

# "FH3 / FH4" Digital Temperature Gauge for Retort Applications

## Introduction

The Anderson-Negele DTG Digital Temperature Gauge carries on the tradition of accurate and reliable electronic temperature indication, while incorporating many new features tailored to a growing industry. Health concerns related to mercury continue to grow, and the days of the traditional (MIG) mercury-in-glass thermometer on the process floor are numbered.

As regulations in the Retort Cooker industry change, and plants look to adopt new technology, the DTG is there to offer a solution. Building on a solid platform of accuracy and reliability, the DTG incorporates additional features specific to this demanding market. Redundant temperature elements provide continuous error checking. Unlike traditional MIG's or simple off the shelf components, this unique feature provides backup so your process can continue to run, with no emergency downtime. Certification of calibration against an NIST traceable source is provided with each unit. For facilities with in-house Metrology capability, the DTG offers up to five user configurable calibration points, so you can fine tune in order to perfectly match your in-house reference.

Complete specifications and ordering information are available on the reverse. For additional information please visit us on the web at [www.anderson-negele.com](http://www.anderson-negele.com), or contact your local Authorized Anderson-Negele Distributor.

## Authorizations



## Features

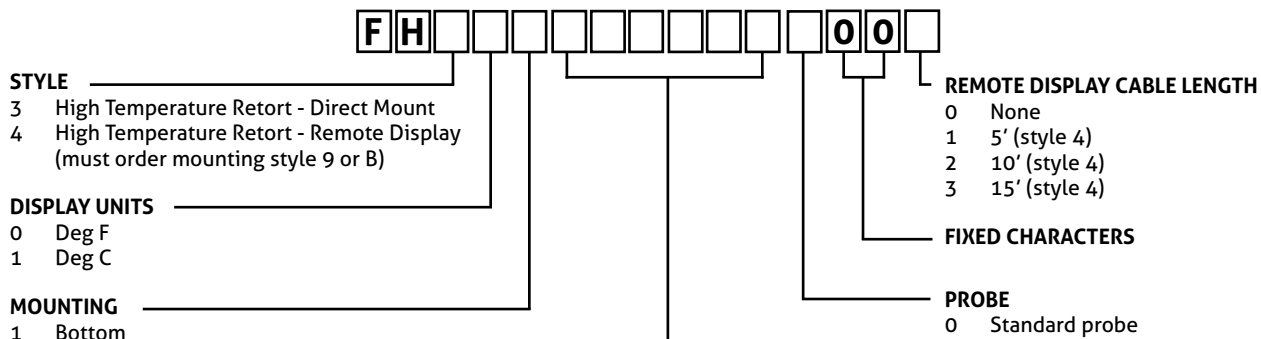
- Ideal replacement for Mercury-In-Glass thermometers
- Designed for Retort Cookers
- Operates on field replaceable batteries
- Large Liquid Crystal Display makes viewing easy and repeatable
- All models offer field calibration capability
- Dual element and onboard diagnostics; complies with Code of Federal Regulations



**Specifications**

|                              |  |                         |   |
|------------------------------|--|-------------------------|---|
| Compliance:                  | CE, NEMA 4X, IP-66   | Display:                | LCD: 4 digit main display, 6 digit secondary; 0.9" high contrast LCD      |
| Product Contact Surface:     | Fitting & Probe: 316L SS   | Error Warning:          | LCD flashing  |
| Non-Product Contact Surface: | Housing - 304 SS<br>Lens - Polysulphone  | Power:                  | Field replaceable battery;<br>Thionyl Chloride Lithium 3.6VDC; AA package |
| Process Temp. Range:         | 0 to 300°F (-18 to 150°C)  | Battery Life:           | 18 months typical<br>(With use of Thionyl Chloride Lithium battery only)  |
| Units:                       | Deg F and Deg C; field selectable  | Vibration:              | 10 to 60 Hz, 2g   |
| Resolution:                  | 0.1°F or °C  | Warranty:               | 2 year  |
| Accuracy:                    | +/- .5°F (+/-0.3°C) Full Scale   | Display Update:         | 3 seconds   |
| Ambient Operating Limits:    | 40 to 158°F (4.4 to 70°C)<br>(With use of Thionyl Chloride Lithium battery only) | Calibration Adjustment: | Via onboard switches; up to five field adjustable points                  |
| Ambient Temp. Stability:     | Better than 0.1°C per 10°C ambient shift   | Surface Finish:         | R <sub>a</sub> max = 32 micro inches                                      |
| Storage Temp.:               | 32 to 140°F (0 to 65°C)  |                         |   |

**Order Information**



**FITTING/INSERTION**

|         |                        |         |  |
|---------|------------------------|---------|--|
| 179-049 | Retort Port*           | 3-1/2"  | 1-1/4" 18UNEF IAMD Nut Industrial Well |
| 179-091 | Retort Port*           | 6-1/8"  |  |
| 179-139 | Retort Port            | 9-1/8"  |  |
| 179-161 | Retort Port            | 10-1/2" |  |
| 179-187 | Retort Port            | 12-1/8" |  |
| 084-033 | Bi-Metal Well 1/2" NPT | 2-1/2"  |  |
| 084-057 | Bi-Metal Well 1/2" NPT | 4"      |  |
| 084-089 | Bi-Metal Well 1/2" NPT | 6"      |  |
| 084-137 | Bi-Metal Well 1/2" NPT | 9"      |  |
| 084-185 | Bi-Metal Well 1/2" NPT | 12"     |  |
| 084-233 | Bi-Metal Well 1/2" NPT | 15"     |  |
| 084-281 | Bi-Metal Well 1/2" NPT | 18"     |  |
| 084-377 | Bi-Metal Well 1/2" NPT | 24"     |  |

Consult factory for other fittings.

\* Typical MIG Thermometer replacement probes.

† Sensors with these options are non-cancellable/non-returnable for credit.

**SPARE PARTS**

| Part#        | Description   |
|--------------|---|
| 62071A0001   | Thionyl Chloride Lithium batteries 3.6VDC; AA package |
| 41100A0002   | 1-1/4" 18UNEF IAMD nut to 3/4" NPT                    |
| SP55408C0001 | Pack of two back plate seal screws                    |

**Mounting**

|  |   |   |
|--|---|---|
|  | 1 | Bottom mount (fixed display)                |
|  | 4 | Back mount 90° (fixed display)              |
|  | 5 | Left mount (fixed display)                  |
|  | 6 | Right Mount (fixed display)                 |
|  | 7 | Top mount (fixed display)                   |
|  | 8 | Back mount 45° (fixed display)              |
|  | 9 | Remote mount (cable exits probe - straight) |
|  | A | Back mount 90° (display rotates ± 90°)      |