

PCI Series Marple Personal Cascade Impactor

The PCI series Marple Personal Cascade Impactor is specifically engineered to be worn by workers and serves as a multi-stage personal size selective device essential for particle size distribution analysis. Crafted from lightweight aluminum, the PCI series features impaction stages weighing under 7 ounces, ensuring unparalleled comfort and minimal user interference. Offered in 8-stage, 6-stage, and 4-stage configurations, this personal cascade impactor caters to diverse sampling requirements across various applications.



Features

- Offers precise aerodynamic particle size distribution analysis ranging from 20 to 0.5 micrometers.
- Lightweight design ensures minimal user interference during operation.
- Maintains a steady flow rate of 2.0 LPM (liters per minute) for consistent sampling.
- Compatible with a wide array of commercial personal sample pumps, enhancing versatility.
- Inlet design that effectively prevents contamination and overload of the initial stage.
- Provides compatibility with multiple 34mm collection media options, allowing for tailored sampling strategies.
- Affordably priced and straightforward to operate, making it accessible to a wide range of users.
- Equipped with 34mm sample substrates for effortless handling and precise weighing using analytical balances.

Applications

- Personal air monitoring for wood dust.
- Measurement of welding fumes and trace metals.
- Assessment of personnel exposure to silica fibers.
- Asbestos monitoring.
- Indoor air monitoring for particulate air pollutants.
- Measurement of mining dust.
- Sampling of inhalable and respirable particulates.
- Utilized as an aerosol and laboratory research tool.

PRESEPARATOR

10 micrometers and above

STAGE 0

9.0 – 10

STAGE 1

5.8 – 9.0

STAGE 2

4.7 – 5.8

pharynx

STAGE 3

3.3 – 4.7

trachea & primary bronchi

STAGE 4

2.1 – 3.3

secondary bronchi

STAGE 5

1.1 – 2.1

terminal bronchi

STAGE 6

0.65 – 1.1

alveoli

STAGE 7

0.43 – 0.65

alveoli

Stage	PCI-8	PCI-6	PCI-4
Stage 1	21.3 µm		21.3 µm
Stage 2	14.8 µm		14.8 µm
Stage 3	9.8 µm	9.8 µm	9.8 µm
Stage 4	6.0 µm	6.0 µm	
Stage 5	3.5 µm	3.5 µm	3.5 µm
Stage 6	1.55 µm	1.55 µm	
Stage 7	0.92 µm	0.92 µm	
Stage 8	0.52 µm	0.52 µm	

PCI Series Marple Personal Cascade Impactor

Model	PCI-8	PCI-6	PCI-4
Description	8 Stage Personal Impactor	6 Stage Personal Impactor	4 Stage Personal Impactor
Flow Rate	2 LPM nominal (0.5 to 5 LPM max range)	2 LPM nominal (0.5 to 5 LPM max range)	2 LPM nominal (0.5 to 5 LPM max range)
Cut Points	0.52 to 21.3 µm	0.52 to 9.8 µm	3.5 to 21.3 µm
Construction	Precision Machined Aluminum	Precision Machined Aluminum	Precision Machined Aluminum
Substrate Size	34mm	34mm	34mm
Outlet Fitting	1/8"NPT with 1/4" I.D. hose barb	1/8"NPT with 1/4" I.D. hose barb	1/8"NPT with 1/4" I.D. hose barb
Height	8.6 cm (3.4 inch)	8 cm (3.15 inch)	7.2 cm (2.8 inch)
Width/Depth	5.7 / 4 cm (2.2/1.6 inch)	5.7 / 4 cm (2.2/1.6 inch)	5.7 / 4 cm (2.2/1.6 inch)
Weight	250 gr (0.55 lb)	200 gr (0.44 lb)	200 gr (0.44 lb)



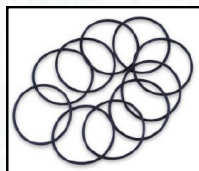
Slotted Substrates

Part Number	CTZ-PCI-GF-SL	CTZ-PCI-MY-SL	CTZ-PCI-SS-SL	CTZ-PCI-MCE-SL	CTZ-PCI-C41-SL
Description	Glass Fiber Slotted Filter	Mylar Slotted Filter	SS Slotted Filter	MCE Slotted Filter	Cellulose Slotted Filter
Material	Glass Fiber	Mylar	Stainless Steel	Mixed Cellulose Ester	Cellulose Grade 41
Diameter	34 mm	34 mm	34 mm	34 mm	34 mm
Quantity	100/pk	100/pk	100/pk	100/pk	100/pk

Un-slotted Substrates

Part Number	CTZ-PCI-GF	CTZ-PCI-MCE	CTZ-PCI-C41
Description	Glass Fiber Filter	MCE Filter	Cellulose Filter
Material	Glass Fiber	Mixed Cellulose Ester	Cellulose Grade 41
Diameter	34 mm	34 mm	34 mm
Quantity	100/pk	100/pk	100/pk

Accessories & Spare parts



Part Number	CTZ-PCI-CAL	CTZ-PCI-ORL	CTZ-PCI-ORS
Description	Calibration Adapter	Large "O" rings, Viton	Small "O" rings, Viton
Quantity	1/pk	10/pk	10/pk

Part Number	CTZ-PCI-CAL	CTZ-PCI-ORL	CTZ-PCI-ORS
Description	Calibration Adapter	Large "O" rings, Viton	Small "O" rings, Viton
Quantity	1/pk	10/pk	10/pk