**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 30 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 - N2
- 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-68 protection
- Accuracy ± 1% FSD

**Specifications**

<table>
<thead>
<tr>
<th>Ref. Standard</th>
<th>ASME B 40.200, EN 13190</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Gas (N2) filled, case compensated in accordance with SAMA Cl. III B</td>
</tr>
<tr>
<td>Dial</td>
<td>100 mm / 150mm / 250mm in aluminium, white background, black marking</td>
</tr>
<tr>
<td>Case</td>
<td>SS304 / SS316 with bayonet bezel</td>
</tr>
<tr>
<td>Protection</td>
<td>Weatherproof to IP-68 (IS/IEC : 60947 / IEC : 60529)</td>
</tr>
<tr>
<td>Window</td>
<td>Shatterproof glass</td>
</tr>
<tr>
<td>Pointer</td>
<td>Aluminium, black with micrometer adjustment</td>
</tr>
<tr>
<td>Stem</td>
<td>SS316 in 6 mm, 8 mm, 10 mm, 12 mm dia as standard</td>
</tr>
<tr>
<td>Capillary</td>
<td>SS316 with SS304 / SS316 armouring or SS316 with SS304 / SS316 armouring, with PVC covering</td>
</tr>
<tr>
<td>Connection</td>
<td>1/2&quot;NPT (M) adjustable three piece compression fitting in SS304 or SS316</td>
</tr>
<tr>
<td>Range</td>
<td>(-) 200°C to 800°C with minimum span of 80°C</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 1% FSD</td>
</tr>
<tr>
<td>Overrange</td>
<td>125% FSD</td>
</tr>
<tr>
<td>Reset</td>
<td>Micrometer Pointer</td>
</tr>
<tr>
<td>Optional</td>
<td>Silicon Oil Filled Case</td>
</tr>
<tr>
<td>Note</td>
<td>1) For minimum insertion length essential for proper sensing, contact our design department.</td>
</tr>
<tr>
<td></td>
<td>2) Three point calibration certificate accompanies each thermometer.</td>
</tr>
<tr>
<td></td>
<td>3) For operating temp&gt;600°C; stem of SS310 / Inconel 600 shall be recommended.</td>
</tr>
</tbody>
</table>

Under Technical Collaboration with M/s. Gauges Bourdon, France
Ordering Information

MODEL : GDT-R / GDT-C

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
Y  Bottom Entry, 2° Pipe Mounting

DIAL
100  100 mm
150  150 mm
250  250 mm

CASE
S4S  SS304
S6S  SS316

STEM-OD
S08  6 mm  $10  10 mm
S08  8 mm  $12  12 mm

STEM LENGTH
Specify in mm

STEM MATERIAL
S6S  SS316
S4S  SS304
310  SS310**  600  Inconel 600**

CAPILLARY
4AR(*)  SS 316 Capillary, SS 304 Armoured
4PV(*)  SS 316 Capillary, SS 304 Armoured + PVC Covered
6AR(*)  SS 316 Capillary, SS 316 Armoured
6PV(*)  SS 316 Capillary, SS 316 Armoured + PVC Covered
NIL   Not Applicable for GDT-R type.

* Specify the length of Capillary in Meters.

**Note: Stem material of SS310 is recommended for Temperature 600 Deg. C and Inconel 600 for temperature above 600 Deg.C

OPTION
TW  Thermowell
CLB  Colour Band
DUS  Dual Scale
L   Nil
DC2  Silicone Oil Filled Case

UNIT
DGC  Deg C
DGF  Deg F

RANGE #
0 to 80  0 to 600
0 to 100  0 to 800
0 to 120  (-) 30 to (+) 50
0 to 160  (-) 20 to (+) 80
0 to 200  (-) 50 to (+) 30
0 to 250  (-) 50 to (+) 50
0 to 250  (-) 80 to (+) 120
0 to 350  (-) 100 to (+) 150
0 to 400  (-) 200 to (+) 50
0 to 500  (-) 200 to (+) 100

CONNECTION

Sample Model Code: GDT-C-P-150-S4S-S10-400-S6S-4AR(5)-T15NTM-(0-250)-DGC-TW

The recommendations made in this catalogue are to be used as intended guide. No guarantee of material can be undertaken since other factors may affect the performance. We reserve the right to change the specifications mentioned in this catalogue without any notice as improvements & development is a continuous process at “General”. Responsibility of typographical errors is specifically disclaimed.
Skin Type - Gas Filled Dial Thermometer

“General” Skin type Temperature Gauges are designed for measurement of Surface temperature of process lines. Theses Gauges are available 100 mm & 150 mm Dial sizes. Inert, non hazardous, non toxic nature of the filled system (Nitrogen) makes it virtually ideal choice of all type of industries. Micro-Switch can be provided as per process requirement.

Features

- Suitable for surface temperature measurement
- Use of inert gas - Nitrogen (N2)
- All SS construction
- Direct mounting or Remote mounting with Capillary
- Fast response
- Non-polluting, environment friendly
- Non-hazardous for the service
- High reliability
- IP-68 protection
- Accuracy ± 1% FSD

Specifications

Ref. Standard ASME B 40.200, EN 13190
System Gas (N2) filled, case compensated in accordance with SAMA Cl. III B
Dial 100 mm / 150 mm in aluminium, white background, black marking
Case SS304 as standard (SS316 on request)
Protection Weatherproof to IP-68
Window Shatterproof glass
Pointer Aluminium, black with micrometer adjustment
Sensor / Bulb SS316 to suit OD of process pipe
Capillary SS316 with SS304 / SS316 armouring or SS316 with SS304 / SS316 armouring, with PVC covering.
Connection 1/2"NPT (M) adjustable three piece compression fitting in SS304 or SS316
Range (-) 200°C to 400°C with minimum span of 80°C
Accuracy ± 1% FSD
Over range 125% FSD
Reset Micrometer Pointer
Optional Silicon Oil Filled Case (Not Applicable for Guage with Microswitch)
1SPDT / 2SPDT Microswitch
Flame proof (IIA/ IIB/ IIC) enclosure in Die Cast Aluminium (applicable for Remote mounted Gauges with Microswitch only)

Under Technical Collaboration with M/s. Gauges Bourdon, France

www.general-instruments.co.in www.general-gauges.com
### Ordering Information

**GDT-SK-R : Rigid stem type**  
**GDT-SK-C : Capillary type**

**MODEL : GDT-SK-R / GDT-SK-C**

#### 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  
- **Y** Bottom Entry, 2*Pipe Mounting

#### DIAL
- **100** 100 mm  
- **150** 150 mm

#### CASE
- **S4S** SS304  
- **S6S** SS316  
- **ALM** Die Cast Aluminium*

#### STEM MATERIAL
- **S6** SS316  
- **S6SL** SS316L  
- **XXX** Any other (Please Specify)

#### PROCESS PIPE OD
Please Specify the size in mm

#### OPTION
- **CLB** Colour Band  
- **DUS** Dual Scale  
- **1ST** 1SPST  
- **2DT** 2SPDT  
- **1DT** 1SPDT  
- **2DT** 2SPDT  
- **REL** Relay  
- **FAB** Flame Proof Case (IIA, IIB)  
- **F2C** Flame Proof Case (IIC)  
- **L** NIL

#### UNIT
- **DGC** Deg C  
- **DGF** Deg F

#### RANGE **
- 0 to 80  
- 0 to 100  
- 0 to 120  
- 0 to 160  
- 0 to 200

#### CAPILLARY
- **4AR(**) SS 316 Capillary, SS 304 Armoured  
- **4PV(**) SS 316 Capillary, SS 304 Armoured + PVC Covered  
- **6AR(**) SS 316 Capillary, SS 316 Armoured  
- **6PV(**) SS 316 Capillary, SS 316 Armoured + PVC Covered  
- **NIL** Not Applicable for GDT-SK-R type

* Die Cast Aluminium Case available in Flameproof version only (for Gauge with Microswitch & Remote mounting)  
** Ranges mentioned are in °C. Equivalent unit in °F can be provided on request.  
***Compound Ranges with negative temperature also can be provided within the above span

---

Sample Model Code: GDT-SK-R-V-150-S4S-S6S-150-NIL-(0-250)-DGC-L