Information for 411T (H), 412T (L), 413T (H&L), 414T (H&HH) & 415T (L&LL) Series

● = Standard Products ▲ = Available NA = Not Available

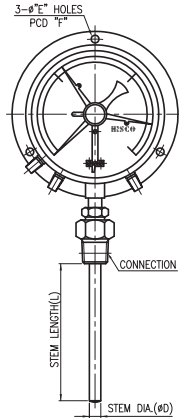
Model	Description	Case & Ring	Stem Material	Contact Location
411T	Filled System Electric Contact Thermometers	304 SS	304 SS	One High Contact Point (H)
412T	Filled System Electric Contact Thermometers	304 SS	304 SS	One Low Contact Point (L)
413T	Filled System Electric Contact Thermometers	304 SS	304 SS	Two Contact Points (H & L)
414T	Filled System Electric Contact Thermometers	304 SS	304 SS	Two Contact Points (H & HH)
415T	Filled System Electric Contact Thermometers	304 SS	304 SS	Two Contact Points (L & LL)
<b>Code</b>	<b>Dial Size</b>	<b>Accuracy</b>		
40	100mm	±2.0% of Full Scale		
50	125mm	±2.0% of Full Scale		
60	150mm	±2.0% of Full Scale		
<b>Code</b>	<b>Mounting Type</b>			<b>All</b>
A	Bottom Connection Stem Mounting			●
B	Bottom Connection Remote Surface Mounting			●
L	Lower Back Connection Stem Mounting			●
K	Lower Back Connection Remote Bracket Mounting			●
<b>Code</b>	<b>Process Connection Style</b>			<b>All</b>
2	PT ("R" in ISO Standard)			●
3	PF ("G" in ISO Standard)			▲
4	NPT			●
<b>Code</b>	<b>Process Connection Size</b>			<b>All</b>
D	3/8"			●
F	1/2"			●
X	Others			☞
<b>Code</b>	<b>Range</b>			<b>All</b>
XXX	Refer to the Temperature Range Code Table			●
<b>Code</b>	<b>Capillary Length</b>			<b>All</b>
00	N/A			●
10	1M			▲
15	1.5M			▲
20	2M			▲
30	3M			▲
40	4M			▲
50	5M			▲
60	6M			▲
XX	Others (Recommend Max Length 10M)			☞
<b>Code</b>	<b>Sensor (Stem) Outer Diameter</b>			<b>All</b>
M8	8.0mm			●
M1	10.0mm			▲
M2	12.0mm			▲

Please request for other size of stem out Diameter.

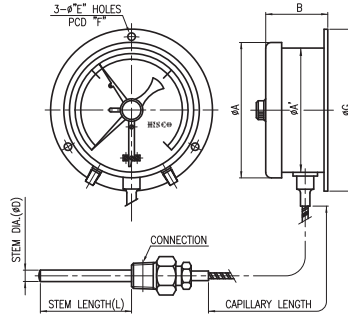
Code	Sensor (Stem) Length				
0075	75mm	0400	400mm	0750	750mm
0100	100mm	0450	450mm	0800	800mm
0150	150mm	0500	500mm	0850	850mm
0200	200mm	0550	550mm	0900	900mm
0250	250mm	0600	600mm	0950	950mm
0300	300mm	0650	650mm	1000	1000mm
0350	350mm	0700	700mm	XXXX	Other (specify the length in mm or inch)
Code	Applicable Accessory Options				All
W1	With Thermowell (Refer to the accessory model 100)				▲
J1	Swivel Nut				▲
J2	Compression Fitting				▲
J3	Adjustable Union				▲
J4	Screw Union for 3/4"				▲
J0	N/A				●
Code	Options				All
Test Reports					
T1	Test Report by Manufacturer				▲
T2	Test Report by KOLAS (ILAC-MRA)				▲
Material Option					
SM	Stem Material (316 SS)				▲
S6	316 SS Case & Cover				▲
Other Option					
OE	OEM Service for a specific customer				▲
EC	Electric Connection type : Pin type				▲
AC	High Accuracy ( $\pm 1.0\%$ of F.S.) Calibration				▲
Sample Model Selection : 411T40A2F117S1HP00M10100J0					
* The standard specification and price are subject to change without prior notice					

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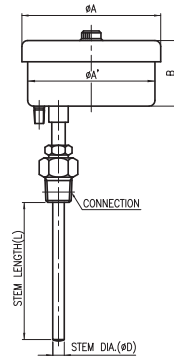
CODE "A"



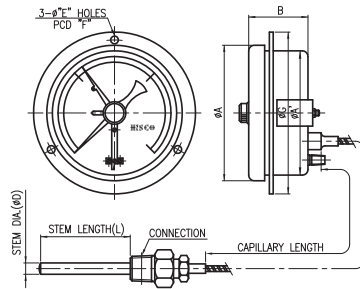
CODE "B"



CODE "L"



CODE "J"



(UNIT : mm)

Code	Dial Size	Type	A	A'	B	E	F	G
40	ø100	A,B,L,J	111	101	48	5.5	115	128
50	ø125	A,B,L,J	138	127	55	-	-	-
60	ø150	A,B,L,J	168	153	69	6.5	174	193

**HISCO** HISCO, INC.

15-5, Yangpyeong-dong, 4-ga, Yeongdeungpo-gu, 150-866 Seoul, Korea  
T : 82-2-2677-6046 F : 82-2-2672-1873 <http://www.hiscoi.com>