

# Flow Instrumentation Selection Chart

**Call 877-243-1010**  
 for Inside Sales, Technical Support,  
 Order Entry and Returns (RMA)

	Technology	Product	Liquids								Air & Gases	Steam	Multi-phase	Low Flows	High Flows	High Temp Rating	High Pressure Rating	Pipe Diameters (inches)
			Clean	Dirty	Corrosive	Viscous	Abrasive	Oil-Based Liquids	Ultra-Pure Water	Cryogenic								
<b>Badger Meter®</b> • Market leader in positive displacement meter technology • Rugged hand-held liquid dispensing options	Positive Displacement	Oval Gear	✓	Ⓢ	▲	✓	Ⓢ	✓	-	-	-	-	-	0.67 gpm	185 gpm	240° F	3000 psig	1/4...3
		Oscillating Piston	✓	Ⓢ	▲	✓	Ⓢ	✓	-	-	-	-	-	1 gpm	100 gpm	250° F	150 psig	1/2...2
		RCDL Nutating Disc	✓	-	▲	✓	-	✓	✓	-	-	-	-	0.5 gpm	170 gpm	250° F	150 psig	1/2...2
		Industrial Hand-held Electronic	✓	Ⓢ	▲	✓	Ⓢ	✓	-	-	-	-	-	0.25 gpm	10 gpm	120° F	600 psig	1/2
		Pistol Grip Hand-held	✓	Ⓢ	-	✓	Ⓢ	✓	-	-	-	-	-	0.4 gpm	4 gpm	110° F	1000 psig	1/2
	Universal Series	✓	-	-	✓	-	✓	-	-	-	-	-	0.4 gpm	4 gpm	150° F	1000 psig	1/2	
	PD Plus Turbine	RCDL Compound	✓	Ⓢ	-	-	Ⓢ	-	-	-	-	-	-	0.25 gpm	1500 gpm	120° F	150 psig	2...6
	Turbine	RCDL Turbo	✓	Ⓢ	-	-	Ⓢ	-	-	-	-	-	-	4 gpm	19,800 gpm	120° F	150 psig	1-1/2...20
		Industrial Turbo	✓	Ⓢ	▲	▲	Ⓢ	✓	Ⓢ	-	-	-	-	8 gpm	2000 gpm	250° F	150 psig	2...6
Vision		✓	✗	Ⓢ	-	-	✓	✓	-	-	-	-	0.03 gpm	9.25 gpm	212° F	363 psig	1/4...3/8	
<b>ModMAG®</b> • Complete line of mag meters for general purpose, sanitary and intrinsically-safe environments • 7500 Models feature built-in batch capability	Electromagnetic	M1000	✓	✓	▲	Ⓢ	✓	-	-	-	-	-	0.01 gpm	6,279 gpm	140° F	ANSI 150 psig flange rating	1/4...8	
		M2000	✓	✓	▲	Ⓢ	✓	-	-	-	-	-	-	0.06 gpm	1,100,000 gpm		311° F	1/4...54
		M3000	✓	✓	▲	Ⓢ	✓	-	-	-	-	-	-	0.02 gpm	53,778 gpm		248° F	1/4...24
		M4000	✓	✓	▲	Ⓢ	✓	-	-	-	-	-	-	0.02 gpm	13,444 gpm		122° F	1/4...12
		M5000	✓	Ⓢ	-	-	-	-	-	-	-	-	-	0.11 gpm	53,778 gpm		212° F	1/4...24
<b>Impeller</b> • Proven flow metering solution • Full line of PVC and metal in-line designs support a wide range of facility applications from HVAC to submetering to irrigation • Some insertion models include hot-tap options	Impeller In-line	380 Btu Meter	✓	▲	-	-	-	-	-	-	-	-	1.7 gpm	157 gpm	260° F	400 psig	3/4...2	
		735	✓	▲	-	-	-	-	-	-	-	-	-	1.2 gpm	49 gpm	110° F	160 psig	1/2...1
		4000	✓	▲	✓	-	-	Ⓢ	✓	-	-	-	-	0.2 gpm	49 gpm	220° F	350 psig	1/2...1
		228PV	✓	▲	Ⓢ	-	-	-	-	-	-	-	-	2.8 gpm	1175 gpm	221° F	100 psig	1-1/2...4
		228 Metal	✓	▲	Ⓢ	-	-	-	-	-	-	-	-	0.3 gpm	459 gpm	221° F	300 psig	2...2-1/2
	Impeller Insertion	250B	✓	▲	-	-	-	-	-	-	-	-	-	1.2 gpm	110 gpm	221° F	400 psig	1/2...1-1/2
		SDI	✓	▲	Ⓢ	-	-	-	-	-	-	-	-	0.3 fps	20 fps	300° F	1000 psig	1-1/2...36
		220	✓	▲	Ⓢ	-	-	-	Ⓢ	-	-	-	-	0.3 fps	20 fps	221° F	400 psig	2...40+
		220PVS	✓	▲	Ⓢ	-	-	-	-	Ⓢ	-	-	-	0.3 fps	20 fps	140° F	100 psig	2...40+
		225	✓	▲	-	-	-	-	-	-	-	-	-	0.3 fps	20 fps	221° F	400 psig	2...40+
226	✓	▲	Ⓢ	-	-	-	Ⓢ	Ⓢ	-	-	-	0.3 fps	20 fps	221° F	400 psig	2...40+		
<b>Coriolis</b> • Unobstructed open flow design • High accuracy (up to ±0.10%) • Advanced fluid diagnostic tools	Mass Flow	RCT1000	✓	✓	Ⓢ	✓	Ⓢ	✓	-	Ⓢ	-	-	0.05 lb/min	5200 lb/min	392° F	3000 psig	1/16...3	
<b>Hedland®</b> • Installation at any angle • Special scales available • Quick delivery	In-line Variable Area	High Pressure	✓	▲	✓	▲	-	▲	▲	-	-	✓	-	0.02 gpm	400 gpm	500° F	6000 psig	1/4...3
		EZ-View	✓	▲	▲	Ⓢ	-	▲	▲	-	-	-	-	-	0.5 gpm	100 gpm	250° F	325 psig

✓ Designed for this Service      ▲ Normally Applicable      ⓘ Consult Factory      - Not Applicable or Suitable

**Milwaukee:** Impeller (Data Industrial), Oval Gear, Industrial Turbo, Mag Meters, Valves (RCV), Recordall, Oscillating Piston, Automotive  
**Racine:** Hedland, Blancett, Vortex, Dynasonics, Coriolis, Flo-tech, Vision  
**Scottsdale:** Cox and Flow Dynamics

**Customer Support**  
 indorders@badgermeter.com or fax 866-613-9305  
 racorders@badgermeter.com or fax 800-245-3569  
 AZCustomerService@badgermeter.com, AZOrders@badgermeter.com

**Technical Support**  
 techsupport@badgermeter.com  
 rfmtechnicalsales@badgermeter.com  
 AZTechSupport@badgermeter.com or fax 480-948-3610

**Additional Products**  
 RCV: rcv@badgermeter.com (valve only)  
 Preso: 800-632-7337

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	Technology	Product	Liquids								Air & Gases	Steam	Multi-phase	Low Flows	High Flows	High Temp Rating	High Pressure Rating	Pipe Diameters (inches)	
			Clean	Dirty	Corrosive	Viscous	Abrasive	Oil-Based Liquids	Ultra-Pure Water	Cryogenic									Fibrous Slurries
<b>Flo-tech</b> • Single device measures flow, pressure, and temperature • High pressure capability • Rugged design	In-line Turbines	Activa, Ultima	✓	-	-	Ⓢ	-	✓	-	-	-	-	-	0.4 gpm	160 gpm	300° F	5800 psig	1/4...1-1/4	
	Portable Hydraulic Testers	PFM, Flo-Check	✓	-	-	Ⓢ	-	✓	-	-	-	-	-	1 gpm	200 gpm	300° F	6000 psig	3/4...1-1/2	
		MC4000	✓	-	-	Ⓢ	-	✓	-	-	-	-	-	0.4 gpm	160 gpm	392° F	5800 psig	1/4...1-1/4	
<b>Blancett®</b> • Rugged, 316 SS w/tungsten carbide internal parts • ±1% accuracy liquid meters • Easy-to-install • Field-replaceable internal repair kits	Positive Displacement	B1750	✓	-	Ⓢ	✓	-	▲	Ⓢ	-	-	-	0.003 gpm	120 gpm	400° F	5000 psig	1/4...1-1/4		
	In-line Turbines	1100	✓	▲	Ⓢ	Ⓢ	Ⓢ	▲	▲	-	-	-	-	0.6 gpm	5000 gpm	350° F	5000 psig	1/2...10	
		QuikSert	✓	▲	Ⓢ	Ⓢ	Ⓢ	▲	▲	-	-	-	-	0.6 gpm	5000 gpm	350° F	3705 psig	3/8...10	
		FloClean	✓	▲	Ⓢ	Ⓢ	Ⓢ	Ⓢ	▲	-	-	-	-	0.6 gpm	400 gpm	350° F	1000 psig	1...3	
		Gas QuikSert	-	-	-	-	-	-	-	-	-	✓	-	-	7 acfm	350 acfm	330° F	2220 psig	2
<b>Cox</b> • High accuracy (up to ±0.10%) • Cost effective alternative to electronic metering options of similar accuracy • Suitable for high-vibration environments	High-Precision Turbine	Single Rotor	✓	-	▲	Ⓢ	Ⓢ	✓	✓	✓	-	-	-	0.007 gpm	310 gpm	500° F	7000 psig	1/4...2	
		Dual Rotor	✓	-	▲	Ⓢ	Ⓢ	✓	✓	✓	-	-	-	-	0.025 gpm	1500 gpm	300° F	3000 psig	1/4...4
<b>Vortex</b> • No moving parts • No minimum pressure requirements and high turndown ratios on gas meters	Vortex Shedding	RVL	✓	Ⓢ	▲	-	-	-	✓	-	-	-	-	0.6 gpm	300 gpm	203° F	150 psig	1/2...3	
		RWG, RWBG	-	-	-	-	-	-	-	-	-	✓	-	-	0.4 acfm	600 acfm	360° F	250 psig	1/2...4
		RNG	-	-	-	-	-	-	-	-	-	✓	-	-	2 fps	140 fps	300° F	250 psig	4+
<b>Preso®</b> • Ellipse Pitot tube has highest turndown ratio (17:1) and lowest permanent pressure loss among competitors • Very low Reynolds number (COIN meter)	Venturi	SSL, SSM, LPL	✓	▲	Ⓢ	Ⓢ	Ⓢ	✓	✓	▲	Ⓢ	✓	✓	✓	-	1500° F	9000 psig	1/2...60	
		CV	✓	▲	Ⓢ	Ⓢ	Ⓢ	✓	✓	-	Ⓢ	✓	-	-	-	-	250° F	300 psig	2...16
	Pitot Tubes	Ellipse	✓	Ⓢ	▲	Ⓢ	-	▲	✓	-	-	✓	✓	-	Application Dependent	800° F	5500 psig	2...42	
	Segmented Wedge	COIN	✓	✓	▲	✓	✓	✓	✓	▲	▲	✓	✓	✓	-	1500° F	9000 psig	1/2...48	
		Cone	Gemini	✓	Ⓢ	▲	Ⓢ	Ⓢ	✓	✓	▲	Ⓢ	✓	✓	✓	-	1000° F	9000 psig	1...16
<b>Dynasonics®</b> • Non-invasive, clamp-on style models • No process shutdown on clamp-on • Large turndown ratio • Btu metering options	Transit Time	TFX Ultra, TFXL	✓	Ⓢ	▲	Ⓢ	Ⓢ	Ⓢ	✓	-	-	-	-	<1 fps	40 fps	350° F	N/A	1/2+	
	Doppler	DFX, UFX	Ⓢ	✓	▲	▲	▲	Ⓢ	-	-	▲	-	-	0.3 fps	30 fps	400° F	N/A	1/4+	
	Hybrid Portable	DXN	✓	✓	▲	▲	▲	Ⓢ	✓	-	▲	-	-	0.001 fps	40 fps	350° F	N/A	1/4+	
<b>Research Control® Valves</b> • Low-flow control valves up to 2 inches • Wide variety of alloys • Engineered solutions	Control Valves	General Industrial	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0.0000018 Cv	54 Cv	1800° F	60,000 psig	1/4...2		
		Sanitary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0.05 Cv	90 Cv	300° F	1500 psig	1/2...3	
<b>Flow Dynamics®</b> • Primary Standard Calibration Service • Liquid calibration uncertainty: ±0.025% to ±0.05% of reading • Gas calibration uncertainty: ±0.20% to ±0.25% of reading • NVLAP (Lab Code 200668-0) accredited traceable to NIST (ISO/IEC 17025 - ANSI/NCL Z540) • Liquids: water, solvent (1.2 cSt), and oil blends (0.7 to 1300 cSt); consult factory above 1300 cSt • Gases: Air, Nitrogen, Helium, Argon, Methane, Propane, and others	Positive Displacement Calibrations	Liquid Calibration Service in Scottsdale, AZ	✓	-	-	✓	-	✓	✓	-	-	-	0.0025 gpm	1500 gpm	140° F	120 psig	1/4...4		
	Bell Provers, Glass Tube & Sonic Nozzles	Air/Gas Calibration Service in Scottsdale, AZ	✓	-	-	-	-	-	-	-	-	✓	-	0.00035 scfm	1000 scfm	N/A	500 psia	1/4...4	
	Calibrators Primary Standard Liquid	PDCL Series Equipment	✓	-	-	✓	-	✓	✓	-	Water Simulation	-	-	0.001 gpm	400 gpm	140° F	120 psig	1/4...2-1/2	
	Field Calibrator Certification	Field Service of Calibrators	✓	-	-	-	-	✓	✓	-	-	-	-	-	Unique to Calibrator	Unique to Calibrator	N/A	Unique to Calibrator	Unique to Calibrator

**Note:** NVLAP accreditation applies only to the Badger Meter Flow Dynamics calibration Lab, located in Scottsdale AZ.

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