

Reflection and transparency glasses

For level indicator box



Model 066



For visual checking of the level of liquids in all types of vessel, including those under pressure, in special thermal and chemical conditions. Also for checking processes.
The quality of the sight glass satisfies the most demanding safety standards and industry guarantees in general.

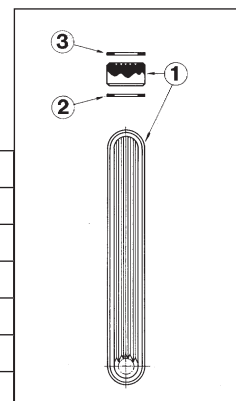
Specifications

- Boron silicate glass of high chemical stability.
- Of great purity and homogeneity.
- Low thermal expansion coefficient.
- Thermally prestressed which guarantees high mechanical resistance.
- High resistance to sharp changes of temperature, pressure and chemical aggression, guaranteeing a long life.
- Joint surfaces are perfectly flat.
- The prisms are pressed, not cut, with a precise angle of reflection.
- If the glass is accidentally broken it does not shatter.
- Satisfies the international standards: DIN-7080, DIN-7081, BS-3463, Ö Norm M7353, Ö Norm M7354, JIS B 8211, MIL G 18498, TGL 7210, ESSO/EXXON, Ö MV H 2009, SOD Spec. 123, etc.

IMPORTANT

Depending on demand:

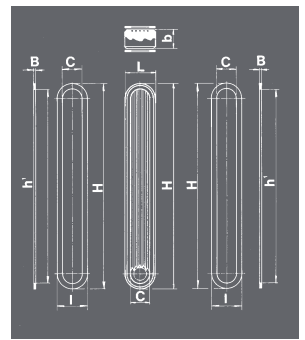
- Other types of joints: Cardboard type klingerit acidit, PTFE (Teflón), etc.



N°.PIECE	PIECE	MATERIAL		
		1	Glass	Boron-Silicate
2	Joint	Klingerit cardboard (1)		
3	Joint	Graphite (1)		
OPERATING CONDITIONS (2)	FLUID	WITH OUTSTANDING ATTACK	WITHOUT OUTSTANDING ATTACK	TRANSPARENCY WITH MICA
	PRESSURE IN bar	35	100	70
	MAXIMUM TEMPERATURE IN °C	243	120	280 ÷ 300

(1) For level indicator box in steam, joint (3) must be exposed to the medium. For level indicator box in processes, joint (2) must be exposed to the medium.
(2) Type H 340 bar at 120°C, 42 bar at 253°C.

	TYPE	N° OF PRISMS	N°	H x L x b	C	TOLERANCES				PARALLELISM TOLERANCES	h1	l	B	WEIGHT IN kgs.	CODE
						H	L	b	C						
REFLECTION	A	5	0	95x30x17	15					0,05	79	30	1,5	0,08	2101-066.1005 -
			I	115x30x17	15						99			0,11	2101-066.1015
			II	140x30x17	15						124			0,14	2101-066.1025
			III	165x30x17	15						149			0,17	2101-066.1035
			IV	190x30x17	15	+0	+0,2	+0,5	+0,2		174			0,20	2101-066.1045
			V	220x30x17	15	-1,5	-0,8	-0,5	-0,8		204			0,23	2101-066.1055
			VI	250x30x17	15						234			0,27	2101-066.1065
			VII	280x30x17	15						264			0,31	2101-066.1075
			VIII	320x30x17	15						304			0,36	2101-066.1085
			IX	340x30x17	15						324			0,38	2101-066.1095
	X	370x30x17	15					354	0,40	2101-066.1105 Δ					
	B	5	0	95x34x17	17					0,05	75	35	1,5	0,10	2101-066.2005
			I	115x34x17	17						95			0,12	2101-066.2015
			II	140x34x17	17						120			0,16	2101-066.2025
			III	165x34x17	17						145			0,19	2101-066.2035
			IV	190x34x17	17	+0	+0,2	+0,5	+0,2		170			0,22	2101-066.2045
			V	220x34x17	17	-1,5	-0,8	-0,5	-0,8		200			0,26	2101-066.2055
			VI	250x34x17	17						230			0,30	2101-066.2065
			VII	280x34x17	17						260			0,35	2101-066.2075
			VIII	320x34x17	17						300			0,41	2101-066.2085
			IX	340x34x17	17						320			0,43	2101-066.2095
	X	370x34x17	17					350	0,45	2101-066.2105					
	H	5	0	95x34x22	17					0,05	75	35	1,5	0,15	2101-066.3005 Δ
			I	115x34x22	17						95			0,17	2101-066.3015 -
			II	140x34x22	17						120			0,22	2101-066.3025 -
			III	165x40x22	17						145			0,25	2101-066.3035 -
			IV	190x34x22	17	+0	+0,2	+0,5	+0,2		170			0,28	2101-066.3045 -
			V	220x34x22	17	-1,5	-0,8	-0,5	-0,8		200			0,34	2101-066.3055 -
			VI	250x34x22	17						230			0,39	2101-066.3065 -
			VII	280x34x22	17						260			0,46	2101-066.3075 -
VIII			320x34x22	17					300		0,53			2101-066.3085 -	
IX			340x34x22	17					320		0,55			2101-066.3095 -	
X	370x34x22	17					350	0,57	2101-066.3105 Δ						
TRANSPARENCY	A	-	0	95x30x17					0,05	79	30	1,5	0,09	2101-066.10051Δ	
			I	115x30x17						99			0,12	2101-066.10151*	
			II	140x30x17						124			0,15	2101-066.10251*	
			III	165x30x17						149			0,18	2101-066.10351*	
			IV	190x30x17		+0	+0,2	+0,5		-			174	0,21	2101-066.10451*
			V	220x30x17		-1,5	-0,8	-0,5		-			204	0,24	2101-066.10551*
			VI	250x30x17									234	0,28	2101-066.10651
			VII	280x30x17									264	0,32	2101-066.10751
			VIII	320x30x17									304	0,37	2101-066.10851
			IX	340x30x17									324	0,39	2101-066.10951
	X	370x30x17						354	0,41	2101-066.11051Δ					
	B	-	0	95x34x17					0,05	75	35	1,5	0,11	2101-066.20051*	
			I	115x34x17						95			0,13	2101-066.20151*	
			II	140x34x17						120			0,17	2101-066.20251*	
			III	165x34x17						145			0,20	2101-066.20351*	
			IV	190x34x17		+0	+0,2	+0,5		-			170	0,23	2101-066.20451*
			V	220x34x17		-1,5	-0,8	-0,5		-			200	0,27	2101-066.20551*
			VI	250x34x17									230	0,31	2101-066.20651
			VII	280x34x17									260	0,36	2101-066.20751
			VIII	320x34x17									300	0,42	2101-066.20851
			IX	340x34x17									320	0,44	2101-066.20951
	X	370x34x17						350	0,46	2101-066.21051*					
	H	-	0	95x34x22					0,05	75	35	1,5	0,16	2101-066.30051*	
			I	115x34x22						95			0,18	2101-066.30151*	
			II	140x34x22						120			0,23	2101-066.30251*	
			III	165x34x22						145			0,26	2101-066.30351*	
			IV	190x34x22		+0	+0,2	+0,5		-			170	0,29	2101-066.30451*
			V	220x34x22		-1,5	-0,8	-0,5		-			200	0,35	2101-066.30551*
			VI	250x34x22									230	0,40	2101-066.30651*
			VII	280x34x22									260	0,47	2101-066.30751
VIII			320x34x22							300			0,54	2101-066.30851	
IX			340x34x22							320			0,56	2101-066.30951	
X	370x34x22						350	0,58	2101-066.31051*						



* Material without stock.
ΔWe do not manufacture
- We will not manufacture more when stocks run out

Chemical properties	ISO-719	CLASS-1
Hydrolytic resistance	0,019	CLASS-1
Acid resistance	0,030	CLASS-1
Alkaline resistance	0,2	CLASS-1
	89	CLASS-2

Physical properties

Type of glass.....Ggl 490
Average coefficient of linear expansion a20°C/300°C.....<5 • 10⁻⁶ K⁻¹
Transformation temperature according to DIN-52324.....575°C
Temperature of the glass at viscosities dPas (Poise): 10¹³.....553°C
10^{7,6}.....775°C
10⁴.....1.225°C
Density.....2,39 g/cm³

Elasticity modulus.....73,54 N/mm²
Poisson index0,19 μ
Specific thermal tension $\varphi = \frac{E \cdot \alpha}{1-\mu}$ 0,405 Nmm⁻²K⁻¹
Thermal conductivity λ 1,168 • $\frac{W}{m \cdot K}$
Refraction index nd $\lambda = 587,6$ mm1,494
Photoelasticity constant K2,9 • 10⁻⁶ mm²/N