



# SUMPLESS, BULKHEAD POOL & SPA SUBMERGED SUCTION OUTLET INSTRUCTIONS

## VGB SERIES

IMPORTANT ADDITIONAL SAFETY INSTRUCTIONS FOR  
4HPxxx and 6HPHAxxx  
(xxx = COLOR SUFFIX)

READ AND FOLLOW ALL FOUR PAGES  
OF INSTRUCTIONS



MEETS OR EXCEEDS ANSI/APSP 16-2011  
ANTI-ENTRAPMENT/ANTI-VORTEX

### MAX FLOW RATES (PER OUTLET) MOUNTING POSITIONS (xxx=COLOR SUFFIX)

Model	4HPxxx	4HP TOTAL OPEN AREA	6HPHAxxx (2")	6HPHAxxx (1½")	6HPHA total open area
Floor	56 GPM @ 3.5 fps	5.2 sq. in.	160 GPM @ 4.9 fps	144 GPM @ 4.4 fps	10.4 sq. in.
Wall	56 GPM @ 3.5 fps	5.2 sq. in.	92 GPM @ 2.8 fps	92 GPM @ 2.8 fps	10.4 sq. in.

### SPECIAL NOTES FOR HP FITTINGS

- No sump is required. AquaStar's Sumpless Series is designed and tested for safe flush-mount installations to tile, fiberglass, acrylic, vinyl and steel as well as plaster, pebble, concrete, etc.
- ABS bulkhead adapter fitting must be securely attached to plumbing with proper glue. Use ABS to PVC transitional glues (such as Oatey® Weld-on® and other green NSF glues).
- **DO NOT** use clear, "hot", "blue" or any fast set glues with any AquaStar pool products.
- When retro-fitting, extra secure installations can be obtained by applying wet and dry epoxy, silicone, etc., to underside of base plates.
- After installation of bulkhead adapter fittings, if a gap exists between pool finish and base of cover it must be filled in with a two-part epoxy to avoid finger or other entrapment.