Cancoppas LIMITED

Flow Instrumentation

CATALOGUE



When you need quality process measurement, control and environmental instrumentation - Challenge us to find your solution

Cancoppas – Your solution provider



Challenge us to find your solution

Cancoppas – Giving you what you need, for the results you want.
Established in 1968 and incorporated in 1973, Cancoppas provides reliable and cost-effective process measurement and control instrumentation. With a highly capable technical staff we provide value added engineering, systems integration, total measurement, control and automation solutions. Whether you are in the industrial, commercial, research or government sectors, our products and integrated solutions will help you meet all your instrumentation and control needs.

Cancoppas – Committed to service and customer satisfaction
Cancoppas serves you from our centrally located 11,000 square foot facilities. We have what you need when you need it. Our fully integrated business system ensures that your order is delivered quickly and accurately and to your timetable. In addition, our knowledgeable sales force can recommend the product or service that perfectly fits your specific requirement. For maintenance and repair, our service department is equipped with a full range of calibration and test equipment to provide you with prompt, accurate and reliable in house or field service for our products and others.

Cancoppas – More than just an equipment supplier
For customers requiring more than standard off-the-shelf product selection, Cancoppas provides complete systems integration, engineering and commissioning combining consultative and broad based customer support. When you have a unique requirement, we will provide equipment customization to your exact specifications. Our services include control panel design, fabrication and assembly, along with mechanical fabrication and controls integration.

Cancoppas – Working to the highest standards
At Cancoppas, we ensure that the highest quality assurance standards are met or exceeded. We operate under best commercial practice and are closely affiliated with ISO9000 registered suppliers.

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Flow Instrumentation - Selection Guide

CATEGORY		CLEAN LIQUID	DIRTY LIQUID	SLURRY	VISCOUS LIQUID	CORROSIVE LIQUID	CLEAN GAS	DIRTY GAS	STEAM
Differential pressure	CONCENTRIC ORIFICE PLATE (SQUARE EDGED)	✓	☎	✗	✗	☎	✓	☎	✓
Differential pressure	VENTURI TUBE	✓	✓	☎	✗	☎	✓	✓	✓
Differential pressure	FLOW NOZZLE	✓	☎	✗	✗	☎	✓	☎	✓
Differential pressure	PILOT TUBE	✓	✗	✗	✗	☎	✓	✗	✓
Positive displacement	OSCILLATING VANE	✓	☎	✗	☎	✓	✗	✗	✗
Positive displacement	OVAL GEAR & GEAR	✓	✗	✗	✓	☎	✗	✗	✗
Positive displacement	OSCILLATING PISTON	✓	✗	✗	✓	☎	✗	✗	✗
Positive displacement	HELICAL ROTOR	✓	✗	✗	✓	☎	✗	✗	✗
Volumetric	TARGET	✓	✓	✓	✓	☎	✓	✓	☎
Volumetric	VARIABLE AREA	✓	☎	✗	☎	☎	✓	☎	☎
Volumetric	MAGNETIC	✓	✓	✓	✓	✓	✗	✗	✗
Volumetric	VORTEX	✓	☎	✗	✗	☎	✓	☎	✓
Volumetric	TURBINE	✓	☎	✗	☎	☎	✓	☎	☎
Velocity	DOPPLER	✗	✓	✓	☎	✓	✗	✗	✗
Velocity	TRANSIT TIME	✓	✗	✗	☎	✓	✓	✗	☎
Mass	CORIOLIS TYPE	✓	✓	✓	✓	☎	☎	☎	✗
Mass	THERMAL DISPERSION	☎	☎	☎	✗	☎	✓	☎	✗
Velocity Area	COMBINATION OF LEVEL & VELOCITY MEASUREMENT	✓	✓	✓	☎	☎	✗	✗	✗

✓ = GOOD ☎ = CALL US ✗ = Not Recommended

Flow Instrumentation - Selection Guide

FULL BORE SIZE AVAILABILITY	TYPE OF MEASUREMENT	ACCURACY	TYPICAL RANGEABILITY	REYNOLDS NUMBER OR OTHER LIMITA-TIONS	SENSITIVITY TO INSTALLATION EFFECTS	STRAIGHT PIPING REQUIREMENTS	TYPICAL ANCILLARY EQUIPMENT
>1 in. >25 mm	Square Root Volumetric	0.5% to 3%	3:1 to 5:1	>10,000	High	10D to 40D-Up 2D to 6D Down	Drain, Vent, Blow-off And Shut-down Valves
>2 in. >50 mm	Square Root Volumetric	0.5% to 1.5%	3:1 to 5:1	>100,000	Low	Upstream Runs Shorter than Orifice by Factor of 2-9 Times	Same as Orifice, Air Purge and Vent Cleaners on Dirty Liquids
>2 in. >50 mm	Square Root Volumetric	1% to 2%	3:1 to 5:1	>75,000	Mod	Same as for Orifice Plate	Same as Orifice Plate
>1/2 in.	Square Root Volumetric	1% to 2%	3,5 to 1		High	10D to 40D-Up 2D to 6D Down	Same as Orifice Plate
1,2,3 in. 25,50,75 mm	Linear Volumetric	0.5%	10:1	Flow Range Fixed for a Given size	Mod to High	10 to 30D-Up 5D-Down	
1,2,3 and 4 inch	Linear Volumetric	0,5 to 2%	10:1 ro 1000:1		Low to Moderate	None	Filter for suspended solids Air eleminators
1/2 to 2 inch	Linear Volumetric	1%	10:1 to 50:1		Low to Moderate	None	Filter for suspended solids Air eleminators
1 1/2 to 10 inch	Linear Volumetric	0.5%	100:01:00		None	None	Filter for suspended solids Air eleminators
>1/2 in. >15 mm	Square Root Volumetric	0.5% to 5%	3:1 to 20:1	>1,000	High	Same as for Orifice Plate	
<3 in. <75 mm	Linear Volumetric	0.5% to 5%	10:1	Fluids Under 3 Cp	None	None	
>1/16 in. >1 mm	Linear Volumetric	0.2% to 2%	30:1 to 100:1	None	Low	5 To 10D-Up 3D-Down	Block Valves May Be Required to Isolate Meter for Servicing
1/2 to 12 in. 15 to 300 mm	Linear Volumetric	0.5% to 1.5%	10:1 to 20:1	>20,000	High	Same as for Orifice Plate With 0.70 Beta	Block Valves May Be Required to Isolate Meter for Servicing
>1.4 in. >6 mm	Linear Volumetric	0.1% to 1%	10:1 to 50:1	Fluids Under 10 CST	High	Similar To Orifice Plate	Strainers, Filters, Air Eliminators, Steam Traps May Be Required
>1/2 in. >15 mm	Linear Mass Volumetric	1% to 5%	>10:1	Fluids Must Have Suspensoids	High	Similar To Orifice Plate	
>1/2 in. >15 mm	Linear Mass Volumetric	1% to 5%	>10:1	Fluid Must Be Clean	High	Similar To Orifice Plate	
<6 in. <150 mm	Linear Mass Volumetric	0.15% to 2%	40:1 to 100:1	None	None	None	Special Supports May Be Required for Meter
<3 in. <75 mm	Logrithmic Mass	1% to 5%	Up to 100:1	None	Mod to High	10 to 20D-Up	
open channel measurement	Volumetric	3 to 10%			High	Flume type dependant Requires some straight length run of pipe or open channel	Often requires data acquisition system

Flow Instrumentation

CATEGORY		OTHER CONSIDERATIONS	PREFERRED METER ORIENTATION	INITIAL COST	INSTALLATION COST	MAINTENANCE COST	OPERATING COST
Differential pressure	CONCENTRIC ORIFICE PLATE (SQUARE EDGED)	Pressure and/or Temperature Compensation May Be Required	Pressure Tap Orientation Depends on Pipe Orientation And Fluid Being Metered	L To H	M To H	M To H	M To H
Differential pressure	VENTURI TUBE	Same as Orifice Plate	Same as Orifice Plate	M To H	M	L	L
Differential pressure	FLOW NOZZLE	Same as Orifice Plate	Same as Orifice Plate	M To H	M	L	M
Differential pressure	PILOT TUBE	Same as Orifice Plate	Same as Orifice Plate	L	L	L	L To M
Positive displacement	OSCILLATING VANE		Flow Should Be Upward In Vertical Installations	L	L	L To M	M
Positive displacement	OVAL GEAR & GEAR	suspended solids, pressure shocks		M To H	M	M To H	M
Positive displacement	OSCILLATING PIS-TON	suspended solids, pressure shocks		M To H	M	M To H	M
Positive displacement	HELICAL ROTOR	suspended solids, pressure drop		M to H	M	M to H	M
Volumetric	TARGET	Viscosity Affects Performance Below Critical Rd.	Zero May Need Adjustment In Vertical Installations	L To M	L	M To H	M
Volumetric	VARIABLE AREA		Can Only Be Installed In Vertical Pipe With Flow Up	L To M	L	L	M
Volumetric	MAGNETIC	AC Designs May Give Better Performanace On Some Slurries	Electrodes Must Be In Horizontal Plane. Flow Should Be Upward In Vertical Installation	M To H	L To M	L To M	L
Volumetric	VORTEX	Indicates Zero Flow Below Cut-off		M To H	L To M	L To M	M
Volumetric	TURBINE	Viscosity Can Affect Performance	Some Designs Must Be Oriented As Calibrated	L To H	M To H	M To H	M
Velocity	DOPPLER	May Have Problems On Concentrated Slurries	Transducers Must Be In Horizontal Plane	L To H	L To H	L	L
Velocity	TRANSIT TIME	May Have Problems On Dirty Fluids	Transducers Must Be In Horizontal Plane	L To H	L To H	L	L
Mass	CORIOLIS TYPE	Entrained Air May Cause Problems	Specific Orientations Vary With Meter Designs	H	L To M	L	L To H
Mass	THERMAL DISPERSION	May Need To Provide Compensation For Wide Temperature Ranges	Some Types Require Same Orientation As In Calibration	L To M	L To M	L	L To M
Velocity Area	COMBINATION OF LEVEL & VELOCITY MEASUREMENT	Level to flow rate conver-sions must match the flume type and size	Specific orientations vary with flume types	M To H	M To H	M	M

L = Low M = Moderate H = High

PERFORMANCE STABILITY	STANDARDS OR RECOMMENDED PRACTICES	ADVANTAGES	DISADVANTAGES
Performance Affected By Edge And Tap Wear	AGA3, ANSI/API 2530 ANSI/ASME MFC 3M. ISO 5167 ASME Fluid Meters	Simple construction, relatively inexpensive, no moving parts, low maintenance, transmitting instruments usually external, wide application of flowing fluid, extensive product experience and performance data base, readily available standards and codes of practise	Flow rate is a non linear function of the differential pressure Low flow rate rangeability due to low generated differential pressure , Accuracy and operation may be affected by grease deposits,coatings, particulates plugging the pressure ports Accuracy may be affected by wear and tear, nicks and scratches in the primary element
Good	AGA3, ANSI/API 2530 ASNI/ASME MFC 3M. ISO 5167 ASME Fluid Meters		
Good	AGA3, ANSI/API 2530 ASNI/ASME MFC 3M. ISO 5167 ASME Fluid Meters		
Good			
Sensor Assembly Requires Periodic replacement		Can measure liquids with varying and high viscosities without appreciable shift in accuracy	Moving parts can create substantial maintenance costs, accuracies degrade with lower viscosity fluids
Good on medium to high viscosity liquids, poorer on lower viscosity liquids			
Good on medium to high viscosity liquids			
Good on medium to high viscosity liquids			
Performance Affected By Wear Of Target		Ease of installation and service Simple construction, high reliability No pressure ports to plug Can be used on most fluids, clean or dirty	Accuracy can be affected by wear of of the target
Good		Simple design, one moving part, requires no power, relatively low cost	Must be installed in most cases vertically with flow going in upwards direction
Good	ISO 6817	Obstructionless design, high accuracy linear output, corrosian resistant wetted parts	Only works in electrically conductive fluids Requires special noise suppresion circuitry for fluids with very high solids content
Good	ANSI/ASME MFC 6M	Ideal on high temperature service such as steams service	May be susceptible to pipe vibration
Performance Affected By Wear Of Bearings And Other Parameters	AGA 7, API 2534, ISO 2715 ASME Fluid Meters, API Manual For Petroleum Measurement Standards	High accuracy, corrosion resistant materials, liquid, gas and cryogenic service, wide temperature & pressure limits	Moving part with a spinning rotor susceptible to suspended solids that can damage the rotor and plug bearings
Good		Easy installation with sensor mounting on outside of pipe	Complete reliance on a minimum level of suspended solids or air bubbles. Affected by internal coating of pipe and porous pipe materials
Good	ANSIASME MFC-YY	Obstructionless design, Will work with both conductive and non conductive fluids	May be affected by temperature variations
Good	ANSI/ASME MFC 11M, California Weights And Standards Bureau	Fluid independent, does not require specific gas calibration factors, Excellent linearity & accuracy, no moving parts, minimum maintenance	Most expensive flowmeter available, Can be susceptible to pipe vibration Low density fluids can be diffiucult to measure
Performance Can Be Affected By Severe Build-up On Sensor For Immersion Types		Relatively independent of pressure and temperature fluctuations, Relatively low cost	Very sensitive to proper installation procedures, Meter requires new calibration when changing the process gas, susceptible to moisture content in the gas, slow response time
Performance and accuracy can be affected by build up solids		Can obtain relativly good accuracy in difficult to measure applications when using two methods of measurement, velocity and level	Very dependant on proper installation conditions and dimensions, sensitive to turbulence & waves

Flow Instrumentation

VARIABLE AREA FLOW METER

Low flow
Liquids, gases
Glass tube

FEATURES

- Available in 65 and 150 mm tube lengths
- Interchangeability of flow tubes and floats
- Built-in control valves for fine and accurate flow control

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.07 ml/min
To 0 - 2,027 ml/min water

Gas flow rates: From 0 - 0.013 scfh air To 0 - 131 scfh air @ 14.7 psia, 72^{O}. F

Sizes & connections:
1/8 " NPT

Temperature: +121^{O}C max.

Pressure: 200 psig max.

Accuracy: Standard ± 2%, special ± 1% FS

Repeatability: ± 0.25%

Wetted parts:

Tube: Borosilicate Glass

End fitting: Aluminum, Brass, 316SS or Teflon

O Ring: Buna-N, Viton or PTFE/Kalrez



SERIES P

VARIABLE AREA FLOW METER

Low & medium flow
Liquids, gases
All Teflon

FEATURES

- Available in 75 and 125 mm tube lengths
- Built-in control valves available in Teflon
- Constructed completely in chemical inert wetted components
- Safety shield for the protection of personnel
- Individually tested for leaks on a mass spectrometer leak detector

SPECIFICATIONS

Liquid flow rates:
From 0 - 75 ml/min To 0 - 45 l/min water

Sizes & connections:
¼, 3/8, ½, and ¾ " NPT

Temperature: +121^{O}C max.

Pressure: 100 psig max.

Accuracy: ±5% FS

Wetted parts:

Tube: Teflon PFA

Floats: Teflon PTFE

End fitting: Teflon PTFE

Guide rods: PCTFE



SERIES L

VARIABLE AREA FLOW METER

Medium flow
Liquids, gases
Glass tube

FEATURES

- Rigid compact construction
- Built-in control valves
- Dual rotatable direct reading scales for air and water
- Vertical in line or panel mounted meters

SPECIFICATIONS

Liquid flow rates:
From 0 - 4 l/min to 0 - 20 l/min water

Gas flow rates:
0 - 5 scfm to 0 - 30 scfm air @ 14.7 psia, 72^{O}. F

Sizes & connections:
3/8" NPT

Temperature: +121^{O}C max.

Pressure: 150 psig max.

Accuracy: ± 5% FS

Wetted parts:

Tube: Borosilicate Glass

Floats: 316SS

End Fitting: Brass or 316SS

O Rings: Viton



SERIES V

Flow Instrumentation

VARIABLE AREA FLOW METER

Medium & high flow
Liquids, gases
Glass tube,

FEATURES

- Small compact design
- Low weight
- Direct reading scales for water & air
- Available with single and dual alarms

SPECIFICATIONS

Liquid flow rates:
From 0 - 1.3 l/min
To 0 - 151 l/min water

Gas flow rates:
From 0 - 2 scfm To 0 - 150 scfm air @ 14.7 psia & 72^{O} C

Sizes & connections:
¼, ½, ¾, 1 and 1¼" NPT

Temperature:
+70^{O}C and +115^{O}C depending on materials

Pressure: 145 psig max.

Accuracy: ±4% FS

Wetted parts:
Tube: Borosilicate Glass
End Fitting: Brass or SS
Float: Polypropylene, Brass, SS or PVDF
O Ring: Buna-N or Viton



SERIES SV

VARIABLE AREA FLOW METER

Low, medium & high flow
Liquids, gases
All PVC

FEATURES

- Shock and corrosion proof design
- Direct reading scales for water and air
- Available with single or dual alarms

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.2 l/min
To 132 - 1000 l/min water

Gas flow rates:
From 0 - 02 SCFM
To 60 - 500 SCFM air @ 14.7 psia & 72^{O} F

Sizes & connections:
3/8, ½, 1, 1½, 2 and 2½ " NPT and socket glued

Temperature: +60^{O}C max.

Pressure: 145 psig

Accuracy: ±4% FS

Wetted parts:
Tube: Trogamid or Polysulfone
End fitting: PVC
Float & float stops: PVDF
O Ring: EPDM



SERIES KSK & KSM

VARIABLE AREA FLOW METER

Low, medium & high flow
Liquids, gases
All metal

FEATURES

- All metal construction
- Small compact design, low weight
- High pressure rating
- Single & dual alarms available
- Can be installed in any position

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.56 l/min
To 15 - 151 l/min water

Gas flow rates:
From 0 - 1 scfm to 10 - 250 scfm air @ 14.7 psia & 72^{O} F

Sizes & connections:
¼, ½, ¾ and 1¼" NPT

Temperature: +115^{O}C depending on float material

Pressure: 3600 psig for Brass meters, 5000 psig for SS meters

Accuracy: ±4% FS

Wetted parts:
Body: Ni.plated Brass or SS
Float: Ni plated Brass, anodized Aluminum, Polypropylene or SS
Seals: Buna N or Viton



SERIES SM

Flow Instrumentation

VARIABLE AREA FLOW METER

Low, medium & high flow
All metal, liquids, gases

FEATURES

- All metal construction
- Analog output option available
- High pressure rating
- Single & dual alarms available

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.41 l/min
To 166 - 1665 l/min water

Gas flow rates:
From 0 - .41 scfm to 29 - 290 scfm air @ 14.7 psia & 72^{O} F

Sizes & connections:
½,1, 2, 3, and 4" flanged 150 and 300 lb. RF

Temperature:
+200^{O}C depending on options

Pressure: As per flange rating

Accuracy: ±1.6% to 2.5% FS

Wetted parts:

Body and float:
316-Ti SS, optional PTFE clad or Hastelloy C4

Seals: Buna N or Viton

Options: 4 - 20 mA output, flow switches



SERIES KDM

DIFFERENTIAL PRESSURE FLOW INDICATOR

Medium flow
Liquids & gases

FEATURES

- All metal construction
- Analog or digital indication of flow
- Optional alarms and analog output signals
- Custom calibrations for density and viscosity

SPECIFICATIONS

Liquid flow Rates:
From 0 - 26.5 l/min
To 378 - 2271 l/min water

Gas flow rate:
3 - 25 scfm
To 300 - 1700 scfm air

Sizes & connections:
½, ¾, 1, 1½, 2, 3" NPT

Temperature: +100^{O}C max.

Pressure: 580 psig max.

Accuracy: ±3% FS

Repeatability: ±1% FS

Wetted parts:

Housing: Bronze or 316-TiSS

Seals: Buna N or Viton

Options: 4 - 20 mA output signal, flow switches



SERIES RCD

DIFFERENTIAL PRESSURE FLOW INDICATOR

Medium & high flow
Liquids, gases & steam

FEATURES

- All metal construction
- Analog or digital display
- Optional alarms and analog output signals
- Custom calibrations for density and viscosity

SPECIFICATIONS

Liquid flow rates:
From 0.3 - 2 gpm
To 400 - 3000 gpm

Gas flow rates:
From 1.5 - 10 scfm
To 3000 - 20,000 scfm Air

Sizes & connections:
¼, ½, ¾, 1, 1½, 2, 3, 4, 6 and 8", NPT up to 3", flanges available for all sizes

Temperature: -35 to +100^{O}C

Optional: 350^{O} C

Pressure: 180 psig standard,

Optional: 400 psig

Accuracy: ±3% FS

Wetted parts:

Body: Bronze, Monel or 316SS

Seals: Buna -N, Viton, EPDM or Teflon



SERIES RCM

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Flow Instrumentation

TARGET TYPE FLOW METER

Medium flow
Liquids & gases

FEATURES

- Patented target/leaf-spring design
- Wide variety of indication and output signals
- Immune to problems caused by fluids with a high solids content

SPECIFICATIONS

Liquid flow rate:
From 1.5 - 8 gpm
To 225 - 500 gpm

Gas flow rate:
From 6 - 30 scfm
To 260 - 1650 scfm air @14.7 psia & 70^{O} F

Sizes & Connections:
3/8, ½, ¾, 1, 1½, 2 and 3" NPT

Temperature: +80^{O}C

Pressure: 580 psig @ 70^{O}F

Accuracy: ±3% FS

Wetted parts:

Bronze version: Bronze, 316-ti, SS and Ceramic, Buna-N

Stainless version: 316-Ti SS, Viton and Ceramic



SERIES DPT

VARIABLE AREA FLOW METER

Low & medium flow
High viscosity liquids

FEATURES

- Available in a manifold system for multi point measurement
- For high & low viscosity liquids
- Viscosity compensated to 760 cstks

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.45 l/min
To 8 - 83 l/min Oil

Sizes & connections:
¼, ½, ¾, and 1" NPT

Temperature: +115^{O}C max.

Pressure: 175 psig max.

Accuracy: ±5% FS

Repeatability: ±1% FS

Wetted parts:

Tube: Borosilicate Glass

End Fitting: Brass or SS

Float: Nickel plated Brass or 304SS

Other internal parts: 301SS

Seals: Buna N or Viton

Options: flow switches



SERIES VK

VARIABLE AREA FLOW METER

Low & medium flow
High viscosity liquids

FEATURES

- Ideal in high pressure service
- For high viscosity liquids
- Viscosity compensated to 760 cstks

SPECIFICATIONS

Liquid flow rates:
From .002 - .018 gpm
To 2 - 20 gpm

Sizes & connections:
¼, ½, ¾ and 1" NPT

Temperature: +115^{O}C

Pressure: 3600 psig on Brass meters, 5000 psig on SS meters

Accuracy: ±5% FS

Wetted parts:

Body & connection fitting: Nickel plated Brass or 304SS

Float: Brass float or 304SS

Orifice & spring:301SS

Seals: Buna-N for Brass meters, Viton for SS meters



SERIES VKM

Flow Instrumentation

GEAR TYPE FLOW METER

Low & medium flow
High viscosity liquids

FEATURES

- Handles viscosity to 50,000 cps
- Immune to changes in viscosity
- Wide variety of electronic output signals and indication
- Very high precision
- Can detect flow direction

SPECIFICATIONS

Liquid flow rates:
From 0 - 2 l/min liquid
Sizes and connections:
1/8, 3/8, ½ and ¾" NPT or flanges
Pressure: 1500 psig
Viscosity: 50,000 cps
Accuracy: 0.5 % of reading
Repeatability: 0.05% of reading
Wetted parts:
Body: Aluminum
Gears: Stainless Steel
Seals: Viton standard
Bearings: 440C



SERIES 220

OVAL GEAR FLOW METER

Low & medium flow
High viscosity liquids

FEATURES

- Handles viscosity to 1,000,000 cps
- Immune to changes in viscosity
- Low head loss oval gear design

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.8 l/min
To 15 - 348 l/min liquid
Sizes & connections:
1/8, ¼, ½, 1, 1½" NPT and 2" flange
Temperature: ±80°C or +120°C depending on gears
Pressure: 150 psig, 500 psig, 800 psig depending on version, high pressure versions available
Viscosity: 1000 cps standard, 1,000,000 cps with high viscosity gears
Accuracy: ±1% FS , 0.5% on some versions
Wetted parts:
Body: Ryton, Aluminum or SS
Gears: Ryton, or 316SS
Shafts: 316SS or Hast. C
O Ring: Buna N, or Viton,



SERIES OMP

OVAL GEAR FLOW METER

Low flow
Medium viscosity liquids

FEATURES

- Handles viscosity to 800 cstks
- Immune to changes in viscosity
- Economically priced

SPECIFICATIONS

Liquid flow rates:
From 0 - 8 l/min
To 0 - 40 l/min
Sizes & connections:
¼, ½, ¾ inch NPT
Temperature: 0 to +80°C
Pressure: 145 psig, 230 psig, and 580 psig
Accuracy: ±2.5% FS
Viscosity: 10 - 800 cstks
Wetted parts:
Body in Delrin with Delrin or Plexiglas cover or body in Aluminum with Plexiglas, Polysulfone or Aluminum cover.
Oval gears: Delrin
Seals: O-ring in Buna-N or Viton



SERIES OVZ

Flow Instrumentation

PISTON FLOW METER

Low & medium flow
High viscosity liquids

FEATURES

- Handles viscosity up to 30,000 cps
- Immune to changes in viscosity
- Very high precision
- Simple one moving part oscillating piston design

SPECIFICATIONS

Liquid flow rates:
From 0 - 100 LPH
To 2 - 98 l/min liquid

Sizes & connections:
1/8, 3/8, ½, ¾" NPT,

Pressure: 1000 psig standard version, 3000 psig optional

Accuracy: ±0.5% reading

Wetted parts:

Body: 303SS

Bearings: 440C

Seals: Viton standard, Teflon, Neoprene, Nordel, Buna-N optional



SERIES 210

OSCILLATING PISTON FLOW METER

Low & medium flow
High viscosity liquids

FEATURES

- Measures low & high viscosity liquids to 1,000,000 cps
- Immune to changes in viscosity
- Simple one moving part oscillating piston design

SPECIFICATIONS

Liquid flow rates:
From 10 - 500 LPH
To 11 - 330 l/min liquid

Sizes & connections:
½, 1,1½ and 2" NPT, flanged or tri-clamp

Temperature: +150°C max depending on version

Pressure: 440 psig for Aluminum version, 1500 psig for SS version and 5150 psig on high pressure version

Viscosity: 1,000,000 cps

Accuracy: ±1% of rate

Wetted parts:

Body: Aluminum or 316L SS

Piston & bearing: PEEK standard or Carbon filled Teflon partition mat. Ceramic or 316L

O Ring: Viton, EPDM, Teflon encapsulated Viton or Buna N



SERIES MP

HELICAL ROTOR FLOW METER

Medium and high flow
High viscosity liquids

FEATURES

- Measures high viscosity liquids to 100,000 cps
- Immune to changes in viscosity
- Simple one moving part helical rotor

SPECIFICATIONS

Liquid flow rates:
From 1 - 189 l/min
To 50 - 8000 l/min

Sizes & connections:
1½, 2½, 3, 4, 6 and 10"
Available up to 3" in NPT connections, flanged connections for 2½ to 10" size.

Pressure: 500 psig on standard models, 1500 psig with customer supplied ANSI flanges.

Accuracy: 0.5% of reading over entire flow range

Viscosity: 0.2 to 100,000 cps

Wetted parts:

Body: 303SS or Carbon Steel

Rotors: 303SS, anodized Aluminum or Carbon Steel

Bearings: Stainless Steel, type 440C

Seals: Viton O ring standard, Teflon, Neoprene, Nordel, Buna N optional



SERIES 240

Flow Instrumentation

PADDLE WHEEL FLOW METERS

Low flow
Liquids, in line

FEATURES

- Compact design
- Measures very low flow rates of clean water like liquids
- Wide choice of output signals and indications

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.7 l/min
To 0.05 - 5 l/min water (liquids must be transparent)

Sizes & connections:
¼" NPT

Temperature: +80°C max.

Pressure: 230 psig

Accuracy: 1.5% FS

Wetted parts:

Body: Brass or 316SS

Nozzle: 316SS

Axle bearing: Sapphire

Pelton wheel: Polypropylene

Receiver: Polysulfone

O Ring: Buna N or Viton

Outputs: frequency, 4 - 20 mA, pulse, analog and digital indications



SERIES DPM

PADDLE WHEEL FLOW METERS

Low & medium flow
Liquids, in line,

FEATURES

- Compact size
- Seven material combinations
- Wide choice of output signals and indications

SPECIFICATIONS

Liquid flow rates:
From 0 - 0.8 l/min
To 12- 140 l/min water

Sizes & connections:
1/8, ¼, ½, ¾, and 1" NPT

Temperature: +100°C max. depending on version

Pressure: 1230 and 580 psig depending on version

Accuracy: ±3% FS

Repeatability: ±1% FS

Wetted parts:

Body: Brass, 316 SS, Delrin, PVDF and different combinations

Paddle: Teflon

Axle & axle support: Ceramic and Teflon

Outputs: frequency, pulse, 4 -20 mA, analog and digital indicators



SERIES DRG/DRH

PADDLE WHEEL FLOW METERS

Medium flow
Liquids, in line

FEATURES

- Compact design
- Wide choice of output signals and indications
- Measures very low flow rates of clean water like liquids

SPECIFICATIONS

Liquid flow rates:
From 0 - 30 l/min
To 57 - 750 l/min water

Sizes & connections:
½, ¾, 1, 1 ½, 2 and 3 inch NPT

Temperature: +80°C max.

Pressure: 250 psig or 580 psig depending on version

Accuracy: 3% FS

Wetted parts:

Body: Brass or 316SS

Impeller: PVDF

Axle: 316SS

Bearings: Sapphire

O Rings: Buna N or Viton

Outputs: frequency, pulse, 4 -20 mA, analog and digital indicators



SERIES DRB/DPE

Flow Instrumentation

PADDLE WHEEL FLOW METERS

High flow
Liquids, insertion type,

FEATURES

- Insertion style allows installation in-line sizes 1½ to 100" with one meter
- Low installed cost especially for large line sizes
- Dual independent pulse outputs
- Suitable for hot tap installation

SPECIFICATIONS

Liquid flow rates:
Velocity range 0.7 - 33 ft/s

Sizes & connections:

Insertion connection: 1½ or 2" NPT good for line sizes from 1½ to 100"

Temperature: +100°C max, options to +240°C

Pressure: 1200 psig
Linearity: 1.5%,

Repeatability: 1%

Wetted parts:

Body 316LSS, rotor: PEEK,

O Ring: Viton

Outputs: frequency, pulse, 4 -20 mA, analog and digital indicators



SERIES DP

TURBINE FLOWMETERS

Medium flow, liquids

FEATURES

- Compact and lightweight construction
- Highly accurate
- Long term stability
- Low pressure drop
- Wide variety of output signals and indications

SPECIFICATIONS

Liquid flow rates:
0 - 11 l/min water

Sizes & connections:
½" - 10", NPT, flanged and grooved end connections

Temperature: -50 to +177°C max. or +232°C with special high temperature pick-ups

Pressure: 4000 psig max.

Accuracy: ±0.5% of reading

Repeatability: ±0.1% reading

Wetted parts:

Body: 303 SS

Rotor: 416 SS

Rotor shaft: 303 SS

Ball bearings: 440 SS
Rotor support (flow straightener) 303 SS



SERIES W

NUTATING DISC WATER COUNTERS

Medium flow, liquids

FEATURES

- Compact & rugged design
- Integral mechanical counter
- Requires no external power source
- Ideal for in plant metering and metering of tenant water usage

SPECIFICATIONS

Liquid flow rates:
0 - 75 l/min water

Sizes & connections:
1" NPT

Temperature: +93°C max.

Pressure: 2000 psig max.

Accuracy: 2% of reading

Wetted parts:

Body: Bronze nutating disc mechanism includes a Fiberglass filled Ryton® measuring chamber wobble plate assembly (composed of Graphite impregnated Neoprene

Indication: 7 digit display counter with test pointer



SERIES X

Flow Instrumentation

MAGNETIC FLOW METER

Medium & high flow
Conductive liquids

FEATURES

- Patented functional magnetic field that permits flow measurement in installations that do not have the usually required straight length runs of pipe diameters
- Special noise suppression circuitry and divided multy sampling system to cancel out noise created by slurries,

SPECIFICATIONS

Liquid flow rate:
From 0.1 - 0.3 m/sec
To 1.0 - 10 m/sec

Sizes & connections:
1½ to 8" wafer style
¾ to 24" flanged, 150 lbs or 300 lbs

Pressure:
Wafer style, 290 psig
Flanged, limited to flange rating

Accuracy: from 0.1% FS to 0.5% FS

Wetted parts:

Body: 316SS on wafer models to 4", Carbon Steel to 8"

Lining: Ceramic standard to 4 inch, Teflon standard to 8"

Electrodes: 316L standard, 316L, Ti, Ta, Hast. C, Pt-Ir available



SERIES LF 400

CORIOLIS MASS FLOW METER

Low, medium & high flow
Liquids, gases, steam

FEATURES

- Uses unique patented torsion rod swinger and Omega tube design
- Torsion rod swinger & Omega design allows for increased tube wall thickness
- Increased tube wall thickness allows for higher pressure rating and renders it insensitive to vibrations
- Big oscillation amplitudes assure highly accurate and reliable measurement

SPECIFICATIONS

Flow rate:
From 0.002 - 0.3 kg/min
To 500 - 25,000 kg/min

Sizes & connections:
¼ to 12", threaded up to 1½", flanged available for all sizes. Also available with sanitary, graylock, swagelok, novasuiss

Pressure: 4,350 psig@ 248^{O}F (up to 25,000 psig on request)

Temperature: -20 to +120^{O}C, High temp. model, 0 to +350^{O}C

Wetted parts: 316Ti SS standard, Hastelloy C22 and Tantalum available on request



SERIES RHM

VORTEX SHEDDING FLOW METER

Medium & high flow
Liquids, gases, steam

FEATURES

- Rugged field tested design
- In-line and insertion configurations for large line sizes
- Can measure liquids, gases as well as steam
- No moving parts makes for easy maintenance
- Non obstructive strut for low pressure drop with unmatched accuracy

SPECIFICATIONS

Liquid flow rate:
From 2.4 - 49 gpm
To 22 - 440 gpm

Insertion models: 20 ft/s velocity

Steam flow rate:
From 2 - 57 LB/Hr
To 688 - 16,500 LB/Hr

Insertion model: 284,000 LB/Hr in a 12" pipe

Pressure: 250 psig

Temperature: +204^{O}C

Accuracy: ±0.8 % of reading +0.1 % FS

Wetted parts: Stainless steel with Ceramic transducers



SERIES

Flow Instrumentation

ORIFICE PLATES

Liquids, steam, gases

FEATURES

- Simple construction
- Relatively inexpensive
- No moving parts
- Transmitting instruments usually external
- Low maintenance
- Wide application of flowing fluid
- Available in a wide variety of materials

SPECIFICATIONS

Gas, liquids & steam flow rate: Usually unlimited within reasons but must be calculated according to allowable and measurable differential pressure

Sizes & connections: ½ to 24 inches. Made to fit in between orifice flanges

Temperature: limited to the temperature rating of the associated differential pressure transmitter

Pressure: limited to pressure rating of the orifice flange. Flanges are typically available up to 1500 # flanges

Accuracy: usually between ½ and 3% depending on variables

Wetted parts:

Plate: typically 316SS but available in many other metals



SERIES OP

PITOT TUBES

Clean liquids, steam, gases

FEATURES

- Simple construction
- Relatively inexpensive
- No moving parts
- Available as an insertion meter substantially reducing installation costs on large line sizes
- Transmitting instruments usually external
- Low maintenance
- Wide applications of flowing fluid

SPECIFICATIONS

Gas, liquids & steam flow rate: Usually unlimited within reasons but must be calculated according to allowable and measurable differential pressure

Sizes & connections: in line models available up to 6" Insertion models are used for larger line sizes (unlimited)

Temperature: limited to the temperature rating of the associated differential pressure transmitter

Pressure: limited to pressure rating of the connection type

Accuracy: usually between ½ and 3% depending on variables

Wetted parts:

Typically 316SS but available in many other metals



SERIES PT

VENTURI TUBES

Liquids, steam, gases

FEATURES

- Simple construction
- Low pressure drop compared to orifice plates
- Can be used with dirty fluids
- No moving parts
- Transmitting instruments usually external
- Low maintenance
- Wide application of flowing fluid

SPECIFICATIONS

Gas, liquids & steam flow rate:

Must be calculated

Sizes & connections: ½" and up. For large sizes, consult factory. Available in flanged, socket weld and NPT connections

Temperature: Limited to the temperature rating of the associated differential pressure transmitter

Pressure: Limited to pressure rating of flanges. Flanges are typically available up to 1500 # flanges

Accuracy: Usually between ½ and 2% depending on variables

Wetted parts:

Typically 316SS and carbon steel but available in many other metals



SERIES VT

Flow Instrumentation

ULTRASONIC DOPPLER FLOW METER

Liquids with solids or air bubbles

FEATURES

- Portable and stationary versions
- Utilizes dual frequency doppler (DFD) to minimize the effects of site noise
- Non-invasive sensor mounts on the outside of the pipe
- Works on any line size
- Works with fluids that have suspended solids or air bubbles such as slurries, primary and digested sludge, thickened sludge, waste & return activated sludge
- Integral data logger

SPECIFICATIONS

Velocity range:
0.2 - 32 ft/s

Mounting: Qty 2 Sensor transducer heads mount externally on any line size

Accuracy: 1% of velocity FS

Temperature:
Sensor Transducer:
-40 to +121^{O}C

Transmitter:
-29 to +60^{O}C

With integral heater
-40 to +60^{O}C



SERIES SX

ULTRASONIC DOPPLER FLOW TRANSMITTER & SWITCH

Liquids with solids or air bubbles

FEATURES

- Non-invasive sensor & integral transmitter assembly mounts on the outside of the pipe
- Very economical flow transmitter where high accuracy is not required
- Works on any line size
- Works on most metal and plastic pipes
- Works with fluids that have suspended solids or air bubbles such as slurries, primary and digested sludge, thickened sludge, waste & return activated sludge, mining slurries

SPECIFICATIONS

Velocity range:
1.0 - 11 ft/s and
1.6 - 20 ft/s

Mounting: Qty. 1 sensor transducer head mounts externally on any line size to 16 inches.

Temperature: -40 to +80^{O}C

Accuracy/repeatability:
±7.5% application dependent



SERIES 500

ULTRASONIC TRANSIT TIME FLOW METER

Clean liquids

FEATURES

- Portable and stationary versions
- Sensor mounting on the outside of the pipe.
- Works on any line size
- Works with clean fluids such as potable water, ultrapure liquids, deionized water, and petroleum products
- Integral data logger

SPECIFICATIONS

Velocity Range:
0.0 - 50 ft/s

Mounting: Qty 2 sensor transducer heads mount externally on any line size to 200 inches versions exist for line sizes to 550 inches

Temperature:
Sensor Transducer:
-40 to +150^{O}C

Transmitter:
-40 to +60^{O}C

Accuracy: 0.5% of velocity



SERIES DCT

Flow Instrumentation

ULTRASONIC TRANSIT TIME FLOW METER

High flow,
Large line sizes
Clean liquids

FEATURES

- Can measure pipe diameters as large as 550 inches and larger
- Sensor version available for buried pipes where the sensor mounts inside the pipe
- Can provide for a single or up to 8 ultrasonic paths for very large pipes and difficult hydraulic conditions
- Very high accuracy due to multiple ultrasonic paths
- Single meter can measure up to 4 different pipes

SPECIFICATIONS

Liquid velocity: 65 ft/s

Sizes & connections:

Pipe sizes up to 550" with standard meter.

Temperature: -30 to +70^{O}C

Pressure: 1100 psig max.

Accuracy: Up to 0.5% of reading (application dependent)

Wetted parts: Sensors made of Stainless Steel



SERIES RIS 2000

MODIFIED VENTURI FLOW TUBE METER

High flow
Open channel and sewer monitoring

FEATURES

- Utilizes a modified venturi flow tube design with strategically positioned pressure transducers to accurately and reliably measure flow in open channel, partially and filled sewage pipes
- Fully portable and easy to install
- Sampler pacing and rainfall logging
- Integral data logging

SPECIFICATIONS

Flow range:
From 0 - 760
To 0 - 4,130 gpm

Sizes & connections:
8 inch to 12 inches and larger with an inflatable ring assembly connection

Temperature:
Sensors: 0 to +50^{O}C

Electronics: -17 to +50^{O}C

Accuracy:
Between ± 3 and ± 5 %

Wetted parts:

Stainless Steel submersible sensors, Fiberglass reinforced Isophthalic Polyester Resin.



SERIES DG

OPEN CHANNEL FLOW MEASUREMENT

High flow
Open channel flow monitoring

FEATURES

- Utilizes time proven principle of ultrasonic level measurement in a flume
- Standard flow calculation for parshall flumes, venturi flumes, weirs, general flow formula, 32 point linearisation
- Easy to set up, simple installation

SPECIFICATIONS

Flow range: Varies with the level of the flume

Temperature: -30 to +90^{O}C.

Accuracy: 0.2% of measured distance + 0.05% of range

Wetted parts:

Sensor housing although not in contact with the process is made in Polypropylene, PVDF or PTFE

Outputs: Indication, 4-20 mA and alarms



SERIES S

Flow Instrumentation

OPEN CHANNEL FLOW METER

High flow
Open channel and sewer monitoring

FEATURES

- Flow measurement made by a combination of velocity and level measurement in an open channel or conduit
- Doppler ultrasonic bi-directional velocity technology measures in forward and reverse flow conditions
- Submerged depth sensor with vented cable for accurate level measurements
- Real-time communications programming, data retrieval and analysis software for Windows 98/2000/XP
- Optional real-time update via wireless Internet

SPECIFICATIONS

Liquid velocity range:
-5 to 20 ft/s

Level range: 0 - 11.5 ft

Temperature:
Sensors: 0 to +60^{O}C

Data Logger: -40 to +70^{O}C

Accuracy:
Application dependent



SERIES OC

OPTICAL SCINTILLATION FLOW METER

High flow
Stack emissions and combustion air

FEATURES

- True straight across the stack flow measurement
- Path averaged result, more representative than point sensors
- No moving parts, non intrusive, non contacting
- Measurement is independent of stack diameter, media, pressure, temperature, moisture and opacity levels

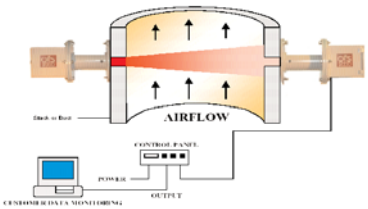
SPECIFICATIONS

Velocity range:
0,1 to 130 ft/s

Size: Stack & duct diameters 1 to 10 meters

Ambient temperature:
-40 to +60^{O}C

Accuracy: 0,1 meter/second or less than 5% of reading whichever is greater



SERIES OFS

THERMAL MASS FLOW METER

Small & medium flow
Gases

FEATURES

- Available in both flow meters & controllers
- Mass flow based measurement of gases
- Temperature & pressure change insensitivity
- Integral & tiltable digital indicator

SPECIFICATIONS

Gas flow rate:
From 0 - 10 sml/min.
To 0 - 1000 sml/min. N2

Sizes & connections:
¼, 3/8, ½, ¾ and 1" NPT or compression fittings

Temperature: +50^{O}C max.

Pressure:
500 psig max. 20 psig optimum

Accuracy: ± 1.5% FS

Repeatability: ± 0.5% FS

Wetted parts:

Body: Aluminum or 316SS

Internals: Aluminum version: Brass, 316SS version: 316SS

O Rings: Viton, optional: Buna N, Neoprene, Kalrez

Output: 0 - 5 Vdc or 4 - 20 mA, digital indication



SERIES GFM / GFC

Flow Instrumentation

THERMAL DISPERSION FLOW SWITCH & TRANSMITTER

Medium and high flow
Liquids and gases

FEATURES

- Simple to install, low cost
- No moving parts, maintenance free reliability
- Insensitive to dirt and most particles
- Temperature compensated

SPECIFICATIONS

Liquid flow rate:
0.04 - 2 m/sec water velocity, 0.1 - 4 m/sec oil velocity, 3.3 - 66 ft/s air vel.

Sizes & connections:
Insertion style with ¼, ½, ¾" NPT insertion connection, 1½" tri-clamp, and 2" flanged. Other connections available

Temperature: +80^{O}C max.

Pressure: 4408 psig max.

Wetted parts:
316 SS, Hastelloy, Teflon coating

Output: NPN/PNP, SPDT



SERIES CF

THERMAL DISPERSION FLOW INDICATOR, SWITCH & TRANSMITTER

Medium flows
Liquids

FEATURES

- No moving parts
- Simple to install, low cost
- Insensitive to dirt and most particles
- Digital indication of flow, analog output and switch set points
- Also available for pressure and temperature measurement

SPECIFICATIONS

Liquid velocity:

Water: 0.2 - 5 ft/s
Oil: 1.0 - 10 ft/s

Sizes & connections:
¼ and ½" NPT insertion connection

Temperature: -20 to +70^{O}C

Pressure: 3000 psig

Accuracy: ± 10%

Wetted parts: Stainless steel



SERIES F

THERMAL MASS FLOW METER

Medium & high flows
Gases

FEATURES

In line and insertion versions for very large line sizes and ducts

Mass flow based measurement of gases

High accuracy & repeatability

Turn down ratios as high as 100:1

SPECIFICATIONS

Gas Flow Rate:
From 0-6 scfm To 3,150 scfm air in a 4" lineInsertion versions can measure up to 30,000 FPM velocity on specials

Size:
In line models: 3/8, ½, ¾, 1, 1 ½, 2, 3, and 4 " NPT or flanged

Insertion Style: Up to 36 " pipes

Temperature:
Std: 93^{O}C (opt. 121 C)

Pressure:
500 psig (1000 psig optional)

Accuracy: ±1% reading plus 0.5% FS

Repeatability: 0.2% full scale

Wetted parts: 316L SS, Hastelloy optional



THERMAL MASS

FIELD MOUNT DIGITAL FLOW RATE INDICATORS

FEATURES

- Large double line display with clear measuring units & text
- Rugged aluminum or ABS field mounted enclosure
- Battery or AC powered
- Meter or wall mounted
- Wide variety of input signals to match most flow meter output signals
- Available in explosion proof and intrinsically safe versions
- Adjustable excitation to operate a wide range of flow meters
- Loop powered versions available
- Nema 4X / IP 67 sealed casing
- Available with totalizers, batch controllers, controllers

SERIES F

PANEL MOUNT DIGITAL FLOW RATE INDICATORS

FEATURES

- Bright 14 mm high electroluminescent red (green optional) LED digits
- Self-extinguishing black UL 94 VO ABS casing
- Standard panel mounting, optional Nema 4X separate enclosure
- Wide variety of voltage and current input signals to match most flow meter output signals
- Version with excitation voltages available to operate a wide variety of flow meters
- Loop powered versions available.

SERIES DGN

BAR GRAPH DIGITAL FLOW RATE INDICATORS

FEATURES

- Single or two channel process inputs
- Bright easy to view orange or green coloured bar graph display with digital indication underneath
- Transmitter loop power supplies available
- Extensive math function capability for min. / max. readings, sums, averages and rate of change
- Calculates root functions for flow rates
- Dual or quad alarms, analog retransmission, serial communications
- Wide variety of modules available for different process measurements

SERIES CRL 200

MULTI CHANNEL GRAPHIC DISPLAY / ALARM SYSTEM

FEATURES

- Up to 16 different input process measurement channels
- Large graphical display will indicate multiple bar graphs, trends, and engineering units on LCD display
- May be used as a paperless chart recorder
- 8 channels may be configured as 4 - 20 mA isolated outputs from input channels
- Calculates max., min. and average data over real time
- Equipped with a clock and calendar
- Portable, Nema 4X and panel mount enclosures
- Standard RS 232C and RS485 outputs for communication to host computer

SERIES ST-70

FLOW COMPUTERS

FEATURES

- Performs mass flow calculations with a product density table entered in the flow computer
- Pressure/temperature compensation calculations with temperature density tables entered in the flow computer
- 10 point linearisation curve
- Calculates total and flow rate as a differential between two flow meter inputs (A - B)
- Calculates total and flow rate as the sum of two flow meter inputs (A + B)
- Universal input signals for pulse, coil, Namur, analog current and analog voltage inputs
- Large alphanumeric or graphical display

SERIES F

UNIVERSAL PROGRAMMABLE CONVERTER

FEATURES

- Universal signal inputs from various voltages, currents, RTDs thermocouple types, potentiometers
- 20 point linearisation
- Square root extraction for differential pressure measuring flow meters
- Din rail mounting or wall mounting
- Programmable response time
- Power supply for loop powered transmitters
- Programmable analog output signals for current, voltage as well as two inverting relays, RS 485 (Modbus, Jbus)
- Sensor rupture detection
- Self zero, self calibration, self diagnostics

SERIES UC

Flow Instrumentation - Application Questionnaire Form

Cancoppas Limited
2595 Dunwin Drive, Unit #2
Mississauga, Ontario L5L 3N9
Tel. 1 800 595 0514
Fax. 905-569-6246

FROM_____
COMPANY_____
_____
PHONE_____FAX_____
DATE_____

Instrument Tag Number: _____

Fluid Name: Water_____ Air_____ Other_____ Gas_____ Liquid_____ Specific Gravity_____

Fluid is: ☐ Clear to Translucent (can see through or into) ☐ Dark or Opaque (cannot see into)

Operating Pressure (Inlet): Min_____ Norm_____ Max_____ ☐ PSIG ☐ Kpag ☐ Other

Operating Pressure (Outlet) Maximum Allowable: Min_____ Norm_____ Max_____ ☐ PSIG ☐ Kpag ☐ Other

Differential Pressure: _____ ☐ PSI ☐ Kpa

Operating Temperature: Min_____ Norm_____ Max_____ ☐ ^oF ☐ ^oC

Ambient Temperature: Min_____ Norm_____ Max_____ ☐ ^oF ☐ ^oC

Operating Viscosity: ☐ Cps ☐ Cstk ☐ SSU ☐ Other_____ ☐ ^oF ☐ ^oC

Flow Range: Min_____ Norm_____ Max_____

Preferred Units Liquids: ☐ CCM ☐ LPM ☐ LPH ☐ USGPM ☐ USGPH ☐ M^3H ☐ %

Preferred Units Gases: ☐ SCCM ☐ NLPM ☐ NLPH ☐ SCFM ☐ SCFH ☐ NM^3H ☐ %

Direct Reading Scale: ☐ Yes ☐ No (To correct for fluid specific gravity , viscosity, pressure, or temperature)

Suspended Solids: ☐ Yes ☐ No Screend to_____Mesh Filtered to_____Microns

Purpose of Flowmeter: ☐ Indicate Flow ☐ Totalize Flow ☐ Local Display ☐ Remote Display

☐ *Transmit:* ☐ 4-20maDC ☐ 0-10 VDC ☐ 1-5 VDC ☐ Pulse_____

☐ *Flow alarm switch:* ☐ High ☐ Low ☐ SPST ☐ SPDT Rating_____

☐ *Batch Control:* ☐ Manual ☐ Semi Automatic ☐ Fully Automatic

Available Power Supply: ☐ Not applicable ☐ 120 VAC ☐ 240 VDC ☐ 24 VDC ☐ 12 VDC ☐ Need Battery Powered

Preferred Connections: Size_____ ☐ NPTF ☐ 150# ANSI RFF ☐ 300# ANSI RFF

☐ SAE Thread ☐ PVC Socket ☐ Other_____

Pipe Information: Size_____ Material_____ Schedule_____

Flow Regulating Valve: ☐ Not Required ☐ On Meter Inlet ☐ On Meter Outlet

Constant Flow Controller: ☐ Not Required ☐ On Meter Inlet ☐ On Meter Outle

Preferred Materials:: _____

Materials To Avoid: _____

Accuracy: ☐ 1% (with special calibration) ☐ 2% ☐ 3-5% ☐ 6-10% ☐ of Rate ☐ of Full Scale

Mounting Orientation: ☐ Vertical ☐ Horizontal *With Flow Direction:* ☐ Up ☐ Down ☐ to Right ☐ To Left

Mounting Preference: ☐ In-line ☐ Panel Surface ☐ Other_____

Electrical Classification: ☐ NEMA ☐ NEMA4X ☐ NEMA7 ☐ NEMA7X ☐ Other_____

Brief Application Description: _____

_____

Currently Using Flowmeters for this Application: * ☐ Yes ☐ No *Specify Brand/Model:* _____

Have you experienced problems:* _____

* (This information will help us to recommend an appropriate replecement flowmeter)

Notes

Cancoppas LIMITED

When you need quality process measurement, control and environmental instrumentation

Challenge us to find your solution

AYSIX technologies

rittmeyer Instrumentation for Water and Energy Management

POLYSONICS A subsidiary of ONIX Systems Inc., a Thermo Electron company

BINMASTER

PMV

TOSHIBA

VALIDYNE ENGINEERING

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Fax. 450-424-1381

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LEVEL
- ❑ Magnetostrictive
- ❑ Ultrasonic
- ❑ Radar
- ❑ Mechanical Rotary
- ❑ Hydrostatic
- ❑ Float
- ❑ BOB
- ❑ Thermal Mass
- ❑ Ultrasonic Gap
- ❑ Capacitance
- ❑ Laser
- ❑ Vibrating
- ❑ Conductive

TEMPERATURE
- ❑ Switches
- ❑ Sensors
- ❑ Thermowells
- ❑ Transmitters

VALVE CONTROL
- ❑ Positioners
- ❑ Analog Feedback
- ❑ Limit Switches
- ❑ Parts

PRESSURE
- ❑ Gauge
- ❑ Differential Pressure
- ❑ Absolute

ANALYTICAL
- ❑ Density
- ❑ Conductivity
- ❑ Interface Level
- ❑ Total Suspended Solids
- ❑ Dissolved Oxygen
- ❑ Sampling Pumps
- ❑ Multi-Parameter UV
- ❑ Residual Chlorine
- ❑ Samplers
- ❑ Turbidity
- ❑ pH/ORP

FLOW
- ❑ Area Velocity
- ❑ Coriolis
- ❑ Doppler
- ❑ Positive Displacement
- ❑ Differential Pressure
- ❑ Magmeter
- ❑ Paddle Wheel
- ❑ Thermal Mass
- ❑ Transit Time
- ❑ Turbine
- ❑ Vortex
- ❑ Rotameters

GAS DETECTION
- ❑ Toxic
- ❑ Combustibles
- ❑ Oxygen

PANEL INSTRUMENTS
- ❑ Universal Indicators
- ❑ DIN Size Controllers
- ❑ Data Aquisition Systems
- ❑ Analog Indicators
- ❑ Data Loggers
- ❑ Signal Conditioners

PROCESS CONTROLLERS
- ❑ Multi/Single loop
- ❑ On-Off
- ❑ Batch
- ❑ Remote Terminal Unit

SERVICE
- ❑ Maintenance Contracts
- ❑ On-site field calibration
- ❑ Bench Repair Shop

ENGINEERING
- ❑ Professional Panel Design
- ❑ PLC Programming
- ❑ Design and Integration
- ❑ “Turn Key” System

Cancoppas provides quality instrumentation solutions that increase your productivity and efficiency.

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