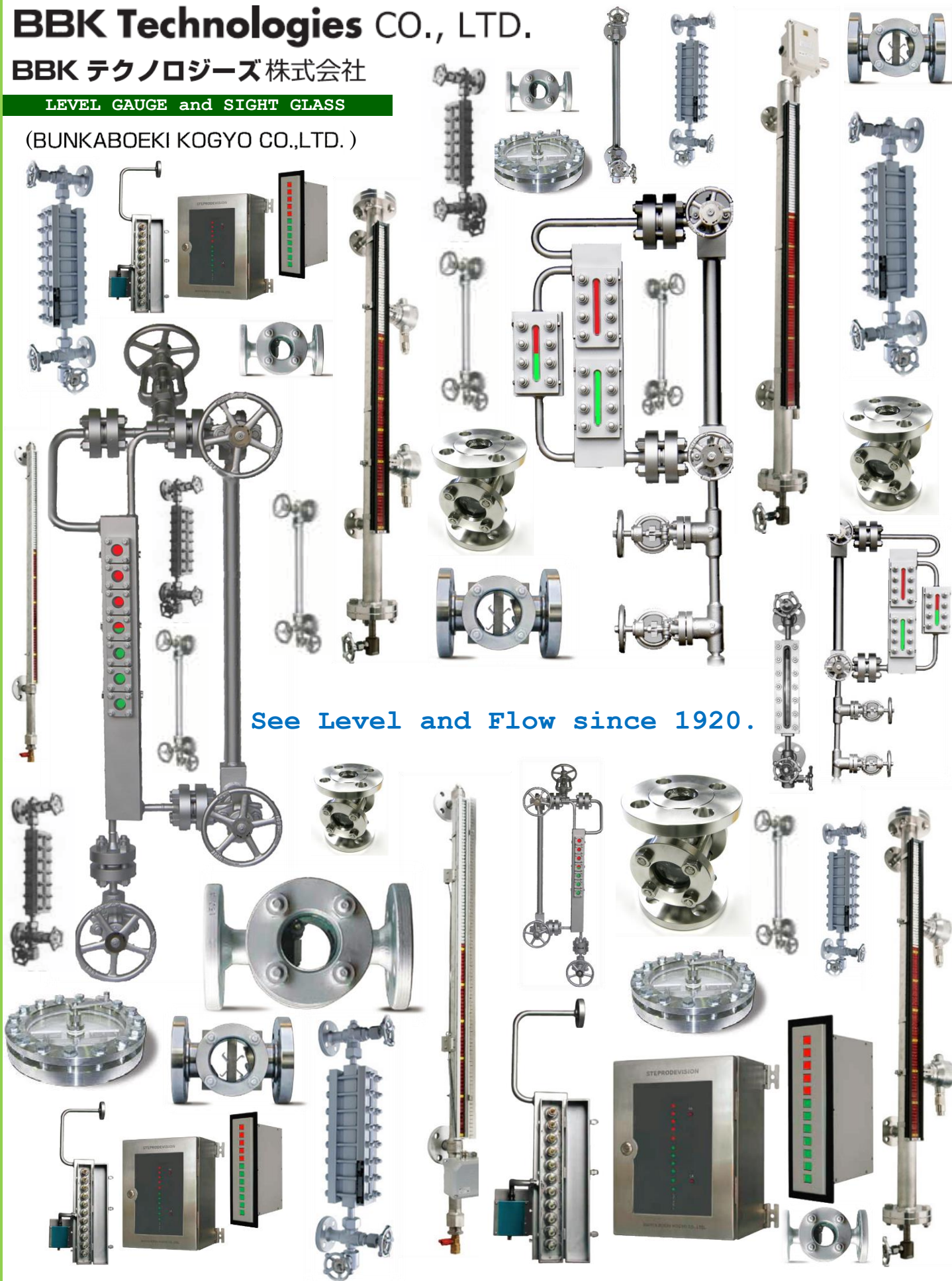


# BBK Technologies CO., LTD.

BBK テクノロジーズ 株式会社

LEVEL GAUGE and SIGHT GLASS

(BUNKABOEKI KOGYO CO.,LTD.)



See Level and Flow since 1920.

We have started business since 1920, the first company to handle Level Gauges to Japan. And after we manufacture our own Level Gauges, which means BBK is the Pioneer of Level Gauge Manufacturer in Japan. We have many supply records for Japan and Overseas Power Plant and Chemical Plant Market. We continue to supply solutions to resolve customer's problem and satisfy customers with our **TECHNOLOGIES** over 100 years.

We change our company name to **BBK Technologies CO., LTD.** from **Bunkaboeki Kogyo Co., Ltd.**

**2020, We celebrate 100th Anniversary of our founding.**

**We make a fresh start in our history!**

**BBK Technologies CO., LTD.**

**BBK テクノロジーズ 株式会社**

(BUNKABOEKI KOGYO CO.,LTD.)

**www.bbk.co.jp**

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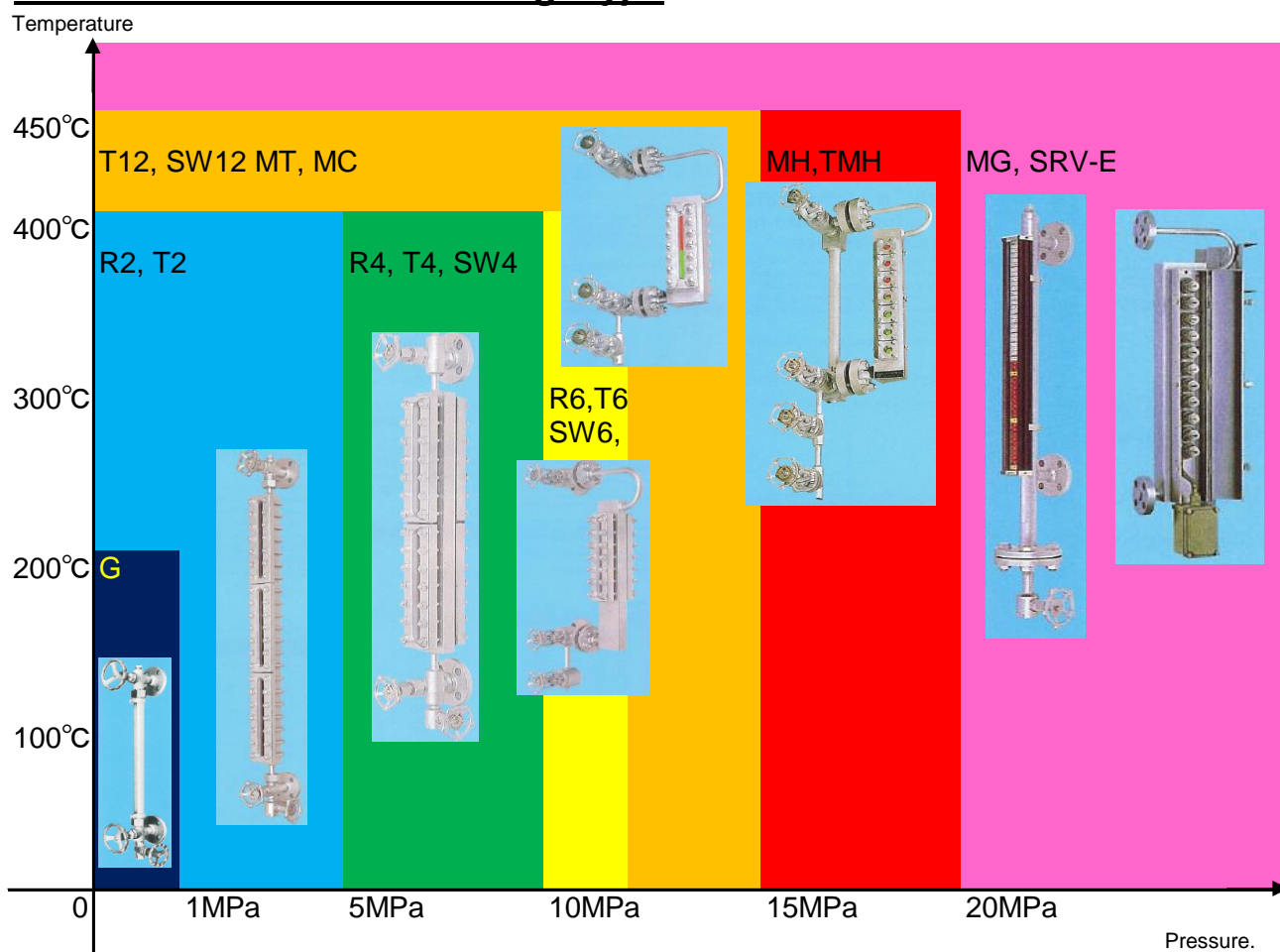
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## Selection Chart for Level Gauge type



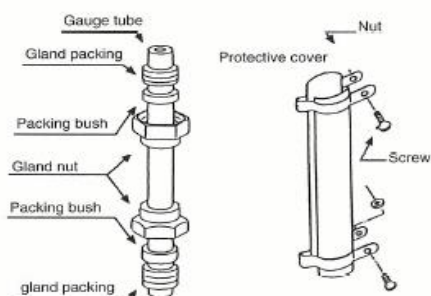
## Selection Table for Level Gauge type

Type		Low Press	Mid. Press	High Press.	Ex-High Press.
Direct Reading	Tubular	G			
	Reflex	R2	R4, R6	S10*	S40**
	Transparent	T2	T4, T6	T12, MT	TMH
	Two-color	SW4, SW6		SW12, MC	MH
Magnet		MG1 ~ MG50			
Electrode		SRV-E			

\*Under 200 deg C Services. \*\*Under 180 deg C Services

### DIRECT VIEWING

## Tubular type Level Gauge (Symbol: G)



Standard Max. Ope. Press./Temp. Table

	Press.	Temp.	Mat'l	Glass#
G	1.0	200	Hard Glass, Acryl, PFA	φ16、φ19

(Mpa) (°C)

\*Simple Structure; Glass Tube, Gauge Valves, Protector and etc.

\*Easy installation and operation.

\*Long Visible Length.



# BBK Technologies CO., LTD.

DIRECT VIEWING

## **Reflex type Level Gauge (Symbol: R / S)**



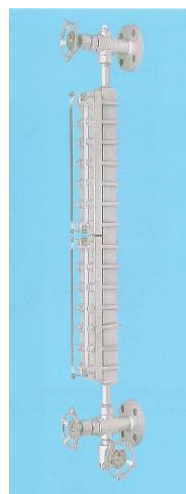
R2 Series



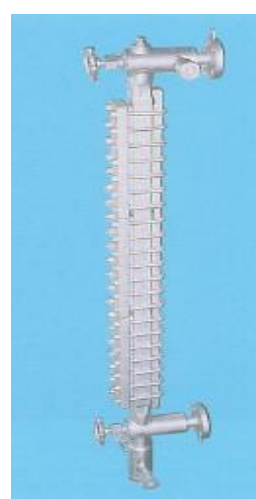
R6 Series



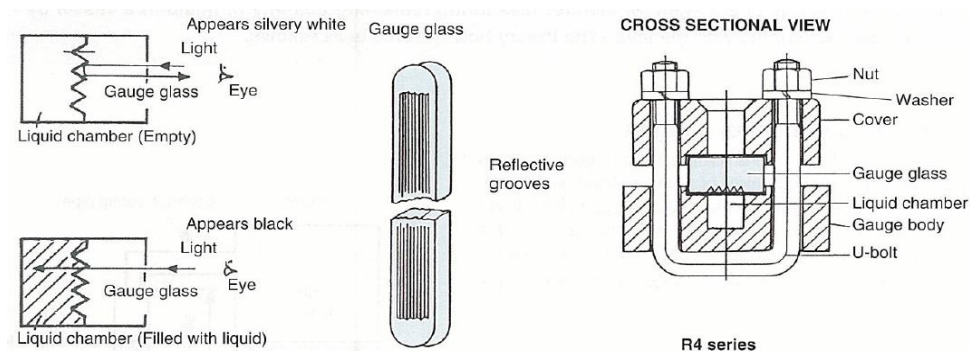
S40 Series



w/ Non-Frost Plate



w/ Full Jacket



Max.Ope.Press./Temp.Table(sample)

	Press.	Temp.	Mat'l	Glass#
R2	6.3	400	C.S/S.S	#4
R4	10.3	400	C.S/S.S	#4
R6	12.5	400	C.S/S.S	#4
S10	19.6	200	C.S.	#6
S40	41.3	180	C.S.	#6

(Mpa)

(°C)

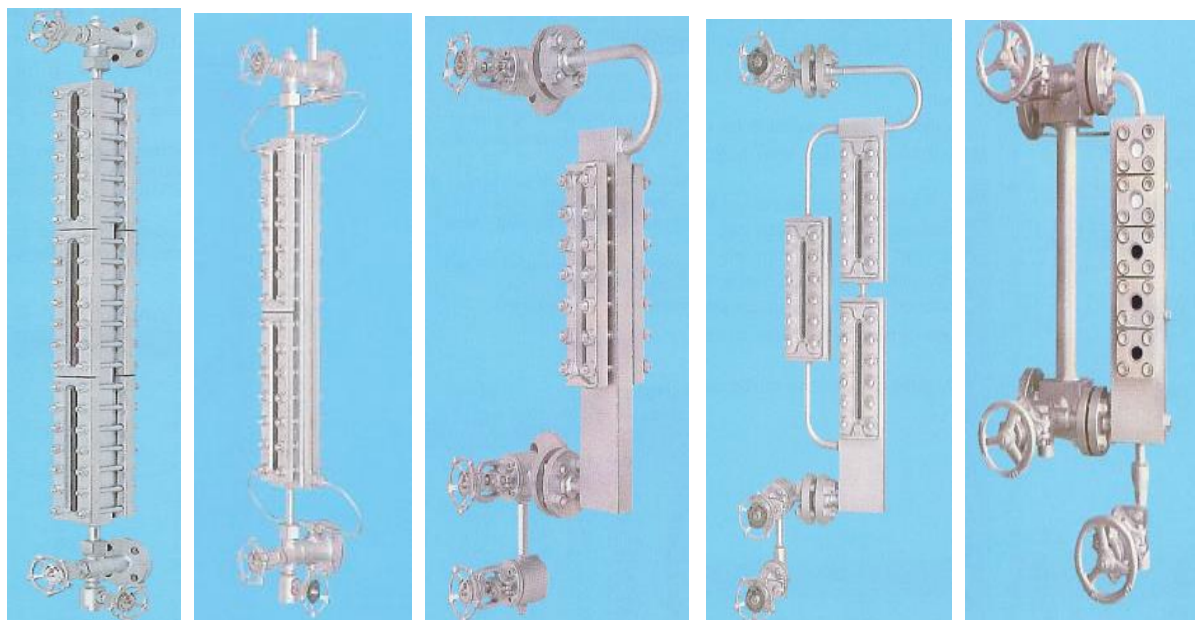
\*Using a Long thick flat gauge glass has groove on one side, the gaseous part of the gauge appears silver and liquid part appears black.

\*Applicable for Chemical, Small Boiler, Power Plant and etc.

\* S10 is applicable under 200 deg C, S40 is applicable under 180 deg C and they are not applicable for corrosive fluid.

## DIRECT VIEWING

### Transparent type Level Gauge (Symbol: T/ MT/ TMH)



T2 Series  
3T2.7-L212M00

w/ Jacket Line

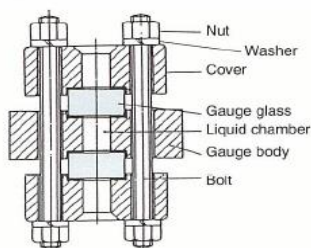
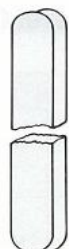
T6 Series  
1T6.7BRM-  
MY242Y10

T12 Series  
3T12.6BRM-  
H244H11

Multi-Port Glass  
MT5BRM-  
H242H11

#### CROSS SECTIONAL VIEW

Gauge glass



T4 series

\*Putting Two flat and thick gauge glass parallel, you can see liquid level transparently.

\* With Mica Plate or Protective sheet, applicable for using high temperature steam service or corrosive fluid service.

\*Applicable for watching the interface between two no-mixing liquid.

#### Max. Ope. Press./Temp. Table

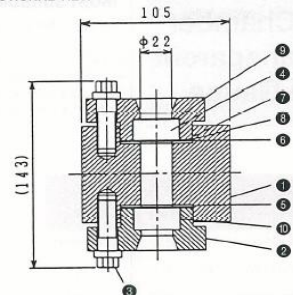
	Press.	Temp.	Mat'l	Glass#
T2	4.1	400	C.S/S.S	#4
T4	10.8	450	C.S/S.S	#4
T6	11.4	450	C.S/S.S	#4
T12	15.5	450	C.S.*	#4
MT*	14.7	450	C.S.*	MC
TMH*	22.1	450	C.S.*	MH
	(Mpa)	(°C)		

\*MT&TMH types are using Multi-Port glass, please see basic summary of structure for MC & MH series.

\*Stainless Steel Mat'l is optional.

\*\*Option: Mica Gaskets, Illuminator.  
Non-Frost Plate and Jacket.

#### CROSS SECTIONAL VIEW

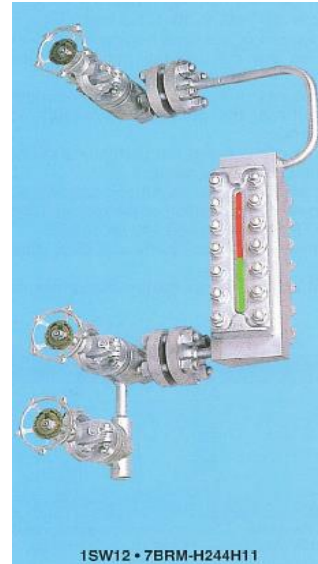


MT type

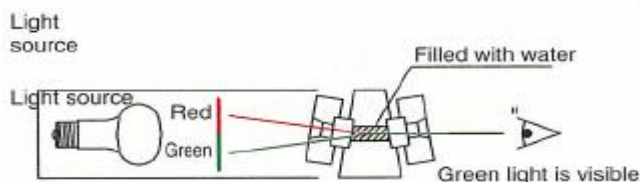
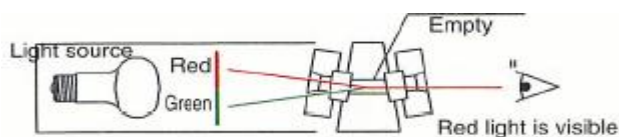
# BBK Technologies CO., LTD.

DIRECT VIEWING

## **Two-Color type Level Gauge (Symbol: SW)**



## **Flat Gauge Glass type: SW Series**



Lighting from Illuminator to Double flat gauge glass with Trapezoided gauge body, by the reflection of lighting the gaseous part appears red and the liquid part appears green clearly.

Two-Color type are good for ITV or Milloring watching because of clearly two-color separation.

Max. Ope. Press./Temp. Table

	Press.	Temp.	Mat'l	Glass#
SW4	10.8	450	C.S/S.S	#4
SW6	11.4	450	C.S/S.S	#4
SW12	15.5	450	C.S.*	#4

(Mpa) (°C)

\*Stainless Steel Mat'l is option.

\*Applicable for High Temperature Steam service or Corrosive Fluid with Mica sheet.

\* Many Exiperience for Steam Drum and High- Temperature and pressure chemical using all over the world.

\* LED type Explosion Proof Illuminator available.

## DIRECT VIEWING

### **Multi-Port Gauge Glass type MC / MH Series**

Max. Ope. Press./Temp. Table

	Press.	Temp.	Mat'l	Glass#
MC	14.7	450	C.S.*	MC
MH	22.1	450	C.S.*	MH

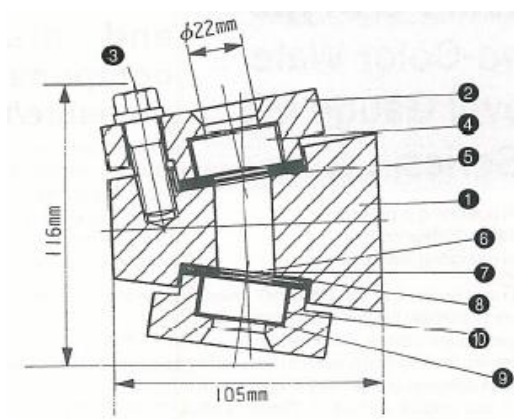
(Mpa) (°C)

\*Stainless Steel Mat'l is option.

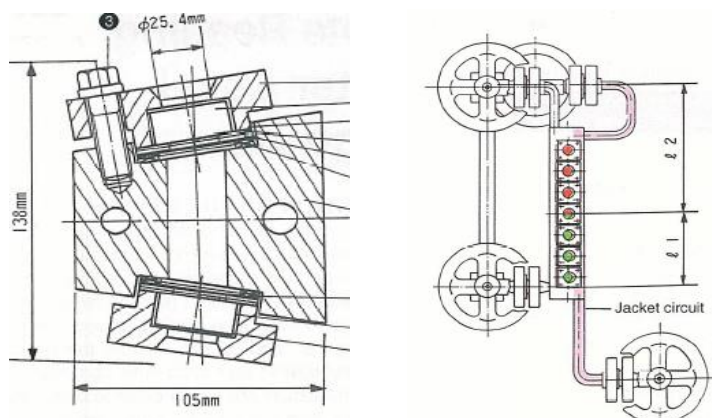
\*Thermal Compensate Jacket Circuit (MH)



\*The Port Glass are used for visible window so as to withstand ultra-high pressure and temperature.



\*MH series has jacket circuit for thermal compensate, applicable for Saturation temperature & pressure.



\*MT and TMH series are using port glasses parallel, so you can see liquid level transparently.



# BBK Technologies CO., LTD.

## **SPARE PARTS**

\*Gauge Glass, Circler Glass, Gasket, Packing...

**We select Best Combination of Glass, Mica and Gaskets for our products.**  
**We insert and supply Best Quality Parts for each level gauge.**



### **OPTION: Artificial Mica (Stainless Mica)**

#### **1) No stain and impurities and High Transparency**

Created in the ground for a long time natural mica have impurities. It is hard to reduce all impurities and stain during process law ore to products. These impurities cause to stain by steam, or to break.

“Stainless Mica” is artificial products. So it contains no impurities during its creation process, the Stainless Mica has no defects like as Natural mica.

#### **2) Great Anti-Corrosive and stable to High temperature Steam**

The components of Stainless Mica and Natural Mica are almost same. Natural mica contains little more Ferrite than stainless mica, the ferrite cause to stain or break on Mica. For using high temperature steam, Stainless mica has low adhesion of stain and great function to maintain clean surface.

**When assembling component parts in the gauge, please make it by all means with our handling manual.**

**It is strongly recommended to use BBK genuine parts for the level gauge to be operated safely for a long time.**



## Magnet type Level Gauge (Symbol: MG )



MG1P4(25A)  
Slim Type



MG1P4(25A)  
Level Switch  
& Scale Plate



MG5F(50A)  
Standard type  
with Level Switch



MG5P(50A)  
-20mA Transmitter

### SUMMARY OF STRUCTURE

Magnetic Level Gauge indicate clear liquid level on the indicator mounted on the outside wall of the chamber.

The indicator is followed the moving of magnetic float by changing liquid level in the non-magnetic material chamber.

4-20mA output Level Transmitter & Level Switch are available for remote monitoring and controlling.

New comer is Slim type. It is compact, light and saving cost.

### FEATURE

#### ● Direct Visible

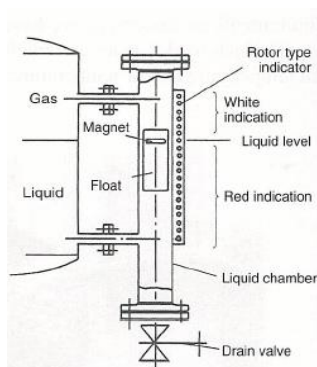
Clear Water Level from far away because of colored indicator with Red and White.

#### ● Safety

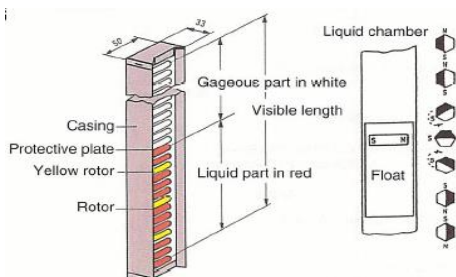
Metal pipe type doesn't have danger of damage or leaking.

#### ● Maintenance Cost Free

Magnetic Level Gauge don't have consumable parts, so you don't need maintenance and management cost.



Low Press	Mid. Press	High Press.	Ex-High Press.
← MG1 ~ MG50 →			



\*\*Option: Transmitter, Level Switch,  
Illuminator, Non-Frost Plate and  
Jacket.

## Electrode type Level Gauge (Symbol: SRV-E)

### STEPRODEVISION

There is no Electrode type with the same capacity and quality in the world.

STEPRODEVISION has been developed by BBK with long experiences as manufacture of direct reading level gauge for steam service.

Max. Ope. Press./Temp. Table

	Press.	Temp.
SRV-E	34.3 (Mpa)	400 (°C)



Detector

→  
CABLE

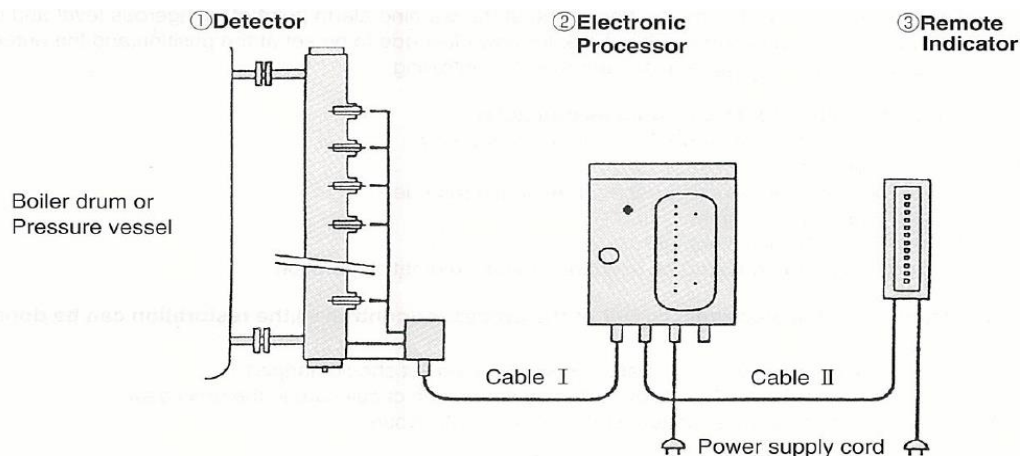


Processor

→  
CABLE



Remote Display



By Electrode plug sensing difference of electric resistance between water and steam, Indicate clearly Liquid level with two color. Steam part indicates Red and Water part indicates Green.

\*Maintenance-Free for 2-year.

\*Clearly level indicating at remote distance.

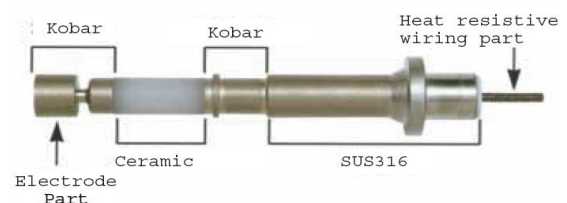
\*Plug Pitch; Standard 50mm, Minimum 25mm.  
Installing plugs required quantity and points.

\*Multiple level monitoring: transmitting 4-20mA to Remote Alarm, Level Control devise and also.

\*Explosion Proof, Water-Proof Structure.

\*Self Testing System for Any breakdown.

### Electrode Plug



## Sight Glasses

Checking flow of Piping equipment.










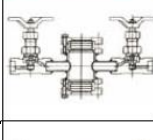

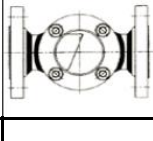

Available for High Pressure, Coating Products and etc..

Here are BBK brand real sight glasses that are designed and manufactured by BBK, long experienced manufacturer with highly qualified technology specialized in level gauges, to which sight glasses are close as a whole.

BBK sight glasses are most reliable ones in the performance of their part for flow checking in the piping equipment of chemical plant and of steam service facilities, and for assistance of safety management, functional improvement and rationalization in respective plants.

The other sight glasses, not mentioned here, for example, for high temperature and high pressure applications, for anti-corrosive material or treatment item or special made may be designed and manufactured on your request. Please consult with us for any advice.

### Various Kind of Sight glasses

Model	Type		Piping Direction	Model	Type		Piping Direction
SG-1T SG-1R	Welded to Wall type		—	SG-7F	Flanged Ball type		↕
SG-2	Welded to Wall type		—	SG-5F	Flanged Rotator type		↕
SG-3F	Flanged Flow type		↕	SG-9	Flanged Jacket type		↕
SG-3S	Threaded Flow type		↕	SG-10	Flanged Short Pipe type		↕
SG-4F	Flanged Flapper type		↕	SG-VP	By-pass sight glass		↔
SG-4S	Threaded Flapper type		↕	SG-3FN	Flanged with Nozzle type		↕
SG-6F	Flanged Lantern type		↕	Standard Material		STPT STPG S25C SUSTP SUS PVC	



Vertical or  
horizontal piping

↔ horizontal piping



# BBK Technologies CO., LTD.

Through the monitoring liquid level, to maintain safety and contribute society...



## 100 YEARS COMPANY

We supply a variety of level gauge, Reflex, Transparent, Two-color, Multi-port, Magnet and Electrode type. Optionally transmitter and level switch included.

Also Flow, Ball, Flapper, Rotator and Lantern type sight glass are in our supply scope.

Please rely on our technology to solve your trouble or problem.



## Monitoring Quality and Safety

Monitoring liquid level and flowing in the boiler, variety tank and pipe line by Level Gauges and Sight Glasses, it supports to maintain the Products Quality control and safety for operator and equipment.



## CONTRIBUTION FOR SOCIAL INFRASTRUCTURE

Many supply records for Power plant, chemical plant, initiation plant, water treatment plant and etc...

We are included in infrastructure and products familiar to life.



## 2020, We celebrate 100th Anniversary of our founding

BBK has not only supplied high quality level gauges and sight glasses but also reliability and after services based on the experience through our long-term business since 1920.

## **BBK Technologies CO., LTD.**

(Our company name Changed from Bunkaboeki Kogyo Co.,Ltd.)

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**BBK Technologies CO., LTD.**

2020.2.@100