



Product Specifications Ductile Iron Outside Diameter (DIOD)

Physical Properties	Nominal Value	Test Method	Physical Properties	Nominal Value	Test Method
Density	0.960 g/cc	ASTM D1505	Tensile Stress @ Yield	> 3,500 psi	ASTM D638
Cell Classification	445574C	ASTM D3350	Brittleness Temperature	< -70°C	ASTM D746
Melt Index (MI) 190°C/2.168g	0.04 g/30min	ASTM D238	SGR Resistance (PINT)	> 2,000 h	ASTM F1473
Flexural Modulus (2% Secant)	> 751 MPa	ASTM D790	Elongation @ Break	> 600 %	ASTM D638
Hydrostatic Design Basis @ 23°C	1600 psi	ASTM D2837	Thermal Expansion	1.0 x 10 ⁻⁴ in/in/°F	ASTM D696
Hydrostatic Design Basis @ 60°C	1000 psi	ASTM D2837	Hardness, Shore D	65	ASTM D2240

DIOD			Pressure Rating (psi)					
Size	OD (in)		335	250	200	160	125	100
			Standard Dimension Ratio (SDR)					
			7	9	11	13.5	17	21.0
4"	4.800"	Wall Min (in)	0.686	---	0.436	---	0.282	0.229
		ICD (in)	3.429	---	3.927	---	4.235	4.343
		Weight (Lbs/Ft)	3.871	---	2.623	---	1.761	1.444
6"	6.900"	Wall Min (in)	0.986	---	0.627	---	0.406	0.329
		ICD (in)	4.929	---	5.645	---	6.088	6.243
		Weight (Lbs/Ft)	7.999	---	5.421	---	3.640	2.984
8"	9.050"	Wall Min (in)	1.293	---	0.823	---	0.532	0.431
		ICD (in)	6.464	---	7.405	---	7.985	8.188
		Weight (Lbs/Ft)	13.761	---	9.325	---	6.261	5.133
10"	11.100"	Wall Min (in)	1.586	---	1.009	---	0.653	0.529
		ICD (in)	7.929	---	9.082	---	9.794	10.043
		Weight (Lbs/Ft)	20.701	---	14.028	---	9.419	7.721
12"	13.200"	Wall Min (in)	1.886	---	1.200	---	0.776	0.629
		ICD (in)	9.429	---	10.800	---	11.647	11.943
		Weight (Lbs/Ft)	29.275	---	19.838	---	13.320	10.919
14"	15.300"	Wall Min (in)	2.186	---	1.391	---	0.900	0.729
		ICD (in)	10.929	---	12.518	---	13.500	13.843
		Weight (Lbs/Ft)	39.330	---	26.653	---	17.895	14.670
16"	17.400"	Wall Min (in)	2.486	---	1.582	---	1.024	0.829
		ICD (in)	12.429	---	14.236	---	15.353	15.743
		Weight (Lbs/Ft)	50.868	---	34.471	---	23.144	18.973
18"	19.500"	Wall Min (in)	2.786	---	1.773	---	1.147	0.929
		ICD (in)	13.929	---	15.955	---	17.206	17.643
		Weight (Lbs/Ft)	63.887	---	43.294	---	29.068	23.829
20"	21.600"	Wall Min (in)	3.086	---	1.964	---	1.271	1.029
		ICD (in)	15.429	---	17.673	---	19.059	19.543
		Weight (Lbs/Ft)	78.388	---	53.121	---	35.666	29.238
24"	25.800"	Wall Min (in)	3.686	---	2.345	---	1.518	1.229
		ICD (in)	18.429	---	21.109	---	22.765	23.343
		Weight (Lbs/Ft)	111.837	---	75.787	---	50.884	41.714

Note: Inside Diameter is based on nominal values and may vary due to manufacturing tolerances.

The above pressure ratings are based on a Hydrostatic Design Basis of 1,600 psi @ 73°F (23°C) and 1,000 psi @ 140°F (60°C) per ASTM D2837.

Cell Classification PE445574C per ASTM D3350



Alexander Tubular | 3052 84 Ave NW, Edmonton, AB, T6P 1K3 | 1-825-901-2700 | alexandertubular.ca