

# What's the Right Flow Technology for Your Application?

Need help figuring out which flow measurement instrumentation to use in your process? Start with the reference charts below. Depending on your application, there may be more than one technology that is right for you.

**Key**

▲ Excellent! Recommended

◆ Fair. Works, but others are better.

▼ Poor. Do not use.

## Rating Technology for Media Types

Media Properties	Clean Liquid	Dirty Liquid	Viscous Liquid	Corrosives	Slurries	Clean Gas	Dirty Gas	Steam	Cryogenics
Coriolis Flowmeter	▲	▲	▲	▲	▲	◆	◆	◆	◆
DP Mass Flowmeter	▲	▲	▲	◆	◆	▲	▲	▲	▼
DP Orifice Plate	▲	◆	◆	▲	▼	▲	◆	▲	▲
DP Pitot Tube	▲	▼	▼	◆	▼	▲	◆	▲	▼
DP Wedge	▲	▲	▲	▲	▲	▲	▲	▲	▼
DP Venturi	▲	▲	◆	◆	▼	◆	◆	▲	▼
Fluidic Oscillatory	▲	◆	▲	◆	▲	▼	▼	▼	▲
Magnetic Flowmeter	▲	▲	▲	▲	▲	▼	▼	▼	▼
Paddlewheel	▲	▼	◆	◆	▼	◆	◆	▼	▼
Positive Displacement	▲	▲	▲	◆	▼	▲	◆	▼	◆
Rotameter	▲	▼	◆	◆	▼	▲	▼	◆	▼
Thermal Dispersion	▲	◆	◆	◆	◆	▲	▲	▼	◆
Turbine Flowmeter	▲	▼	◆	◆	▼	▲	◆	▲	◆
V-Notch	▲	◆	▼	◆	◆	▼	▼	▼	▼
Vortex Flowmeter	▲	◆	◆	◆	▼	▲	◆	▲	▼
Weir	▲	◆	▼	◆	◆	▼	▼	▼	▼

## Comparing Specifications Side by Side

**Key**

**H** High

**M** Medium

**L** Low

Technology/Spec.	Turndown Ratio	Sizes	Accuracy (%FS)	Repeatability (%)	Upstream Pipe Diameter	Permanent PSI Drop	Relative Cost
Coriolis Flowmeter	25:1	0.1-6"	0.15%	0.1%	0	L	H
DP Mass Flowmeter	40:1	--	0.1%	0.1%	--	--	H
DP Orifice Plate	4:1	>1"	1%	0.1%	10-30	H	L
DP Pitot Tube	4:1	0.5-72"	0.75%	0.1%	10	L	L
DP Venturi	10:1	0.5-72"	1%	0.1%	10	M	L
DP Wedge	10:1	0.5-30"	3%	0.5%	12	H	H
Fluidic Oscillatory	15:1	1-3"	1.5%	0.2%	10	L	H
Magnetic Flowmeter	10:1	>0.1"	0.5%	0.2%	5	L	M
Paddlewheel	3:1	0.1-1.5"	2.5%	1%	0	H	L
Positive Displacement	20:1	0.5-6"	1%	0.3%	0	H	M
Rotameter	5:1	0.2-3"	4-8%	2%	0	M	L
Thermal Dispersion	100:1	0.2-72"	0.5%	0.2%	10	L	H
Turbine Flowmeter	10:1 50:1	>0.25"	0.5%	0.1%	10-20	H	H
V-Notch	300:1	--	2-5%	2%	4H	0	L
Vortex Flowmeter	H	>1"	1%	0.2%	20-30	M	L
Wier	300:1	--	2-5%	2%	4H	0	L