

AQUALINE

PS Series

ANTI-SCALING PHOSPHATE CARTRIDGES

SIZE: 9 3/4 in.: Fits all standard 10 in. housings. (Also available in 2.5" X 20" and Big Blue 10" and 20")

POST FILTER: 20 micron spun-bonded polypropylene.

MEDIA: PS-1 Series (Slow dissolving polyphosphate)
PS-3 Series (Combines slow dissolving polyphosphate and premium, dedusted 20x50 mesh GAC)

PRE-FILTER: 100 micron reticulated poly foam.

FLOW RATE: 0.2 - 0.5 gpm continuous
0.5 - 3.0 gpm intermittent (standard size cartridges)
3.0 - 5.0 gpm (Big Blue Series)

CAPACITY:

PS-1	*25000+	gallons
PS-1BB	*50000+	gallons
PS-1BB-20	*120000+	gallons
PS-3	*2500+	gallons
PS-3BB	*5000+	gallons
PS-3BB-20	*10000+	gallons

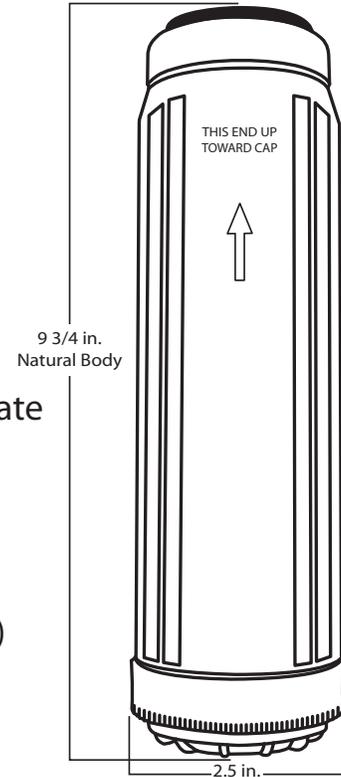
pH RANGE: 6 - 9

* Based on 5 ppm phosphate available for continuous use

Technical Information

The Aqualine Phosphate Series cartridges are non-refillable polyphosphate-adding cartridges designed to sequester iron and hardness to prevent scaling and precipitation reactions in beverage and ice making equipment. They can also be used as anti-scalers for pre R/O or distillation. The Aqualine Phosphate Series is constructed totally from FDA grade materials and media.

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Phosphate Sequestering

The bicarbonate and sulphate salts of divalent ions such as calcium and magnesium undergo change in contact with heat. Such is the case in boilers and hot water heaters. Calcium and magnesium (hardness) scale forms, reducing heat transfer efficiency. Hardness salts also react with soap to form soap curd and the familiar bathtub ring. Iron under goes similar reactions and can also react with organic extracts in coffee and other beverages resulting in off taste. Hardness salts can also precipitate upon concentration, such as in an R/O or distiller. This causes fouling.

Soluble polyphosphate salts added to water at threshold levels of 3 - 5 ppm can effectively tie up (sequester) divalent ions, preventing reactions and hard scale formation. This way equipment stays cleaner and easier to maintain. Some cloudiness and soft scale may occur due to the formation of hardness seed crystals. This is easily removed. The Aqualine Phosphate Series cartridges contain a crystalline form of polyphosphate that dissolves very slowly, allowing only 3 - 5% of the total phosphate to enter the water stream over a 30-day period. This is sufficient to put 5ppm of phosphates into 25000 gallons of feed water per month for 6 - 12 months.

Phosphate Corrosion Protection

In addition to the scale prevention properties of polyphosphates, these salts combine with the surface metal inside pipes to form a protective layer that can reduce corrosion. This is particularly desirable in handling low TDS, aggressive waters or acidic feed streams.

PS-1

This cartridge contains 2.0 lbs of crystalline polyphosphate and can treat 2500 gallons of raw water per month for 12 months. When placed in a clear housing, the remaining phosphate level can be observed.

The PS-1 can be used as a pretreatment for R/O's, ice machines, coffee makers, distillers, hot water heaters, evaporators, and steam generators. Maximum benefit is derived when the feed water flows into a holding tank (boiler, hot water heater) or reservoir, which provides a leveling effect on the phosphate concentration.

PS-3

This cartridge combines 0.5 lb. of crystalline polyphosphate with 36 cubic inches of premium, dedusted 2050 mesh GAC. This is an ideal combination for coffee and ice-makers or for pretreatment of small R/O's requiring dechlorination as well as anti-scaling.