

## Installation Instructions F-550

### Specifications

**Meter Body:** Acrylic, clear

**Floats:** #316 Stainless Steel

**Adapters:** Polypropylene

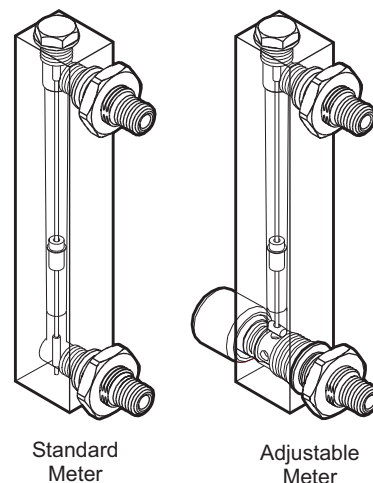
**O-Rings:** Viton

**Lock Nut:** Polypropylene

**Scale:** Permanent Silkscreen

**Max. Pressure:** See Temperature vs. Pressure chart\*

**Max. Temperature:** See Temperature vs. Pressure chart\*



Standard  
Meter

Adjustable  
Meter

### Your Blue-White® F-550 Series Panel Mount Flowmeter

Your Blue-White® flowmeter was designed to be easy to install.

Please read the Instruction Guideline on the next page before installing your flowmeter.

This flowmeter is an instrument, and special care should be taken when installing.

### Dimensional Drawing

#### English System

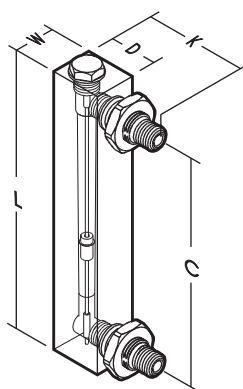
| Dimension | W       | L      | K      | D      | C      | Maximum<br>Panel Thickness<br>T-max (inches) | Recommended<br>Panel Cutout<br>hole (inches) |
|-----------|---------|--------|--------|--------|--------|----------------------------------------------|----------------------------------------------|
| Meters    | Inches  | Inches | Inches | Inches | Inches |                                              |                                              |
| F-55250xx | 1-1/16  | 6-7/8  | 2-1/2  | 1-1/4  | 5-5/8  | 1/2                                          | 11/16                                        |
| F-55375xx | 1-11/32 | 8      | 2-3/4  | 1-1/2  | 6-1/2  | 1/2                                          | 11/16                                        |
| F-55376xx | 1-11/32 | 8      | 2-3/4  | 1-1/2  | 6-1/2  | 1/2                                          | 11/16                                        |
| F-55500xx | 1-11/32 | 8      | 2-3/4  | 1-1/2  | 6-1/2  | 1/2                                          | 27/32                                        |
| F-55750xx | 1-1/2   | 8-5/8  | 3-3/4  | 1-3/4  | 6-1/2  | 13/16                                        | 1-21/64                                      |
| F-55100xx | 1-3/4   | 10-1/4 | 4      | 2      | 8      | 13/16                                        | 1-21/64                                      |
| F-55200xx | 1-3/4   | 10-1/4 | 4      | 2      | 8      | 13/16                                        | 1-21/64                                      |

For F-550055xx, F-55010xx, and F-55015xx dimensions, see F-55200xx

#### Metric System

| Dimension | W    | L     | K     | D    | C     | Maximum<br>Panel Thickness<br>T-max (mm) | Recommended<br>Panel Cutout<br>hole (mm) |
|-----------|------|-------|-------|------|-------|------------------------------------------|------------------------------------------|
| Meters    | mm   | mm    | mm    | mm   | mm    |                                          |                                          |
| F-55250xx | 27.0 | 174.5 | 63.5  | 32.0 | 143.0 | 13.0                                     | 18.0                                     |
| F-55375xx | 34.3 | 203.0 | 70.0  | 38.0 | 165.0 | 13.0                                     | 18.0                                     |
| F-55376xx | 34.3 | 203.0 | 70.0  | 38.0 | 165.0 | 13.0                                     | 18.0                                     |
| F-55500xx | 34.3 | 203.0 | 70.0  | 38.0 | 165.0 | 13.0                                     | 22.0                                     |
| F-55750xx | 38.1 | 219.0 | 95.0  | 44.5 | 165.0 | 21.0                                     | 34.0                                     |
| F-55100xx | 44.5 | 260.5 | 101.5 | 51.0 | 203.0 | 21.0                                     | 34.0                                     |
| F-55200xx | 44.5 | 260.5 | 101.5 | 51.0 | 203.0 | 21.0                                     | 34.0                                     |

For F-550055xx, F-55010xx, and F-55015xx dimensions, see F-55200xx



**Blue-White®**  
Industries, Ltd.

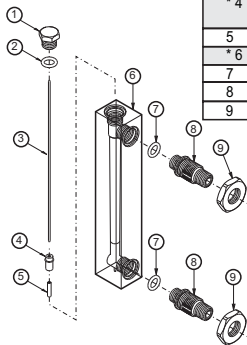
## Exploded View and Parts List

### Standard Meters

Option: x = L (liquid) or G (gas)

| ITEM | DESCRIPTION       | F-55250x  | F-55375x<br>F-55376x   | F-55500x  | F-55750L  | F-55005LA<br>F-55100LA<br>F-55015LA<br>F-55200LA | QTY |
|------|-------------------|-----------|------------------------|-----------|-----------|--------------------------------------------------|-----|
| 1    | Cap               | 76001-080 | 91001-032              | 91001-032 | 91001-033 | 91001-160                                        | 1   |
| 2    | O-ring (cap)      | 90003-072 | 90003-081              | 90003-081 | 90003-082 | 90003-079                                        | 1   |
| 3    | Guide wire        | 76000-039 | 90007-534              | 90007-534 | 90007-535 | 76000-046                                        | 1   |
| * 4  | Float             | 76000-129 | 90007-547<br>90007-564 | 90007-522 | 90007-563 | 76001-170<br>90007-565<br>76000-147              | 1   |
| 5    | Float stop bottom | 76000-024 | 76000-024              | 76000-024 | 76000-093 | 76000-517                                        | 1   |
| * 6  | Body              | 76100-117 | 76100-119              | 76100-119 | 76100-121 | 76100-123                                        | 1   |
| 7    | O-ring (adapter)  | 90003-072 | 90003-034              | 90003-034 | 90003-081 | 90003-110                                        | 2   |
| 8    | Adapter           | 76001-079 | 91001-141              | 91001-142 | 91001-143 | 91001-144                                        | 2   |
| 9    | Lock nut          | 91001-153 | 91001-153              | 91001-154 | 91001-171 | 91001-172                                        | 2   |

\* item not sold separately

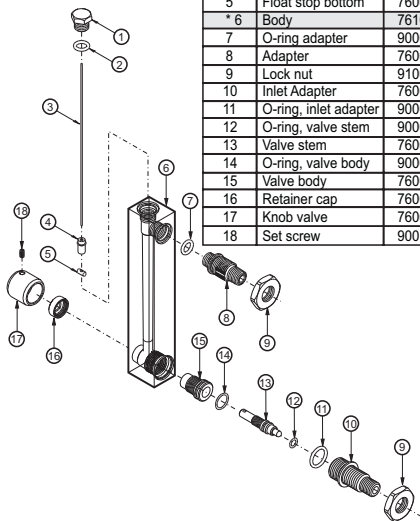


### Adjustable Meters

Option: x = L (liquid) or G (gas)

| ITEM | DESCRIPTION           | F-55250xA | F-55375xA<br>F-55376xA | F-55500xA | F-55750LA | F-55005LA<br>F-55100LA<br>F-55015LA<br>F-55200LA | QTY |
|------|-----------------------|-----------|------------------------|-----------|-----------|--------------------------------------------------|-----|
| 1    | Cap                   | 76001-080 | 91001-032              | 91001-032 | 91001-033 | 91001-160                                        | 1   |
| 2    | O-ring cap            | 90003-072 | 90003-081              | 90003-081 | 90003-082 | 90003-079                                        | 1   |
| 3    | Guide wire            | 76001-108 | 76001-109              | 76001-109 | 76001-110 | 76000-111                                        | 1   |
| * 4  | Float                 | 76000-129 | 90007-547<br>90007-564 | 90007-522 | 90007-563 | 76001-170<br>90007-656<br>76000-147              | 1   |
| 5    | Float stop bottom     | 76001-085 | 76001-091              | 76001-091 | 76001-096 | 76001-107                                        | 1   |
| * 6  | Body                  | 76100-118 | 76100-120              | 76100-120 | 76100-122 | 76100-124                                        | 1   |
| 7    | O-ring adapter        | 90003-072 | 90003-034              | 90003-034 | 90003-081 | 90003-110                                        | 1   |
| 8    | Adapter               | 76001-079 | 91001-141              | 91001-142 | 91001-143 | 91001-144                                        | 1   |
| 9    | Lock nut              | 91001-153 | 91001-153              | 91001-154 | 91001-171 | 91001-172                                        | 2   |
| 10   | Inlet Adapter         | 76001-153 | 91001-173              | 91001-174 | 91001-175 | 91001-176                                        | 1   |
| 11   | O-ring, inlet adapter | 90003-034 | 90003-081              | 90003-081 | 90003-110 | 90003-082                                        | 1   |
| 12   | O-ring, valve stem    | 90003-004 | 90003-010              | 90003-010 | 90003-072 | 90003-113                                        | 1   |
| 13   | Valve stem            | 76001-082 | 76001-088              | 76001-088 | 76001-094 | 76001-104                                        | 1   |
| 14   | O-ring, valve body    | 90003-114 | 90003-081              | 90003-081 | 90003-017 | 90003-021                                        | 1   |
| 15   | Valve body            | 76001-081 | 76001-086              | 76001-086 | 76001-093 | 76001-103                                        | 1   |
| 16   | Retainer cap          | 76001-084 | 76001-090              | 76001-090 | 76001-095 | 76001-106                                        | 1   |
| 17   | Knob valve            | 76001-083 | 76001-089              | 76001-089 | 76001-097 | 76001-105                                        | 1   |
| 18   | Set screw             | 90011-056 | 90011-116              | 90011-116 | 90011-116 | 90011-116                                        | 1   |

\* item not sold separately



## Installation Guideline

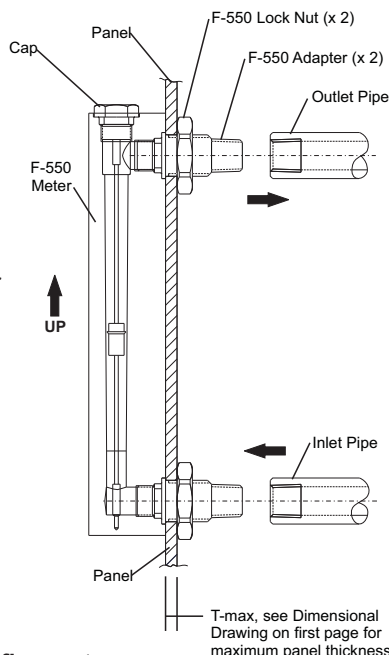
Please use the following steps to guide you through the installation.

**Caution:** Follow these tips to avoid failure

**Danger:** Wear eye protection when installing or removing flowmeter.

### STEP 1. Unpack the flowmeter.

- Check for damage while unpacking the flowmeter.
- Be sure the meter is suitable for your application.
- The maximum temperature and pressure is shown on the following page.
- Although the meter may be suitable for other chemicals, Blue-White® meters are tested with water only. If you are unsure of the meters compatibility with your chemical, consult the factory.
- Blue-White® guarantees the meter is suitable with water only.



### STEP 2. Choose a suitable location for the flowmeter.

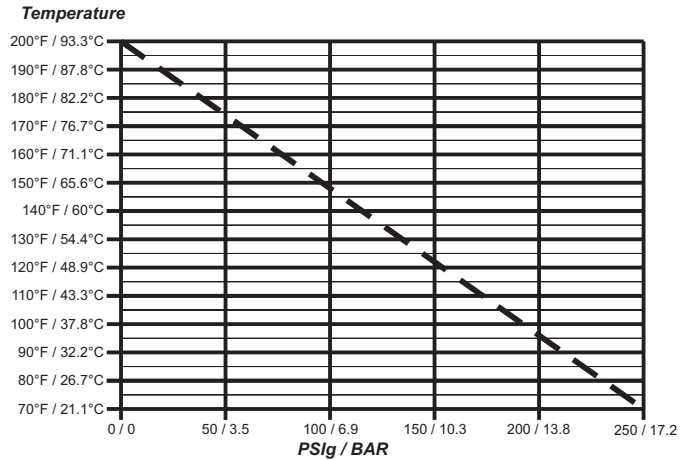
- Never allow the flowmeter to support the weight of related pipe or tubing.
- Flowmeter must be installed in plumbing which is free of vibration.
- Flowmeter must be installed in an exact vertical plane to ensure accuracy.
- *Valves* - Avoid a system that will impose a sudden burst of flow (water hammer) to the meter. Such a burst will cause the float to impact the float stop with destructive force. Magnetic, solenoid, ball, or other quick opening valves cannot be used unless the meter is protected against sudden bursts of flow.
- *Do not exceed* maximum working pressure (see Temperature vs. Pressure chart on next page).

### STEP 3. Connecting the flowmeter to the plumbing.

- Use an appropriate amount of PTFE (or similar) tape on external pipe threads before making connections.
- Acrylic and other exotic plastics cannot tolerate PVC Glue and/or pipe dope. Even fumes can cause crazing. If you are installing your flowmeter to a glued pipe configuration, install flowmeter *after* all glued fittings are dried and lines are purged of all fumes.
- Install the meter to the panel using the panel lock nuts. Do not over-tighten.
- The meter adapters are provided with wrench flats. Prevent the meter adapters from rotating while attaching the inlet and outlet plumbing. Be careful not to damage the plastic threads.

**Cleaning:** The flowmeter body and all other parts can be cleaned by washing in a mild soap and water solution. A soft bristle bottle brush will simplify cleaning inside the meter body. Note the floats up position for re-assembly.

### Temperature vs. Pressure



### Pressure and Temperature

Pressure and temperature limits are inversely proportional. At the maximum suggested pressure the temperature should approach 70°F / 21.1°C; at the maximum suggested temperature the pressure should approach zero psi. We cannot guarantee our flowmeters will not be damaged either at or below the suggested limits simply because of many factors which influence meter integrity; stress resulting from meter misalignment, damage due to excessive vibration and/or deterioration caused by contact with certain chemicals as well as direct sunlight. These situations and others tend to reduce the strength of the materials from which the meters are manufactured.

**Flowmeters are tested and calibrated for water only.**

Although meters may be suitable for other chemicals, Blue-White cannot guarantee their suitability.