

Transparent level gauge glass

Transparent level gauge glasses offered by us are made by a recognized, global companies like Klinger, Maxos, Spectraglass of high-quality **borosilicate** ("extra hard") or **aluminosilicate** glasses. Glass in the production process is subjected to a two-sided polishing and toughening. This results in products characterized by high mechanical strength and high resistance to alkalis, acids and condensates. In the production process is conducted constant and precise control of transparency and the dimensions of manufactured glass.

Transparent (smooth) level gauge glasses are used to read the liquid level directly or with the use of CCTV (industrial television). They can be (type TA 28) used up to **180 bar / 356°C** for aggressive environments affecting (interacting) the glass (eg. saturated steam, hot water, alkalis) and up to **300 bar / 400°C** for soft environments. **Glass must be protected from the medium side through the mica shields.** They are especially recommended for environments contaminated, viscous and highly corrosive.

Depending on the width and thickness there are four basic types of transparent level gauge glasses:

- type A** - width 30 mm, thickness 17 mm
- type B** - width 34 mm, thickness 17 mm
- type H** - width 34 mm, thickness 22 mm
- type TA 28** - width 27,6 mm, thickness 16,8 mm

In addition, the occasionally encountered also:

- **type C** - width of 20 mm, thickness 12 mm
- **type D** - width 25 mm, thickness 15 mm

Transparent level gauge glasses are supplied in sets with gaskets and mica shields or separately.

Meets the conditions of the following standards:

- ÖNORM M 7354 (Austrian standard)
- **DIN 7081 (German standard)**
- JIS B 8211 (Japanese standard)
- ÖMV-Spez. H 2009 (Austrian factory standard of the petrochemical concern ÖMV-AG, Vienna)
- MIL-G-16356 D (regulations the US Navy)
- Esso Eng. Spec. 123 (Esso Research & Engineering Co. - New Jersey)
- S.O.D. Spec. 123 (Standard Oil Development Company - New Jersey)
- BS 3463 (British Standard)

Scope of application:

	Type A		Type B		Type H		Type TA 28 ³⁾	
	[bar]	[°C]	[bar]	[°C]	[bar]	[°C]	[bar]	[°C]
For soft environment, not affecting aggressive on the glass ie. oils, hydrocarbons, etc.	240	120	290	120	340	120	-	-
	160	400	800	400	230	400	-	-
	0 - 10	430	0 - 10	430	0 - 10	430	-	-
For aggressive environment acting on the glass, eg. saturated steam, hot water, alkalis	35 ¹⁾	243	35 ¹⁾	243	42 ¹⁾	253	120 ²⁾	324
	70	300	85	300	85	300	180	356

¹⁾ For steam pressures above 35 bar is recommended to use mica shields

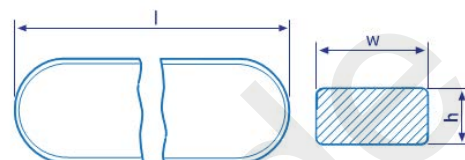
²⁾ For steam pressures above 120 bar can be used only glasses TA-28-I

³⁾ Glass type TA 28 **can be used only with mica shields.**

Dimensions

Size	Type A			Type B			Type H			Type TA 28		
	L	W	H	L	W	H	L	W	H	L	W	H
I	115	30	17	115	34	17	-	-	-	113	27,6	16,8
II	140	30	17	140	34	17	140	34	22	-	-	-
III	165	30	17	165	34	17	165	34	22	163	27,6	16,8
IV	190	30	17	190	34	17	190	34	22	188	27,6	16,8
V	220	30	17	220	34	17	220	34	22	218	27,6	16,8
VI	250	30	17	250	34	17	250	34	22	248	27,6	16,8
VII	280	30	17	280	34	17	280	34	22	278	27,6	16,8
VIII	320	30	17	320	34	17	320	34	22	318	27,6	16,8
IX	340	30	17	340	34	17	340	34	22	338	27,6	16,8
X	-	-	-	370	34	17	-	-	-	-	-	-

All dimensions in mm.



Sample contents of the set.

The set, packaged in a common box, consists of:

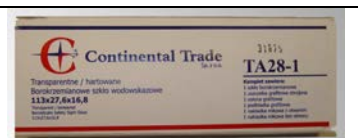
- box
- set of washers
- gasket
- mica shield for the media side
- mica shield for the place of observation (with a hole Φ ca. 1 mm)
- installation guide

In all **TA-28** sets, soft washers and protective washers are made from graphite foil. In set **TA-28-I** gasket is made from graphite laminate KlingerGraphite type SLS (see desc. [here](#)), but for sets **TA-28-III .. TA-28-IX** KlingerGraphite type PSM is used (see desc. [here](#)).

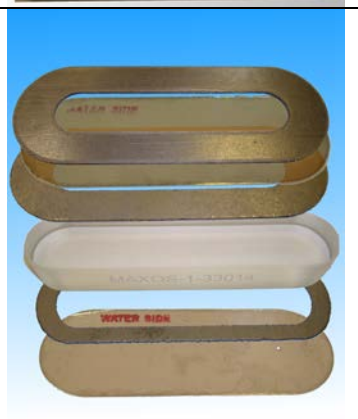
In sets type **A, B, H** all washers are made from KlingerSil plate type C-4430 (see desc. [here](#)), but gaskets are made from graphite laminate KlingerGraphite type SLS (see desc. [here](#)).

It is good to know, that the role of the mica shield installed on the outside (ie, on the side of the viewer) is to reduce the thermal shock to which gauge glass is exposed, working on the one hand, in an environment of high temperature (steam, hot water), and on the other, with a low (room) temperature environment. Outer mica shield helps to a longer faultless operation of the set. The hole made in the shield, protects against moisture staying between the glass and mica while mounting assembly and relieves pressure above and below the shield during normal operation.

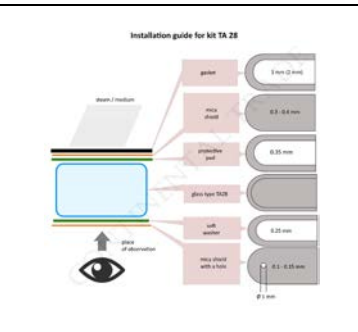
Box



Set of elements



Installation guide



We also provide glass unusual: manufactured according to individual customer technical requirements, custom sizes and custom shapes.