

## Introducing Apex PM1 Cyclone

Apex Instruments now offers a cyclone designed for sampling very fine particulate matter in the 1.5 to 0.5 micron range. The cyclone is based on the cyclone "V" from the Multi-stage cyclone system designed and calibrated by Southern Research Institute under contract for the EPA. The design has been modified to accept the nozzles from the PM 2.5 cyclone, which has been expanded to a set of 12 different size nozzles. The sample flow rate must be maintained, in which the constant rate determines the actual "D<sub>50</sub>" cut-point. The cyclone is followed by a 47 mm filter assembly. Quartz or PTFE coated glass fiber filters should be used to minimize reactivity with the flue gas.

The cyclone and nozzles are constructed from grade 316 stainless steel with Viton O-rings. Other materials are available upon request for corrosive or high temperature applications.

### PM1 Cyclone Set

The PM1 Cyclone is used for in-stack measurement of very fine particulate matter. The shank has a 5/8" outer diameter for easy adaptation to the Method 5 Probe Assemblies. The cyclone kit is enclosed in a sturdy plastic case.



**PM1, Cyclone Kit, PM1-K**

Product	Description
PM1-K	PM1 Cyclone Kit, 12 Nozzles, (PM2-NS), Filter (SFA-47), Cyclone Body, and Case
PM1	PM1 Cyclone Body Only, Stainless Steel with Viton® O-Rings
PM2-NS	Set of 12 Nozzles for PM2.5 Cyclone, Stainless Steel
O-017V	O-Ring (2 per cyclone)

### Recommended Filters

Product	Description
GF-47QR	47mm Quartz Fiber Filters-100/box (MFS QR100 47mm)
GF-47TPG	47mm PTFE Coated Glass Fiber Filters - 100/box (MFS PG60)
GF-47	47mm Binderless Glass Fiber Filters - 100/box (934AH)

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