



GENERAL PURPOSE PANEL MOUNT Flowmeters

SERIES	RMA	RMB	RMC	VFA	VFB	VFC/VFCR
Ranges	0.05 to 200 SCFH air (5 to 2500 cc/m air) 1 to 50 GPH water (5 to 300 cc/m water)	0.5 to 600 SCFH air (0.6 to 95 LPM air) 1 to 100 GPH water (0.06 to 6.2 LPM water)	5 to 1800 SCFH air (2.5 to 850 LPM air) 0.1 to 10 GPM water (0.05 to 5 LPM water)	0.1 to 200 SCFH air (0.06 to 100 LPM air) 0.6 to 40 GPH water (6 to 200 cc/m water)	0.3 to 200 SCFH air (0.2 to 40 LPM air) 0.5 GPH to 5 GPM water (0.002 to 20 LPM water)	2.5 to 100 SCFM air (60 to 2800 LPM air) 0.5 to 20 GPM water (2 to 75 LPM water)
Accuracy	±4% FS	±3% FS	±2% FS	±5% FS	±3% FS	±2% FS
Body Materials	Polycarbonate	Polycarbonate	Polycarbonate	Acrylic	Acrylic	Acrylic
Temperature Limits	130°F (54°C)	130°F (54°C)	130°F (54°C)	With valve: 120°F (48°C); Without valve: 100°F (38.6°C)	With valve: 120°F (48°C); Without valve: 100°F (38°C)	120°F (48°C)
Pressure Limits	100 psi (6.7 bar)	100 psi (6.7 bar)	100 psi (6.7 bar)	With valve: 100 psi (6.7 bar); Without valve: 150 psi (10 bar)	With valve: 100 psi (6.7 bar); Without valve: 150 psi (10 bar)	100 psi (6.7 bar)
Process Connection	1/8" female NPT back connections	1/4" female NPT back connections	1/2" female NPT back connections	1/8" female NPT back or end connections	1/8" female NPT back or end connections	1" female or male NPT or BSPT back or end connections (VFC only)
Scale Length	2" (51 mm)	5" (127 mm)	10" (254 mm)	2" (51 mm)	4" (102 mm)	5" (127 mm)
Metering Valve	Optional bottom or top mount brass or stainless steel valve	Optional bottom brass or stainless steel valve	Optional bottom brass or stainless steel valve	Optional bottom or top mount brass or stainless steel valve	Optional bottom brass or stainless steel valve	VFCR standard with Delrin® plastic full adjust and control valve

GENERAL PURPOSE IN-LINE Flowmeters

SERIES	LFMA	LFMB	LFMC	LFMD	LFME	LFMF
Ranges	0.1 to 5 GPM water (0.5 to 18 LPM water)	0.1 to 5 GPM water (0.5 to 18 LPM water)	0.25 to 8 GPM water (1 to 30 LPM water)	0.8 to 10 GPM water (3 to 40 LPM water)	1.2 to 25 GPM water (5 to 100 LPM water)	2.5 to 70 GPM water (10 to 250 LPM water)
Accuracy	±5% FS	±5% FS	±5% FS	±5% FS	±5% FS	±5% FS
Body Materials	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Process Connection	1/2" male NPT in-line or 90° elbow connections	1/2" male NPT in-line or 90° elbow connections	1/2" or 3/4" male NPT in-line or 1/2" male NPT 90° elbow connections	3/4" male or female NPT in-line or 3/4" male NPT 90° elbow connections	1" male or female NPT in-line or 1" male NPT 90° elbow connections	2" male or female NPT in-line connections
Scale Length	2" (51 mm)	3" (76 mm)	3" (76 mm)	3.5" (89 mm)	4.5" (114 mm)	5.5" (140 mm)



CORROSIVE MEDIA Flowmeters

SERIES	VAT	TVA	VA1000	VA1500	VA20000	VA25000	DR10000	DR20000
Ranges	1.19 to 79 GPH water (75 to 5000 ml/min water)	6.34 to 79.2 GPH water (400 to 5000 ml/min water)	0.104 to 89.2 SCFH air (49 to 42000 ml/m air) 0.009 to 19.97 GPH water (0.55 to 1260 ml/m water)	0.22 to 49 SCFH air (104 to 23100 ml/min air) 0.028 to 27 GPH water (1.8 to 522 ml/min water)	0.792 to 93.9 SCFH air (374 to 44300 ml/min air) 0.087 to 21.7 GPH water (5.5 to 1370 ml/m water)	0.104 to 18.39 SCFH air (49 to 8600 ml/m air) 0.01 to 3.32 GPH water (0.61 to 209 ml/min water)	0.24 to 100 SCFH air (0.13 to 50 LPM air) 0.02 to 24 GPH water (1.5 to 1500 cc/m water)	0.33 to 90 SCFH air (0.16 to 44 LPM air) 0.05 to 21 GPH water (3.2 to 1300 cc/m water)
Accuracy	±5% FS	±5% FS	±2% FS	±2% FS	±2% FS	±2% FS	±5% FS	±5% FS
Body Materials	PFA	PFA	Glass flow tube	Glass flow tube	Glass flow tube	Glass flow tube	Glass flow tube	Glass flow tube
Temperature Limits	250°F (121°C)	250°F (121°C)	250°F (121°C)	150°F (65°C)	250°F (121°C)	150°F (65°C)	250°F (121°C)	250°F (121°C)
Pressure Limits	100 psi (6.7 bar)	100 psi (6.7 bar)	200 psi (13.8 bar)	100 psi (6.7 bar)	200 psi (13.8 bar)	100 psi (6.7 bar)	250 psi (17 bar)	250 psi (17 bar)
Process Connection	1/4" or 3/8" female NPT back connections	1/4" or 3/8" female NPT back connections	1/8" female NPT back connections	1/8" female NPT back connections	1/8" female NPT back connections	1/8" female NPT back connections	1/8" female NPT back connections	1/8" female NPT back connections
Scale Length	5" (127 mm)	3" (75 mm)	2.5" (65 mm)	2.5" (65 mm)	6" (150 mm)	6" (150 mm)	2.5" (65 mm)	6" (150 mm)
Metering Valve	N/A	Optional 6-turn needle valve	6-turn needle valve; Optional 16-turn high precision valve	6-turn needle valve	6-turn needle valve; Optional 16-turn high precision valve	6-turn needle valve	Optional 6-turn needle valve	Optional 6-turn needle valve

INDUSTRIAL Flowmeters

SERIES	IF	HF	TVFS	SSM
Ranges	1.2 to 250 SCFM air (35 to 7080 LPM air) 0.25 to 116 GPM water (0.95 to 439 LPM water)	2 to 22 SCFM air 0.5 to 25 GPM oil 0.05 to 116 GPM water	0.025 to 0.545, 4.00 to 120.0 GPM water 0.16 to 3.20, 20.0 to 1000 SCFM air	0.2 to 5.4, 4 to 120 GPM water 2 to 50, 20 to 1000 SCFM air
Accuracy	±3% FS	±4% FS	±2% FS	±2% FS
Body Materials	Glass flow tube	Aluminum, brass, or 304 SS	Body: T316 SS; O-ring: Buna-N; Sight tube: Polysulfone	Body: T316 SS; O-ring: FKM
Temperature Limits	200°F (93°C)	240°F or 400°F (115° or 204°C)	300°F (149°C)	300°F (149°C)
Pressure Limits	200 psi (13.8 bar); some models 125 psi (8.6 bar)	600 psi to 6000 psi (41 to 413 bar)	3/4" models: 300 psig (20.6 bar) @ 200°F (93°C); 1-1/2" models: 180 psig (12.4 bar) @ 200°F (93°C)	3/4" models: 1000 psig (68.9 bar) @ 250°F (121°C); 1-1/2" models: 800 psig (55 bar) @ 250°F (121°C)
Process Connection	1/2", 1" or 2" female NPT back connections	1/8" to 2" female NPT back connections	3/4" or 1-1/2" female NPT	3/4" or 1-1/2" female NPT
Scale Length	4-3/4" (120 mm)	1-1/2" to 2-1/4" (38 to 57 mm)	3/4"NPT: 3.2" (8 cm); 1-1/2" NPT: 5.2" (13 cm)	3/4" NPT: 3.2" (8 cm); 1-1/2" NPT: 5.2" (13 cm)



PADDLE AND THERMAL STYLE Flow Switches

SERIES	V4	V6	V7	V10	V8	FS-2	TDFS
Service	Gases or liquids	Gases or liquids	Liquids	Gases or Liquids	Liquids	Liquids	Liquids
Set Point Range	3 to 2400 GPM (12 to 9000 LPM) 17 to 10000 SCFM (8 to 4700 LPM)	.03 to 10 GPM (.11 to 38 LPM) .15 to 43 SCFM (4 to 1200 LPM)	7.5 to 58.0 GPM (28.4 to 218 LPM)	2.3 to 9.5 GPM (8.7 to 36 LPM) 8.8 to 50 SCFM (250 to 1420 LPM)	6.8 to 58 GPM (25.7 to 218 LPM)	4 to 396 GPM (15 to 1500 LPM)	0.5 to 10 ft/s (0.15 to 3 m/s)
Wetted Materials	Brass, 430 SS, 316 SS*	Brass or 303 SS, 301 SS, 302 SS, Ceramic*	301 SS	Brass or 303 SS, 316 SS, 301 SS, 302 SS, Ceramic	Brass or 316 SS, 301 SS, 302 SS, Ceramic	Tin-Bronze, Brass, SS	316 SS, Polysulfone, and FKM
Temperature Limits	-4 to 400°F (-20 to 205°C)	-4 to 400°F (-20 to 205°C)	250°F (121°C)	200°F (93°C)	-40 to 250°F (-40 to 121°C)	230°F (110°C)	185°F (85°C)
Pressure Limits	5000 psig (345 bar)	2000 psig (138 bar)	2000 psig (138 bar)	2000 psig (138 bar)	250 psig (17.2 bar)	145 psig (10.0 bar)	500 psig (34.5 bar)
Adjustable Set Point	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Requirement	None	None	None	None	None	None	9 to 24 VDC
Enclosure Rating	WP and EXP	WP and EXP	WP	WP	WP	WP	WP
Switch Type	SPDT or DPDT	SPDT or DPDT	SPDT	SPST	SPDT	SPDT	1 NO NPN, 1 NC NPN
Process Connection	1-1/2" male NPT* or 1-1/2" male BSPT	1/2" male NPT* or 1/2" male BSPT	1" male NPT	1/2" male NPT* or 1/2" male BSPT	1" male NPT	1" male NPT or BSPT	1" male NPT
Agency Approvals	ATEX, CE, CSA, FM, IECEx, UL**	ATEX, CE, CSA, IECEx, KTL, UL	CE, UL	CE, CSA, UR	CE, cURus	CE	CE

*Other options available, contact factory
**No housing option (-NH) has no approvals

PISTON STYLE Flow Switches

SERIES	P2	P3	P1	P8	GVS	AFS
Service	Gases or liquids	Liquids	Liquids	Liquids	Liquids	Gases or Liquids
Set Point Range	.05 to 1 GPM (.2 to 3.79 LPM) .42 to 5 CFM (11.9 to 141 LPM)	.25 to 2 GPM (.95 to 7.57 LPM)	.1 to 1.5 GPM (.38 to 5.7 LPM)	.25 to 2 GPM (.95 to 7.57 LPM)	1 to 8 GPM (3.8 to 30.3 LPM)	1 to 75 SCFM @ 5 psi (28 to 2123 LPM @ 5 psi) .5 to 20 GPM (2 to 75.5 LPM)
Wetted Materials	PPE & PS, Epoxy, 316 SS	Polypropylene, PPS Composite, 316 SS, Fluorocarbon	Brass, Polysulfone, 316 SS, Fluoroelastomer, Epoxy	Brass, PPS Composite, Epoxy, 316 SS, Fluorocarbon	Bronze, TFE, 316 SS, Fluoroelastomer, Ceramic	316 SS, Fluoroelastomer, Epoxy, Brass
Temperature Limits	0 to 212°F (-18 to 100°C)	0 to 212°F (-18 to 100°C)	-20 to 225°F (-29 to 107°C)	-20 to 275°F (-28 to 135°C)	-20 to 200°F (-29 to 93°C)	-20 to 300°F (-29 to 149°C)*
Pressure Limits	150 psig (10.3 bar) @ 70°F (21°C), 50 psig (3.4 bar) @ 212°F (100°C)	125 psig (8.6 bar) @ 70°F (21°C), 50 psig (3.4 bar) @ 212°F (100°C)	1000 psig (69 bar)	1500 psig (103 bar)	400 psig (27 bar) @ 100°F (38°C)	1000 psig (69 bar)
Adjustable Set Point	No	No	No	No	Yes	Yes
Power Requirement	None	None	None	None	None	None
Enclosure Rating	GP	GP	GP	GP	GP	GP
Switch Type	SPST, NO	SPST, NO	SPDT	SPST, NO	SPDT	SPDT
Process Connection	1/4" male NPT	3/8" male NPT or 1/4" Quick Disconnect	1/4" female NPT	3/8" male NPT	1" female NPT	1/2" female NPT
Agency Approvals	CE	CE	CE	CE	CE	CE

*Other options available, contact factory



PADDLE WHEEL/TURBINE/MULTI-JET Flow Transmitters



SERIES	TFP	PFT	SFI-100T	DFMT
Service	Gases	Liquids	Liquids	Liquids
Wetted Materials	PPS	Brass or 316 SS	Brass	PVDF
Accuracy	±3% FS	±1% FS	±5% FS	±1.5% FS
Temperature Limits	158°F (70°C)	212°F (100°C)	-20 to 212°F (-29 to 93°C)	194°F (90°C)
Pressure Limits	40 psig (2.8 bar)	400 psig (27.6 bar)	125 psig (8.6 bar)	145 psi (1.0 MPa)
Pipe Size	1/8", 1/4", 3/8" or 1/2" (3.2 mm, 6.4 mm, 9.5 mm or 12.7 mm)	1-1/2 to 40" (38.1 to 1016 mm)	1/2" or 3/4" (12.7 mm or 19 mm)	3/8", 1/2", 3/4", 1", 1-1/2" or 2" (9.5 mm, 12.7 mm, 19 mm, 25.4 mm, 38 mm or 50.8 mm)
Flow Rate	.042 to 420 SCFH (0.02 to 200 LPM)	1.2 to 25 ft/s (0.37 to 7.62 m/s)	2 to 35 GPM (7.6 to 132.5 LPM)	0.44 to 176.11 GPM (0.1 to 40 m³/h)
Output	0 to 5 V	4 to 20 mA or pulsed	Pulsed	4 to 20 mA or pulsed

ULTRASONIC Flow Transmitters



SERIES	UFB	UFM	PUB
Service	Liquids	Liquids	Liquids
Wetted Materials	n/a	n/a	n/a
Accuracy	±2% of reading	±3% of reading	±2% FS
Temperature Limits	275°F (136°C)	185°F (85°C)	275°F (135°C)
Pressure Limits	N/A	N/A	N/A
Pipe Size	0.05 to 79" (13 to 2000mm)	0.98 to 4.62" (24.89 to 117.35 mm)	0.5 to 78" (13 to 2000 mm)
Flow Rate	0.33 to 33 ft/s (0.1 to 10 m/s)	0.33 to 32.8 ft/s (0.1 to 10 m/s)	0.33 to 65.62 ft/s (0.1 to 20 m/s)
Output	4 to 20 mA, 0 to 16 mA or 0 to 20 mA	4 to 20 mA and pulsed	4 to 20 mA, 0 to 16 mA or 0 to 20 mA and pulsed



FLOW
Water Meters



SERIES	WMT2	WMH	WPT	WRBT
Service	Water	Water	Water	Water
Wetted Materials	Body and couplings: Brass; Measuring Chamber: ABS plastic	Body and couplings: Brass; Measuring chamber: ABS plastic	Body: Nylon 66; Couplings: Nylon 66, 1-1/2" (40 mm) sizes lead free ECO BRASS®; Measuring chamber: ABS plastic	Body and couplings: ECO BRASS®; Measuring chamber: ABS plastic
Accuracy	±2% FS	WMH-A-X-XX: Transitional flow: ±3%; Nominal flow: ±1.5%	WPT-A-X-XX: Transitional flow: ±3; Nominal flow: ±1.5%	Transitional flow: ±3%; Nominal flow: ±1.5%
Temperature Limits	104°F (40°C)	190°F (88°C)	122°F (50°C)	122°F (50°C)
Pressure Limits	232 psi (16 bar)	150 psi (10 bar)	150 psi (10 bar)	150 psi (10 bar)
Pipe Size	1/2" to 2" (12.7 mm to 50 mm)	5/8" x 1/2" to 2" (15 mm to 50 mm)	5/8" x 1/2" to 1-1/2" (15 mm to 40 mm)	5/8" x 1/2" to 2" (15 mm to 50 mm)
Flow Rate	20 to 160 GPM (3 to 30 m³/h)	20 to 160 GPM (3 to 30 m³/h)	20 to 160 GPM (3 to 30 m³/h)	20 to 160 GPM (3 to 30 m³/h)
Output	Pulsed	Pulsed	Pulsed	Pulsed

ELECTROMAGNETIC, IN-LINE/INSERTION
Flow Transmitters



SERIES	MFS	FLM	IEFS	EFS2
Service	Liquids	Compatible, non-coating, conductive liquids	Liquids	Liquids
Wetted Materials	316 SS	Liner: Dual durometer rubber; Electrodes: 316 SS	Brass or 316 SS	Brass, 316 SS or PVC
Accuracy	±2% of reading	±1% FS	±1% FS	±1% FS
Temperature Limits	194°F (90°C)	Process: 14 to 140°F (-10 to 60°C); Ambient: 14 to 140°F (-10 to 60°C)	200°F (93°C)	200°F (93°C)
Pressure Limits	232 psi (16 bar)	≤ 232 psi (1.6 mPa)	200 psi (13.8 bar)	200 psi (13.8 bar)
Pipe Size	1/2 or 1" (12.7 or 25 mm)	1 to 6" (25 to 150 mm)	3 to 48" (76.2 to 1219.2mm)	1 to 12" (25.4 to 304.8 mm)
Flow Rate	0.25 to 52.8 GPM (1 to 200 LPM)	0.77 to 1320 GPM (3.5 to 5000 LPS)	0.28 to 20 ft/s (0.08 to 6.09 m/s)	0.28 to 20 ft/s (0.08 to 6.09 m/s)
Output	4 to 20 mA or pulsed	4 to 20 mA	Pulsed	Pulsed