

INDUSTRIAL THERMOCOUPLE

MODEL S2.01



PRODUCT DESCRIPTION

A thermocouple is an electrical device consisting of two dissimilar electrical conductors forming an electrical junction, that produce a voltage (expressed in millivolts) with a change in temperature. A thermocouple can measure a wide range of temperature. They produce electric currents, so they're beneficial for operating automatic senses. It's easier to use an electronic circuit or a computer to detect a temperature at constant processes than to do it manually with a thermometer.



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KEY FEATURES

- Mineral Insulated Cable
- Spring Loaded design for positive contact with Thermo-well
- Available in various connections & sheath diameters
- Enclosures (Head)
- Weatherproof IP-68
- Flameproof Gr. IIA, IIB
- Explosion proof IIA, IIB, IIC
- ATEX Certification
- Transmitter output 4-20 mV (optional)
- Various mounting options
- Standard Followed : IEC-584.2

SPECIFICATIONS

No of element	: Simplex, Duplex
Element type	: K-type, Standard
Range	: -270...1370 °C
Accuracy	: Class 1 as per IEC-584.2 / ANSI MC – 96.1
Hot Junction Type	Ungrounded Junction
Sheath Diameter	: 6 mm Dia.
Terminal Head Type	: Screwed type, Weatherproof, IP-68
No of Conduit Entry	: One
Cable Gland	: 3/4" ET (F)
Head Extension type	: Fixed Connection Type
Extension Length	: 150 mm

SUGGESTED APPLICATIONS

- Oil & Gas applications
- Chemical & Petrochemical
- Cement Plants
- Fertilizer
- Steel Plants
- Power Plants
- Nuclear Plants

MATERIAL OF CONSTRUCTION

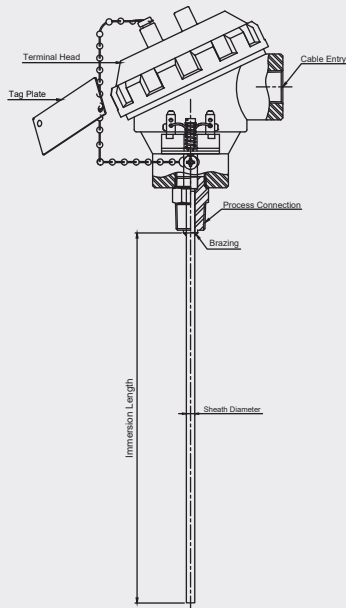
Terminal Head Type	: Die Cast Aluminum
Sheath material	: SS 316
Cable Gland	: Nickel plated brass, Single, Double Compression
Tag plate	: Stainless Steel

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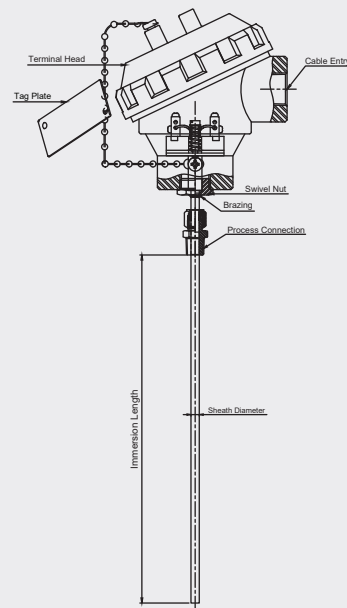
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DIMENSIONAL DRAWINGS

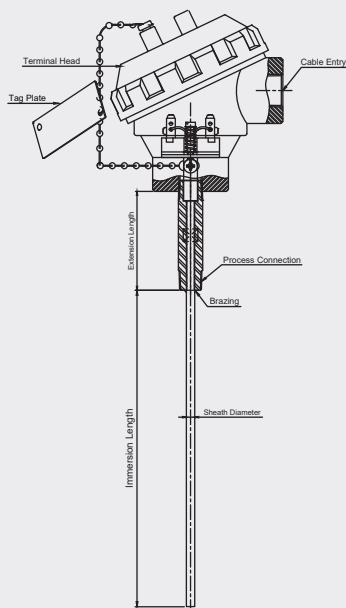
Fixed



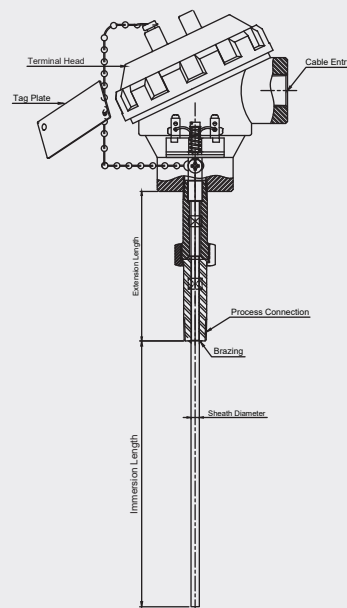
Adjustable



Nipple Extension



NUN Extension

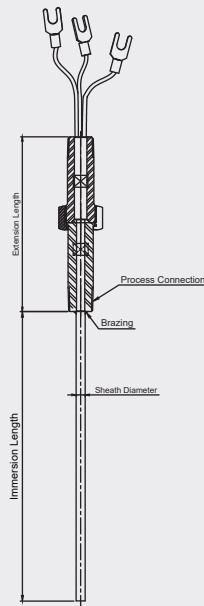


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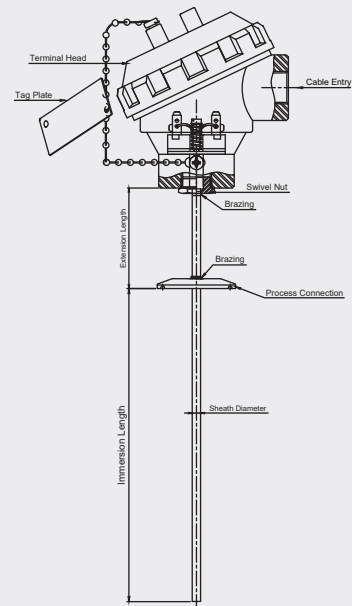
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DIMENSIONAL DRAWINGS

Direct Mount



Tri-clover



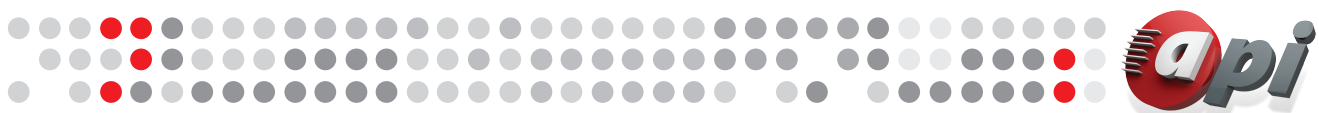
Important Notes: Above drawings are not to scale. All Dimension are in mm

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MODEL CODING & ORDERING INFORMATION

DESCRIPTION	CODE	S2.01	A	S	K	1	UJ	SL	B06	TH3	E2	2
Model												
Industrial Thermocouple	S2.01	S2.01										
Version												
Fixed	F											
Adjustable	A		A									
Nipple Extension	N											
NUN Extension	U											
Direct Mount	D											
Tri-clover	T											
No of Element												
Simplex	S			S								
Duplex	D											
Element												
K - Chromel-Alumel	K				K							
J - Iron-Constantan	J											
N - Nicrosil-Nisil	N											
E - Chromel-Constantan	E											
T - Copper-Constantan	T											
R - Platinum 13% Rhodium-Platinum	R											
S - Platinum 10% Rhodium-Platinum	S											
B - Platinum 6% Rhodium-Platinum 30% Rhodium	B											
Accuracy												
Class 1	1					1						
*As per IEC-584.2 / ANSI MC – 96.1												
Hot Junction Type												
Grounded Junction	GJ											
Un-Grounded Junction	UJ						UJ					
Sheath Material												
SS 316	S6											
SS 316L	SL							SL				
SS 310	S3											
Inconel 600	I60											
Sheath Diameter												
Ø3.0 mm	B03											
Ø4.5 mm	B04											
Ø6.0 mm	B06								B06			
Ø8.0 mm	B08											
Ø10.0 mm	B10											
Ø12.7 mm	B12											
Terminal Head Type												
None	XX											
Screwed type, Flameproof IP 67 Gr IIA IIB in Die-cast Aluminum	TH1											
Screwed Type, Explosion proof, IP 68 Gr IIC in Die-cast Aluminum	TH2											
Hinged Type, Weatherproof, IP 68 in Die Cast Aluminum	TH3									TH3		
Weather proof Head in Die-Cast Aluminum	TH4											
Screwed Type, Weather proof, IP 68 in Die Cast Aluminum	TH5											
Ex-Proof to CSA, FM, ATEX [EEx-d]	TH6											
SS 304-WP, IP-68	TH7											
SS 316-WP, IP-68	TH8											
Cable Entry												
None	XX											
1/2" NPT (F)	E2										E2	
1/2" BSP (F)	E3											
3/4" ET (F)	E5											
M20×1.5 (F)	E6											
No. of Cable Entry												
One	1											
Two	2											2



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DESCRIPTION	CODE	S4	100	XXX	12NM	X16
Head Extension Material						
CS Plated	CP					
SS 304	S4	S4				
SS 316	S6					
Extension Length						
50 mm	050					
75 mm	075					
100 mm	100		100			
150 mm	150					
200 mm	200					
250 mm	250					
Immersion length						
XXX. As per customer requirement in `mm'	XXX			XXX		
Process Connection						
1/4" BSP (M) (#)	14BM					
1/4" NPT (M) (#)	14NM					
1/2" BSP (M)	12BM					
1/2" NPT (M)	12NM				12NM	
1/2" NPT (F)	12NF					
1/2" BSP (F)	12BF					
M20×1.5 (M)	M20M					
3/4" NPT (M)	34NM					
3/4" NPT (F)	34NF					
3/4" BSP (M)	34BM					
3/4" BSP (F)	34BF					
# Suitable Sheath dia. for below 3 mm.						
Other Options						
Plug for Conduit entry in Aluminium	XCA					
SS base plate Suitable for Temperature transmitter	XBP					
Head mount transmitter [4...20 mA]	XHT					
Plug for Conduit entry in Carbon Steel	XPC					
Plug for Conduit entry in SS 304	XPS					
Calibration certificate	X16					X16
Plug for Conduit entry in SS 316	X23					
SS Tag plate	X26					
Single compression, WP, Ni-Brass	Q51					
Single compression, WP, AISI 304 SS	Q52					
Single compression, WP, AISI 316 SS	Q53					
Double compression, WP, Ni-Brass	Q54					
Double compression, WP, AISI 304 SS	Q55					
Double compression, WP, AISI 316 SS	Q56					
Double compression, FLP, Ni-Brass	Q57					
Double compression, FLP, AISI 304 SS	Q58					
Double compression, FLP, AISI 316 SS	Q59					

SAMPLE ORDERING CODE:

S2.01-A.S.K.1.UJ.SL.B06.TH3.E2.2.S4.100.XXX.12NM.X16

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and material specified may be replaced by others without prior notice.