

F-550 SERIES Machined Panel Mount Meter



F-550A with Integral Flow Adjustment Valve

F-550N

F-550 BENEFITS

- ▶ Durable, highly polished, one piece machined meter body.
- ▶ #316 Stainless Steel floats and float guides.
- ▶ Sturdy adapters with Viton® o-ring seals.
- ▶ Bulkhead nuts attach directly to inside panel.
- ▶ Separate mounting screws are not required.
- ▶ Optional Adjustable Flow Control Valve (F-550A only) easy to disassemble. No special tool required, ALL FIELD REPLACEABLE.
- ▶ Acceptable in direct sunlight applications.

F-550 SPECIFICATIONS

Temperature.....200°F (93°C) @ 0 pressure
 Pressure.....250 psig (17.2 Bar) @70°F (21°C)
 Full Scale Accuracy.....± 5%
 Meter Body Material.....Machined acrylic
 Shield Material.....Lexan®
 Adapter Material.....PVC, PVDF, CPVC
 O-rings.....Viton®
 Float Material.....#316 SS
 Max. Pressure Drop.....2 psi full scale
 Approximate Shipping Wt...2 lbs. (.907 kg.)

F-550 ORDERING GUIDELINES

with NON-ADJUSTABLE & ADJUSTABLE Valves

MODEL NUMBER	CALIBRATION GPM	CALIBRATION LPM	ADAPTER SIZE	FLOAT MATERIAL
F-55250L(*)	0.025 to 0.250	0.1 to 1	1/4" M/NPT	#316 SS
F-55375L(*)	0.1 to 1	0.4 to 4	3/8" M/NPT	#316 SS
F-55376L(*)	0.2 to 2	0.75 to 7.5	3/8" M/NPT	#316 SS
F-55500L(*)	0.5 to 5	2 to 20	1/2" M/NPT	#316 SS
F-55505L(*)	1 to 10	4 to 40	3/4" M/NPT	#316 SS
F-55005L(*)	1 to 5	3 to 18	1" M/NPT	PTFE
F-55010L(*)	1 to 10	4 to 40	1" M/NPT	#316 SS
F-55015L(*)	1 to 15	5 to 60	1" M/NPT	#316 SS
F-55200L(*)	2 to 20	7.5 to 75	1" M/NPT	#316 SS

MODEL OPTIONS

(*) To order with Flow Adjustment Valve add the letter "A" after the "L" in the model number.
 Model #F-55005L is not available with Adjustment Valve.
 For optional hastelloy internals, add letter "K" to model number.

NEW!

Blue-White Ind.® has released 1/2" barb fittings for the F-550N Flowmeter!

Barb fittings are the perfect solution for connecting flexible tubing / hose to our flowmeters.

AVAILABLE FLOW RANGES:
 Liquid: 0.5 to 5.0 GPM (2 to 20 LPM)
 Gas: 2 to 20 SCFM

F-550 NON-ADJUSTABLE DIMENSIONS

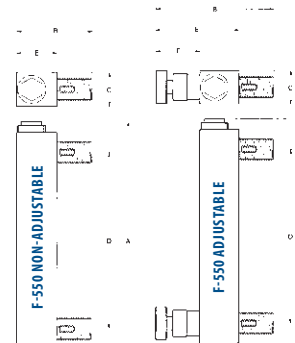
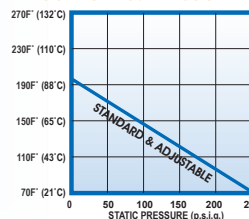
Model Number	A	B	C	D	E	Mount Hole
F-55250L (1/4")	7-1/4"	2-1/2"	11/16"	5-5/8"	1-1/4"	9/16"
F-55375L (3/8")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	1-1/16"
F-55376L (3/8")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	1-1/16"
F-55500L (1/2")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	7/8"
F-55750L (3/4")	9"	3-3/4"	1-1/2"	6-1/2"	1-3/4"	1-1/16"
F-55200L (1")	10-5/8"	4"	1-3/4"	8"	2"	12-1/64"

F-550 ADJUSTABLE DIMENSIONS

Model Number	A	B	C	D	E	F
F-55250LA (1/4")	7-1/4"	3-7/16"	1"	5-5/8"	2-7/16"	1-11/32"
F-55375LA (3/8")	8-3/8"	4-1/2"	1-11/32"	6-1/2"	3-1/4"	1-3/4"
F-55376LA (3/8")	8-3/8"	4-1/2"	1-11/32"	6-1/2"	3-1/4"	1-3/4"
F-55500LA (1/2")	8-3/8"	4-1/2"	1-11/32"	6-1/2"	3-1/4"	1-3/4"
F-55750LA (3/4")	9"	5-1/2"	1-1/2"	6-1/2"	3-1/4"	1-5/16"
F-55200LA (1")	10-5/8"	5-1/4"	1-3/4"	8"	3-1/2"	1-7/16"

Note: Mount Hole Dimensions are the same as the Model Non-Adjustable

F-550 OUTPUT VS. PRESSURE



F-500E SERIES Panel Mount

F-500E BENEFITS

- ▶ Impact resistant, one piece machined acrylic meter body.
- ▶ #316 Stainless Steel or glass floats (material depends on meter ordered).
- ▶ Permanent screen printed scales.
- ▶ A wide range of standard calibrations.
- ▶ Viton® o-ring seals.
- ▶ Excellent Accuracy.
- ▶ Acceptable in direct sunlight applications.

F-500E SPECIFICATIONS

Temperature.....120°F (49°C) @ 0 pressure
 Pressure.....150 psig (10.3 Bar) @ 70°F (21°C)
 Full Scale Accuracy.....± 5%
 Meter Body Material.....Machined acrylic
 Adapter Material.....PVC
 O-rings.....Viton®
 Float Material.....#316 SS or Glass
 Max. Pressure Drop.....2 psi
 Approximate Shipping Wt...1.7 lbs. (.227 kg.)

F-500E DIMENSIONS

Model #	A	B	C	D	F
F-501E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-502E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-503E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-504E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-505E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-506E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-507E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-508E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-509E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-510E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-511E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-514E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-512E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-513E	4-1/8"	1-1/4"	1"	3"	1-5/8"



F-500E

PIPE SIZES

1/4" and 1/8" M/NPT

FLOW RATES

4.0 to 40 OZ/Hour
 0.3 to 20 OZ/Min
 2 to 50 SCFM
 5 to 24 LPM/Air
 1 to 72 GPM
 2 to 300 CFH

F-300 SERIES Machined Acrylic Flowmeters

F-300 BENEFITS

- ▶ Well suited for closed pipe installation.
- ▶ Easy to read dual scale (GPM/LPM), screen printed on both sides of the meter body.
- ▶ Horizontal or Vertical pipe installation.
- ▶ One piece machined acrylic meter body.
- ▶ Corrosion resistant internal parts.
- ▶ Calibrated pitot tube.
- ▶ Ships with gasket seal and mounting clamps.
- ▶ Calibrated for use on PVC or Copper Pipe.
- ▶ Low Flow units offered.

F-300 SPECIFICATIONS

Max. Working Pressure.....150 psig (10.3 bar) @ 70°F (21°C)
 Max. Fluid Temperature.....190°F/88°C @ 0 pressure
 Full Scale Accuracy.....± 10%
 Meter Body Material.....Acrylic
 Connection Type.....Saddle
 Float Material.....#316 SS, Hastelloy or PTFE (low flow units)
 Max. Pressure Drop.....0 psi
 Approx. Shipping Weight... 1" to 4" Pipe: 1 lbs. (.454 kg.); 6" to 8" Pipe: 2 lbs. (.907 kg.)



U-300

F-300

I.P.S. PIPE SIZES

1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4", 6", 8"

FLOW RATES

5 to 1900 U.S. GPM
 20 to 7200 LPM

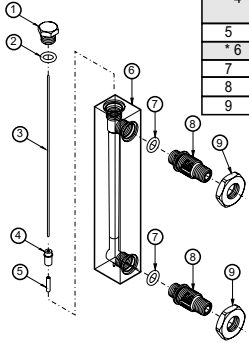
* Viton® is a registered trademark of DuPont.

Exploded View and Parts List

Standard Meters

ITEM	DESCRIPTION	F-55250x	Option: x = L (liquid) or G (gas)			QTY	
			F-55375x F-55376x	F-55500x	F-55750L		F-55005L F-55100L F-55200L
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 90007-564	90007-522	90007-563	76001-170 90007-565 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

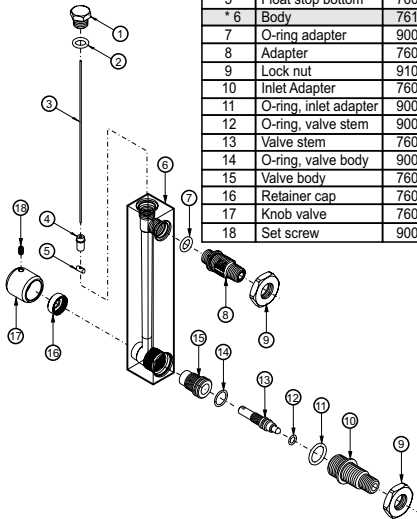


Adjustable Meters

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

ITEM	DESCRIPTION	F-55250xA	Option: x = L (liquid) or G (gas)			QTY	
			F-55375xA F-55376xA	F-55500xA	F-55750LA		F-55005LA F-55100LA F-55200LA
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 90007-564	90007-522	90007-563	76001-170 90007-656 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



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5300 Business Drive
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Installation Instructions F-550

Specifications

Meter Body: Acrylic, clear

Floats: #316 Stainless Steel

Adapters: Polypropylene

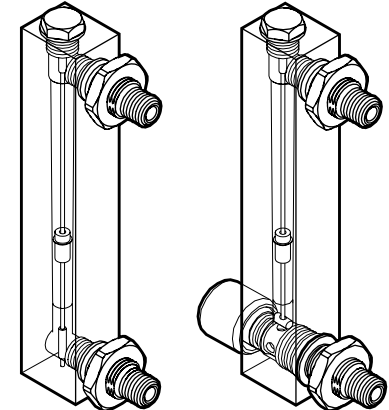
O-Rings: Viton

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.

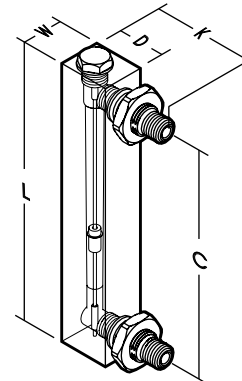
Dimensional Drawing

English System

Dimension	W	L	K	D	C	Maximum Panel Thickness T-max (inches)	Recommended Panel Cutout 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

Metric System

Dimension	W	L	K	D	C	Maximum Panel Thickness T-max (mm)	Recommended Panel Cutout 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



Blue-White
Industries, Ltd.

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.

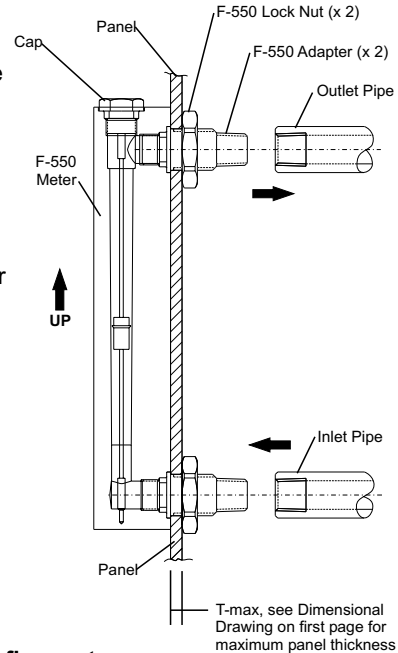
- Check for damage while unpacking the flowmeter.
- Be sure the meter is suitable for your application.
- The maximum temperature and pressure is shown on the following page.
- Although the meter may be suitable for other chemicals, Blue-White® meters are tested with water and air only. If you are unsure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

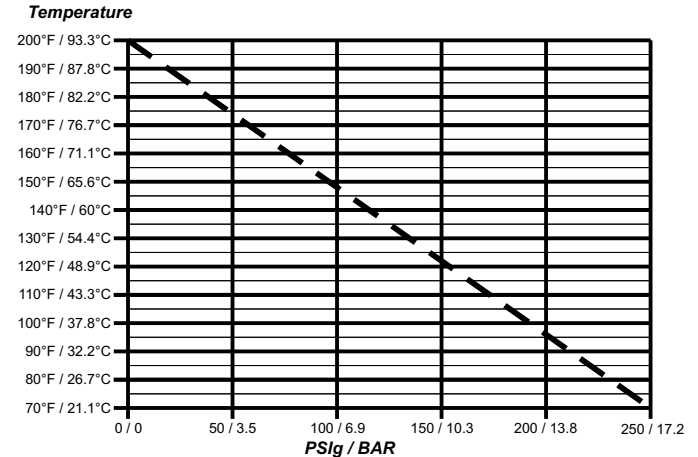
STEP 3. Connecting the flowmeter to the plumbing.

- Use an appropriate amount of Teflon® (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 or air only.

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