



# Temperature Gauges

# Bimetal Dial Thermometer

The Bimetal thermometer employs a bimetal strip in the form of helix (it works on the principle of thermal expansion - two metals having different coefficient of expansions are joined to form a bimetal. The resultant expansion of bimetal is proportional to temperature). Bimetal dial thermometers are simple in construction, yet rugged. They are used for measurement of temperature in most of the industrial applications. They are offered in the range of (-) 50°C to 600°C. With rigid stem having bottom or back entry. It can also be offered in every angle rotatable construction.

## Features

- Rugged construction
- Bottom/Back entry, every angle construction
- Fast response
- Protection class IP-67
- Accuracy  $\pm 1\%$  FSD
- High repeatability, low hysteresis
- Hermetically sealed case

## Specifications

**Reference standard** : ASME B 40.3, EN 13190

**Dial** : 63 mm, 100 mm or 150 mm in aluminium white background, black markings

**Case** : Die cast aluminium with screwed bezel  
SS304 with bayonet bezel

**Protection** : Weatherproof to IP - 67 ( IS : 13947)

**Window** : Shatterproof glass

**Pointer** : Aluminium, black

**Stem** : SS304 or SS316 in 6 mm, 8 mm, 9.5 mm, 10 mm, 12 mm, 12.7 mm, 14 mm, 16 mm dia and length from 100 mm to 1000 mm as standard

**Connection** : 1/2" NPT (M) as standard in SS304 or SS316 adjustable three piece compression fitting

**Range** : (-) 50°C to 600°C with a minimum span of 80°C

**Accuracy** :  $\pm 1\%$  FSD ( $\pm 2\%$  FSD for 63 mm dial size)  
(In accordance with EN 13190)

**Overrange** : 125% FSD  
(130% on request upto 500°C)

**Reset** : External

**Contact** : Single SPST, normally open, closed on rise in temperature (specify action required) adjustable over the entire range, rating 30 VA @ 230 V AC (100 mm dial back entry model in SS case only)

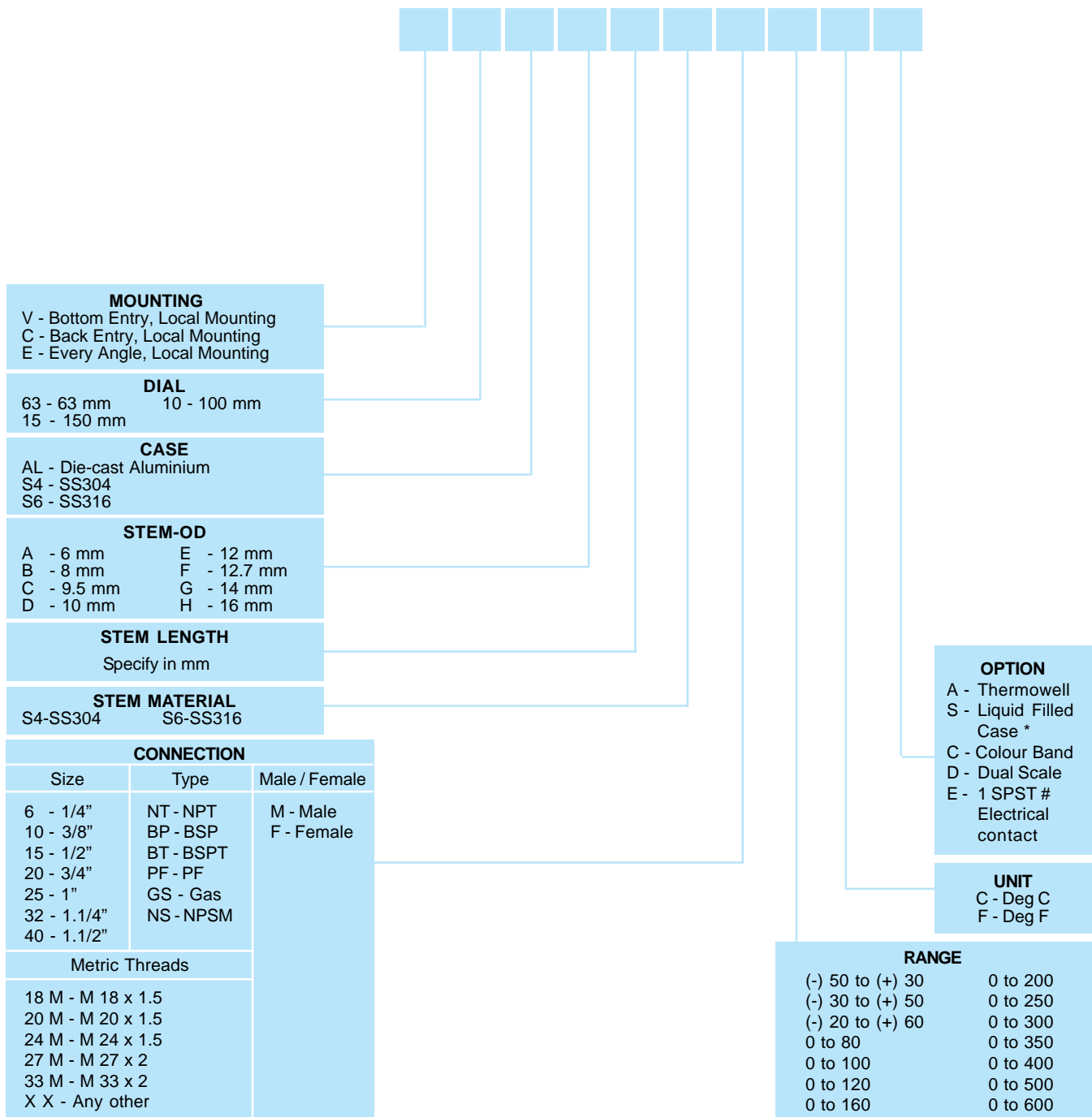
**Note** : 1) For minimum insertion length essential for proper sensing, contact our design department.  
2) Three point calibration certificate accompanies each thermometer.



# Bimetal Dial Thermometer

## How to Order

### TYPE : TB



\* Suitable upto maximum temperature 339°C.

# In 100 mm dial size, back entry, SS case.

# Mercury in Steel Dial Thermometer



Mercury filled system based on mercury expansion principle is used for measuring temperature ranging from (-) 40°C to 600°C. It has faster response and the same is available in rigid stem as well as capillary type for remote sensing. Every angle type can be offered in all SS construction. Manufactured in accordance with BS:5235. System is case compensated as standard (SAMA CI VB). Fully compensated (capillary compensation) system is offered wherever essential.

## Features

- Rugged construction
- Rigid stem or capillary type
- Fast response
- Protection class IP- 67
- Accuracy  $\pm 1\%$  FSD (0.5% FSD on request)
- High repeatability, low hysteresis
- Case compensated system
- Micrometer Pointer

## Specifications

<b>Ref Standard</b>	: BS 5235
<b>System</b>	: Mercury filled, case compensated in accordance with SAMA CI. V B
<b>Dial</b>	: 100 mm or 150 mm in aluminium, white background, black markings
<b>Case</b>	: Die cast aluminum with screwed bezel, SS304 / SS316 with bayonet bezel
<b>Protection</b>	: Weather proof to IP - 67 (IS : 13947 Part I)
<b>Window</b>	: Shatterproof glass
<b>Pointer</b>	: Aluminium, black
<b>Stem</b>	: SS304 or SS316 in 6 mm, 8 mm, 9.5 mm, 10 mm, 12 mm, 12.7 mm, 14 mm, 16 mm dia and length from 100 mm to 1000 mm (longer lengths available on request )
<b>Capillary</b>	: SS covered / SS covered + PVC / SS armoured (up to 15 M).
<b>Connection</b>	: ½" NPT (M) as standard in SS304 or SS316 three piece adjustable compression fitting.
<b>Range</b>	: (-) 40°C to 600°C with a minimum span of 50°C
<b>Accuracy</b>	: $\pm 1\%$ FSD / $\pm 0.5\%$ FSD
<b>Overrange</b>	: 130% FSD as standard
<b>Zero reset</b>	: Micrometer Pointer
<b>Optional</b>	: 1) Glycerine filled SS304 / SS316 case 2) Fully compensated double bourdon system in accordance with SAMA CI. V A 3) SS solid drawn capillary for better performance

**Note** : 1) For minimum immersion length essential for proper sensing, contact our design department.  
2) Three point calibration certificate accompanies each thermometer.

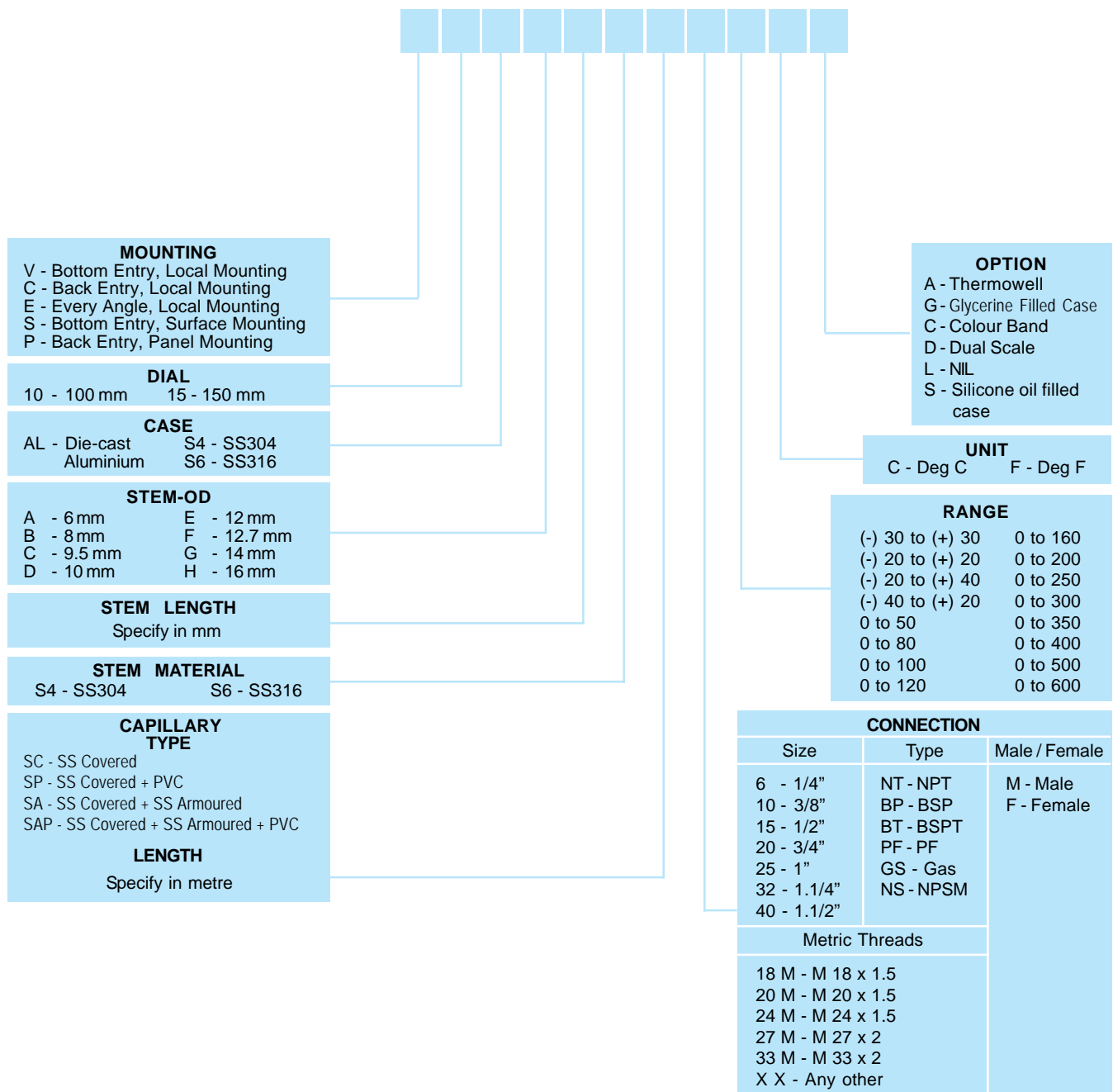
# Mercury in Steel Dial Thermometer

## How to Order

### TYPE

**TM-R - Rigid Stem**

**TM-C - Capillary Type**



**MOUNTING**

V - Bottom Entry, Local Mounting  
C - Back Entry, Local Mounting  
E - Every Angle, Local Mounting  
S - Bottom Entry, Surface Mounting  
P - Back Entry, Panel Mounting

**DIAL**

10 - 100 mm    15 - 150 mm

**CASE**

AL - Die-cast Aluminium    S4 - SS304  
S6 - SS316

**STEM-OD**

A - 6 mm                      E - 12 mm  
B - 8 mm                      F - 12.7 mm  
C - 9.5 mm                    G - 14 mm  
D - 10 mm                     H - 16 mm

**STEM LENGTH**

Specify in mm

**STEM MATERIAL**

S4 - SS304                      S6 - SS316

**CAPILLARY TYPE**

SC - SS Covered  
SP - SS Covered + PVC  
SA - SS Covered + SS Armoured  
SAP - SS Covered + SS Armoured + PVC

**LENGTH**

Specify in metre

**OPTION**

A - Thermowell  
G - Glycerine Filled Case  
C - Colour Band  
D - Dual Scale  
L - NIL  
S - Silicone oil filled case

**UNIT**

C - Deg C    F - Deg F

**RANGE**

(-) 30 to (+) 30	0 to 160
(-) 20 to (+) 20	0 to 200
(-) 20 to (+) 40	0 to 250
(-) 40 to (+) 20	0 to 300
0 to 50	0 to 350
0 to 80	0 to 400
0 to 100	0 to 500
0 to 120	0 to 600

# Liquid Filled Dial Thermometer

Liquid filled system based on liquid (other than mercury) expansion principle is used for measuring temperature ranging from (-) 30°C to 250°C.

It has faster response and the same is available in rigid stem as well as capillary type for remote sensing. Every angle type can be offered in all SS construction. Generally used where mercury type thermometer is not used in industries such as Food, Pharmaceutical, etc. The main advantage is its minimum immersion length required for sensing (as low as 30mm suffices for proper sensing thereby making it ideal for installing in lower line sizes)



## Features

- Rugged construction
- Rigid stem or capillary type
- Suitable for pharmaceutical, food, biotechnology industry.
- Protection class IP-67
- Accuracy  $\pm 1\%$  FSD
- Minimum immersion length (as low as 30 mm suitable for lower line sizes) possible.
- Case compensated system (SAMA Cl. IB)



## Specifications

<b>System</b>	: Liquid filled, case compensated in accordance with SAMA Cl. IB
<b>Dial</b>	: 100 mm or 150 mm in aluminium, white background, black markings
<b>Case</b>	: Die cast aluminum with screwed bezel, SS304 / SS316 with bayonet bezel
<b>Protection</b>	: Weather proof to IP - 67 (IS : 13947 Part I)
<b>Window</b>	: Shatterproof glass
<b>Pointer</b>	: Aluminium, black
<b>Stem</b>	: SS304 or SS316 in 6 mm, 8 mm, 9.5 mm, 10 mm, 12 mm, 12.7 mm, 14 mm, 16 mm dia (immersion length as small as 30 mm possible).
<b>Capillary</b>	: SS covered / SS covered + PVC / SS armoured (up to 5 Mtr.).
<b>Connection</b>	: ½" NPT (M) as standard in SS304 or SS316 three piece adjustable compression fitting.
<b>Range</b>	: (-) 30°C to 250°C with a minimum span of 50°C
<b>Accuracy</b>	: $\pm 1\%$ FSD
<b>Overrange</b>	: 125% FSD as standard
<b>Zero reset</b>	: Micrometer Pointer
<b>Optional</b>	: Glycerine filled SS304 case

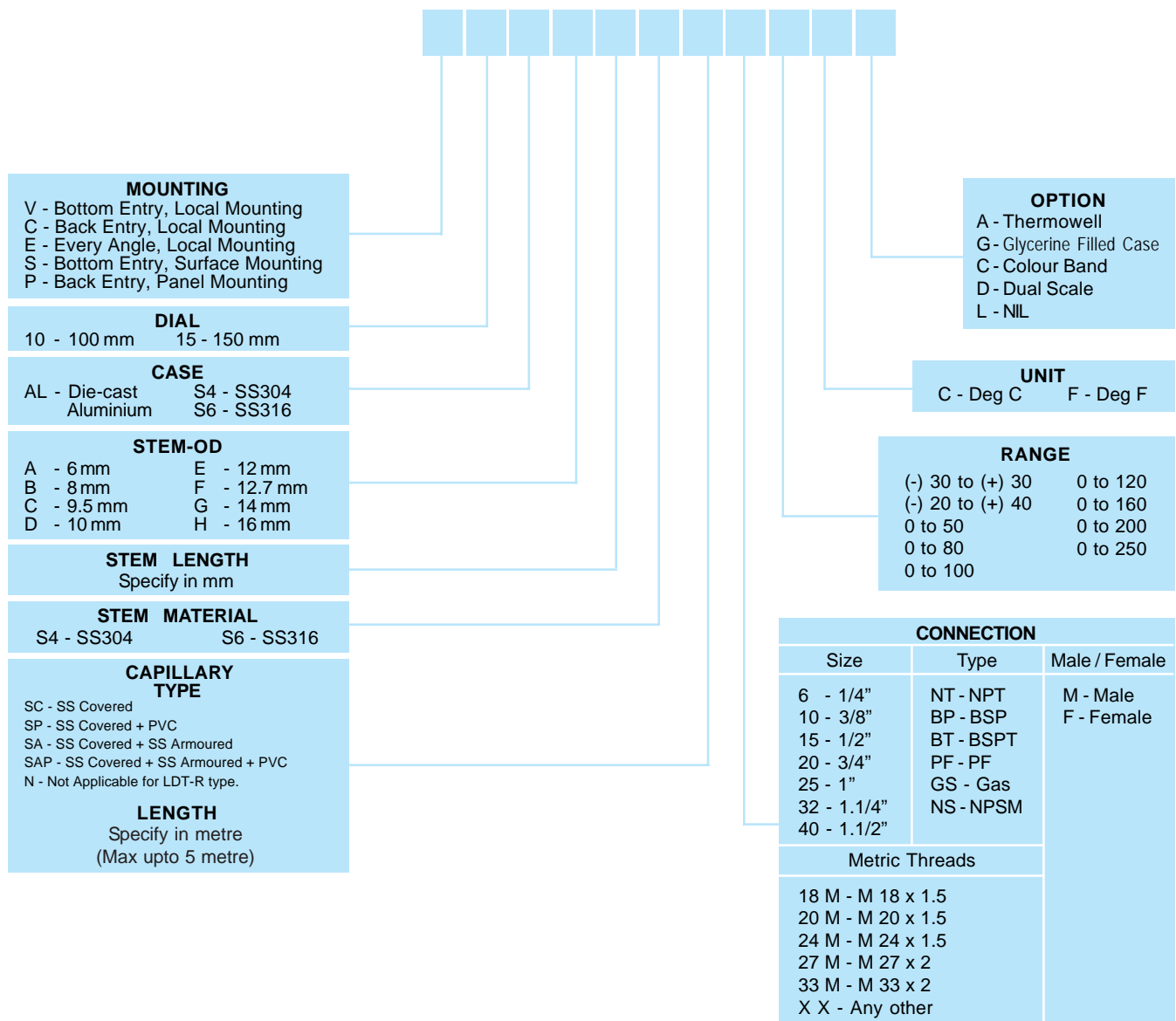
# Liquid Filled Dial Thermometer

## How to Order

### TYPE

**TDL-R - Rigid Stem**

**TDL-C - Capillary Type**



# Gas Filled Dial Thermometer

Gas filled temperature gauge overcomes most of the limitations of other members of family. It is offered in a very wide temperature range i.e. (-)200 to 800°C. Practically any stem length can be offered and capillary length as long as 25 mtr, without any loss of accuracy. Inert, non hazardous, non toxic nature of the filled system makes it virtually ideal choice of cross section of industries.

## Features

- Use of inert gas - N<sub>2</sub>
- Suitable for sanitary application
- All SS construction
- Rigid stem or capillary type
- Fast response
- Non-polluting, environment friendly
- Non-hazardous for the service
- High reliability
- IP-67 protection
- Accuracy  $\pm$  1% FSD

## Specifications

<b>System</b>	: Gas (N <sub>2</sub> ) filled, case compensated in accordance with SAMA Cl. III B
<b>Dial</b>	: 100 mm or 150 mm in aluminium, white background, black marking
<b>Case</b>	: SS304 / SS316 with bayonet bezel
<b>Protection</b>	: Weatherproof to IP-67 (IS:13947 Part I)
<b>Window</b>	: Shatterproof glass
<b>Pointer</b>	: Aluminium, black with micrometer adjustment
<b>Stem</b>	: SS316 in 8 mm, 10 mm, 12 mm dia as standard
<b>Capillary</b>	: SS solid drawn or SS armoured or SS + PVC covered up to 25 M
<b>Connection</b>	: 1/2"NPT (M) adjustable three piece compression fitting in SS304 or SS316
<b>Range</b>	: (-) 200°C to 800°C with minimum span of 80°C
<b>Accuracy</b>	: $\pm$ 1% FSD in accordance with EN 13190
<b>Overrange</b>	: 130% FSD
<b>Zero Reset</b>	: Micrometer pointer

**Note** :For minimum immersion length (excluding thread length) for proper sensing, contact our design department.





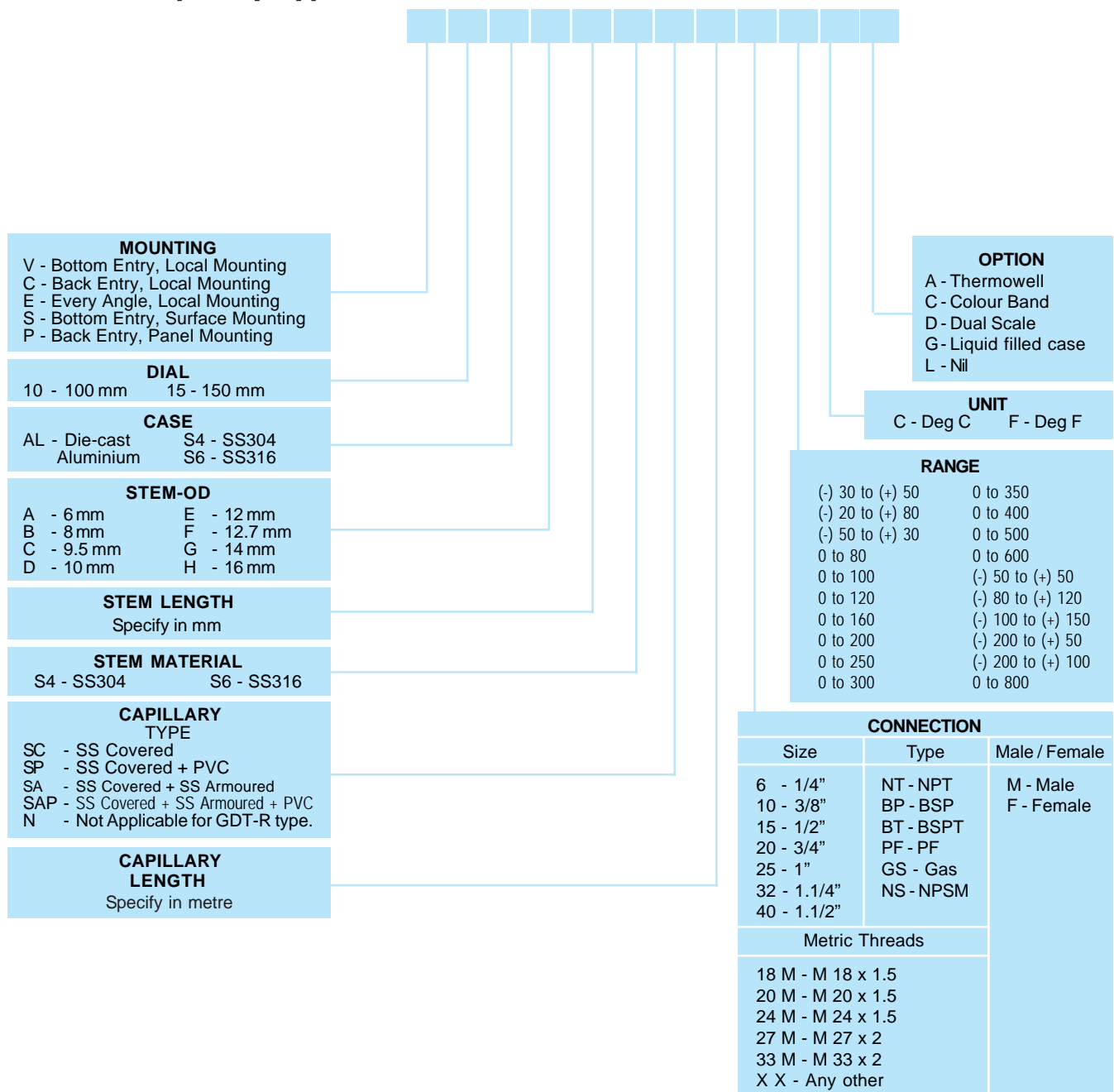
# Gas Filled Dial Thermometer

## How to Order

### TYPE

**TDG-R - Rigid Stem**

**TDG-C - Capillary Type**

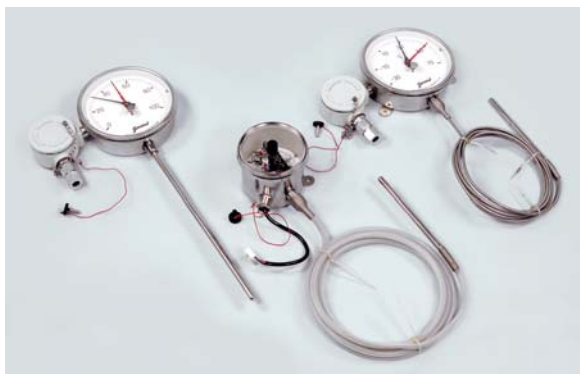


# Indicating Temperature Switch

Indicating temperature switch combines indication with switching (in order to make or break the associated electrical circuit). Can be offered with contact assembly as well as microswitch (as a combination of switch and movement)

## Features

- Combination of indication and switch
- Fast response
- Choice of contact assembly or microswitch
- Switching accuracy  $\pm 2\%$  FSD
- High repeatability and low hysteresis
- Flameproof version available
- Case compensated system



## Specifications

- System** : Mercury filled, Gas (N<sub>2</sub>) filled case compensated in accordance with SAMA C1. V B/IIIB
- Dial** : 100 mm or 150 mm, white anodised, black markings
- Case** : SS304 / SS316 with bayonet bezel (Flameproof case in Al only)
- Protection** : Weatherproof to IP-67 ( IS : 13947)  
Flameproof to IIA IIB (Equivalent to NEC C1. I Div 2 Gr. C&D)
- Stem** : SS304 or SS316, 6 mm, 8 mm, 10 mm, 12 mm
- Connection** : 1/2" NPT (M) adjustable three piece compression fitting as standard
- Capillary** : SS covered or SS armoured or SS covered with PVC up to 15 M.
- Range** : (-) 40°C to 600°C with a minimum span 50°C for mercury filled temperature switch / (-) 100 to 600°C for gas filled temperature switch (minimum span 80°C )
- Accuracy** :  $\pm 1\%$  FSD for indication,  $\pm 2\%$  FSD for switching
- Overrange** : 125% FSD as standard (130% FSD on request upto 500°C)
- Contacts** : 1) 1 SPST, single, normally open, closed on rise in temperature or vice versa, rated 30 VA @ 230V AC  
2) 2 SPST, two contacts, independently adjustable, one normally open other normally closed or both normally open or both normally closed, rated 30VA @ 230 V AC  
3) IS PDT, single microswitch, adjustable over entire range, rated 5amp @ 230 V AC (3A @ 28 VDC)  
4) 2 SPDT, double microswitch, adjustable over entire range, rated 5 amp @ 230 V AC (3A @ 28 VDC)
- Accessory** : Relay for the contact assembly to suit 5 amp @ 230 V AC, separately mounted.
- Note** : 1) SPDT microswitch is offered in flameproof housing, 100mm dial and diecast Al case.  
2) Surface mounted flameproof housing is available with capillary.  
3) Flameproof ( conforming to IIC ) version also available with microswitch.  
4) 2 SPDT only in 150 mm dial size.



**Advantages of Microswitch Type Models** : Microswitch is rated 5 amp @ 230 V AC (3A @ 28 VDC). No relay is required. Microswitch is imported from reputed international supplier as combination of movement and switch. Microswitch assembly gives better switching accuracy. Compact design.

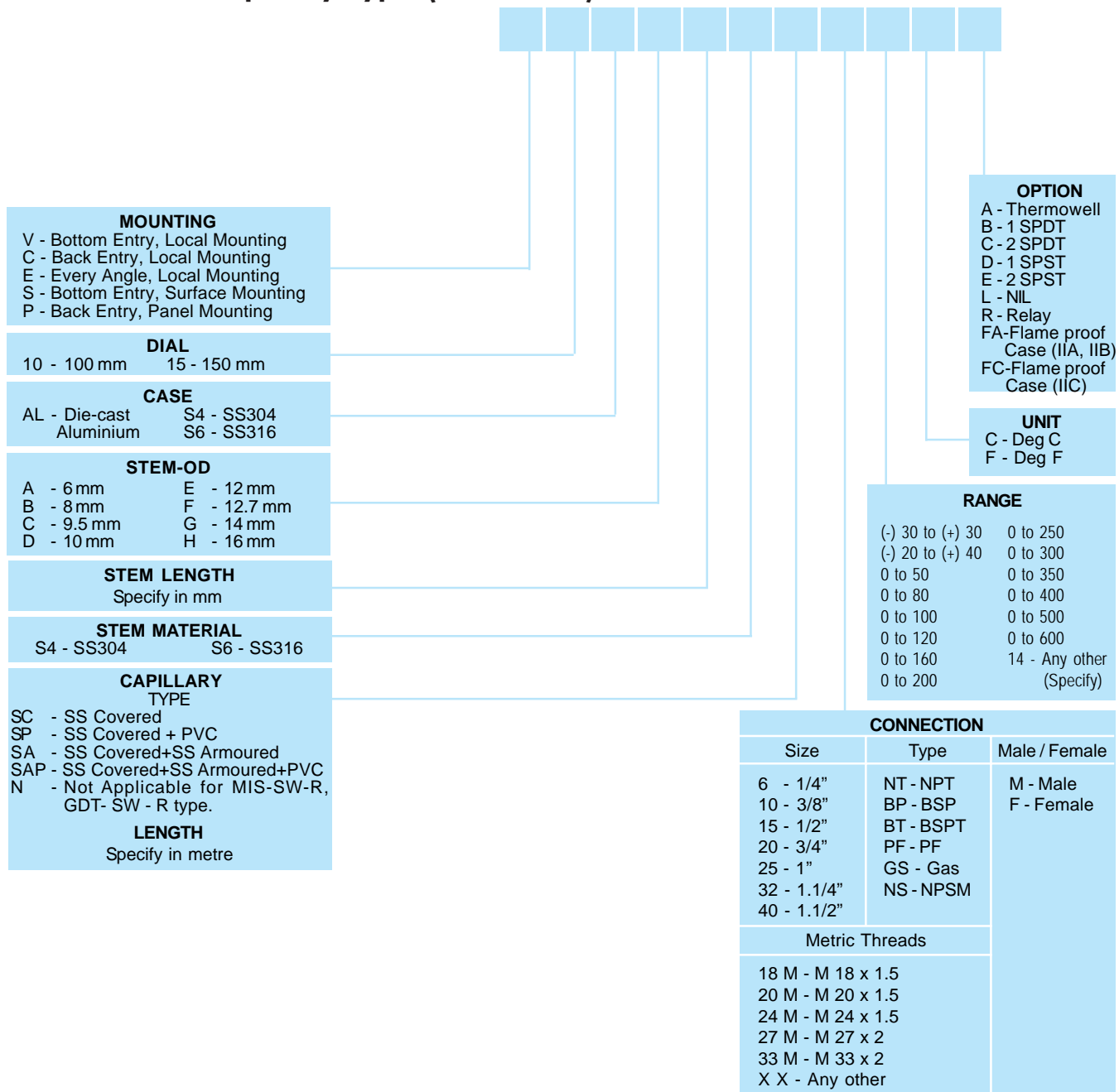
**Note** : For minimum immersion length essential for proper sensing, contact our design department.

# Indicating Temperature Switch

## How to Order

### TYPE

- TM-SW-R - Rigid Stem (Mercury Filled)**  
**TM-SW-C - Capillary Type (Mercury Filled)**  
**TDG-SW-R - Rigid Stem (Gas Filled)**  
**TDG-SW-C - Capillary Type (Gas Filled)**



## TEMPERATURE CONVERSION TABLE

°C	°F		°C	°F		°C	°F		°C	°F		°C	°F	
-129	-200	-328	-13.3	8	46.4	104	220	428	238	460	860	371	700	1292
-118	-180	-292	-12.8	9	48.2	110	230	446	243	470	878	377	710	1310
-107	-160	-256	-12.2	10	50	116	240	464	249	480	896	382	720	1328
-96	-140	-220	-6.7	20	68	121	250	482	254	490	914	388	730	1346
-84	-120	-184	-1.1	30	86	127	260	500	260	500	932	393	740	1364
-79	-110	-166	4.4	40	104	132	270	518	266	510	950	399	750	1382
-73	-100	-148	10	50	122	138	280	536	271	520	968	404	760	1400
-68	-90	-130	15.6	50	140	143	290	554	277	530	986	410	770	1418
-62	-80	-112	21.1	70	158	149	300	572	282	540	1004	416	780	1436
-57	-70	-94	26.7	80	176	154	310	590	288	550	1022	421	790	1454
-51	-60	-76	32.2	90	194	160	320	608	293	560	1040	427	800	1472
-46	-50	-58	38	100	212	166	330	626	299	570	1058			
-40	-40	-40	43	110	230	171	340	644	304	580	1076			
-34	-30	-22	49	120	248	177	350	662	310	590	1094			
-29	-20	-4	54	130	266	182	360	680	316	600	1112			
-23	-10	14	60	140	284	188	370	698	321	610	1130			
-17.8	0	32	66	150	302	193	380	716	327	620	1148			
-17.2	1	33.8	71	160	320	199	390	734	332	630	1166			
-16.7	2	35.6	77	170	338	204	400	752	338	640	1184			
-16.1	3	37.4	82	180	356	210	410	770	343	650	1202			
-15.6	4	39.2	88	190	374	216	420	788	349	660	1220			
-15	5	41	93	200	392	221	430	806	354	670	1238			
-14.4	6	42.8	99	210	410	227	440	824	360	680	1256			
-13.9	7	44.6	100	212	413.6	232	450	842	366	690	1274			

## MATERIAL SELECTION GUIDE FOR BULB/STEM MATERIAL

APPLICATION	MATERIAL
<b>POWER</b>	
Boiler Tube	SS 304, SS 316, SS 310
<b>CHEMICAL</b>	
<b>Acetic Acid</b>	
10 to 50% 20°C	SS 304
50% 100°C	SS 316
<b>Alcohol, ethyl, methyl</b>	
20 to 100°C	SS 304
<b>Ammonia</b>	
All connections 20°C	SS 304, SS 316
<b>Ammonium Chloride</b>	
All connections 100°C	SS 316
<b>Calcium Hydroxide</b>	SS 304
Up to 50% 100°C	SS304
<b>Chlorine Gas</b>	
Dry, 20°C	SS 316
<b>Chromic Acid</b>	
10 to 50% 100°C	SS 316
<b>Ethyl Acetate</b>	SS304
<b>Ethyl Chloride</b>	
20°C	SS304
<b>Formaldehyde</b>	SS 304, SS 316
<b>Formic Acid</b>	
5% 20 to 66°C	SS 316
<b>Hydrogen peroxide</b>	SS 304, SS 316
<b>Hydrogen Sulphide, wet and dry</b>	SS 316
<b>Phosphoric Acid</b>	
Up to 10% 20°C	SS 316

## In-House Testing facilities for Temperature Gauges

For the manufacturing & testing of temperature gauges, we strictly follow EN : 13190-2001 and DIN 16203, 16204, 16205 and 16206 standard. Following tests are carried out to ensure the quality of temperature gauges. We have facilities to carry out following tests in-house at our manufacturing plant.

1. Accuracy test
2. Overrange test
3. Hysteresis test
4. Response time test
5. Repeatability test
6. Vibration test (rattling test)
7. Load test
8. Mounting position test
9. Case temperature compensation test
10. Capillary compensation test
11. (for Bimetal temperature gauges)
12. Thermal stability test
13. (for Bimetal temperature gauges)
14. Hose down test (water spray test)
15. Switching accuracy test (for contact assembly)
16. High voltage test (for contact assembly)
17. Insulation test
18. Contact resistance test
19. Altitude test
20. Dial printing stability test
21. Life test for SPDT movement
22. Cyclic test
23. Friction test



## Some of our valued customers

### Consultants

Chemtex Engineering of India Ltd.  
Dalal Consultants & Engineers Ltd.  
Desein Indure Ltd.  
Development Consultants Ltd.  
Engineers India Ltd.  
Fact Engineering & Design Organisation  
Fichtner Consulting Engineers Pvt. Ltd.  
Jacobs H&G Limited  
Kvaerner Powergas India Ltd.  
Lurgi (I) Ltd.  
Mehtalia Associates  
Metallurgical & Engineering Consultants Pvt. Ltd.  
M.N. Dastoor  
Pipecon Consultants  
Projects & Development India Ltd.  
S N C Lavalin Engineering India Pvt. Ltd.  
Tata Consulting Engineers  
Technimont ICB Ltd.  
Toyo Engineering (I) Ltd.  
Uhde India Ltd.

### Instrument Manufacturers

ABB Ltd.  
Emerson India Ltd.  
Endress + Hauser  
Forbes Marshall  
Honeywell Automation Ltd.  
Invensys  
Siemens Ltd.  
Yokogawa India Ltd.

### Original Equipment Manufacturers

Alfa-Laval (India) Ltd.  
Bharat Heavy Electricals Ltd.  
Bharat Heavy Plates & Vessels Ltd.  
Daelim Engineering  
Greensol Power Systems Private Limited.  
Hindustan Dorr-Oliver Ltd.  
Hyundai Heavy Engineering  
Ion Exchange (India) Ltd.  
Kirloskar Pneumatic Co. Ltd.  
Larsen & Toubro Ltd.  
Mazgaon Dock Ltd.  
Neela Group of Companies  
Nishotech Engineers Pvt. Ltd.  
Pall Pharamlab  
Praj Industries Ltd.  
T. D. Power Systems Private Limited.  
Thermax Ltd.  
Thermax Babcock & Wilcox Ltd.  
Triveni Engineering

### Cement

Associated Cement Companies Ltd.  
Grasim Cement  
Gujarat Ambuja Cement Ltd.  
Manikgarh Cement  
Rajashree Cement

### Pharmaceutical

Cadila Healthcare Ltd.  
Ciba Specialty Chemicals (India) Ltd.  
Core Parental  
Johnson & Johnson Ltd.  
Max - GB Ltd.  
Orchid Chemicals & Pharmaceuticals Ltd.  
Pfizer Ltd.  
Ranbaxy Laboratories Ltd.  
Sandoz (India) Ltd.  
Torrent Pharmaceuticals Ltd.  
Unichem Laboratories  
Wockhardt Ltd.

### Oil Exploration / Refineries / Petrochemicals

Bharat Petroleum Corporation Ltd.  
Bongaigaon Refinery & Petrochemicals Ltd.  
Chennai Petroleum Corporation Ltd.  
Cochin Refineries Ltd.  
Deepak Fertilisers & Petrochemicals Corpn. Ltd.  
Gas Authority of India Ltd.  
Hindustan Petroleum Corporation Ltd.  
Indian Oil Corporation Ltd.  
Indian Petrochemicals Corporation Ltd.  
Manali Petrochemical Ltd.  
Mysore Petrochemicals Ltd.  
Numaligarh Refinery  
Oil India Ltd.  
Oil & Natural Gas Corporation India Ltd.  
SPIC - SMO  
Reliance Industries Ltd.  
The Andhra Petrochemicals Limited

### Chemical

Alkyl Amines Chemicals Ltd.  
DCW Ltd.  
Gharda Chemicals Ltd.  
Hindustan Lever Ltd.  
Hindustan Organic Chemicals Ltd.  
India Glycols Ltd.  
Lubrizol India Ltd.  
Maharashtra Aldehydes & Chemicals Ltd.  
National Organic Chemicals Inds. Ltd.  
National Peroxide Ltd.  
Punjab Alkalies & Chemicals Ltd.  
United Phosphorus Ltd.

### Fertiliser

Chambal Fertilisers & Chemicals Ltd.  
Coromondal Fertilisers Ltd.  
Deepak Fertilisers & Petrochemicals Corpn. Ltd.  
Godavari Fertilisers & Chemicals Ltd.  
Gujarat Narmada Valley Fertiliser Co. Ltd.  
Indian Farmers Fertilisers Co-op. Ltd.  
Indo-Gulf Fertilisers & Chemicals Corpn. Ltd.  
Krishak Bharati Co-op Ltd.  
Madras Fertilizers Ltd.  
National Fertilizers Ltd.  
Oswal Chemicals & Fertilizers Ltd.  
Rashtriya Chemicals & Fertilizers Ltd.  
Tata Chemicals Ltd.  
The Fertilisers & Chemicals Travancore Ltd.  
Zuari Agro Chemicals Ltd.

### Pulp & Paper

Andhra Pradesh Paper Mills Ltd.  
Ballarpur Industries Ltd.  
ITC Bhadrachalam Paperboards Ltd.  
Mysore Paper Mills Ltd.  
Orient Paper Mills.  
Tamilnadu Newsprint and Papers Ltd.

### Power Generation

Ahmedabad Electricity Co. Ltd.  
A. P. State Electricity Board  
Asea Brown Boveri  
Damodar Valley Corporation  
Gujarat Industries Power Co. Ltd.  
Haryana State Electricity Board  
Madhya Pradesh Electricity Board  
Maharashtra State Electricity Board  
National Thermal Power Corpn. Ltd.  
Punjab State Electricity Board  
Reliance Energy Ltd.  
Siemens Ltd.  
T. N. Electricity Board  
U. P. State Electricity Board

### Metallurgy

Bharat Aluminium Co. Ltd.  
Bhushan steel  
Birla Copper  
Essar Steel  
Godavari Power & Ispat Ltd.  
Hindalco Ltd.  
Hindustan Copper Ltd.  
Hindustan Zinc Ltd.  
Ispat Industries Ltd.  
Jindal Vijayanagar Steel Ltd.  
Kerala Minerals & Metals Ltd.  
Kudremukh Iron Ore Co. Ltd.  
NALCO  
Neo Metalliks Ltd.  
Neyveli Lignite Corpn. Ltd.  
Orissa Sponge Iron Ltd.  
Steel Authority of India Ltd.  
Sunflag Iron & Steel Ltd.  
Tata Iron & Steel Co. Ltd.  
Tata Metaliks Limited.  
Sesa Goa Limited.

### Synthetic Fibre

Apollo Fibers  
Bombay Dyeing & Mfg. Co. Ltd.  
Century Enka Ltd.  
Central India Polyesters Ltd.  
Garden Silk Mills Ltd.  
Indo-Rama Synthetics India Ltd.  
JCT Ltd.  
J.K. Synthetics Ltd.  
Parasrampuriah Synthetics Ltd.  
Raymond Synthetics Ltd.  
SRF Ltd.

# Global Acceptance From Superior Performance



**PRISMA**  
I n s t r u m e n t s  
& Gauge Bourdon France

5, rue de Rome - Espace 22 - ZAC de Nanteuil  
93110 ROSNY-SOUS-BOIS  
Tél. : +33 (0)1 48 54 01 19  
info@prisma-instruments.com  
www.prisma-instruments.com

CAT NO.: TG-001

#### OVERSEAS NETWORK:

- |             |              |            |          |               |             |
|-------------|--------------|------------|----------|---------------|-------------|
| ■ AUSTRALIA | ■ BANGLADESH | ■ CANADA   | ■ FRANCE | ■ GERMANY     | ■ INDONESIA |
| ■ IRAN      | ■ KUWAIT     | ■ MALAYSIA | ■ OMAN   | ■ PHILIPPINES | ■ QATAR     |
| ■ SINGAPORE | ■ SRI LANKA  | ■ THAILAND | ■ U A E  | ■ U K         | ■ USA       |