

**BONT<sup>®</sup>**

**BONT Technologies**

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**GAUGE GLASSES**

FOR WATER LEVEL GAUGE



## Gauge glasses to DIN 7081

We manufacture two standard versions of gauge glasses: reflex glasses, which allow simple and safe readings to be made at a distance; and transparent glasses, which can also be supplied in a high-pressure version for particularly high requirements. If you cannot find your gauge glass here please contact us at [info@lkssb.com.my](mailto:info@lkssb.com.my)

### MECHANICAL PROPERTIES

- Tensile bending strength: Standard:  $\geq 150 \text{ N/mm}^2$  High Pressure:  $\geq 180 \text{ N/mm}^2$
- Surface pressure-prestressing: Standard:  $\geq 80 \text{ N/mm}^2$  High Pressure:  $\geq 90 \text{ N/mm}^2$

The Thermal prestressing increases the existing tensile bending strength by a factor of at least two. This means that the safety required by DIN 7081 for gauge glasses is guaranteed.



## **THERMAL PROPERTIES AND WORKING CONDITIONS**

- Maximum working temperature: 300 °C

Temperatures exceeding > 280 °C may cause the induced compressive stress to be relieved, reducing its durability. With saturated and superheated steam: -unprotected glasses 243 °C -Mica-protected glasses 300 °C

The admissible temperature limit can be 430 °C for media without any technically significant attack to glass, provided the specific conditions of use (pressure, medium type, type of fitting) permit this.

- Resistance to thermal shock:  
 $\Delta T$  min. 265K

## **VERSIONS**

- Surfaces: optical and sealing surfaces polished
- Lateral surfaces: press-moulded or ground with a 1.5° bevel for manufacturing reasons
- Edges: Chamfered at an angle of 30° or 45°
- Sealing Surfaces: at least 5 min for gauge glasses up to 30mm wide at least 6mm for gauge glasses up to 34mm wide.



Gauge glasses of Borosilicate glass 1-420								
Standard						High Pressure		
Reflex			Transparent			Transparent		
Size	Dimensions l x b x s / mm	Catalogue number	Size	Dimensions l x b x s / mm	Catalogue number	Size	Dimensions l x b x s / mm	Catalogue number
0	95 x 34 x 17*	GG-LK-RB0	0	95 x 34 x 17*	GG-LK-TB0	0	95 x 34 x 17.5*	GG-LK-HTB0
1	115 x 34 x 17*	GG-LK-RB1	1	115 x 34 x 17*	GG-LK-TB1	1	115 x 34 x 17.5*	GG-LK-HTB1
2	140 x 34 x 17	GG-LK-RB2	2	140 x 34 x 17	GG-LK-TB2	2	140 x 34 x 17.5*	GG-LK-HTB2
3	165 x 34 x 17	GG-LK-RB3	3	165 x 34 x 17	GG-LK-TB3	3	165 x 34 x 17.5*	GG-LK-HTB3
4	190 x 34 x 17	GG-LK-RB4	4	190 x 34 x 17	GG-LK-TB4	4	190 x 34 x 17.5*	GG-LK-HTB4
5	220 x 34 x 17	GG-LK-RB5	5	220 x 34 x 17	GG-LK-TB5	5	220 x 34 x 17.5*	GG-LK-HTB5
6	250 x 34 x 17	GG-LK-RB6	6	250 x 34 x 17	GG-LK-TB6	6	250 x 34 x 17.5*	GG-LK-HTB6
7	280 x 34 x 17	GG-LK-RB7	7	280 x 34 x 17	GG-LK-TB7	7	280 x 34 x 17.5*	GG-LK-HTB7
8	320 x 34 x 17	GG-LK-RB8	8	320 x 34 x 17	GG-LK-TB8	8	320 x 34 x 17.5*	GG-LK-HTB8
9	340 x 34 x 17	GG-LK-RB9	9	340 x 34 x 17	GG-LK-TB9	9	340 x 34 x 17.5*	GG-LK-HTB9
10	370 x 34 x 17	GG-LK-RB10	10	370 x 34 x 17	GG-LK-TB10	10	370 x 34 x 17.5*	GG-LK-HTB10
11	400 x 34 x 17	GG-LK-RB11	11	400 x 34 x 17	GG-LK-TB11	11	400 x 34 x 17.5*	GG-LK-HTB11
1	115 x 30 x 17*	GG-LK-RA1	1	115 x 30 x 17*	GG-LK-TA1	1	115 x 30 x 17.5*	GG-LK-HTA1
2	140 x 30 x 17	GG-LK-RA2	2	140 x 30 x 17	GG-LK-TA2	2	140 x 30 x 17.5*	GG-LK-HTA2
3	165 x 30 x 17	GG-LK-RA3	3	165 x 30 x 17	GG-LK-TA3	3	165 x 30 x 17.5*	GG-LK-HTA3
4	190 x 30 x 17	GG-LK-RA4	4	190 x 30 x 17	GG-LK-TA4	4	190 x 30 x 17.5*	GG-LK-HTA4
5	220 x 30 x 17	GG-LK-RA5	5	220 x 30 x 17	GG-LK-TA5	5	220 x 30 x 17.5*	GG-LK-HTA5
6	250 x 30 x 17	GG-LK-RA6	6	250 x 30 x 17	GG-LK-TA6	6	250 x 30 x 17.5*	GG-LK-HTA6
7	280 x 30 x 17	GG-LK-RA7	7	280 x 30 x 17	GG-LK-TA7	7	280 x 30 x 17.5*	GG-LK-HTA7
8	320 x 30 x 17	GG-LK-RA8	8	320 x 30 x 17	GG-LK-TA8	8	320 x 30 x 17.5*	GG-LK-HTA8
9	340 x 30 x 17	GG-LK-RA9	9	340 x 30 x 17	GG-LK-TA9	9	340 x 30 x 17.5*	GG-LK-HTA9

We supply gauge glasses  
to the following standards:  
DIN 7081, BS 3463, JIS B  
8211, Ö-Norm M7354,  
MIL G 16356 D.



## Please read the following information – it concerns your safety.

Each of our sight and gauge glass carefully manufactured and tested. It can only fill its duties safely and to your complete satisfaction if both the working conditions and information about its assembly and use are taken into account. We are pleased to provide you with some information on this page.

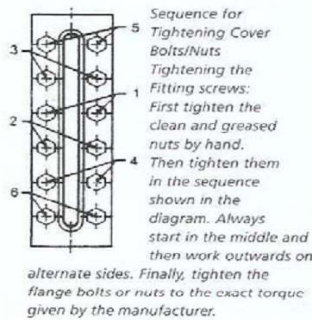
**Fittings:** You should always observe the manufacturer's instructions for assembling and changing sight and gauge glasses. The basic fittings and flanges must satisfy the normal requirements for working under temperature and pressure conditions. It is particularly important that the flatness and freedom from distortion of the sealing surfaces can be guaranteed. These must satisfy at least the same requirements as are guaranteed for the sight and gauge glasses. The flatness should be checked when the sealing surfaces have been thoroughly and completely cleaned.

**Never reuse** a sight or gauge glass that has already been exposed to process conditions.

**Sealing material:** Always use new gaskets for assembly and use the sealing material recommended by the manufacturer of the fittings.

These gaskets must also be flat and undamaged.

**Mica protection shields** can be used to increase the working life of sight and gauge glasses and to allow them to be exposed to higher temperatures. However reflex glasses cannot be protected in this way. During assembly the glass must always be centred in the fitting in order to avoid a glass-metal contact. The correct sequence must always be observed when assembling the glass, gasket and mica protection shield.



**During operating processes** never try to clean the glass by mechanical means, never tighten up the nuts and bolts of the fitting and never perform other work on the fitting.

**Transport packing** is used to protect the glasses. Please leave the glass in packing until they are required for use and avoid contact with other glass or metal components.

**Sight and gauge glasses which are scratched, chipped, pitted or any other surface damage exist, should never be used.**

**Sight and gauge glass condition checks** should be carried out regularly; when used in new and unknown processes daily. Keep maintenance records and replace the glasses on a regular basis. Look for damage, scratches and loss of substance.

**Cleaning the glasses:** please only use commercially available glass cleaning agents to clean the glasses. Never use wire brushes, metal scrapers, or other sharp-edged items which could scratch the glass and make it unusable. Opaque and rough glasses which cannot be cleaned with simple cleaning agents should be replaced.

*Our aim is to inform and advise our customers. Nevertheless, general values obtained from experience and test results simply cannot be applied to particular and specific applications. Too many factors which we cannot influence play a role. We must therefore ask you to appreciate that no claims can be made which may arise as a result of any advice we may have provided. You are responsive to property care for and maintain the sight glasses.*



**Fax this inquiry to 03-5525 2277**  
**We will attend your inquiry immediately**

Dear Sir,

- Yes, We are interested on your system
- No, we already have the system but need to have maintenance contract

Please contact us by,

- Visit our site/factory
- Fax us a Quote

Customer Contact detail:-

Names: \_\_\_\_\_

Company: \_\_\_\_\_

Mobile/Tel: \_\_\_\_\_

Fax No: \_\_\_\_\_

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