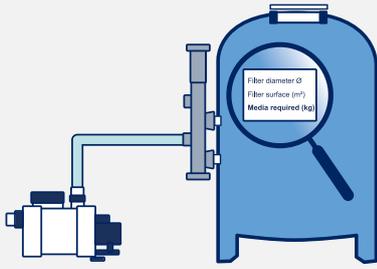


# 1 Before the installation, determine the total quantity of AFM® you need

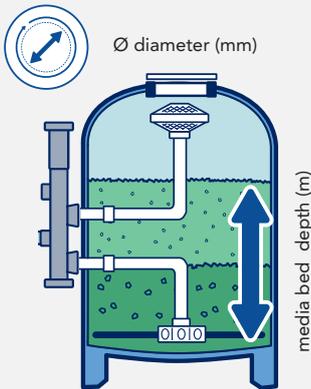


► Check how much sand is required for your filter according to manufacturer's instructions



Quantity of sand x 0.85  
= Quantity of AFM®

► Determine the total quantity of AFM® you need. AFM® has a lower bulk density than sand (1,250kg/m<sup>3</sup>) and quantities by weight should be reduced by 15%. 25kg of sand = 21kg of AFM®



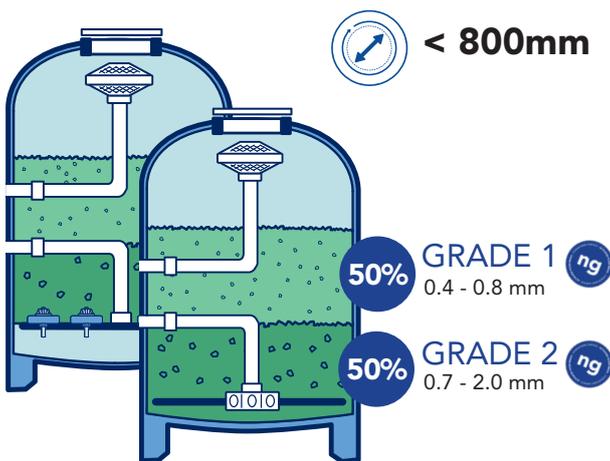
► If no indications are given on your filter on the amount of filter media required, do the following calculations:

1. Calculate filter surface area (m<sup>2</sup>) = radius (m) x radius (m) x 3,14
2. Calculate filter media volume (m<sup>3</sup>) = filter surface area (m<sup>2</sup>) x media bed depth (m)
3. Calculate quantity of AFM® (kg) = 1,250 kg/m<sup>3</sup> x filter media volume (m<sup>3</sup>)

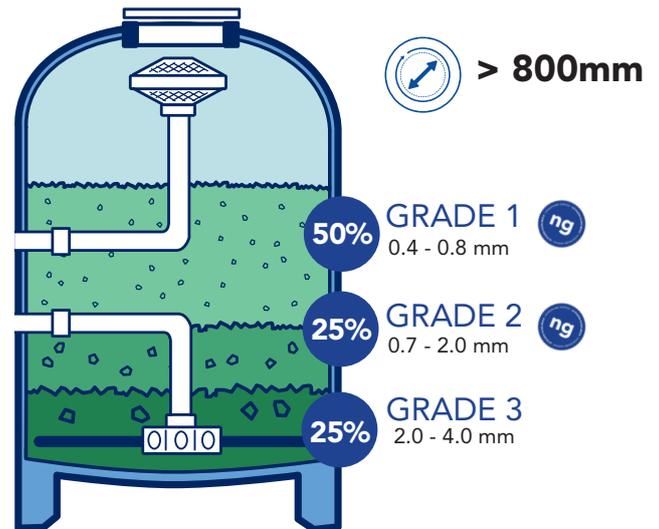
E.g. Filter diameter = Ø1600mm. Media bed depth = 1.2m

Filter surface = 0.8 m x 0.8 m x 3.14 = 2.00 m<sup>2</sup>  
 Filter media volume = 2.00 m<sup>2</sup> x 1.2 m = 2.4 m<sup>3</sup>  
 Quantity of AFM® = 1'250 kg/m<sup>3</sup> x 2.4 = 3'000 kg

# 2 According to filter size, use the following AFM® grades

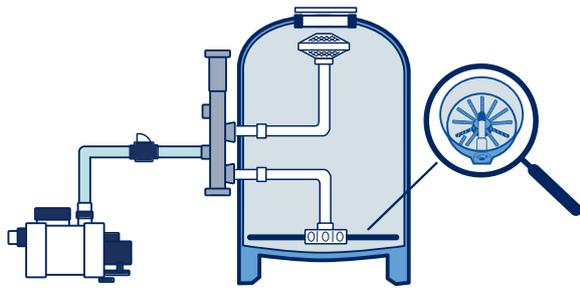


For smaller filters (< Ø 800 mm diameter) and for all filters with nozzle plate beds, irrespective of filter diameter: Use 50% of AFM® ng Grade 1 and 50% of AFM® ng Grade 2

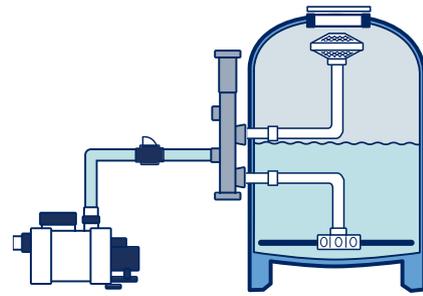


For larger diameter filters (> Ø 800mm) Use 50% of AFM® ng Grade 1, 25% of AFM® ng Grade 2 and 25% AFM® Grade 3. AFM® Grade 3 is required to cover big filter's laterals and, to ensure adequate water flow.

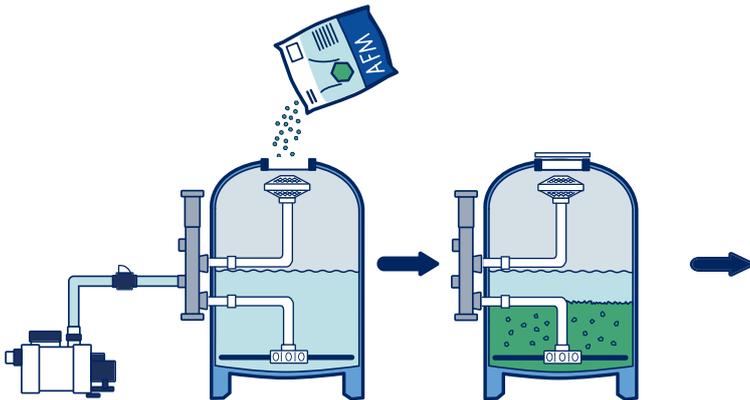
### 3 Filter installation



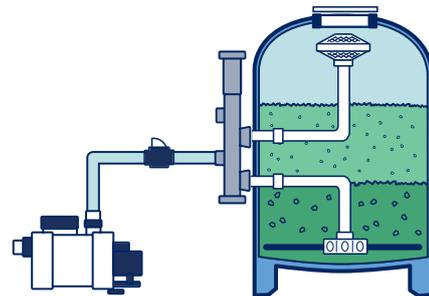
Before filling the filter with AFM®, check your filter's laterals and make sure they are not damaged.



Half fill the filter with water to protect the laterals before pouring AFM® into the filter

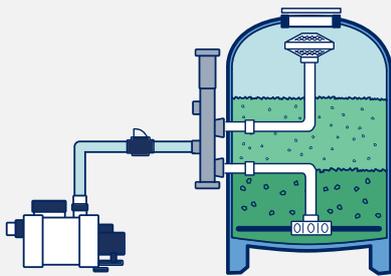


Fill up the filter with AFM® grades as determined in 1 and 2 above

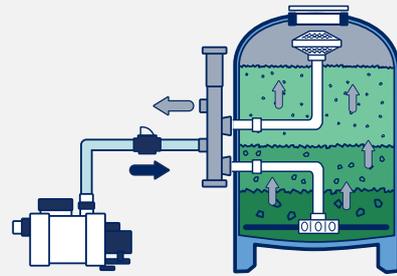


Your filter is ready!

### 4 Filter commissioning

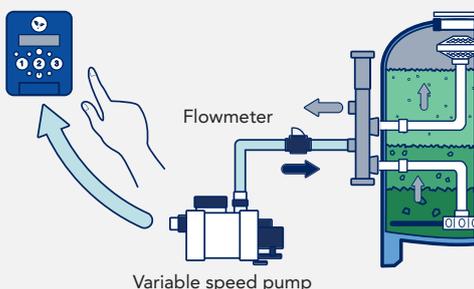


After installation, let AFM® soak to get it wet or run pool equipment on "filtration" for >24 hours to wet AFM®



Proceed to first backwash >24 hours after installation at a velocity of 40 to 50 m/h ( $\text{m}^3/\text{h}/\text{m}^2$ )

### For the best water quality and energy savings



Variable speed pump

- ▶ Use AFM®, preferably with a variable speed pump and set filtration speeds between 15 to 30 m/h : Calculation: Filtration speed (m/h) x filter surface ( $\text{m}^2$ ) = Filtration flowrate ( $\text{m}^3/\text{h}$ ). Adjust flowrate (speeds  $n^{\circ}1$  &  $n^{\circ}2$ ) on your pump using a flowmeter.
- ▶ Backwash filter at least once a week at a velocity of >40m/h for 3 to 5 minutes. Calculation: Backwash speed (m/h) x filter surface ( $\text{m}^2$ ) = Backwash flowrate ( $\text{m}^3/\text{h}$ ). Adjust flowrate (speed  $n^{\circ}3$ ) on variable speed pump using a flowmeter.