Check Valves: Flanged, Lug, Wafer, and Butt-welding

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1 Scope

This standard covers the design, materials, face-to-face dimensions, pressure-temperature ratings, inspection, examination, and testing requirements for two types of check valves.

Type “A” check valves have short face-to-face dimensions per this standard.

— The body pattern may be wafer, wafer with lugs, or double flanged.

— The obturator may be single or dual plate, swing disc, or pivoting disc.

— Body materials include gray and ductile irons, and materials included in ASME B16.34.

— See typical illustrations in Annex C, Figures C.1, C.2, C.3, C.4, and C.5.

Type “B” check valves are long pattern or short pattern with face-to-face/end-to-end dimensions per ASME B16.10.

— The body may be flanged or have butt-welding ends.

— The obturator may be swing disc or pivoting disc.

— Body materials are included in ASME B16.34.

— See typical illustrations in Annex C, Figure C.5.

Other types of check valves, such as axial disc or body/stem guided disc (center spring type) valves, nozzle-type check valves, or lift-type check valves, are not included in this standard.

This standard covers valves of the nominal pipe sizes DN:

— 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, and 1200

corresponding to nominal pipe sizes NPS:

— 2, 2½, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, and 48.

Pressure class designations include:

— 150, 300, 600, 900, 1500, and 2500 per ASME B16.34;

— 125 and 250 per ASME B16.1;

— 150 and 300 per ASME B16.42.

Information to be specified by the purchaser is shown in Annex B.

The standard nomenclature for valve parts are identified in Figures C.1 through C.5 in Annex C. These figures show typical designs only and are not to be construed as precluding other available designs that conform to the requirements of this standard.

The construction of a valve is acceptable only if it conforms to this standard in all respects.