

Aquatherm Technical Bulletin

201403A -AQTTB

Large Diameter Ball Valve Clarifications

Date Issued: 13 March 2014

This bulletin is being issued to clarify the bolt connections and sealing of Aquatherm large diameter ball valves (part #'s 41602 – 41607).

As can be seen on the face of the valve, there is an area where it appears a large O-ring can be inserted to help seal the valve connection to the piping system. When these valves were first introduced, this groove was used to secure an O-ring in the seal against a gasket. That is, use of both an O-ring and gasket were necessary. Testing and field experience have shown that this O-ring is no longer needed.

Therefore, Aquatherm recommends using only a full-faced gasket to seal the valve against the flange adapter and backing ring. Do not use an O-ring alone or with a gasket.

Note that the bolt pattern on the valve is European or ISO pattern. Aquatherm flange adapters and backing rings are made to fit with these valves without problem or difficulty. Other backing rings may not line up properly with the bolt pattern on these valves.

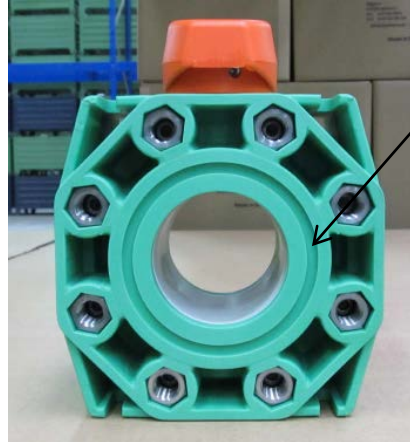
Below are a picture and a sketch of the face of the valves indicating the basic dimensions of each valve. The face of each valve is the same, only the dimensions change from valve to valve.

Below the sketch is a table with the indicated dimensions. These dimensions can be used to manufacture an appropriate full-faced gasket to fit the valve.

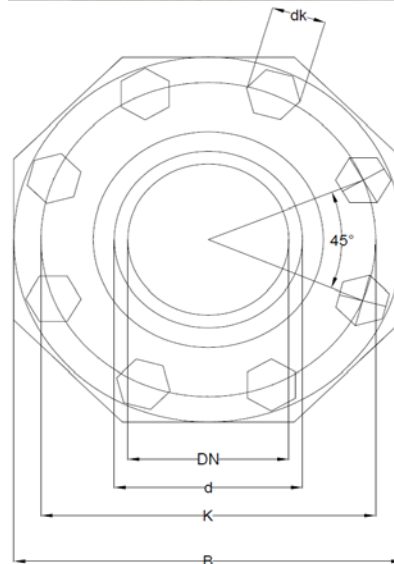
Bear in mind that the gasket material chosen to be used in sealing the valve in the piping system should be compatible with the fluid being transported in the piping system. It is the responsibility of the installer to purchase the appropriate gasket for the system involved.

A full-faced gasket would cover from “B” through “DN” on the sketch and chart, with holes to fit the bolts.

A list of suggested gasket suppliers is available in technical bulletin 201207A – Gaskets. These suppliers are suggested only and the installer may use any reputable gasket supplier that they wish to use.



O-Ring Depression



Valve/Gasket Dimensions

Aquatherm Valve Part No. & Size	41602	41604	41607
Part Call-out	3" – 90 mm	3-1/2" to 4" – 110 to 125 mm	6" – 160 mm
B	7.32" – 186mm	8.11" – 206 mm	10.75" – 273 mm
K	6.3" – 160 mm	7.09" – 180 mm	9.45" – 240 mm
d	3.54" – 90 mm	4.33" – 110 mm	6.30" – 160 mm
DN	3.15" – 80 mm	3.94" – 100 mm	5.91" – 150 mm
dk	0.71" – 18 mm	0.71" – 18 mm	0.87" – 22 mm



These valves are manufactured by Stubbe out of Germany for Aquatherm. Note that the part call outs correspond to the valve manufacturer's drawings and part call-outs. If needed, the valve literature is available from your local Aquatherm Representative.