

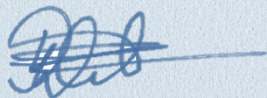
Low Fugitive Emissions Certificate

Velan corrosion resistant API 603 gate valves and similar globe valves

We certify that Velan corrosion resistant API 603 gate valves and similar globe valves designed to API 603 basis using graphite packings and gaskets have been qualified to *API Standard 624 Type Testing of Rising Stem Valves Equipped with Flexible Graphite Packing for Fugitive Emissions*. All graphite packed valves of these types use low fugitive emissions graphite packing certified to API 622. We also certify that Velan API 603 gate and similar globe valves with PTFE packings and gaskets have been qualified to *ISO Standard 15848-1 Fugitive Emissions Type Testing of Valves*. Test reports and performance results are available on request. All valves marked API 624 or ISO FE on the valve nameplate or on a separate permanent metal tag conform to the requirements of API 624 or ISO-15848-1, as applicable.

We further certify that Velan API 603 gate and similar globe valves have been designed in accordance with generally accepted good engineering practice for low fugitive emissions. Our valves have been type-tested pursuant to recognized fugitive emissions qualification standards including API 624 and ISO-15848-1 and have been found to have fugitive emissions lower than 100 ppmv. This certification is based on extensive laboratory testing as well as field experience with regards to emissions performance of our valves. Note that check valves designed to API 603 basis do not fall under the scope of the API 624 standard, so the valves are not marked API 624 but utilize the same low fugitive emission technology for the body-bonnet joint.

To ensure low fugitive emissions throughout the operating life, valves must be used in accordance with Velan's installation, operating and maintenance manuals. In particular, it is important that gland and body-bonnet bolting is adjusted to recommended values and that stems are kept clean to prevent external dirt, grit, sand and other materials from damaging packing or stems. The corrosion resistance of the valve components in relation to the application requirements must also be considered during valve selection.



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