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MeasurIT Technologies Ltd. are pleased to introduce you to our May technical product update.

Yours sincerely,  
Zoe Williams, [zoe@measurIT.com](mailto:zoe@measurIT.com)

### Wide-Bill Tideflex Check Valves for outfall diffuser systems

Michael Duer, P.E. Sr. Design Engineer  
RED VALVE COMPANY, INC.

The [Wide Bill Tideflex](#) valve opens to and beyond 100% of the nominal diameter.

For those of you that have designed multi-port diffusers with [Tideflex valves](#) in the past, special considerations had to be taken on sizing the valves.

Conventional valves open between 50-85% of nominal pipe diameter depending on flow rate and relative stiffness of the valves. So, for example, 6" (150mm) or 8" (200mm) [Tideflex valves](#) had to be installed on 4" (100mm) ports to have the same headloss at peak flow.



With advances in fabrication and vulcanization equipment, [Tideflex valves](#) that open to and beyond 100% nominal pipe diameter have been designed and fabricated. There is no longer a need to use oversized valves.

Independent hydraulic testing was completed at the Manly Hydraulics laboratory in Sydney, Australia, on two 100mm [Tideflex valves](#).

At higher flow rates, the effective diameter of the [wide-bill Tideflex valve](#) is greater than the 110mm fixed-diameter port upstream of it. The result is less velocity head being dissipated (exit loss). Therefore, **the headloss of the combined port (fixed-diameter port + Tideflex valve) IS LESS than the 110mm fixed-diameter port alone!** Since the [Tideflex valve](#) is still a variable orifice, the jet velocity enhancement at lower flows are still realized.

These valves will allow the direct retrofit of existing diffusers without having to install oversized valves to have the same headloss at peak flow. For new diffusers, the ports/risers will not have to be increased to match the size of the conventional valve.

Read more about [Tideflex check valves](#) at [www.measurIT.com](http://www.measurIT.com).

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We will arrange for our engineer to come on-site and perform non-invasive flow measurements according to your requirements.

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### Stormwater Flow Regulators

When it rains..

A large number of sewage systems have inadequate capacity to transport those amounts of water which prolonged rain produces.

When the water level in the pipes rises above a certain level, basements and other low placed localities are flooded.

Control the problem - find the solution! [read more](#) .

[Learn more about Stormwater Flow Regulators](#) .



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