

ECONOMICAL IN-LINE LIQUID FLOWMETERS

FLMW and FLMH Series
Starts at

\$172



Optional †

- ✓ Direct-Reading Dual Scales
- ✓ Ranges from 0.05 to 150 GPM
- ✓ High Pressure: 3500 psi (Brass or Aluminum); 6000 psi (Stainless Steel)
- ✓ High Temperature: 116°C (240°F) Standard, 204 or 316°C (400 or 600°F) Optional
- ✓ Mounts in Any Position
- ✓ Relay Alarms and Analog Outputs Optional

The FLMW and FLMH flowmeters can be installed directly in the fluid line without flow straighteners or special piping.

The spring-and-piston type assembly enables these flowmeters to be mounted in any position and protects them against changes in viscosity.

The FLMW or the FLMH Series with the optional analog output (-MA) are typically used to transmit a signal proportional to the flow rate to a process controller, a PLC, a recorder, or a panel-mount display. With the -MA options the user can choose between reading a 0 to 2000 Hz square-wave pulse, a 0 to 5 Vdc analog signal, or a 2-wire 4 to 20 mA analog signal by connecting the appropriate pins.

SPECIFICATIONS

Measuring Accuracy: ±2.5% FS in the center third of the measuring range; ±4% FS over the entire scale range

Repeatability: ±1% FS

Flow Measuring Range: 0.2 to 560 LPM (0.05 to 150 GPM)

Max Operating Pressure:
Aluminum and Brass Monitors: 240 bar (3500 psig)
Stainless Steel Monitors: 410 bar (6000 psig) up to 116°C (240°F)

Max Operating Temperature: 116°C (240°F)

[Note: For high temperature (“-HT”, “-UHT”), see chart on page B-62.]

† Refers to footnote on page B-62 for NIST calibration ordering information.



FLMW-1205BR-MA
5 GPM oil meter with
4 to 20 mA output, \$723

All models shown
smaller than
actual size.

Standard Calibration Fluids:

Oil Monitors:

DTE 25 @ 43°C (110°F), 0.873 sg

Water Monitors:

Tap water @ 21°C (70°F), 1.0 sg

Maximum Particle Size:

76 microns

Relay (Optional): 1 or 2 form “C”

relays, rated 10 A @ 125 or 250 Vac or 0.25 A @ 250 Vdc

Mechanical Life:

>10⁷ cycles

Analog Output (Optional):

Supply voltage 12 to 35 Vdc, field selectable for 0 to 5 Vdc (100 W minimum load), 0 to 2000 Hz square-wave pulse or 4 to 20 mA
R_{max} = 50 (V_S-12). V_S = supply voltage DC



FLMH-3810AL,
\$172



FLMW-3405BR
5 GPM water meter,
\$353

Materials of Construction (Wetted Components)

Description	Aluminum (Not for Water)	Brass	Stainless Steel
High-pressure casing, end ports and tapered shaft	Aluminum	Brass	304 SS
Seals	Buna (STD), EPR, FKM or Perfluoroelastomer	Buna (STD), EPR, FKM or Perfluoroelastomer	FKM with PTFE backup (STD) Buna, EPR or Perfluoroelastomer
Transfer magnet	PTFE-coated Alnico	PTFE-coated Alnico	PTFE-coated Alnico
Floating orifice disk	Stainless steel	Stainless steel	Stainless steel
All other internal parts	Stainless steel	Stainless steel	Stainless steel

Materials of Construction (Non-Wetted Components)

Description	Aluminum	Brass	Stainless Steel
Window tube	Polycarbonate (STD), Pyrex®	Polycarbonate (STD), Pyrex	Polycarbonate (STD), Pyrex
Window seals	Buna (STD), PTFE	Buna (STD), PTFE	Buna (STD), PTFE

Port Sizes	¼ to 1½ FNPT
Installation Dimensions	¼ and ½ Port: 1¼ OD x 168 mm (6.6") length ¾ and 1.0 Port: 2¼ OD x 183 mm (7.2") length 1¼ and 1½ Port: 3¼ OD x 257 mm (10.1") length

Note: Minimum flow rate = 10% of maximum.

MOST POPULAR MODELS HIGHLIGHTED!

B

Oil Flowmeters

Model No.	Max Rate GPM	Conn Size	Price
FLMH-1401(*)	1	¼ NPT	\$172
FLMH-1402(*)	2	¼ NPT	172
FLMH-1405(*)	5	¼ NPT	172
FLMH-1410(*)	10	¼ NPT	172
FLMH-1415(*)	15	¼ NPT	172
FLMH-3801(*)	1	⅜ NPT	172
FLMH-3802(*)	2	⅜ NPT	172
FLMH-3805(*)	5	⅜ NPT	172
FLMH-3810(*)	10	⅜ NPT	172
FLMH-3815(*)	15	⅜ NPT	172
FLMH-1201(*)	1	½ NPT	172
FLMH-1202(*)	2	½ NPT	172
FLMH-1205(*)	5	½ NPT	172
FLMH-1210(*)	10	½ NPT	172
FLMH-1215(*)	15	½ NPT	172

* Indicate material: **AL**=aluminum, **standard**; **BR**=brass, add \$58; **SS**=stainless steel, add \$368.

Oil Flowmeters

Model No.	Max Rate GPM	Conn Size	Price
FLMH-3402(*)	2	¾ NPT	\$264
FLMH-3405(*)	5	¾ NPT	264
FLMH-3410(*)	10	¾ NPT	264
FLMH-3415(*)	15	¾ NPT	264
FLMH-3420(*)	20	¾ NPT	264
FLMH-3425(*)	25	¾ NPT	264
FLMH-3430(*)	30	¾ NPT	264
FLMH-3440(*)	40	¾ NPT	264
FLMH-1002(*)	2	1 NPT	264
FLMH-1005(*)	5	1 NPT	264
FLMH-1010(*)	10	1 NPT	264
FLMH-1015(*)	15	1 NPT	264
FLMH-1020(*)	20	1 NPT	264
FLMH-1025(*)	25	1 NPT	264
FLMH-1030(*)	30	1 NPT	264
FLMH-1040(*)	40	1 NPT	264

* Indicate material: **AL**=aluminum, **standard**; **BR**=brass, add \$89; **SS**=stainless steel, add \$459.

Oil Flowmeters

Model No.	Max Rate GPM	Conn Size	Price
FLMH-114025(*)	25	1¼ NPT	\$691
FLMH-114050(*)	50	1¼ NPT	691
FLMH-114075(*)	75	1¼ NPT	691
FLMH-114100(*)	100	1¼ NPT	691
FLMH-114150(*)	150	1¼ NPT	691
FLMH-112025(*)	25	1½ NPT	691
FLMH-112050(*)	50	1½ NPT	691
FLMH-112075(*)	75	1½ NPT	691
FLMH-112100(*)	100	1½ NPT	691
FLMH-112150(*)	150	1½ NPT	691

* Indicate material: **AL**=aluminum, **standard**; **BR**=brass, add \$407; **SS**=stainless steel, add \$719.

Water Flowmeters

Model No.	Max Rate GPM	Conn Size	Price
FLMW-1401(*)	1	¼ NPT	\$230
FLMW-1402(*)	2	¼ NPT	230
FLMW-1405(*)	5	¼ NPT	230
FLMW-1410(*)	10	¼ NPT	230
FLMW-3801(*)	1	⅜ NPT	230
FLMW-3802(*)	2	⅜ NPT	230
FLMW-3805(*)	5	⅜ NPT	230
FLMW-3810(*)	10	⅜ NPT	230
FLMW-3815(*)	15	⅜ NPT	230
FLMW-1201(*)	1	½ NPT	230
FLMW-1202(*)	2	½ NPT	230
FLMW-1205(*)	5	½ NPT	230
FLMW-1210(*)	10	½ NPT	230
FLMW-1215(*)	15	½ NPT	230

* Indicate material: **BR**=brass, **standard**; **SS**=stainless steel, add \$310.

Water Flowmeters

Model No.	Max Rate GPM	Conn Size	Price
FLMW-3402(*)	2	¾ NPT	\$353
FLMW-3405(*)	5	¾ NPT	353
FLMW-3410(*)	10	¾ NPT	353
FLMW-3415(*)	15	¾ NPT	353
FLMW-3420(*)	20	¾ NPT	353
FLMW-3425(*)	25	¾ NPT	353
FLMW-3430(*)	30	¾ NPT	353
FLMW-3440(*)	40	¾ NPT	353
FLMW-1002(*)	2	1 NPT	353
FLMW-1005(*)	5	1 NPT	353
FLMW-1010(*)	10	1 NPT	353
FLMW-1015(*)	15	1 NPT	353
FLMW-1020(*)	20	1 NPT	353
FLMW-1025(*)	25	1 NPT	353
FLMW-1030(*)	30	1 NPT	353
FLMW-1040(*)	40	1 NPT	353

* Indicate material: **BR**=brass, **standard**; **SS**=stainless steel, add \$370.

Water Flowmeters

Model No.	Max Rate GPM	Conn Size	Price
FLMW-114025(*)	25	1¼ NPT	\$1098
FLMW-114050(*)	50	1¼ NPT	1098
FLMW-114075(*)	75	1¼ NPT	1098
FLMW-114100(*)	100	1¼ NPT	1098
FLMW-114150(*)	150	1¼ NPT	1098
FLMW-112025(*)	25	1½ NPT	1098
FLMW-112050(*)	50	1½ NPT	1098
FLMW-112075(*)	75	1½ NPT	1098
FLMW-112100(*)	100	1½ NPT	1098
FLMW-112150(*)	150	1½ NPT	1098

* Indicate material: **BR**=brass, **standard**; **SS**=stainless steel, add \$312.

Options

Order Suffix	Description
-HT	High temperatures, 204°C (400°F) max
-UHT	Ultra high temperatures, 315°C (600°F) max
-R1	Single SPDT relay, 10 A @ 220 Vac
-R2	Dual SPDT relays, 10 A @ 220 Vac
-MA	4 to 20 mA output (12 to 35 Vdc powered)
-BDF	Bidirectional flow (not available with 1½" size units, or with UHT, R1, R2, or MA options) \$62 additional for ¼ to ½" sizes \$90 additional for ¾ to 1" sizes \$205 additional for 1¼" size

Note: Only one option may be ordered with each unit.

Flowmeter Pricing With Options

Port Size	Aluminum					Brass					Stainless Steel				
	-HT	-UHT	-R1	-R2	-MA	-HT	-UHT	-R1	-R2	-MA	-HT	-UHT	-R1	-R2	-MA
¼ to ½"	\$307	\$516	\$408	\$429	\$636	\$408	\$602	\$444	\$501	\$723	\$674	\$871	\$667	\$744	\$888
¾ to 1"	407	732	469	512	691	523	819	525	577	798	795	1204	885	930	1051
1¼ to 1½"	794	1807	822	954	1030	1239	2125	1269	1521	1519	1553	2674	1823	2021	2019

Comes complete with operator's manual.

Note: Units over 400 SCFM cannot be NIST-calibrated.

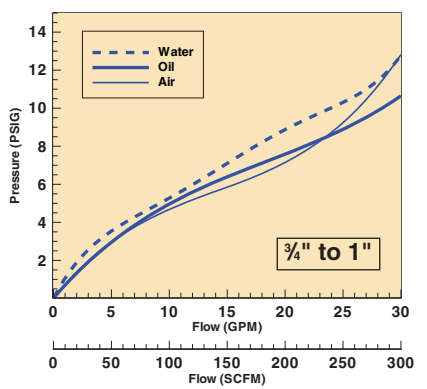
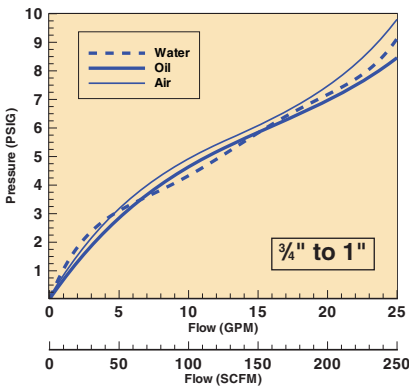
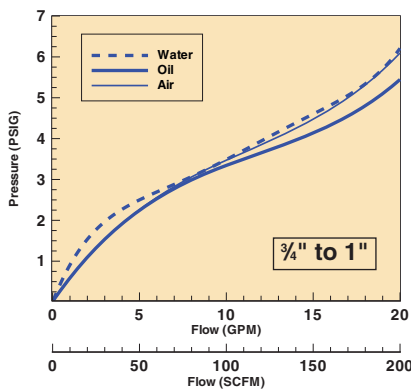
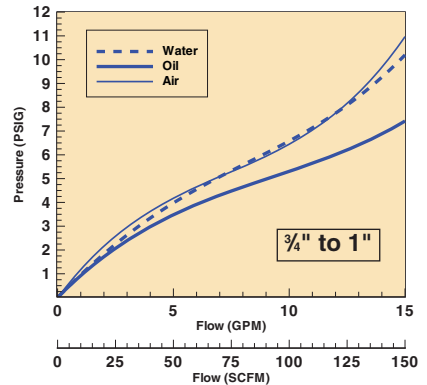
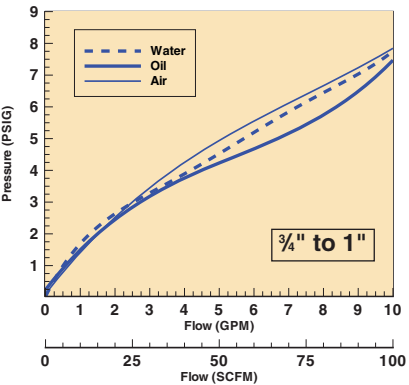
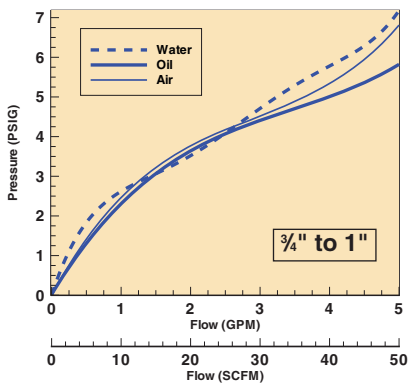
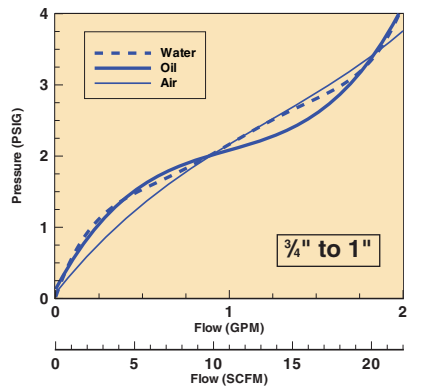
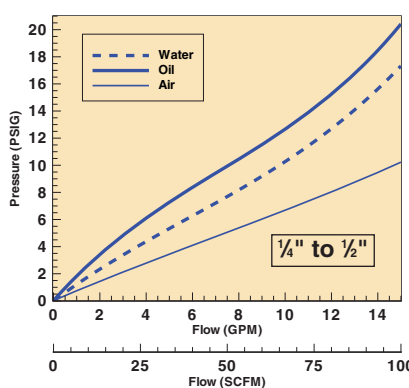
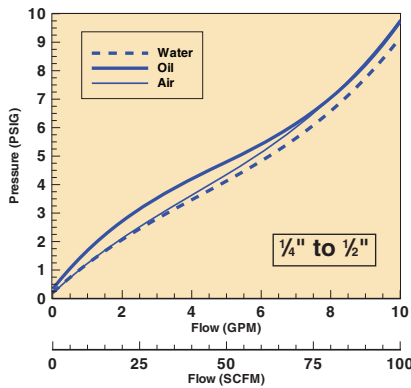
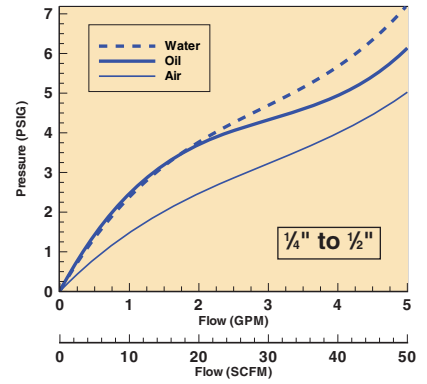
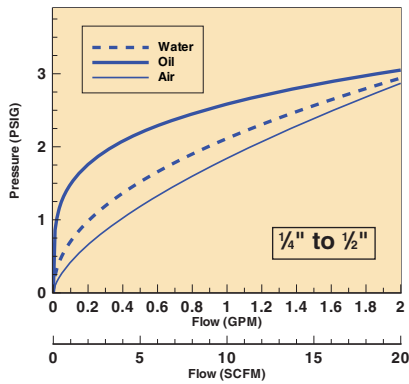
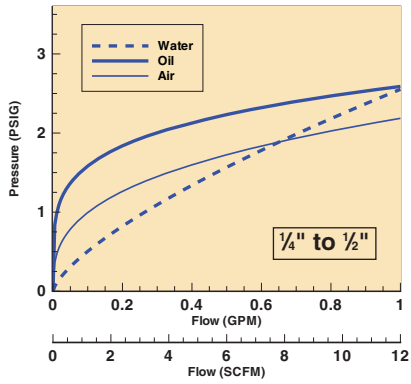
† For NIST traceable certificate, add suffix "-NIST" to model number and add \$250 to price.

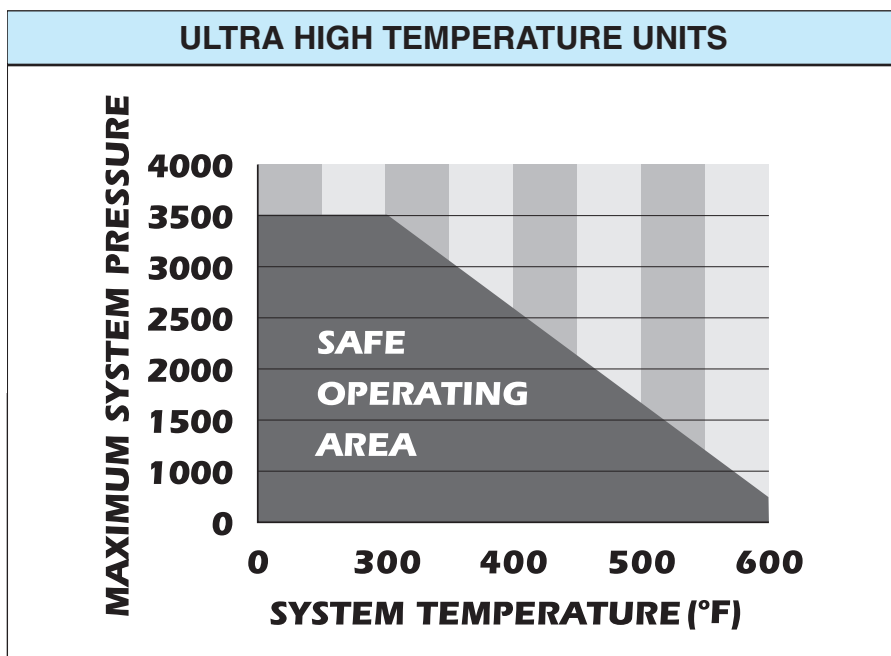
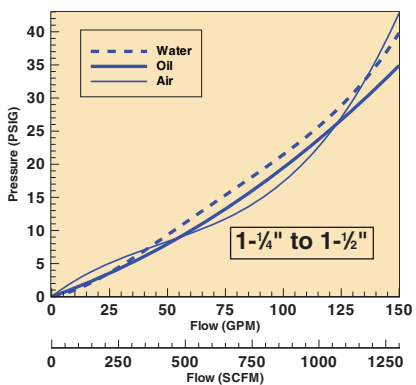
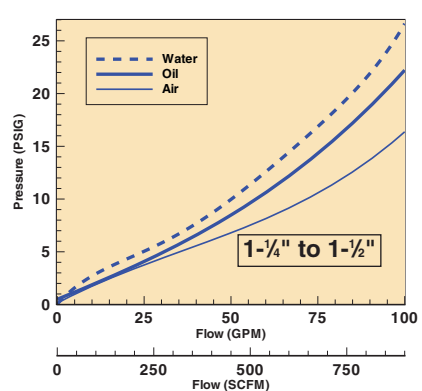
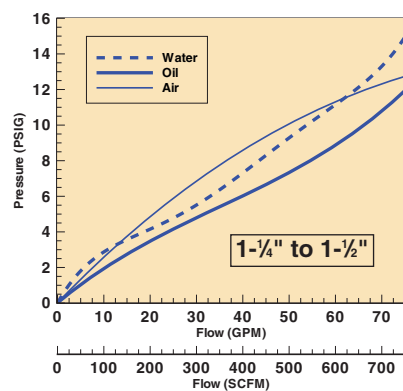
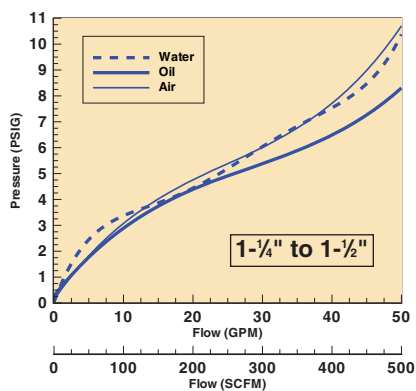
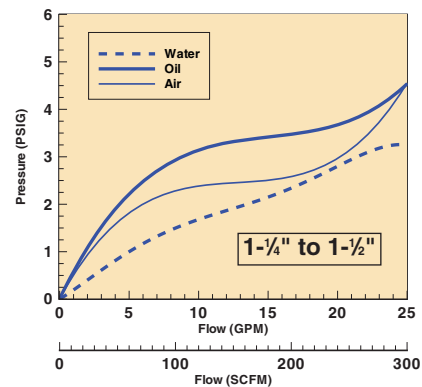
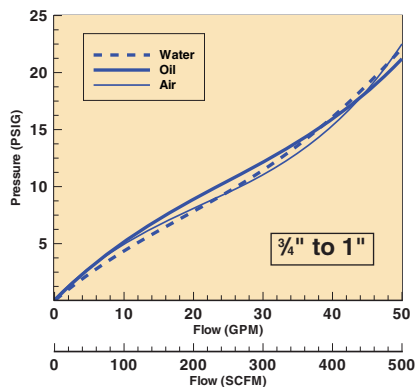
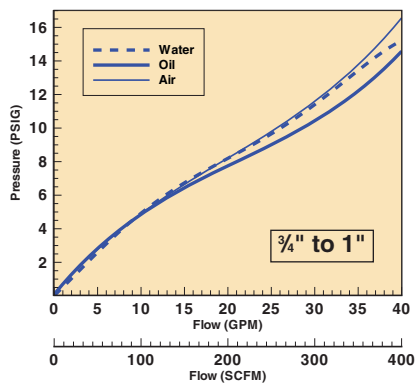
Ordering Examples: FLMW-1202BR-R1, ½", 2 GPM water flowmeter (brass) with relay, \$444.

FLMH-1401AL, ¼" oil meter (aluminum), 1 GPM, \$172.

PRESSURE DROP GRAPHS

FLMG, FLMW, and FLMH





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