# 8150 Battery Powered Flow Totalizer

## Features
- Three totalizers
- Long-lasting lithium batteries
- Mounting versatility
- No-flow indicator
- Large digital display with averaging
- Simple push-button operation
- User selectable access code prevents unwanted changes
- Auto-calibration

## Applications
- Wastewater Flow Accumulation
- Water Treatment Systems
- Remote or Mobile Treatment/Distribution Systems
- Irrigation Systems
- Filtration Systems
- Pools & Spas
- Groundwater Remediation
- RO Concentrate
- Process Flow Monitoring
- UPW Distribution
- Demineralizer Regeneration
- Process Cooling Water
- Neutralization Systems

## Description
The +GF+ SIGNET 8150 Battery Operated Flow Totalizer is compatible with the +GF+ SIGNET 515, 525 and 2517 flow sensors, and will provide years of dependable operation. The large digital display indicates flow rate and totalized flow volume simultaneously. One of the three totalizers is resettable from the front panel or a remote location, while the second resettable totalizer can only be reset by entering a user-selectable security code. Meanwhile, the third is a permanent non-resettable totalizer. Our intuitive software design and four-button keypad provide for simple operation while setting screen displays and programming the system. Calibration can be easily performed by entering the Auto-Cal feature and entering a value to match an external reference. Screen displays can be modified to suit the user’s needs; along with the flow rate, any of the three totalizers can be selected as the displayed totalizer. Customers can quickly scroll through the totalizers simply by pressing any key on the keypad. A display averaging feature is included for applications where the flow in the pipe fluctuates. For applications where flow stops and starts due to production needs, a no-flow indicator will display the hours of non-flow.

## System Overview

<table>
<thead>
<tr>
<th>Panel Mount +GF+ SIGNET 8150 Flow Totalizer</th>
<th>Pipe, Tank, Wall Mount +GF+ SIGNET 8150 Flow Totalizer</th>
<th>Integral Mount +GF+ SIGNET 8150 Flow Totalizer -includes adapter and sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes mounting bracket and panel gasket</td>
<td>+GF+ SIGNET Universal Adapter Kit (3-8050) (sold separately)</td>
<td></td>
</tr>
<tr>
<td>+GF+ SIGNET Flow Sensor (sold separately)</td>
<td>+GF+ SIGNET Flow Sensor (sold separately)</td>
<td></td>
</tr>
<tr>
<td>+GF+ SIGNET Fittings (sold separately)</td>
<td>+GF+ SIGNET Fittings (sold separately)</td>
<td></td>
</tr>
</tbody>
</table>

## Compatible Sensors
The 8150 Battery Powered Flow Totalizer is compatible with the following +GF+ SIGNET Flow Sensors:
515  525  2517
Specifications

General
- Compatibility: +GF+ SIGNET 515, 525 and 2517 flow sensors
- Input Freq. Range: 0 to 400Hz
- Accuracy: ±0.5% of reading
- Display: LCD type
  - 4-digit upper line - flow rate
  - 8-digit lower line - volume totalizer count, either resettable or permanent
- Averaging: 0 to 120 secs.
- Contrast: Automatic
- Low battery indication: Battery symbol appears on LCD display
- 8-digit resettable totalizers:
  - Stored until user resets; continues to be stored even after batteries are removed
- 8-digit permanent:
  - Kept permanently, even when batteries are removed

Materials
- Enclosure: PBT resin
- Keypad material: Sealed 4-key silicon rubber
- Panel Case gasket: Neoprene
- Window: Polyurethane coated polycarbonate

Electrical
- Battery: Two 3.6V Lithium thionyl chloride, AA-size
- Battery life: 4 years nominal ≤ 50°C (122°F)

Environmental
- Enclosure rating: NEMA 4X/IP65 front
- Operating Temperature: -10°C to 65°C (14°F to 149°F)
- Storage Temperature: -40°C to 100°C (-40°F to 212°F)
- Relative Humidity: 0 to 95% Non-condensing

Shipping Weight: 0.5 kg (1.1 lbs.)

Standards and Approvals
- CE
- CUL, UL pending

Installation
Below are examples of common installations for the 8150 Flow Totalizer and the 8510 Integral Mount Flow Sensor. For more details, see the instruction manual.

- Integral Installation with Field Mount Totalizer
- Remote Wall Mount Installation
Installation (continued)

- Remote Pipe Mount

![Diagram of Remote Pipe Mount](image)

- Remote installation with Panel Mount

![Diagram of Panel Mount](image)

Ordering Information

<table>
<thead>
<tr>
<th>Instrument Part Number</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-8150</td>
<td></td>
</tr>
<tr>
<td>Battery Operated Flow Totalizer</td>
<td></td>
</tr>
<tr>
<td>Field, Panel, or Integral Sensor mount - choose one</td>
<td></td>
</tr>
<tr>
<td>-1 Field mount for pipe, tank, and wall mounting</td>
<td>159 000 929</td>
</tr>
<tr>
<td>-1P Panel mount; includes mounting bracket and panel gasket</td>
<td>159 000 930</td>
</tr>
<tr>
<td>-P0* 3-8150-1 integrally mounted on Model 515 Paddlewheel (Part No. 3-8510-P0) for 0.5 to 4 in. pipes, with a polypropylene body, Black PVDF rotor, and Titanium pin</td>
<td>159 000 931</td>
</tr>
<tr>
<td>-P1* 3-8150-1 integrally mounted on Model 515 Paddlewheel (Part No. 3-8510-P1) for 5 to 8 in. pipes, with a polypropylene body, Black PVDF rotor, and Titanium pin</td>
<td>159 000 932</td>
</tr>
<tr>
<td>-T0* 3-8150-1 integrally mounted on Model 515 Paddlewheel (Part No. 3-8510-T0) for 0.5 to 4 in. pipes, with a natural PVDF body, rotor, and pin</td>
<td>159 000 933</td>
</tr>
<tr>
<td>-VO* 3-8150-1 integrally mounted on Model 515 Paddlewheel (Part No. 3-8510-VO) for 0.5 to 4 in. pipes, with a natural PVDF body, rotor, and Hastelloy pin</td>
<td>159 001 011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3-8150-1P</td>
<td>159 000 932</td>
<td>3-8150-P1</td>
<td>159 001 012</td>
</tr>
<tr>
<td>3-8150-T0</td>
<td>159 001 011</td>
<td>3-8150-V0</td>
<td>159 001 011</td>
</tr>
</tbody>
</table>

Model 8150 Ordering Notes:
1) For panel version, cutout must be 92 x 92 mm (3.62 x 3.62 in.)
2) To mount the panel version on a wall, use the heavy duty wall mount bracket.
3) Use the Universal mounting kit with the field mount instrument to mount to a pipe, tank or wall.
4) An optional splash proof rear cover can be ordered separately if needed.
### Accessories and Replacement Parts

<table>
<thead>
<tr>
<th>Mfr. Part No.</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-8050</td>
<td>159 000 184</td>
<td>Universal mounting kit</td>
</tr>
<tr>
<td>3-0000.596</td>
<td>159 000 641</td>
<td>Heavy duty wall mount bracket (for panel mount only)</td>
</tr>
<tr>
<td>3-5000.598</td>
<td>198 840 225</td>
<td>Surface mount bracket</td>
</tr>
<tr>
<td>3-8050.395</td>
<td>159 000 186</td>
<td>Splashproof rear cover for panel mount totalizer</td>
</tr>
<tr>
<td>3-9000.392</td>
<td>159 000 368</td>
<td>Liquid tight connector kit (includes 3 connectors)</td>
</tr>
<tr>
<td>3-9000.392-1</td>
<td>159 000 839</td>
<td>Liquid tight connector, NPT (1 connector)</td>
</tr>
<tr>
<td>3-9000.392-2</td>
<td>159 000 841</td>
<td>Liquid tight connector, PG-13.5 (1 connector)</td>
</tr>
<tr>
<td>3-8050.392</td>
<td>159 000 640</td>
<td>Model 200 retrofit adapter</td>
</tr>
<tr>
<td>7400-0011</td>
<td>159 000 022</td>
<td>Lithium battery, 3.6V, Size AA</td>
</tr>
<tr>
<td>5523-0222</td>
<td>159 000 392</td>
<td>Cable, two conductor shielded, 22 AWG (per ft.)</td>
</tr>
</tbody>
</table>

**Replacement parts for integral mount units** - see Model 515 catalog pages for more information

- **3-8051**: 159 000 187 - Flow integral mounting kit, NPT (replacement)
- **3-8510-PO**: 198 864 504 - Sensor for 0.5 to 4 in. pipes, Polypropylene body
- **3-8510-PI**: 198 864 505 - Sensor for 5 to 8 in. pipes, Polypropylene body
- **3-8150-T0**: 159 000 622 - Sensor for 0.5 to 4 in. pipes, all natural PVDF
- **3-8150-V0**: 198 864 506 - Sensor for 0.5 to 4 in. pipes, PVDF body

### For more information, contact your local George Fischer Sales Office:

- **A**: Georg Fischer Rohrleitungssysteme GmbH, Sandgasse 16, 3130 Herzogenburg, Tel. +43(0)2782 856 43-0, Fax +43(0)2782 856 64, e-mail: office@georgfischer.at
- **AU**/S: Georg Fischer Pty Ltd, 186-190 Kingsgrove Road, Kingsgrove NSW 2213, Tel. +61(0)2 95 34 39 77, Fax +61(0)2 95 02 25 61
- **B/L**: Georg Fischer NV/SA, Digue du Canal 109-III - Vaardijk 109-III, 1070 Brussel/Brussels, Tel. +32(0)2 524 23 26
- **BR**: Georg Fischer Ltda, Av. das Nações Unidas 21689, 04795 133 São Paulo, Brasil, Tel. +55(0)11 5687 1311, Fax +55(0)11 5687 6009
- **CH**: Georg Fischer Rohrleitungssysteme AG, Einbassstrasse 1, Postfach, 8201 Schaffhausen, Tel. +41(0)52 631 30 26, Fax +41(0)52 631 28 97
- **CN**: Georg Fischer Piping Systems Ltd Shanghai, No. 218 Kang Qiao Dong Rd., 201319 Pudong, Shanghai, Tel. +86(0)21 58 13 33 33, Fax +86(0)21 58 13 33 66
- **DK**: Georg Fischer DEKA GmbH, Kreuzstrasse 22, 35232 Dautphetal-Mornshausen, Tel. +49(0)6468 915-0, Fax +49(0)6468 915 221/222
- **E**: Georg Fischer Ltd, 2–47, Shikitsuhigashi 1-chome, Naniwa-ku, 556-8601 Osaka, Tel. +81(0)6 664 82 59 4, Fax +81(0)6 664 82 56 5, e-mail: info@georgfischer.jp
- **FR**: Georg Fischer SA, Alcalá, 85, 2º, 28009 Madrid, Tel. +34(0)9 781 98 90, Fax +34(0)9 426 08 23, e-mail: info@georgefischer.fr
- **GB**: Georg Fischer Sales Limited, Paradise Way, Coventry, CV2 2ST, Tel. +44(0)2476 535 535, Fax +44(0)2476 530 450
- **GR**: Georg Fischer S.A., Athens Branch, 101, 3rd September Str., 10434 Athen, Tél. +33(0)1 49 22 43 43, Fax +33(0)1 49 22 40 00, e-mail: info@georgefischer.fr
- **ID**: Georg Fischer Representative Office, c/o Wisma Aria, 3rd Floor, Jl. H.O.S. Cokroaminoto 81, Jakarta 10310, Indonesia, Tel. +62(0)21 391 48 62, Fax +62(0)21 391 48 63
- **IND**: Georg Fischer Piping Systems Ltd, India Branch Office, Solitaire Corporate Park, 532, Building No. 5, 3rd Floor, Chakala, Ghatkopar Link Road, Andheri (E)
- **I**: Georg Fischer S.A., 105–135, rue Charles Michels, 93208 Saint-Denis Cedex 1, Tél. +33(0)1 882 4491, Fax +33(0)1 881 0291, e-mail: dderv_piping_gf@oneway.gr
- **PL**: Georg Fischer Sp. z o.o., Uł. Porymaty 4, 02-229 Warszawa, Tel. +48 10202 31 30 05, Fax +48 10202 31 30 06, www.georgfischer.pl
- **RO**: Georg Fischer Rohrleitungssysteme AG, Rep. Office Romania, 11 Barbulu Deleanu, 70000 Bucharest - Sector I, Tel. +40(0)1 222 91 36, Fax +40(0)1 222 91 77, e-mail: office@georgfischer.ro
- **S/FIN**: Georg Fischer AB, Box 113, 12523 Alvik-Stockholm, Tel. +46(0)8 506 77 500, Fax +46(0)8 749 23 70, e-mail: info@georgfischer.se, Internet: http://www.georgfischer.se
- **SGP**: Georg Fischer Pte Ltd, 15 Kaki Bukit Road 2, KB-Warehouse Complex, 417 845 Singapore, Tel. +65(0)9 47 76 11, Fax +65(0)47 07 05 77, e-mail: info@georgfischer.com.sg
- **USA**/B/L: George Fischer Inc., 2862 Dow Avenue, Tustin, CA 92780-7258, Tel. 1-714-731-8800, Toll free (800) 854-4590, Fax 1-714-731-6201
- **+GF+ SIGNET**: George Fischer Signet, Inc., 3401 Aerojet Avenue, El Monte, CA 91731-2882 U.S.A. • Tel. 1-626 571-2770 • Fax 1-626 573-2057

*Includes North, Central, and South America*