

Table 4-4 Allowances for casting tolerance

Nominal Pipe Size, <i>in.</i>	Casting Allowance, <i>in.</i>
3-8	0.05
10-12	0.06
14-42	0.07
48	0.08
54-64	0.09

NOTE: To convert inches (in.) to millimeters (mm), multiply by 25.4.

Table 4-5 Standard pressure classes of ductile-iron pipe

Nominal Pipe Size, <i>in.</i>	Outside Diameter, <i>in.</i>	Pressure Class				
		150	200	250	300	350
Nominal Thickness, <i>in.</i>						
3	3.96	—	—	—	—	0.25*
4	4.80	—	—	—	—	0.25*
6	6.90	—	—	—	—	0.25*
8	9.05	—	—	—	—	0.25*
10	11.10	—	—	—	—	0.26
12	13.20	—	—	—	—	0.28
14	15.30	—	—	0.28	0.30	0.31
16	17.40	—	—	0.30	0.32	0.34
18	19.50	—	—	0.31	0.34	0.36
20	21.60	—	—	0.33	0.36	0.38
24	25.80	—	0.33	0.37	0.40	0.43
30	32.00	0.34	0.38	0.42	0.45	0.49
36	38.30	0.38	0.42	0.47	0.51	0.56
42	44.50	0.41	0.47	0.52	0.57	0.63
48	50.80	0.46	0.52	0.58	0.64	0.70
54	57.56	0.51	0.58	0.65	0.72	0.79
60	61.61	0.54	0.61	0.68	0.76	0.83
64	65.67	0.56	0.64	0.72	0.80	0.87

NOTES: Pressure classes are defined as the rated water working pressure of the pipe in pounds per square inch (psi). The thicknesses shown are adequate for the rated water working pressure plus a surge allowance of 100 psi (689 kPa). Calculations are based on a minimum yield strength in tension of 42,000 psi (289.6×10^3 kPa) and a 2.0 safety factor times the sum of working pressure and 100 psi (689 kPa) surge allowance.

To convert inches (in.) to millimeters (mm), multiply by 25.4.

Thickness can be calculated for rated water working pressure and surges other than those indicated by use of the formula shown in ANSI/AWWA C150/A21.50.

Ductile-iron pipe is available for water working pressures greater than 350 psi (2,413 kPa).

Pipe is available with thicknesses greater than Pressure Class 350. See Table 4-7.

Lowest nominal thicknesses shown in ANSI/AWWA C115/A21.15 for threaded flanged pipe are still required; lowest nominal thicknesses shown in ANSI/AWWA C606 for pipe with grooved and shouldered joints are still required.

*Calculated thicknesses for these sizes and pressure ratings are less than those shown above. (See Table 13 of ANSI/AWWA C150/A21.50 for actual calculated thicknesses.) Presently these are the lowest nominal thicknesses available in these sizes.