



## 2.2.1 Macro Cells

## 2.2.1 Macro Cells with lids made of PTFE

The macro cell has emerged as the standard for photometry. This cell is defined as follows:

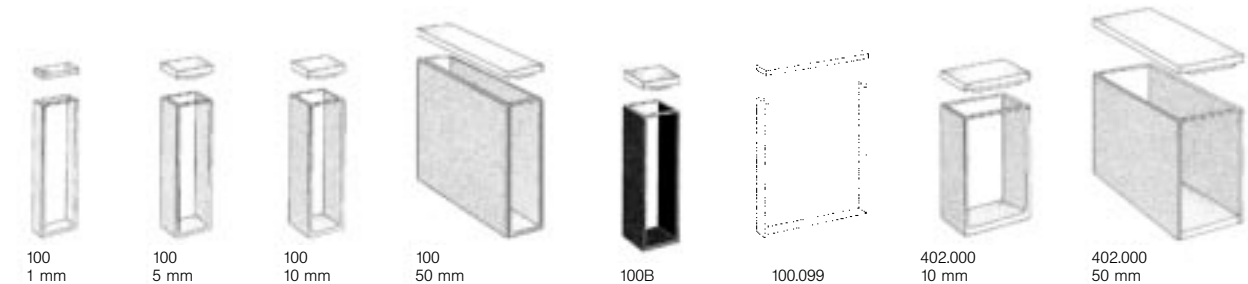
- According to DIN 58963 a macro cell is a rectangular cell with an inner width larger than 5 mm.
- A cylindrical cell must have an inner diameter above 8 mm in order to be classified as a macro cell.

The most widely used macro cell is a rectangular cell with outer dimensions of 45 x 12.5 mm (height x width). The depth of the cell is dependent on the desired light path.

For information about the handling of cells with stoppers please see chapter 2.1.6.

Catalogue Number	Window Material	Light Path mm	Outside Dim. H x W x D mm	Inside Width mm	Base Thickn. mm	Volume $\mu$ l	Number of Windows	Remarks
100-OS*	Special Optical Glass	1	45 x 12.5 x 3.5	9.5	1.5	350	2	glass lid
		2	45 x 12.5 x 4.5	9.5	1.5	700	2	glass lid
		5	45 x 12.5 x 7.5	9.5	1.5	1750	2	
		10	45 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	45 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	45 x 12.5 x 42.5	9.5	1.5	14000	2	
		50	45 x 12.5 x 52.5	9.5	1.5	17500	2	
100	45 x 12.5 x 102.5	9.5	1.5	35000	2			
100-QS	Quartz SUPRASIL	1	45 x 12.5 x 3.5	9.5	1.5	350	2	glass lid
		2	45 x 12.5 x 4.5	9.5	1.5	700	2	glass lid
		5	45 x 12.5 x 7.5	9.5	1.5	1750	2	
		10	45 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	45 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	45 x 12.5 x 42.5	9.5	1.5	14000	2	
		50	45 x 12.5 x 52.5	9.5	1.5	17500	2	
100	45 x 12.5 x 102.5	9.5	1.5	35000	2			
100-QX	Quartz SUPRASIL 300	1	45 x 12.5 x 3.5	9.5	1.5	350	2	glass lid
		2	45 x 12.5 x 4.5	9.5	1.5	700	2	glass lid
		5	45 x 12.5 x 7.5	9.5	1.5	1750	2	
		10	45 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	45 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	45 x 12.5 x 42.5	9.5	1.5	14000	2	
		50	45 x 12.5 x 52.5	9.5	1.5	17500	2	
100	45 x 12.5 x 102.5	9.5	1.5	35000	2			
100B-QS	Quartz SUPRASIL	10	45 x 12.5 x 12.5	9.5	1.5	3500	2	black side walls and base
100.099-OS	Special Optical Glass	1	45 x 35 x 4	32	1.5	13000	2	
		2	45 x 35 x 5	32	1.5	26000	2	
		4	45 x 35 x 7	32	1.5	52000	2	
402.000-OG	Optical Glass	1	40 x 23.6 x 6	18.5	2	450	2	glass lid
		2	40 x 23.6 x 7	18.5	2	900	2	glass lid
		5	40 x 23.6 x 10	18.5	2	2250	2	
		10	40 x 23.6 x 15	18.5	2	4500	2	
		20	40 x 23.6 x 25	18.5	2	9000	2	
		50	40 x 23.6 x 55	18.5	2	22500	2	

\* These cells can also be made with glued windows made of CaF<sub>2</sub> or sapphire (Al<sub>2</sub>O<sub>3</sub>) if required.





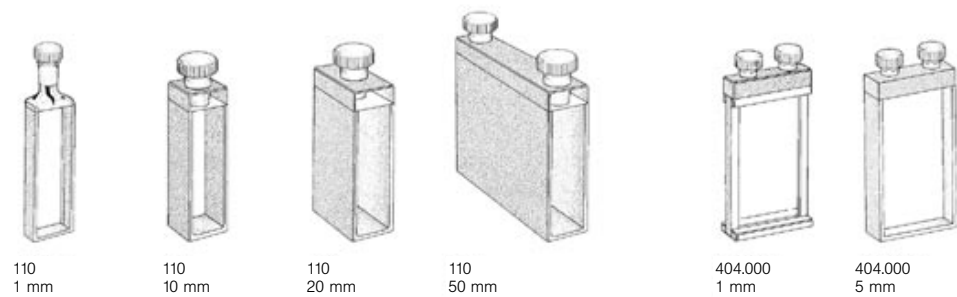
## 2.2.1 Macro Cells

with stoppers made of PTFE

## 2.2.1 Macro Cells

without lids

Catalogue Number	Window Material	Light Path mm	Outside Dim. H x W x D mm	Inside Width mm	Base Thickn. mm	Volume $\mu$ l	Number of Windows	Remarks
110-OS	Special Optical Glass	1	52 x 12.5 x 3.5	9.5	1.5	350	2	
		2	52 x 12.5 x 4.5	9.5	1.5	700	2	
		5	46 x 12.5 x 7.5	9.5	1.5	1750	2	
		10	46 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	46 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	46 x 12.5 x 42.5	9.5	1.5	14000	2	
		50	46 x 12.5 x 52.5	9.5	1.5	17500	2	
100	46 x 12.5 x 102.5	9.5	1.5	35000	2	from 40 mm with 2 stoppers		
110-QS	Quartz SUPRASIL	1	52 x 12.5 x 3.5	9.5	1.5	350	2	
		2	52 x 12.5 x 4.5	9.5	1.5	700	2	
		5	46 x 12.5 x 7.5	9.5	1.5	1750	2	
		10	46 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	46 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	46 x 12.5 x 42.5	9.5	1.5	14000	2	
		50	46 x 12.5 x 52.5	9.5	1.5	17500	2	
100	46 x 12.5 x 102.5	9.5	1.5	35000	2	from 40 mm with 2 stoppers		
110-QX	Quartz SUPRASIL 300	1	52 x 12.5 x 3.5	9.5	1.5	350	2	
		2	52 x 12.5 x 4.5	9.5	1.5	700	2	
		5	46 x 12.5 x 7.5	9.5	1.5	1750	2	
		10	46 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	46 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	46 x 12.5 x 42.5	9.5	1.5	14000	2	
50	46 x 12.5 x 52.5	9.5	1.5	17500	2	from 40 mm with 2 stoppers		
404.000-QX	Quartz SUPRASILL 300	1	47.5 x 23.6 x 3.5	18.5	2.5	700	2	with 2 stoppers
		2	47.5 x 23.6 x 4.5	18.5	2.5	1400	2	
		5	47.5 x 23.6 x 7.5	18.5	2.5	3500	2	
		10	47.5 x 23.6 x 12.5	18.5	2.5	7000	2	
		20	47.5 x 23.6 x 22.5	18.5	2.5	14000	2	



Catalogue Number	Window Material	Light Path mm	Outside Dim. H x W x D mm	Inside Width mm	Base Thickn. mm	Volume $\mu$ l	Number of Windows	Remarks
440.000-OG	Optical Glass	10	100 x 12.5 x 12.5	9.5	1.5	8500	2	
6030-OG	Optical Glass	10	45 x 12.5 x 12.5	9.5	1.5	3500	2	
		20	45 x 12.5 x 22.5	9.5	1.5	7000	2	
		40	45 x 12.5 x 42.5	9.5	1.5	14000	2	
		50	45 x 12.5 x 52.5	9.5	1.5	17500	2	
6030-UV	Quartz HERASIL	10 $\pm$ 0.05	45 x 12.5 x 12.5	9.5	1.5	3500	2	
800.000-OG	Optical Glass	13	75 x 16.5 x 16.5	12.5	1.5	10000	2	
		26	75 x 16.5 x 29	12.5	1.5	20000	2	
		40	75 x 16.5 x 43	12.5	1.5	30000	2	
810.000-OG	Optical Glass	2.5	75 x 16.5 x 5.5	13	1.5	2000	2	
		5	75 x 16.5 x 8	13	1.5	4000	2	
		10	75 x 16.5 x 13	13	1.5	8000	2	
		25	75 x 16.5 x 28	13	1.5	20000	2	

