

temperature sensor accessories

Thermowells

Flanges

Protection Tubes

Precision Pipe Fittings

Compression Fittings

Baynot Parts

Seal Pots & Accessories

Connectors

Compensating Cables

Connection Heads

Terminal Block



www.tempsensindia.com

Thermowells



Threaded



Flanged



Stepped



Van Stone



Socket-Weld



Weld-in

Tempens thermowells come in variety of material and sizes.

Material : AISI -SS304, SS304L, SS 316, SS 316L, SS 321, SS 310, 321 Ti, 304 Ti
HRS 446, INCONEL 600/800, Hastalloy, Monel Titanium etc.

Type : Drilled barstock, Fabricated, Flanged, Screwed

Flanges



Plate Flange



Lap Joint Flange



Socket Weld Flange



Weld Neck Flange



Thread Flange

Material : AISI- SS304,SS304L, SS316, SS316L, Carbon Steel, Cast Iron etc.

Size : 1/2" to 4" & others

Rating : 150# to 2500# etc.

Ceramic Tubes



Open Ended



Close Ended



Insulators



Beads

Material : Ceramic -Alumina Tubes, Type DIN C-799, Type 610, K 80 etc.
Type : One End Closed / Open Both End
Standard Length : 350, 530, 600, 650, 740, 900, 1030, 1200, 1430, 2000, 2300mm

Ceramic Tubes

OD X ID (mm)	Length (mm)
6 X 4	350 to 2300
8 X 5	350 to 2300
10 X 6	350 to 2300
12 X 8	350 to 2300
15 X 6	350 to 2300
15 X 10	350 to 2300
20 X 10	350 to 2300
20 X 15	350 to 2300
24 X 12	350 to 2300
24 X 18	350 to 2300

Insulating Tubes

OD	Configuration	Length(mm)
2.8	2/4/6 Holes	350 to 2300
3.5	2/4/6 Holes	350 to 2300
4.5	2/4/6 Holes	350 to 2300
5.5	2/4/6 Holes	350 to 2300
8.5	2/4/6 Holes	350 to 2300

Ceramic Beads

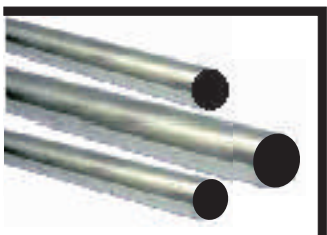
OD(mm)	Configuration	Length(mm)
3.6	2/4 holes	25
8.5	2/4 holes	25
11	2/4 holes	25
12	2/4 holes	25
13.5	2/4 holes	25

Material Properties:

Properties	Units	Rubalit (DIN C-799)	Dimulit
Al ₂ O ₃ - content	%	99	59.0
Color	-	yellow	white
Water absorption	%	0	0
Flexural Strength	N/mm ²	360	200
Max. Temp. use*	°C	1700	1500
Thermal Conductivity	W/m °K	28	4
Temperature Stability		Good/satisfactory	Good/satisfactory
Chemical resistivity		Very good	good

Stainless Steel Tubes

Material : SS304, SS304L, SS310, SS446, Inconel-800/600, Hastalloy, Titanium etc.
Type : Open Ended, Close Ended ,Round Ended
Length : As per Customer requirement



Open Ended



Close Ended



Round Ended

OD X ID (mm)
3x2.2
4x3.7
4.5x3.7
5x4
6x5
8x6.5
9.5x7.1
10x7
12x8
21.3x2.77 1/2"NB SCH 40
21.3x3.77 1/2"NB SCH 80
21.3x4.77 1/2"NB SCH 160
26.7x5.35
33x8.5
33.4x21
3/4" NB SCH 40, 60, 80, 160
1" NB SCH 80, 160

We welcome your enquiries for items not listed.

Precision Pipe Fittings



Hex Nipple



Long Nipple



Reducing Adapter



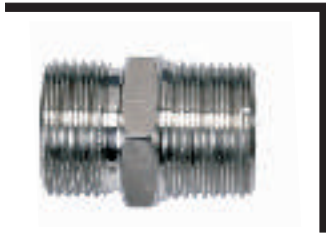
Pipe Cap



Reducing Bushing



Pipe Plug



Hex Reducing Nipple



Three Piece Union

Material : AISI- SS316, SS304, SS303, SS321 etc.

Thread : NPT, BSP, Others

Size : 1/8" to 1"

Compression Fittings



Hex Nipple



Male Pipe Weld Connector



Elbow Union



Male Adapter



Back Ferrule



Front Ferrule



Male Elbow



Reducing Union

Material : AISI -SS316, SS304, SS303, Carbon Steel, Brass etc.

Thread : NPT, BSP, Others

Size : 1/8" to 1"

Bayonut Caps



Bayonut Caps



Bayonut Adapters



Springs



Adjustable Bayonut Caps

Material : AISI- SS316, SS304, SS303, Carbon Steel, Brass etc.

Thread : NPT, BSP , Others

Seal Pots and Accessories



Plain Seal Pots



Threaded Seal Pots



Connector Seal Pots



Seal Pots for Armour

Material : AISI- SS316, SS304, SS303, Carbon Steel ,Brass etc.

Thread : Plain, Threaded

Size : As per customer requirement

Connectors

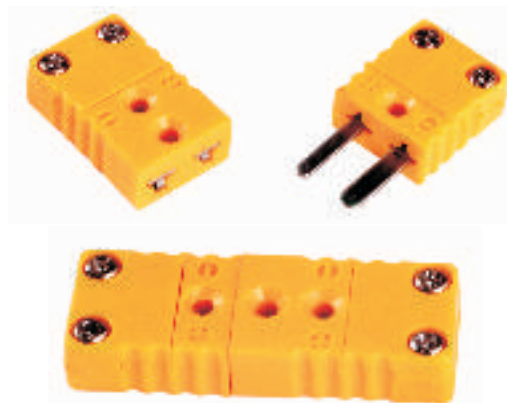
Plug and jack compensated connectors for thermocouples.

Types : J, K, R, S, B, T, E
Standard, Miniature

Material : Fibre Glass

Features

- ❖ High Quality impact resistant material
- ❖ Polarized pins prevent misconduction
- ❖ Easy to wire.

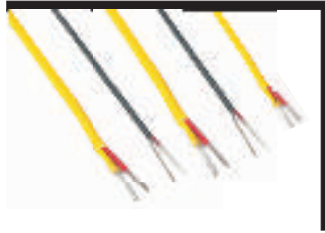


We welcome your enquiries for items not listed.

Compensating Cable



PVC Insulated Wire



Fiberglass Insulated Wire



Metal Overbraid Wire



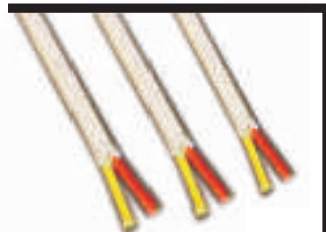
Teflon Insulated Wire



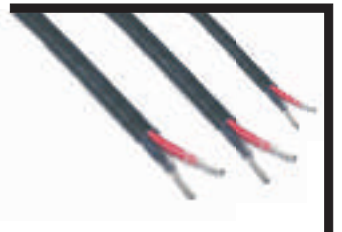
Teflon Insulated Twisted Wire



Fiberglass Asbestos Insulated Wire



Ceramic Fiber Insulated Wire



Teflon Silicon Rubber Insulated Wire

COMPENSATING CABLES

- Wire Gauge** : 14 to 36 gauge (AWG /SWG)
- Conductor** : Solid /Multistrand
- Insulation** : Single and Double Fiber Glass, Teflon, Ceramic Fiber, Silica Fiber, SS Braided, PVC etc.
- Protection** : Armoured / Unarmoured

COLOR CODE OF THERMOCOUPLE EXTENSION AND COMPENSATING CABLE

THERMOCOUPLE COMBINATION TYPE	CONDUCTOR		INTERNATIONAL COLOUR CODE TO IEC 5842:1989	AMERICAN TO ANSI/MCSE-1	JAPANESE TO JIS C 5515-1981	TOLERANCE CLASS		CABLE TEMPERATURE RANGE °C
	EXTENSION CABLE	COMPENSATING CABLE				1	2	
K	KX					±0.5% (±1.5°C)	±1.0% (±2.5°C)	25°C TO +200°C
	KCA						±1.0% (±2.5°C)	0°C TO +150°C
	KCB						±1.0% (±2.5°C)	0°C TO +100°C
T	TX					±0.5% (±1.5°C)	±1.0% (±2.5°C)	25°C TO +100°C
J	JX					±0.5% (±1.5°C)	±1.0% (±2.5°C)	25°C TO +200°C
N	NX					±0.5% (±1.5°C)	±1.0% (±2.5°C)	25°C TO +200°C
	NC						±1.0% (±2.5°C)	0°C TO +150°C
E	EX					±0.5% (±1.5°C)	±1.0% (±2.5°C)	25°C TO +200°C
R	RCA						±1.0% (±2.5°C)	0°C TO +100°C
	RCB						±1.0% (±2.5°C)	0°C TO +200°C
S	SCA						±1.0% (±2.5°C)	0°C TO +100°C
	SCB						±1.0% (±2.5°C)	0°C TO +200°C
B	BC							

Wire Insulation Identification and Application guide

Insulation		Appearance of Thermocouple Grade Wire	Temp Range, Insulation	Abrasion Resistance	Flexibility	Water Submersion	Resistance to:				
Overall	Conductors						Solvent	Acid	Base	Flame	Humidity
Polyvinyl Chloride (PVC)	Polyvinyl Chloride (PVC)		-40 to 105°C	Good	Excellent	Good	Fair	Good	Good	Good	Good
PFA Teflon or Neoflon	PFA Teflon or Neoflon		-267 to 260°C	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Kapton	Kapton		-267 to 316°C	Excellent	Good	Excellent	Good	Good	Good	Good	Excellent
Glass Braid	Glass Braid		-73 to 260°C	Good	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
High Temp. Glass Braid	High Temp. Glass Braid		-73 to 871°C	Poor	Good	Poor	Excellent	Excellent	Excellent	Excellent	Excellent
Nextel Braid	Nextel Braid		-73 to 1204°C	Poor	Good	Poor	Excellent	Good	Good	Excellent	Fair
Silica	Silica		-73 to 1038°C	Poor	Good	Poor	Excellent	Good	Poor	Excellent	Fair

Connection Heads



Type A



Type B



Type C



Type DAN



Type D



Type DAN-W



Type MA

- Material** : Die cast aluminum, Stainless steel, Plastic etc.
- Types** : A, B, C, DAN, DAN-W, KNE etc
Single entry, Double entry, miniature
- Cable Entry** : M24x1.5, M20x1.5, 3/4" ET, 1/2" NPT/BSP
- Bottom Entry** : 1/2" BSP, M20x1.5, 1/2" NPT
- Protection Class** : IP 65, IP 67, Ex-proof II A/II B, II C

Terminal Block

Tempsens offers various types of terminal blocks for connection heads.

- Material** : Ceramic
- Terminal** : Two, Three, Four, Six, Eight



Six Pin
Terminal Block



Four Pin
Terminal Block



Three Pin
Terminal Block



Two Pin
Terminal Block

We welcome your enquiries for items not listed.

Always One Step ahead.... Committed to success

TEMPESENS Instruments (I) Pvt. Ltd is a part of Pyrotech group which was established by four technocrats in 1976 at Udaipur, with our first product as Thermocouples and RTDs. To enhance our customer's success we provide high quality products and services for "Temperature solution", tailored to their needs, and delivered to meet their schedule.

We have tied up with world leaders in Temperature measuring technology for critical components, Non contact Temperature measurement and Thermal imaging solutions. We add value to these products and deliver complete engineered solutions, backed by efficient service and application support.

- 35 years of experience.
- Large Customer base.
- Strong sales and service network
- Executed Major Projects in India and Abroad.
- Production Expertise-Specialised Team & Facility.
- NABL Accredited Calibration Laboratory -40°C to 1500 °C.
- Fixed Point Temperature Calibration-TPW, Ga, Sn, Zn & Al.

Quality Assurance

- ❖ Inspection and testing
- ❖ Raw Material Surface Finish
- ❖ Material Analysis
- ❖ Ultrasonic Test for integrity
- ❖ Hardness Test
- ❖ Intergranular Corrossion Test
- ❖ Dimensional Inspection
- ❖ GO/NO GO Gauge for threads
- ❖ Hydro Test
- ❖ Pneumatic/Gas Test
- ❖ Helium Leak Test
- ❖ Pressure Cycle Test
- ❖ Temperature Cycle Test
- ❖ Radiography
- ❖ Ultrasonic Bore Concentricity Test
- ❖ Positive Material Identification (PMI)

Other Products

- Thermocouples
- RTDs
- Glass Thermocouples
- Master Sensors
- Calibration Equipments
- Calibration Services – NABL Accredited Lab and on-site calibration
- InfraRed Pyrometer.
- Furnace Cameras.
- Kiln Shell Scanner



TEMPESENS INSTRUMENTS (I) PVT. LTD.
B-188 A, Road No.5, M.I.A., UDAIPUR-313003 (Rajasthan) INDIA
Ph. : +91-294-3057700 to 800 Fax : +91-294-2492447, 3057750
Email : info@tempensindia.com, Web : www.tempensindia.com
www.tempensindia.com/accessories, www.thermowellworld.com