



ISO 9001 Certified  
JQA-2172

# GENERAL GUIDANCE





# FLOW MEASUREMENT AND CONTROL INSTRUMENTS

Almost all types of instruments for flow measurement are available from one source.


For FLOW MEASUREMENT AND CONTROL INSTRUMENTS, the following abbreviations are applicable for identification :

 : Liquids can be measured.

 : Gases can be measured.

 : Steam can be measured.

 : Flameproof available




 : Intrinsically safe available

## AM-1000 series Compact Flowmeters (Metal Tube Rotameters)



The Best-Seller Metal Tubes, 15mm~150mm  
Lining materials available.



Model	Function	Construction
AM-1400	Local indication	
AM-1310	Pneumatic output	
AM-1520	Electric output	
AM-1690	Integration with Pulse output	
AM-1740	Alarm output	

## AM-2000 series Hybrid Flowmeters



Compact designed 250mm-length tube fits all types of process lines.

In addition to highly reliable local indication, various additional functions are ready to meet the requirements.



## MX series 250mm version

Unified installation length of 250mm for all sizes. Cost-effective metal tube rotameters. 15mm~100mm sizes available. Thread connection (NPT 1/2 to 2") is available for MX series.



**MX-400**  
Local indicator



**MX-700**  
Alarm output



**MX-52E**  
Electric output



**MX-52D**  
Intelligent, Electric output  
Digital indication

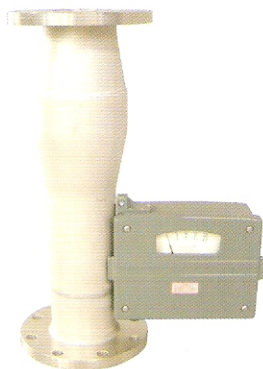


**NMX**  
Local indication/Alarm output  
NMX is simpler than existing MX series.

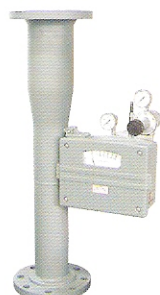
## M series Metal Tube Rotameters



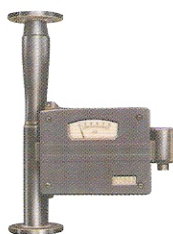
Have been supplied for tough applications of Nuclear, High pressure...



**M-400**  
Local indicator



**M-300**  
Pneumatic output



**M-600**  
Integration with Pulse output 



**M-500**  
Electric output 

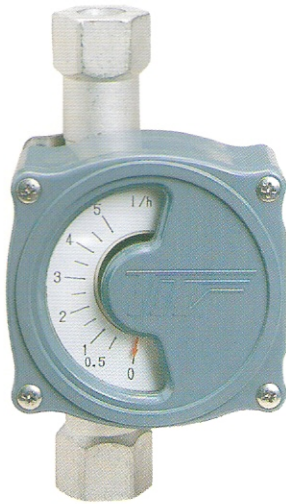


**M-700**  
Alarm contact(s) 

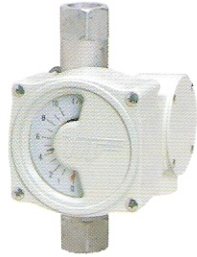


## M-900, MA-900 series Micro Flowmeters

Minimum 0.1~0.5L/h can be measured. Stainless steel and other metallic material i.e. Titanium etc. available. From equipment assembling to general industrial process measurement.



**MA-900**  
Local indicator



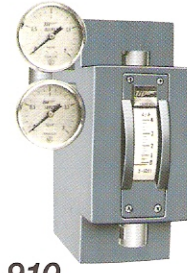
**MA-950**  
With alarm contact



**MA-920**  
Electric output



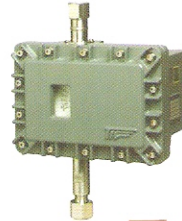
**M-900**  
Local indicator



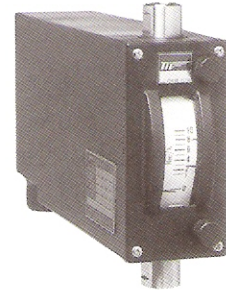
**M-910**  
Pneumatic output



**M-920**  
Electric output



Exd



Exi

**M-950/960** With alarm contact

## R series Glass Tube Rotameters

The Standard of Glass Tube, 10mm~100mm.



**R-101**



**R-101-E**



**R-101-H**



**R-105-RK**

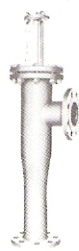
## Direct Indication type Rotameters

Easy handling, Low cost



**A-101**

Glass tube direct indication



**A-102**



**M-202**

Magnet tracking indication



**V-201**

## AC series Plastic Made Rotameters

All connection fittings of TS socket, Rc thread and flanges are available. Easy dismantling from line by Union thread construction. Best cost-performance and quick delivery. All-Fluororesin construction type, AC-T, newly added. 15mm~50mm. Alarm contact available.



## Rotameters for Steam Measurement



**M-403-FD**  
Local indicator



**M-524-D**  
Electric output



**M-316-FD**  
Pneumatic output



**M-693-FD**  
Totalizer, Pulse output

## Rotameters for Slurry Measurement

Smooth path, High anti-erosion capability



**AS-1400**



**S-100**



**S-400**

## Rotameters for Sanitary Applications

Suitable for Food, Pharmaceuticals



**R-101-SR**  
Glass tube



**AM-1000-SR**  
Various output available

Exd

Exi



## P series Purgemeters

Wide variation. Suitable for assembling onto various devices.

General purpose (115mm)	General purpose (200mm)	Simple design	Stainless steel construction	Max.30L/min (Water)	PVC construction	
<b>P-100</b>	<b>P-200</b>	<b>P-300</b>	<b>P-400</b>	<b>P-510</b>	<b>P-520</b>	
Compact type	Smart design	For large flow rate	Acryl molded	Acryl molded	Fluororesin tube available	
<b>P-530</b>	<b>P-540</b>	<b>P-550</b>	<b>P-610</b>	<b>P-620</b>	<b>P-710</b>	
For semiconductor applications	Minute bellows valve provided	Max.130°C	Stainless steel	Quick delivery	Compact design	Acryl molded
<b>P-810</b>	<b>P-820</b>	<b>P-830</b>	<b>P-900</b>	<b>XP</b>	<b>YP</b>	<b>P-060</b>

## ALL-Fluororesin Purgemeters

Particle free, NO ion production...  
Suitable for Pure/Ultra pure water lines in semiconductor applications.



<b>P-771</b>	<b>P-773</b>
<b>P-772</b>	<b>P-774</b>

## Purgemeters with Alarm contact and Analog output

For remote instrumentation of Purgemeter process.

<b>P-510</b>	<b>PAU</b>	<b>P-7810</b>
Reed switch alarm	Optical Alarm unit	
<b>P-831</b>	<b>IAU</b>	
	Analog Output Unit	
	DC4~20mA output	

## HQ series High Quality Purgemeters

Electro-polished finish  
Low leakage



<b>P-810</b>

## CP, CM series Purge Sets


To keep constant flow even when process pressure changes

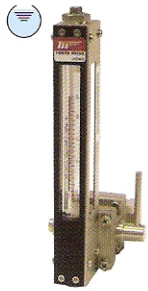


<b>CP-12-100</b>	<b>CP-21-100</b>	<b>CP-22-400</b>	<b>CP-32-500</b>	<b>CM-21-900</b>	<b>CR series</b>	<b>CM series</b>



## O series Orifice Flowmeters

  Cost effective flow measurement even for large lines



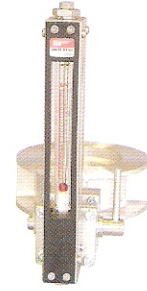
**O-010** Quick delivery & Low price



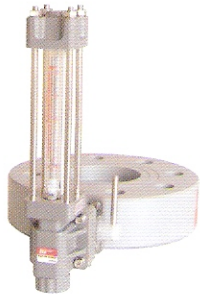
**O-180** Screw connection



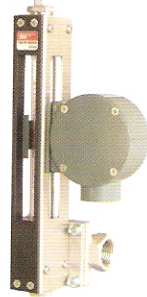
**O-180** Flange connection



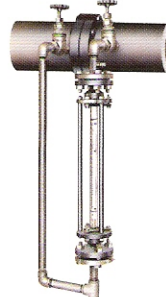
**O-180** Wafer connection



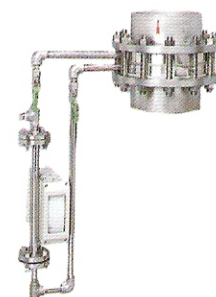
**O-180** Wafer connection (PVC)



**O-780** With alarm contact



**O-100** Glass tube indicator

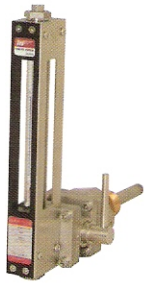


**O-1000** Metal tube indicator  
Output signals available

Exd  
Exi

## Flowmeters for Air conditioning application

### Digital indication type



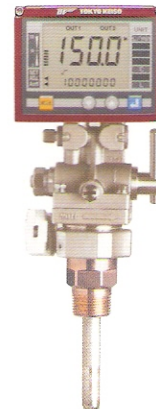
**CFW1200**  
Fixed type



**CFW1400**  
Vertical type



**CDT1000**  
Pitot tube + Digital indicator



**CDT1400**



**CDT2000**  
One Touch Flow



**CFW2000**  
One Touch Flow  
Portable and Removal



**HDT1000**  
Orifice +  
Digital indicator



**DT**  
Digital D.P. indicator /  
transmitter

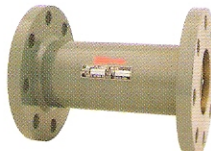
## CX series Flow Set Valve

To maintain flow rate of liquids and gases even supply/load pressure changes.

**CX-1000**   
For liquids,  
Fixed setting 15mm~40mm



**CX-1500/1510**    
Fixed setting 15mm~150mm




**CX-2000**   
For liquids,  
adjustable setting 15mm~100mm



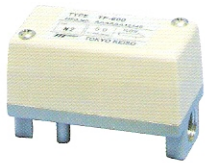


# TF,TC series Thermal Mass Flowmeters,Controllers

 For accurate measurement and control of gases

**TF-600/900 series Mini-Thermal Flowmeters**  
Best cost effective

**TF-2000N series Thermal Mass Flowmeters**  
Indication, Totalization and output function are provided.



**TF-600**



**TF-900**

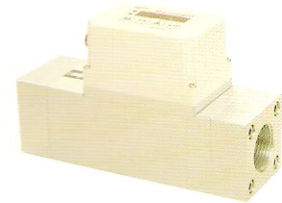


**TF-1000/1100series Mini-Thermal Flowmeters**  
Non by-pass type, Competitive price

**TF-4000 series Thermal Mass Flowmeters**  
Low price & High performance



**TF-1000P**  
All plastic molded

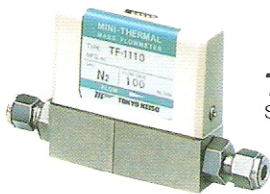


**TF-1000S**  
Stainless steel cast

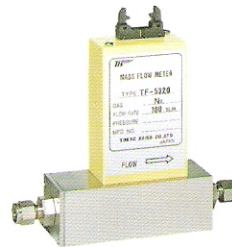


**TF-5000/6000 series Thermal Flowmeters**  
Standard type

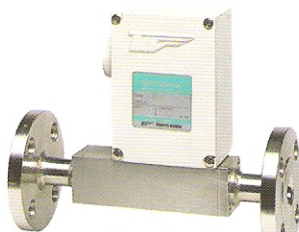
**Mass Flowmeters / Controllers**



**TF-1100**  
Stainless steel machined



**H-EP-TF-5000/EP-TC-1000**  
Flameproof construction  
Covers upto 14.7MPa high press.



**TF-1200**  
Watertight housing

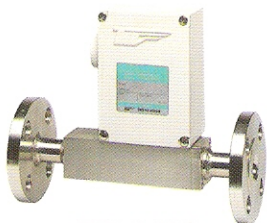


**TF-1300**  
Low ΔP,  
Indoor type

**TC-1000/2000 series Thermal Mass Flow Controllers**

**TM-7000 Converter units**

All necessary functions  
in DIN 96×96 compact housing



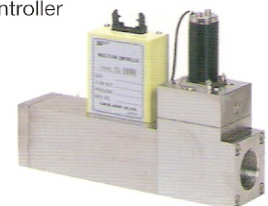
**TF-1400**  
Low ΔP,  
Watertight housing



**TF-1500**  
With indicator,  
Watertight housing

**TC-3000 series Mini-Thermal Mass Flow Controllers**

Best cost-effective controller



**TM-2000**  
Mini converter unit



**TM-1400**  
Converter Unit

FLOW MEASUREMENT INSTRUMENTS



## TH series Thermal Flowmeters

General purpose



**TH-1100**  
Insertion type



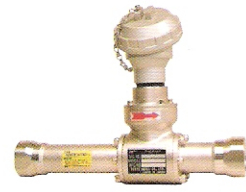
**TH-1200**  
Flange ended



**TH-1400**  
Variable  
insertion type



**TH-1700**  
Flange connection



**TH-1800**  
Built-in straightener type

Converters



**TR-1000**  
Standard, Panel mount



**TRX-5000**  
Standard, Field mount



**TRX-700**  
Digital output available



**TR-9000**  
High function  
Field mount

High quality version EP polished,  
Hermetic sealing



**TH-1100HQ**  
Insertion type



**TH-1500HQ**  
In-line type



**TH-1100-SP/TH-3200-SP**  
Insertion type

High / Low temp. version



**TH-3100/3200/3300**  
Covers  $-196^{\circ}\text{C}$ – $550^{\circ}\text{C}$

## HM series Thermal Mass Flowmeters/Controllers

Wide use type



**HM1000**

High performance type



**HM5000**

Metal seal type



**HM6500**

With digital indicator



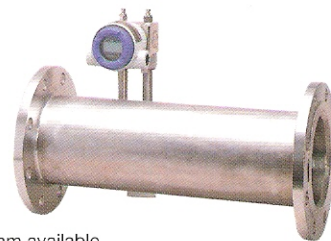
**HM9700A**

## V Cone flowmeters



Exd

The total new concept of flow measurement by  $\Delta P$  theory.  
Eliminates all the weakpoints likely to Orifice and Vortex flowmeters.  
Transmitter mounted type, VD series, newly added in product line for  
easy field installation.



15mm~900mm available.  
Liquids, gases and steam can be measured.

## TL series Thermal liquid flowmeters

Small flow of 7mL/min measured



**EP-TL-3000**  
Flameproof detector



TN series converter

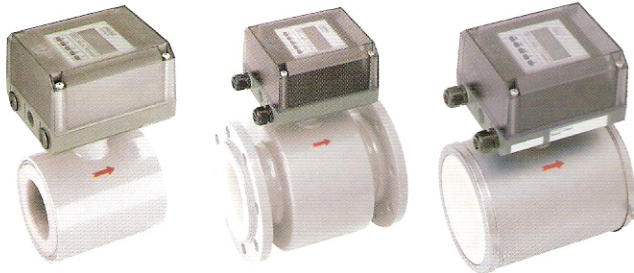


Automatic compensation of press. and temp. change



## MAGMAX Electromagnetic Flowmeters High accuracy and High performance

Compact version  
Best cost performance

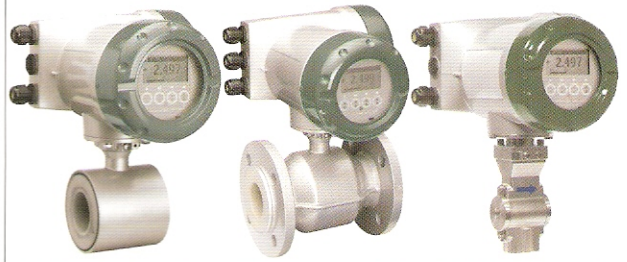


**EGM1010C**  
PFA liner + Hastelloy C  
10~150mm

**EGM4010C**  
Flange type  
10~1000mm

**EGM5010C**  
Ceramic tube  
2.5~100mm

Aluminum alloy housing



**EGM1300C**  
PFA liner + Hastelloy C  
10~150mm

**EGM4300C**  
Flange type  
10~1000mm

**EGM5300C**  
Ceramic tube  
2.5~100mm

Separate version Detector



**EGS1000F**  
Standard type

**EGS4000F**  
Flange type

**EGS5000F**  
Ceramic tube

Converter



**EGC010W**  
Standard type

**EGC300W**  
High performance

Ex-proof compact type



**Exi**  
**Exd**

**MGM4090K-JEx/EEEx**  
Flange type



**MGM5090K-JEx/EEEx**  
Ceramic tube

Low price type for water



**EGM2010C/2300C**  
Polypropylene / Hard rubber liner

Non contact electrode design



**MGM5090K-CAP**  
Capacitance detection type  
25~100mm

## MASSMAX Coriolis Mass Flowmeters **Exd**

High accuracy  $\pm 0.1\%$ .  
Direct mass measurement Density and temperature are also measured.

**MASSMAX 7100 series**  
Single tube for small flow



**MMM7150K**

**MASSMAX 7000 series**  
Single tube, straight through  
The Epoch-Making coriolis Mass flowmeter



**MMM7050K**



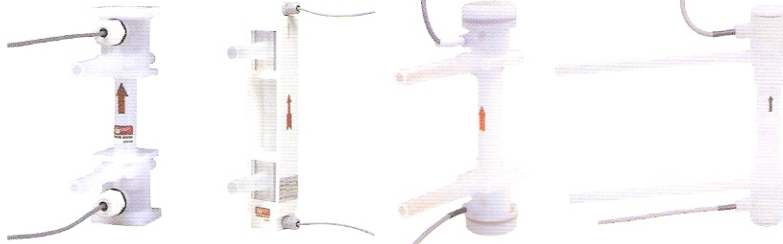
## Ultrasonic Flometers

Non contact, Non movement flow measurement

### UCUF

All wetted parts made of new PFA.  
Available sizes are 3,4,6,10,15 and 20mm.

Detector



P series

M series

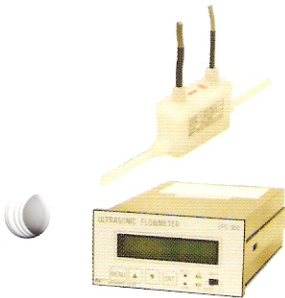
Converter



SFC-710



SFC-750



UCSS-100  
Straight tube type



UL3030K  
In-line, Triple beam

Exd



UL310  
Clamp-on type  
Loaded with DSP



UL610P  
Portable type  
Anytime, anywhere

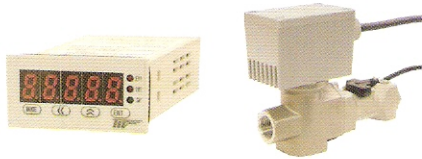
## FC series Liquid Flow Controller



FC series is a flow controller for liquids consisting of control valve and controller unit.

### FC-100 series

Flow control valve for water



### FC-3000 series

The wetted part is made of Fluororesin.



### FC-7000

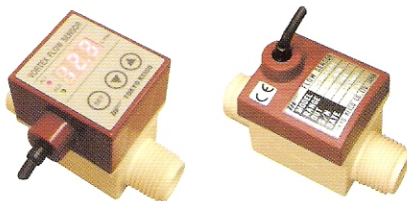
Controller with ultrasonic flowmeter for small flow



## VF series Vortex Flowmeters



VF series is developed specifically for use in Semiconductor industries. Its high durability and anti-corrosive capabilities made it ideal for chemical processes as well as Pure and Ultra pure water measurement.



### VF-2000

The most cost effective vortex flowmeter made from PPS resin.



### VF-3000

Made from New PFA.



### VF-4000

High performance  
Non intrusive ultrasonic sensor

## KARUMAN ACE Vortex Flowmeters



Compact flowmeter for liquids. Battery driven and 2 wire, DC4~20mA output versions are ready. Perfect Non-metallic construction suitable for Pure/Ultra pure water lines, chemical injection process in semiconductor production processes.



10,15,20 and 25mm sizes available



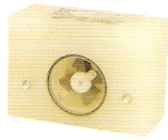
## W series Mag-wheel Flowmeters

### W-100/200/300 Mini-Wheel Flowmeters

Compact design for built-in use



**W-110/120**  
Open collector pulse  
or DC0~5V



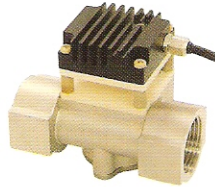
**W-200**  
Open collector pulse  
DC0~10V or DC4~20mA



**W-300**



**W-2000**  
Open collector pulse  
or DC4~20mA



**W-3000**  
Open collector pulse  
For high temperature

### W-400,W-500 Mag-wheel flowmeter

Medium size of 15~200mm



**W-521**



**W-551**



**W-591**

Model	Function
<b>W-421</b> <b>W-521</b>	2 wire, DC4-20mA outout
<b>W-451</b> <b>W-551</b>	Local flow rate indication without power supply
<b>W-452</b> <b>W-552</b>	Remote flow rate indication without power supply (Upto 10m distance)
<b>W-453</b> <b>W-553</b>	Unscaled pulse output Used in combination with IR series Universal Totalizers for indication, totalization, alarm etc
<b>W-491</b> <b>W-591</b>	Battery driven, alternative indication of flow rate and total volume
<b>W-492</b> <b>W-592</b>	Remote version of above (upto 2 m distance)

Model	Function
<b>W-31</b>	Open collector pulse
<b>W-32</b>	DC0~5V
<b>W-33</b>	DC0~5V+Alarm contact
<b>W-34</b>	Alarm contact
<b>W-35</b>	DC4~20mA
<b>W-37</b>	DC0~5V
<b>W-38</b>	DC1~5V
<b>W-39</b>	DC0~10V

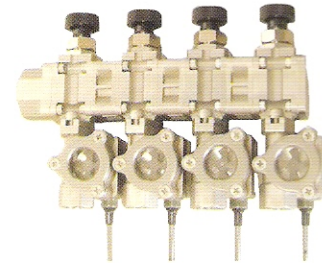
### W-800 Mini-Wheel Flowmeters

All Fluororesin, Optical sensing system



### Manifold Mini-Wheel Flowmeters

Specify the number of connection freely.  
Best for built-in-use in save space



**MU-1000**

### Mini-Turbine Flowmeters



**TW-100**

Open collector pulse  
or DC0~5V

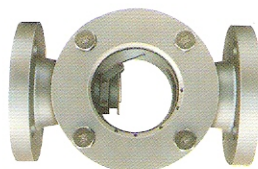
**TW-080/090**

Mass production  
& cost effective

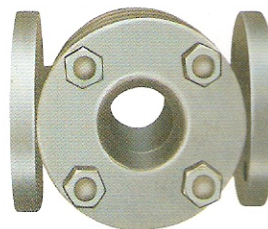
## K series Sight Glasses Watch the Flow!



**K-200**  
Flapper detection  
Magnet coupling indication



**K-400**  
Flapper direct indication



**K-500**  
Direct observation type  
Glass lining material available

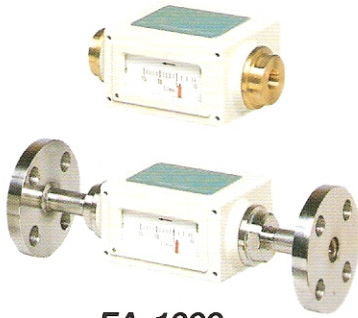


**K-600**  
Straight glass tube  
Direct indication



## Flow Monitors

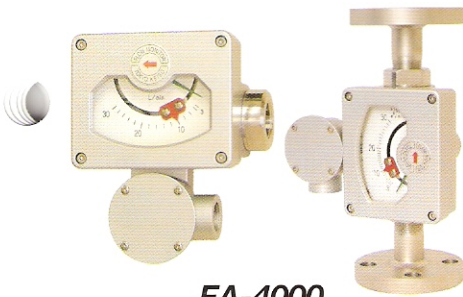
Flow indication with alarm contact.  
Suitable for monitoring of cooling  
water supply line/devices etc. Any flow  
direction acceptable.



**FA-1000**  
Stainless steel made.  
Max.100L/min.



**FA-3000**  
Compact with metal  
supporting body  
Max.30L/min.



**FA-4000**  
10~40mm,  
Max.130L/min



**FA-5000 Flow Monitor**  
Most simple and cost-effective  
flowmeter for water lines.



**FA-6000**  
Max.100L/min

## Flow Switches

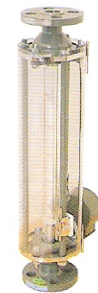
For flow monitoring



**F-740**  
No indication, contact only  
**Exd Exi**



**K-700**  
Flapper detection  
Magnet coupling indication  
**Exi**



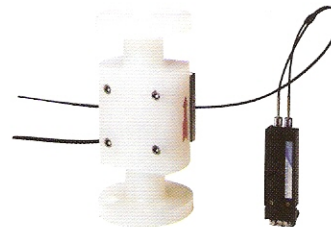
**R-751**



**R-750(-E)**  
Glass tube type upto 100mm

## WX series Opto-Wheel Flowmeters

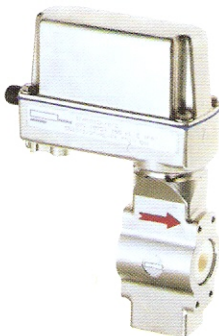
Flow measurement under strong magnetic  
field by optical sensing



**WX-2000**

## Filler Flowmeter

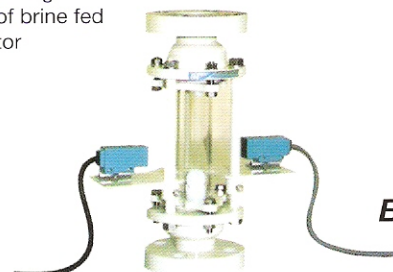
Electromagnetic flowmeter  
for bottle and/or can filler machine.  
Aiming for high speed filling.  
Series for 2.5 to 40mm.



**EGM5015C**

## Brine Monitor

Simultaneous monitoring of flow  
and concentration of brine fed  
to electrolysis reactor



**BM-1000**



# LEVEL MEASUREMENT AND CONTROL INSTRUMENTS

From large crude oil tanks to small vessels and underground pits, we have various types of level measurement and detecting instruments.

LEVEL MEASUREMENT INSTRUMENTS

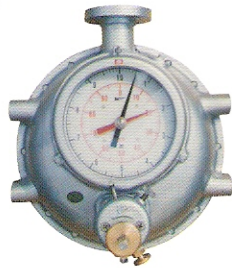
## Spring Balanced Tank Gauges

Low pressure  
Dial indication



**FT-1000**  
Standard, Float-Tape type

High pressure,  
Dial indication



**FP-1000**  
Pipe sealed type



## Servo Operated Tank Gauges

Tank side type



**FT-2000** Tape type



**FW-2000**  
All-wire  
Heavy duty type

Tank top type

The best-seller servo gauge  
RS-485 MODBUS and  
HART communication are available.



**FW-9000**  
Super intelligent  
tank gauge

## Transmitters for Tank Gauge

Analog output versions

### TR-100 Alarm transmitter

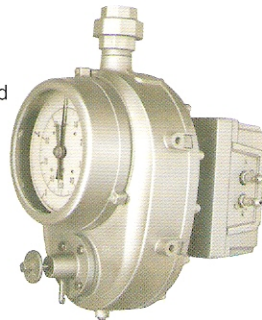
Max. 4 points micro switch contact provided  
Flameproof ready

### AT-101W Pneumatic transmitter

20-100kPa pneumatic output

### TR-200 Electric transmitter

DC4-20mA output  
Alarm contact(s) available  
Flameproof ready



Attachable onto FT-1000, FP-1000, FT-2000 and FW-2000 type tank gauges for remote indication.

Digital output versions

### DB-M type

2-wire for power supply including level  
and temp data in serial BCD

### DM4 type

Intelligent, 2 way-2 wire system  
Max. 8 point contacts 2 way transfer  
possible in addition to level and temp.  
data transmission



## Supporting Instruments for Tank Gauging System



**DIR-110/120**  
Flameproof tank side  
indicator used together  
with tank top tank gauges



### FDC-1000

Field device controller

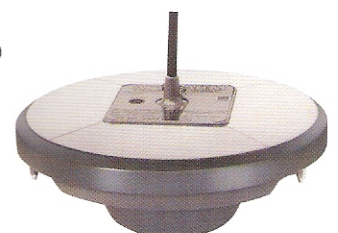
2 way contact transfer upto 8 points  
and field analog data transfer  
to control room are possible  
by one unit.  
Suitable for motor valve control  
through bus lines of tank gauges



**TS**  
Spot type  
Temperature sensors



**ATM/ATS**  
Average type  
Temperature sensors



**CSi-3005**  
Oil leak detector

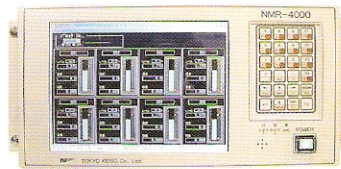


## Receiving Indicators for Tank Gauging System



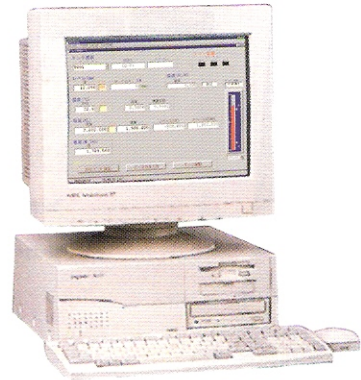
### DIR-500

DIR-500 is a tank data indicator for small sized tank farm where a few tanks are involved at a small cost. Parallel and serial data communication ports such as RS-232C, RS-485 and MODBUS protocol (TRU mode) are available to HOST/DCS/sequence controller data transfer.



### NMR-4000

Max. 64 tanks capacity for all types of two core digital transmitters i.e. RS-232C serial communication (MODBUS or ASCII) provided.



### CATAMS Windows

Tank Monitoring Software operated in Windows NT Workstation. Full function provided.



### Series C

Tokyo Keiso also offers most updated data acquisition system in use of Series C interface unit and tank management software. Up to 256 tanks data can be acquired shortest available time. We provide you a reliable tank monitoring and tank farm management system.

## Optical Fiber Tank Gauging System

Data transmission is conducted through optical fiber cable to eliminate the effect of external noise such as thunder storms. Different signal formats of FFI\*1 compatible, CNT\*2 compatible and Tokyo Keiso originals are ready for clients' choice.



### FW-9000 (Optical pulse output type)

Optical signal output version of Super Intelligent Servo Gauges.



### DM4-2-3

Optical tank data transmitter to install tank side type tank gauges



### O-DB-M

FFI compatible



### O-ATM

Temp. signal is transmitted by optical signal



### O-FDC-1000

Field Device Controller  
Two way max. 8 point contacts transfer in Optical signal  
Suitable for value control



### DNM

CNT compatible



### O-ATII

2 way contact data transmission by optical signal

\*1 : Trade mark of Fuji Electric Co.

\*2 : Optical Tank Gauging system jointly developed by Chiyoda Instrumentation Co., Japan



## Level Switches

Multi-point detection for pump control by one unit



**FP-4000**



**FP-4100**



**FP-4200**



**FR-6000**

Most well accepted Float type.  
ExdIICT6 which covers  
hydrogen atmosphere available.

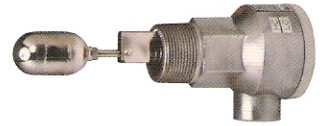


**FS-100**

Spring balanced displacer type  
ExdIICT6 which covers  
hydrogen atmosphere  
available.

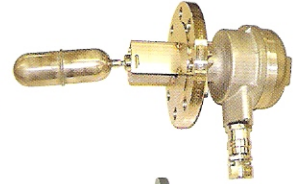
**FB-5000**

Magnetic coupling,  
Reed switch contact,  
1 1/2" flange mount



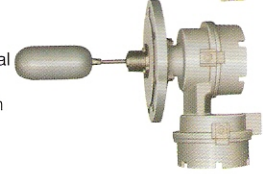
**FB-7000**

Magnetic coupling,  
Micro switch contact,  
3" flange mount



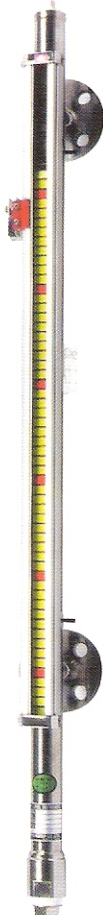
**FB-9000**

Bellows type mechanical  
action.  
Suitable for slurries with  
ferrous particles

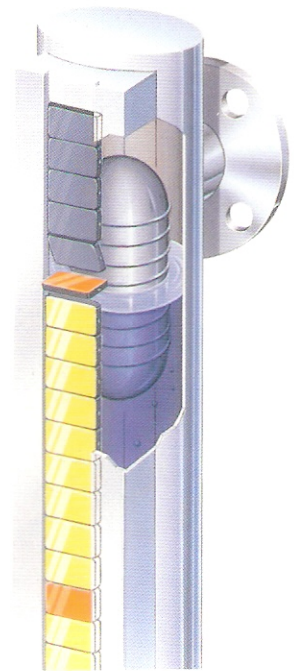
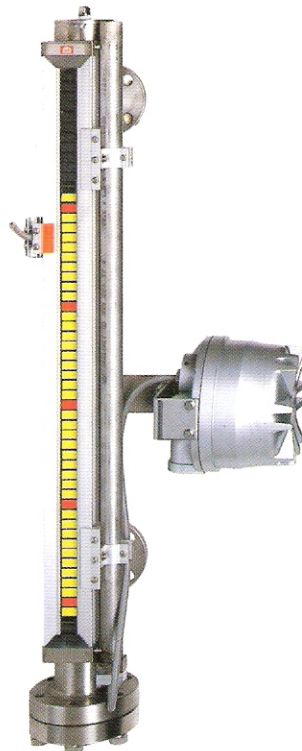


## FM series Metal Tube Level Gauges

Multi-function by one unit. Cost-saving.  
Eliminates common problems of existing glass tube gauges.  
Alarm contacts and/or analog output additionally available.



**FM-3100**  
Compact type



Max. 300°C and 7.3MPa possible.  
PVC, fluoro-resin and other materials available  
in addition to standard stainless steel version.



## Displacement Type Level Transmitters

Spring balanced type



- FS-110** Local indication
- FS-115** Local indication+Alarm contact
- FS-313** Local indication+Pneumatic output
- FS-512** Local indication+Electric output
- FS-517** Local indication+Electric+Contact output



### FST-3000

Intelligent type.  
Operation parameters, i.e. Sp. Gr., range, zero adjustment can be done by pressing flameproof built-in key board during operation in hazardous area. The totally new idea of displacer type level transmitter.

## Magnetostrictive Level Transmitters

Extreme high accuracy and reliability



**LT-320**  
Cost effective

## FP-7100 Float Type Level Transmitter



Liquid level is output by DC4~20mA electric signal.  
Max.4810mm.

## Level Radar

Non-contact level measurement free from change of temp., press. etc.



### TLR3000

TLR3000 is two-wire transmission type FMCW radar gauge. The contactless measurement of the level of liquid, paste, slurry and so on can be made by using the micro-pulse reflection. TLR3000 can comply with any applications of process tanks such as the high temperature and pressure tanks, high corrosive liquids, tank with the stirrer, for which it was very difficult to make level measurement by the contact type or ultrasonic level meters.

## Guided Radar



### TGR3000

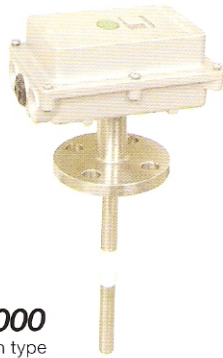
TGR3000 is two-wire transmission type guided radar gauge. The measurement of the boundary side of two liquids can be made. The measurement by the micro-pulse led by a probe assures the stable output regardless of the change of measurement conditions such as temperature, pressure, density, and viscosity.



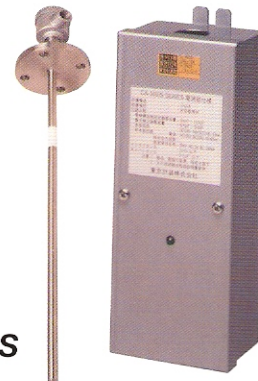
## CAPATIC Capacitance Type Level Switches

Non movement detection/measurement for powders, solids and liquids

Level Switches



**CA-1000**  
Integration type



**CA-1000S**  
Intrinsically safe version

## UW series Ultrasonic level meters

High accuracy and non-contact



**UW-100**  
High performance



**UW-2000**  
Compact and low cost

## Pressure Level Meters for liquid application

CP, PGT Pressure type Level Meter

Level measurement by purge pressure  
Density measurement also possible



**PGT**  
Purge tube



**CP**  
Purge set

## MICROCELL Weighing System

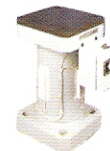
For measurement of contents in silos and hoppers  
Semiconductor strain sensor weighs the contents in silos and hoppers.



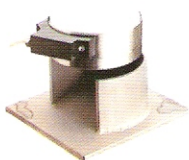
Bolt-on sensor



LOADLINK sensor



LOAD BLOCK sensor



LOAD DISC Sanitary sensor



**SVS2000**  
Digital indicator



# Marine Use Cargo Monitoring System

For total monitoring of level and temperature of cargo of oil tankers and product carriers  
High level/Overflow monitoring system also ready

## Cargo Level and Temp. Sensors



### SPT-3500

Magnet float type  
Hall element sensing offers durability, stability, and high accuracy. Large sized local indicator provided for easy on-deck monitoring. Saves wiring cost by 2 core wiring system.



### SPT-7200

Reed switch detector

## High Level Alarm Sensors



### FPT-7091S

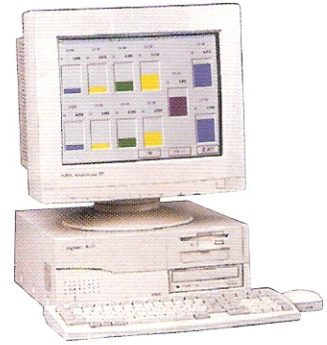
Float type level switch for high alarm system



### MIA-LIDEC

Acoustic wave type Level switch

## CCR Equipment



### CALTIS II

Cargo Monitoring Software operated in Windows XP



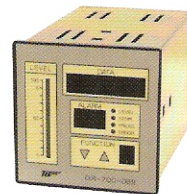
### DIR-M1600-SPT II

Multi-monitor for cargo tank



### DIR-M1600-ALG

Multi-monitor for inputting current signal



### DIR-700-DB II

DIN 96×96



### TAN-M1600-RP

Compact annunciator unit for high level alarm

LEVEL MEASUREMENT INSTRUMENTS



# OTHER INSTRUMENTS

We still have more types of Instruments!

## FCX-AII series DP Pressure transmitters

For level, flow, pressure... full line-up to meet all possible requirements, Intelligent type also available. Try once and you will be satisfied.



**FKY, FKE**  
Level transmitter



**FKX, FKD**  
Remote seal type



**FKC**  
Dp (Flow) transmitter



**FKG**  
Press. transmitter

## Universal Indicator

Totalization by analog flow signal possible  
Save space, save cost

Indication, totalization,  
2 point alarm,  
loop power supply



**IR-6000**  
DIN 48x48

Indication, totalization  
(alternative),  
2 point alarm,  
loop power supply



**IR-4500**  
DIN 96x48  
Best cost performance



**IR-1000**  
Mini digital scaling meter (Pulse input)

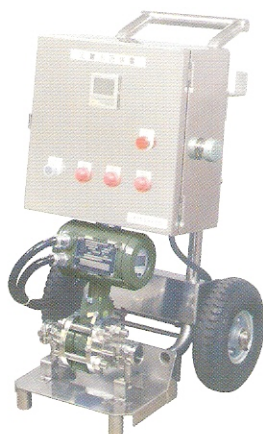


**RR-900**  
Mini digital converter (RS-485)

## BD series Movable Batch Control System "BATCH AUTO-BOY"



Anywhere, anytime, any liquids...  
Combination of pump, flowmeter and batch control unit.  
For automatic operation in various liquid food industries,  
i.e. beer, juice, wine...



**BD-1100**  
External pump control version



**BD-1200**  
Pump integrated version

## CT series Conductivity meter

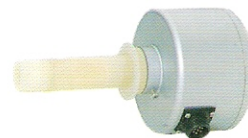
Liquid conductivity and temperature are measured  
and simultaneously output.  
Full lineup including electrode type, magnetic type  
and sanitary type.



**CTS-1000**  
Electrode type  
for low conductivity



**CTS-2000**  
Electrode type  
for medium  
conductivity



**CTS-3000**  
Magnetic type  
for high  
conductivity



**CTC**  
Microprocessor loaded  
high functional  
converter



## Flowmeters and measuring system for Automobile engine test

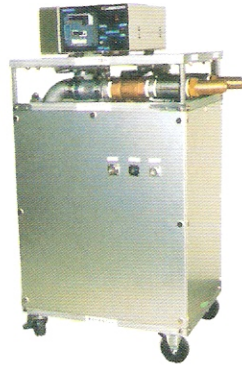
### BF series Engine Blow-By Gas Measurement System (Direct and high accuracy mass flow measurement by TH Thermal flowmeter)

For evaluation test of cylinders, piston rings, engine oils.  
Wide range preparation to meet requirements.



#### BF-1000

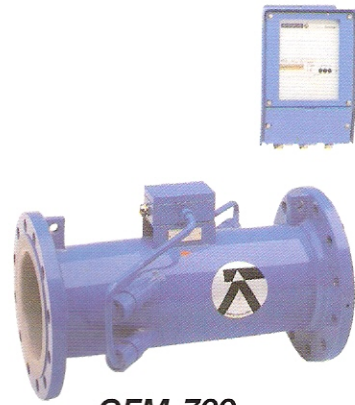
Pressure loss compensated by integrated blower  
Highest accuracy and versatile function for continuous operation



#### BF-2000

For large sized engines

### Ultrasonic Gas Flowmeter

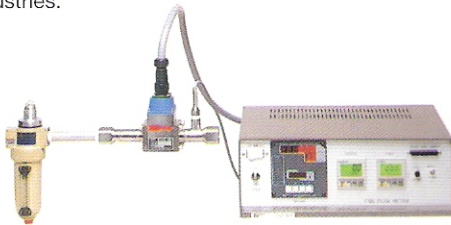


#### GFM-700

For gases in-line type

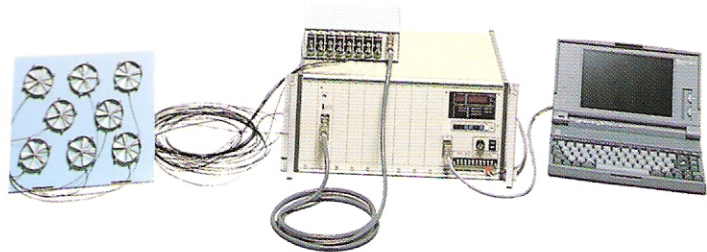
### CNG Flow Measurement System

CNG, the new energy source for engines, is measure in mass flow with high accuracy and wide range. Suitable for R & D in Automobile industries.

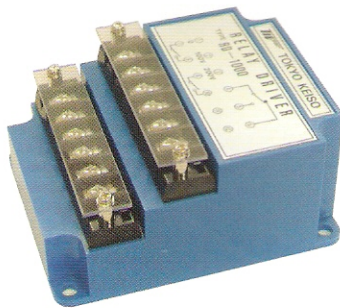


### RF series Propeller Air Velocity Meters

Propeller type velocity meter for detection of air flow.  
Suitable for evaluation of air flow distribution profile for radiators.



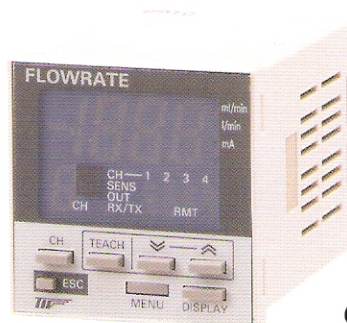
### RD-1000 Relay Driver



For amplifying of level switch contacts.  
Built-in sequence for pump control provided.

### OAC series 4 Loop Flow Indicator

Max. 4 flowmeter's analog signal (4-20mA) can be received and indicate each flow rate by channel switching.



OAC series



[www.tokyokeiso.co.jp](http://www.tokyokeiso.co.jp)

Individual catalogues or technical guidances are available for all the products introduced in this general guidance.  
Contact your agent or TOKYO KEISO.

\*Specification is subject to change without notice.

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