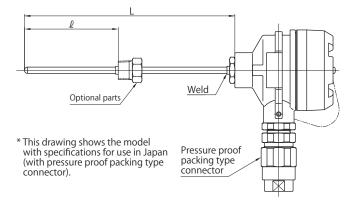
Explosion-Proof (Hydrogen Protection) Thermocouple



Model code T99

99.	<u>(1)</u> <u>(2)</u>	3	<u>(4)</u> <u>(5)</u> <u>(6)</u> <u>(7)</u>		8 9 / 10 11
		Blank	TIIS (Japan)	NP	NEPSI (China)
		JP	CML (Japan)	KS	KOSHA (South Korea)
	Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)
1	organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)
	_	FM	FM (US)	TS	OSHA (Taiwan)
		FC	FMC (Canada)	IN	INMETRO (Brazil)
		GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)
2)	Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}
		GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}
3	Length (Unit: mm)	L			
	Sheath outer	B,CN	φ1.6, φ2.0	F,FN	φ6.4, φ6.0
4)	diameter	D,DN	φ3.2, φ3.0	G	φ8.0
	(Unit: mm)	E,EN	φ4.8, φ4.5		
5)	Number of	2	Single		
9	element wires	4	Double		
		N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni
6)	Туре	К	Ni-Cr/Ni-Al	Т	Cu/Cu-Ni
		E	Ni-Cr/Cu-Ni		
7	Measuring	5	(#5) Ungrounded/Separated	9	U (#9) Ungrounded
	junction	8	G (#8) Grounded		
8	Sheath	С	316SS	В	NCF600eq. (Inconel 600)
<u> </u>	material	D	3105 SS		
		01	1 (Former JIS class 0.4)	05	ASTM SP.
9	Class	02	2 (Former JIS class 0.75)	06	1 (IEC)
2	Class	03	3 (Former JIS class 1.5)	07	2 (IEC)
		04	ASTM STD.	08	3 (IEC)
0	Optional parts		See "Standard Parts" section		
1	Immersion length (Unit: mm)	- Q			

- Characteristics
 New technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex db ll C T6 (for Japan/TIIS) Explosion proof class: Ex db el I C T6 or T3 Gb Ex bl ll C T85°C or T100°C Db (for Japan/C/KL)
 Suitable for use in environments with gas vapor, dust, etc. in conformance with IEC xand ATEX directives, and supplied with CE marking Explosion proof class: Ex db el I C T6 S Gb Ex bl ll C T85°C & T100°C Db
 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard Explosion proof class: Class I, Div. 1 Gr. A, B, C & D (for C3nda) Class II/III, Div. 1 Gr. E, F & G (for US/Canada)
 Conforms to GB China explosion proof class: Ex de ll C T5/T6 G b X 2A: the ll C T5/T6 G b X 2A:



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Japan (CML) certified product

International/ATEX (Baseefa)

NEPSI certified product

TR CU certified product

KOSHA certified product

INMETRO certified product

PESO certified product OSHA certified product

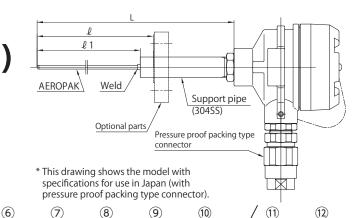
certified product FM certified product

Explosion-Proof (Hydrogen Protection) Thermocouple with **Support Pipe**

(3)

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Model code T99S

2

T995^{*1}- ①

		Blank	TIIS (Japan)	NP	NEPSI (China)		
		JP	CML (Japan)	KS	KOSHA (South Korea)		
	Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)		
1	organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)		
		FM	FM (US)	TS	OSHA (Taiwan)		
		FC	FMC (Canada)	IN	INMETRO (Brazil)		
2	Structure	-1	ϕ 22 support pipe				
		GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)		
3	Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}		
		GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}		
4	Length (Unit: mm)	L					
	Sheath outer	B,CN	φ1.6, φ2.0	F,FN	φ6.4, φ6.0		
5	diameter	D,DN	φ3.2, φ3.0	G	\$ 8.0		
		E,EN	φ4.8, φ4.5				
6	Number of element wires	2	Single	4	Double		
		N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni		
$\overline{7}$	Туре	К	Ni-Cr/Ni-Al	Т	Cu/Cu-Ni		
		E	Ni-Cr/Cu-Ni				
(8)	Measuring	5	(#5) Ungrounded/Separated	9	U (#9) Ungrounded		
	junction	8	G (#8) Grounded				
9	Sheath	С	316SS	В	NCF600eq. (Inconel 600)		
9	material	D	310S SS				
		01	1 (Former JIS class 0.4)	05	ASTM SP.		
(10)	Class	02	2 (Former JIS class 0.75)	06	1 (IEC)		
	Class	03	3 (Former JIS class 1.5)	07	2 (IEC)		
		04	ASTM STD.	08	3 (IEC)		
11	Optional parts		See "Standard Parts" section				
(12)	Immersion length		N/A				

Characteristics

- Characteristics New technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex dl II C T6 (for Japan/TIIS) Explosion proof class: Ex dl be II C T6 or T5 Gb Ex to III C T85'C or T100'C Db (for Japan/CML) Suitable for use in environments with gas vapor, dust, etc. in confor-mance with IECEx and ATEX directives, and supplied with CE marking Explosion proof class: Ex db be II C T6 & T5 Gb Ex to III C T85'C & T100'C Db Suitable for use in environments with gas vapor, dust, etc. in confor-mance with NEC standard/CSA standard Explosion proof class: Class I, Div. 1 Gr. A, B, C & D (for US) Gr. B, C & D (for US) Class II/III, Div. 1 Gr. F, F & G (for US/Canada) Conforms to GB China explosion proof standards Explosion proof class: Ex de II C T5/F G6 Ex tD A21 IP66 T85'C/T100'C

- Conforms to South Korea safety standards Explosion proof class: Ex de II C T5/T6
- Conforms to EAC TR CU customs union regulations for Russia, Kazakhstan, and Belarus Explosion proof class: 1Ex de II C T5/T6 Gb X Ex tb III C T95°C/80°C Db X
 Conforms to India safety standards Explosion proof class: Ex de II C T6 Ta
 Excellent protection class: IP66 (for Japan, international, Europe, China, South Korea, Russia, Kazakhstan, Belarus, Taiwan, and India), NEMA4 & 4X (for US), and Type 4 & 4X (for Canada)
 Models with threavier temperature transmitters (4 to 20 mA output) also
- Models with two-wire temperature transmitters (4 to 20 mA output) also
- wodels with two-wire temperature transmitters (4 to 20 mA output) also supported
 Light and compact body: Made of aluminum die-cast (stainless steel also available)
 Pressure proof packing type connector equipped as standard (for Japan)
 Multi-paired type also available (for Japan, certified by IECEx, ATEX, FM, NEPSI, and PESO)
 The type names on the certification certification and the table is the standard in the
- *1: The type names on the certification certificates are indicated in the table on the right. *2: Cannot be used as product with type approval in Japan (TIIS). *3: The standard coating color is blue.
- Japan (TIIS) type approved T409 product Japan (CML) certified product OFP International/ATEX (Baseefa) OFP certified product FM certified product T409 NEPSI certified product OFP TR CU certified product OFP KOSHA certified product OFP PESO certified product OFP OSHA certified product OFP INMETRO certified product OFP



(12)

Explosion-Proof (Hydrogen Protection) **Thermocouple with Nipple**

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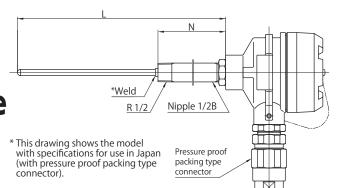
(5)

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(8)

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(10)

/ 11

Japan (CML) certified product

International/ATEX (Baseefa) certified product

NEPSI certified product

TR CU certified product

KOSHA certified product

PESO certified product

OSHA certified product

INMETRO certified product

FM certified product

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Model code T99N

(2)

T99N*1. ①

99N ·- <u> (</u>	<u> </u>		_ (8)			
	Blank	TIIS (Japan)	NP	NEPSI (China)		
	JP	CML (Japan)	KS	KOSHA (South Korea)		
Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)		
1 organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)		
	FM	FM (US)	TS	OSHA (Taiwan)		
	FC	FMC (Canada)	IN	INMETRO (Brazil)		
2 Structure	-1	N=100 *Not welded	-3	N=100 *Welded		
2) Structure	-2	N=150 *Not welded	-4	N=150 *Welded		
	GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)		
3 Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}		
	GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}		
(Unit: mm)	L					
5 Sheath outer	D,DN	φ3.2, φ3.0	F,FN	φ6.4, φ6.0		
diameter	E,EN	φ4.8, φ4.5	G	φ8.0		
6 Number of element wires	2	Single	4	Double		
	N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni		
🔿 Туре	К	Ni-Cr/Ni-Al	Т	Cu/Cu-Ni		
	E	Ni-Cr/Cu-Ni				
Measuring	5	(#5) Ungrounded/Separated				
⁸ junction	8	G (#8) Grounded				
	9	U (#9) Ungrounded				
9 Sheath	С	316SS	В	NCF600eq. (Inconel 600)		
material	D	3105 SS				
	01	1 (Former JIS class 0.4)	05	ASTM SP.		
10 Class	02	2 (Former JIS class 0.75)	06	1 (IEC)		
Class	03	3 (Former JIS class 1.5)	07	2 (IEC)		
	04	ASTM STD.	08	3 (IEC)		
1) Optional parts		See "Standard Parts" section				
Immersion length N/A						
Characteristics New technical standards that conform to IEC standard (TIIS) Conforms to EAC TR CU customs union regulations for Russia, Kazakhstan, and Belarus						

Only technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex do be II C T6 (for Japan/TIIS) Explosion proof class: Ex do be II C T6 or T5 Gb (for Japan/TIS) Explosion proof class: Ex do be II C T6 or T5 Gb (for Japan/CILL)
 Suitable for use in environments with gas vapor, dust, etc. in conformance with IECEx and ATEX directives, and supplied with CE marking explosion proof class: Ex do be II C T6 & T5 Gb (for Japan, international, Europe, China, South Korea, Russia, Kazakhstan, Belarus Explosion proof class: Ex do be II C T6 & T5 Gb (for Japan, international, Europe, China, South Korea, Russia, Kazakhstan, Belarus, Taiwan, and India), NEMA4 & 4X (for US), and Type 4 & 4X (for Canada)
 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard geopoint of class: Ex do be II C T6 & T6 Gb (for Japan, International, Europe, China, South Korea, Russia, Kazakhstan, Belarus, Taiwan, and India), NEMA4 & 4X (for US), and Type 4 & 4X (for Canada)
 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard geopoint of class: Ex do be II C T6 (T 6 Gb Ex tD A21 IP66 T85'C/T100'C C)
 Conforms to GB China explosion proof standards Explosion proof class: Ex de II C T5/T6 Gb Ex tD A21 IP66 T85'C/T100'C C)
 Conforms to South Korea safety standards Explosion proof class: Ex de II C T5/T6
 Suth Standard Coating color is blue.



Mineral Insulated Thermocouple

Explosion-Proof (Hydrogen Protection Thermocouple with Nipple/Union

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n)		<u>R 1/2</u>	*We	1/2B		
	* This does in a			Nipple 1/2E (304SS)		<u> </u>
	* This drawing s with specificat (with pressure connector).	nows the mo ions for use i proof packir	in Japan ng type	Pressure proof packing type connector		
6	$\overline{\mathcal{O}}$	(8)	9	(10)	/ ①	(12)

Model code T99U

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T99U^{*1}- ①

		Blank	TIIS (Japan)	NP	NEPSI (China)		
		JP	CML (Japan)	KS	KOSHA (South Korea)		
1	Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)		
Ū	organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)		
		FM	FM (US)	TS	OSHA (Taiwan)		
		FC	FMC (Canada)	IN	INMETRO (Brazil)		
2	Structure	-2	N=150 *Not welded				
	Structure	-4	N=150 *Welded				
		GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2 *3} (COPPER-FREE)		
3	Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}		
		GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}		
4	Length (Unit: mm)	L					
	Sheath outer	D,DN	φ3.2, φ3.0	F,FN	<i>φ</i> 6.4, <i>φ</i> 6.0		
(5)	diameter	E,EN	φ 4.8, φ 4.5	G	φ 8.0		
	Number of						
6	element wires	2	Single	4	Double		
	Туре	N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni		
\bigcirc		К	Ni-Cr/Ni-Al	Т	Cu/Cu-Ni		
		E	Ni-Cr/Cu-Ni				
	Measuring	5	(#5) Ungrounded/Separated				
8	junction	8	G (#8) Grounded				
	Junction	9	U (#9) Ungrounded				
9	Sheath	С	316SS	В	NCF600eq. (Inconel 600)		
9	material	D	3105 SS				
		01	1 (Former JIS class 0.4)	05	ASTM SP.		
(10)	Class	02	2 (Former JIS class 0.75)	06	1 (IEC)		
	Class	03	3 (Former JIS class 1.5)	07	2 (IEC)		
		04	ASTM STD.	08	3 (IEC)		
11	Optional parts		See "Standard Parts" section				
(12)	Immersion length		N/A				

Characteristics

- Characteristics
 New technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex d II C T6 (for Japan/TIIS) Explosion proof class: Ex d b II C T6 or T5 Gb Ex to III C T85°C or T100°C Db (for Japan/CNL)
 Suitable for use in environments with gas vapor, dust, etc. in conform ance with IECEx and ATEX directives, and supplied with CE marking Explosion proof class: Ex d b II C T6 S G b Ex to III C T85°C & T100°C Db
 Suitable for use in environments with gas vapor, dust, etc. in conform ance with NEC standard/CSA standard Explosion proof class: Class 1, Div. 1 Gr. A, B, C & D (for CDada) (for US) Gr. B, C & D (for US) Gr. B, C & D (for US) Gr. B, C & D (for CJ) (Cassi II/III, Div. 1 Gr. E, F & G (for US/Canada)
 Conforms to GB China explosion proof standards Explosion proof class: Ex de II C T5/T6 Gb Ex D A21 IP66 T85°C/T00°C
 Conforms to South Korea safety standards Explosion proof class: Ex de II C T5/T6
 Suitable for use in environments with gas vapor, dust, etc. in conform to GB China explosion proof standards Explosion proof class: Class II/III, Div. 1 Gr. F, F & G (for US/Canada) (Light and compact body: Made of aluminum die-cast (stainless steel also available)
 Pressure proof packing type connector equipped as standard (for Japan) (Multipaired type also available) (For Japan, certified by IECEx, ATEX, FM, NEPS), and PESO)
 The type names on the certification certificates are indicated in the table on the right. '2: Cannot be used as product with type approval in Japan (TIIS). '3: The standard coating color is blue.



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Japan (TIIS) type approved

Japan (CML) certified product

International/ATEX (Baseefa)

NEPSI certified product

TR CU certified product

KOSHA certified product

PESO certified product

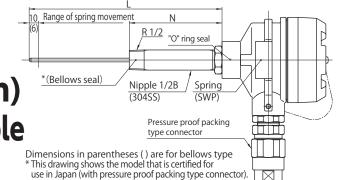
OSHA certified product

INMETRO certified product

certified product FM certified product

product

Spring Loaded Explosion-Proof (Hydrogen Protection) **Thermocouple with Nipple**



Model code T409N

T40	9N*1- <u>1</u>	2	3 4 5 6 7	8			
1		Blank	TIIS (Japan)	NP	NEPSI (China)		
		JP	CML (Japan)	KS	KOSHA (South Korea)		
	Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)		
	organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)		
		FM	FM (US)	TS	OSHA (Taiwan)		
		FC	FMC (Canada)	IN	INMETRO (Brazil)		
2	Structure	-1	N=100	-3	N=100 *Bellows seal		
	Structure	-2	N=150	-4	N=150 *Bellows seal		
		GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)		
3	Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}		
		GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}		
4	Length (Unit: mm)	L					
	Sheath outer	D,DN	φ3.2, φ3.0	F,FN	<i>φ</i> 6.4, <i>φ</i> 6.0		
5	diameter	E,EN	φ4.8, φ4.5	G	φ 8.0		
6	Number of element wires	2	Single	4	Double		
		N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni		
$\overline{\mathcal{O}}$	Туре	к	Ni-Cr/Ni-Al	т	Cu/Cu-Ni		
	,,	Е	Ni-Cr/Cu-Ni				
		5	(#5) Ungrounded/Separated				
8	Measuring	8	G (#8) Grounded				
	junction	9	U (#9) Ungrounded				
	Sheath	С	31655	В	NCF600eq. (Inconel 600)		
9	material	D	3105 SS				
		01	1 (Former JIS class 0.4)	05	ASTM SP.		
	Class	02	2 (Former JIS class 0.75)	06	1 (IEC)		
10	Class	03	3 (Former JIS class 1.5)	07	2 (IEC)		
		04	ASTM STD.	08	3 (IEC)		
(1)	Optional parts		See "Standard Parts" section				
(12)	Immersion length		N/A				

Characteristics

- Characteristics

 New technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex d II C T6 (for Japan/TIIS) Explosion proof class: Ex db eb II C T6 or T5 Gb Suitable for use in environments with gas vapor, dust, etc. in conformance with IECEx and ATEX directives, and supplied with CE marking Explosion proof class: Ex db eb II C T6 & T5 Gb Ex tb III C T85°C & T100°C Db
 Conformance with IEC standard/CSA standard

 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard
 Mathematical Standard/CSA standard

 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard
 Mathematical Standard

 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard
 Mathematical Standard

 Suitable for use in environments with gas vapor, dust, etc. in conformance with NEC standard/CSA standard
 Mathematical Standard

 Conforms to GB China explosion proof standards
 Mathematical Standard
 Mathematical Standard

 Conforms to South Korea safety standards
 * 2:
 Conforms to South Korea safety standards
 * 2:

 Explosion proof class: Ex de II C T5/T6
 * 3:
 * 3:

- Conforms to EAC TR CU customs union regulations for Russia, Kazakhstan, and Belarus Explosion proof class: 1Ex de II C T5/T6 Gb X Ex tb III C T95'C/80'C Db X
 Conforms to India safety standards Explosion proof class: Ex de II C T6 Ta
 Excellent protection class: IP66 (for Japan, international, Europe, China, South Korea, Russia, Kazakhstan, Belarus, Taiwan, and India), NEMA4 & 4X (for US), and Type 4 & 4X (for Canada)
 Models with two-wire temperature transmitters (4 to 20 mA output) also supported

- Light and compact body: Made of aluminum die-cast (stainless steel also available)
- available) Pressure proof packing type connector equipped as standard (for Japan) Multi-paired type also available (for Japan, certified by IECEx, ATEX, FM, NEPSI, and PESO) *1: The type names on the certification certificates are indicated in the table on the right. *2: Cannot be used as product with type approval in Japan (TIIS). *3: The standard coating color is blue.



T409

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OFP

Japan (TIIS) type approved

Japan (CML) certified product

International/ATEX (Baseefa)

NEPSI certified product

TR CU certified product

KOSHA certified product

PESO certified product

OSHA certified product

INMETRO certified product

product

certified product FM certified product

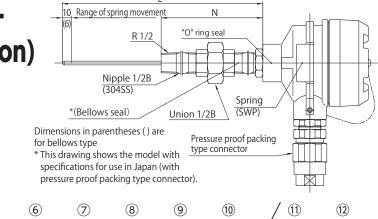
Mineral Insulated Thermocouple

Spring Loaded Explosion-Proof (Hydrogen Protection) Thermocouple with Nipple/Union

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Model code T409U

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T409U^{*1}- ①

		Blank	TIIS (Japan)	NP	NEPSI (China)		
		JP	CML (Japan)	KS	KOSHA (South Korea)		
	Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)		
1	organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)		
	•	FM	FM (US)	TS	OSHA (Taiwan)		
		FC	FMC (Canada)	IN	INMETRO (Brazil)		
	Christerine	-2	N=150				
2	Structure	-4	N=150 *Bellows seal				
		GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)		
3	Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}		
		GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}		
4	Length	L					
	(Unit: mm)						
(5)	Sheath outer	D,DN	φ3,2, φ3.0	F,FN	φ6.4, φ6.0		
	diameter Number of	E,EN	φ4.8, φ4.5	G	φ8.0		
6	element wires	2	Single	4	Double		
	Туре	N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni		
\bigcirc		К	Ni-Cr/Ni-Al	Т	Cu/Cu-Ni		
		Е	Ni-Cr/Cu-Ni				
		5	(#5) Ungrounded/Separated				
8	Measuring junction	8	G (#8) Grounded				
	Junction	9	U (#9) Ungrounded				
9	Sheath	С	316SS	В	NCF600eq. (Inconel 600)		
9	material	D	310S SS				
		01	1 (Former JIS class 0.4)	05	ASTM SP.		
(10)	Class	02	2 (Former JIS class 0.75)	06	1 (IEC)		
	Class	03	3 (Former JIS class 1.5)	07	2 (IEC)		
		04	ASTM STD.	08	3 (IEC)		
(11)	Optional parts		See "Standard Parts" section				
(12)	Immersion length		N/A				

Characteristics

- Characteristics
 New technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex d B L C T6 (for Japan/TIIS) Explosion proof class: Ex d b B II C T6 or T5 Gb Ex to III C T85°C or T100°C Db (for Japan/CNL)
 Suitable for use in environments with gas vapor, dust, etc. in conform ance with IECEx and ATEX directives, and supplied with CE marking Explosion proof class: Ex db e B II C T6 & T5 Gb Ex to III C T85°C & T100°C Db
 Suitable for use in environments with gas vapor, dust, etc. in conform ance with NEC standard/CSA standard Explosion proof class: Class 1, Div. 1 Gr. A, B, C & D (for Clanada)
 Suitable for use in environments with gas vapor, dust, etc. in conform sto GB China explosion proof standards
 Conforms to GB China explosion proof standards
 Conforms to GB China explosion proof standards
 Explosion proof class: Ex de B II C T5/T6
 Suitable for use in environments with gas vapor, dust, etc. in conform to GB Sch With VID VI 1 Gr. E, F & G (for US/Canada)
 Conforms to GB China explosion proof standards
 Explosion proof class: Ex de B II C T5/T6
 Suitable for use in environments with gas vapor, dust, etc. in conform to South Korea safety standards
 Supplicion proof class: Class 1, Div. 1 Gr. A, B, C & D (for Canada)
 Motels with two-wire temperature transmitters (4 to 20 mA output) also supprietd
 Nersure proof packing type connector equipped as standard (for Japan)
 Multipaired type also available (for Japan, certified by IECEX, ATEX, FM, NEPS), and PESO)
 *1 The type names on the certification certificates are indicated in the table on the right.
 *2: Cannot be used as product with type approval in Japan (TIIS).
 *3: The standard coating color is blue.



product	T409
Japan (CML) certified product	OFP
International/ATEX (Baseefa) certified product	OFP
FM certified product	T409
NEPSI certified product	OFP
TR CU certified product	OFP
KOSHA certified product	OFP
PESO certified product	OFP
OSHA certified product	OFP
INMETRO certified product	OFP

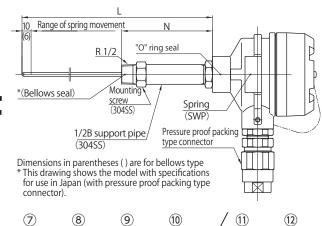
Spring Loaded Explosion-Proof (Hydrogen Protection) Thermocouple with Support Pipe

3

4

(5)

(6)



Model code T409S

2

T409S^{*1}- ①

		Blank	TIIS (Japan)	NP	NEPSI (China)		
1		JP	CML (Japan)	KS	KOSHA (South Korea)		
	Certifying	EX	IECEx (International)	TR	TR CU (Russia/Kazakhstan/Belarus)		
\cup	organization	EC	ATEX (Baseefa) (Europe)	PS	PESO (India)		
	-	FM	FM (US)	TS	OSHA (Taiwan)		
		FC	FMC (Canada)	IN	INMETRO (Brazil)		
2	Structure	-1	N=100	-3	N=100 *Bellows seal		
	Structure	-2	N=150	-4	N=150 *Bellows seal		
		GE	Aluminum die-cast (ADC)	GED-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)		
3	Terminal box	GE-CFT	Aluminum die-cast (ADC) ^{*2*3} (COPPER-FREE)	GES	Stainless steel ^{*2}		
		GED	Aluminum die-cast (ADC) (two-way)	GEDS	Stainless steel (two-way) ^{*2}		
4	Length	L					
	(Unit: mm)						
(5)	Sheath outer	D,DN	φ3.2, φ3.0	F,FN	φ6.4, φ6.0		
	diameter	E,EN	φ4.8, φ4.5	G	φ8.0		
6	Number of element wires	2	Single	4	Double		
		N	Ni-Cr-Si/Ni-Si	J	Fe/Cu-Ni		
\bigcirc	Туре	К	Ni-Cr/Ni-Al	т	Cu/Cu-Ni		
		Е	Ni-Cr/Cu-Ni				
	Moosuring	5	(#5) Ungrounded/Separated				
8	Measuring	8	G (#8) Grounded				
	junction	9	U (#9) Ungrounded				
9	Sheath	С	316SS	В	NCF600eq. (Inconel 600)		
9	material	D	310S SS				
		01	1 (Former JIS class 0.4)	05	ASTM SP.		
(10)	Class	02	2 (Former JIS class 0.75)	06	1 (IEC)		
	Class	03	3 (Former JIS class 1.5)	07	2(IEC)		
		04	ASTM STD.	08	3(IEC)		
11	Optional parts		See "Standard Parts" section				
(12)	Immersion length		N/A				

Characteristics

- Characteristics
 New technical standards that conform to IEC standard (TIIS) Explosion proof class: Ex d II C T6 (for Japan/TIIS) Explosion proof class: Ex d II C T6 (for Japan/TIIS) Explosion proof class: Ex d II C T6 or T5 Gb Ex th II C T85°C or T100°C Db (for Japan/CIL)
 Suitable for use in environments with gas vapor, dust, etc. in conform mance with IECEx and ATEX directives, and supplied with CE marking Explosion proof class: Ex d e II C T6 % C5 Gb Ex th III C T85°C & T100°C Db
 Suitable for use in environments with gas vapor, dust, etc. in conform mance with NEC standard/CSA standard Explosion proof class: Casa I, Div. 1 Gr. A, B, C & D (for US) Gr. B, C & D (for Canada)
 Conforms to GB China explosion proof standards Explosion proof class: Ex d e II C T5/T6 Gb Ex th DA21 IP66 T85°C/T100°C
 Conforms to South Korea safety standards Explosion proof class: Ex d e II C T5/T6
 Conforms to South Korea safety standards Explosion proof class: Ex d e II C T5/T6
 Conforms to South Korea safety standards Explosion proof class: Ex d e II C T5/T6
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 Conforms to South Korea safety standards
 C



T409

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T409

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OFP

Japan (TIIS) type approved

Japan (CML) certified product

International/ATEX (Baseefa)

NEPSI certified product

TR CU certified product

KOSHA certified product

PESO certified product

OSHA certified product

INMETRO certified product

product

certified product FM certified product