



2.2.9.1 Cells for HPLC Measurements

ultra-micro | HPLC flow-through cells

The flow-through cells which are a component of the detector system in a HPLC instrument are characterised by the following:

- small measuring chamber volume, such as 8 µl, for maximum resolution
- stainless steel tubing which are glued in place using a process patented by Hellma, which results in high pressure resistance.

The Hellma patented gluing process produces a connection of the tubes with very good chemical resistance and with a pressure resistance equal to that of the cell windows.

These cells can also be fitted with PEEK tubings as opposed to the standard stainless steel tubings.

Do not expose to high pressure for a prolonged period of time!

These cells are not subjected to high pressures during normal operation. In exceptional circumstances, such as when a tubing following the detector is blocked, the full pressure of the instrument can build up within the cell. For safety reasons these cells are able to withstand pressure of about 30 bar for a short time.

Catalogue Number	Window Material	Light Path mm	Centre Height mm	Outside Dim. H x W x D mm	Aperture H x W mm	Volume µl	Stainless Steel Tubings			
							O-Ø mm	Inside-Ø In mm	Out mm	Leng. mm
178.310-QS	Quartz SUPRASIL	10	15	35 x 12.5 x 12.5	Ø 3	80	1.6	1.1	1.1	25
		10	8.5	35 x 12.5 x 12.5	Ø 3	80	1.6	1.1	1.1	25
178.313-QS	Quartz SUPRASIL	10	15	35 x 12.5 x 12.5	Ø 1	8	1.6	0.25	0.50	100
		10	8.5	35 x 12.5 x 12.5	Ø 1	8	1.6	0.25	0.50	100



178.310



178.313

2.2.9.2 Cells for TDA Measurements

macro | semi-micro | with in/outlet tubes

These cells are used in the pharmaceutical industry and in quality control for the analysis of the temporal dissolution during the release of an active ingredient (for example in tablets: TDA – Tablet Dissolution Analysis).

The most important characteristics of these cells are:

- the possibility of automatic measuring in 6 to 8 channels
- the suppression of the creation of bubbles
- applicable for all centre heights
- optional light paths from 1 mm to 100 mm
- adjustable, exchangeable and leak-proof connectors

Catalogue Number	Window Material	Light Path mm	Centre Height mm	Outside Dim. H x W x D mm	Aperture H x W mm	Volume µl	Number of Windows	Remarks		
170-QS	Quartz SUPRASIL	1	both heights	35 x 12.5 x 12.5	175 x 6.5	120	2			
		2	both heights	35 x 12.5 x 12.5	175 x 6.5	240	2			
175.000-QS	Quartz SUPRASIL	5	15	45 x 12.5 x 12.5	11 x 6.5	375	2			
		5	8.5	38.5 x 12.5 x 12.5	11 x 6.5	375	2			
		10	15	45 x 12.5 x 12.5	11 x 6.5	750	2			
		10	8.5	38.5 x 12.5 x 12.5	11 x 6.5	750	2			
		20	15	45 x 12.5 x 22.5	11 x 6.5	1500	2			
		20	8.5	38.5 x 12.5 x 22.5	11 x 6.5	1500	2			
		50	15	45 x 12.5 x 52.5	11 x 6.5	3750	2			
		50	8.5	38.5 x 12.5 x 52.5	11 x 6.5	3750	2			
		100	15	45 x 12.5 x 102.5	11 x 6.5	7500	2			
		100	8.5	38.5 x 12.5 x 102.5	11 x 6.5	7500	2			
		176.000-QS	Quartz SUPRASIL	5	15	45 x 12.5 x 12.5	11 x 4	230	2	
				5	8.5	38.5 x 12.5 x 12.5	11 x 4	230	2	
				10	15	45 x 12.5 x 12.5	11 x 4	450	2	
10	8.5			38.5 x 12.5 x 12.5	11 x 4	450	2			
20	15			45 x 12.5 x 22.5	11 x 4	900	2			
20	8.5			38.5 x 12.5 x 22.5	11 x 4	900	2			
50	15			45 x 12.5 x 52.5	11 x 4	2250	2			
50	8.5			38.5 x 12.5 x 52.5	11 x 4	2250	2			
100	15			45 x 12.5 x 102.5	11 x 4	4500	2			
100	8.5			38.5 x 12.5 x 102.5	11 x 4	4500	2			



170



175.000



176.000