FERGUSON INDUSTRIAL

INDUSTRIAL PLASTICS

HDPE PIPE DIMENSIONAL SPECS

FERGUSON INDUSTRIAL

Iron Pipe Size (IPS) and Dimension Data

PE4710

Pressure Ratings are calculated using 0.63 design factor for HDS at 73°F as listed in PPI TR-4 for PE 4710 materials. HDPE can accommodate up to 1.5 times the pipe pressure rating for a recurring surge and up to 2.0 times the pipe pressure rating for an occasional surge. Temperature, Chemical and Environmental use considerations may require use of additional design factors.

PE 4710		DR 7 (333 psi)			DR 9 (250 psi)			DR 11 (200 psi)		
PIPE SIZE	AVE. O.D.	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT
1/2	0.840	0.120	0.586	0.120	0.093	0.643	0.100	0.076	0.679	0.080
3/4	1.050	0.150	0.732	0.190	0.117	0.802	0.150	0.095	0.849	0.120
1	1.315	0.188	0.916	0.290	0.146	1.005	0.230	0.120	1.061	0.200
1 1/4	1.660	0.237	1.158	0.460	0.184	1.270	0.370	0.151	1.340	0.310
1 1/2	1.900	0.271	1.325	0.610	0.211	1.453	0.490	0.173	1.533	0.410
2	2.375	0.339	1.656	0.950	0.264	1.815	0.770	0.216	1.917	0.640
3	3.500	0.500	2.440	2.060	0.389	2.675	1.660	0.318	2.826	1.390
4	4.500	0.643	3.137	3.400	0.500	3.440	2.750	0.409	3.633	2.300
5	5.563	0.795	3.878	5.200	0.618	4.253	4.200	0.506	4.490	3.520
6	6.625	0.946	4.619	7.360	0.736	5.065	5.960	0.602	5.349	4.990
7	7.125	0.976	5.056	8.520	0.792	5.446	6.890	0.648	5.751	5.780
8	8.625	1.232	6.013	12.480	0.958	6.594	10.090	0.784	6.963	8.460
10	10.750	1.536	7.494	19.400	1.194	8.219	15.680	0.977	8.679	13.140
12	12.750	1.821	8.889	27.280	1.417	9.746	22.070	1.159	10.293	18.490
14	14.000	2.000	9.760	32.900	1.556	10.107	26.610	1.273	11.301	22.300
16	16.000	2.286	11.154	42.970	1.778	12.231	34.750	1.455	12.915	29.120
18	18.000	2.571	12.549	54.370	2.000	13.760	43.970	1.636	14.532	36.840
20	20.000	2.857	13.943	67.130	2.222	15.289	54.280	1.818	16.146	45.490
22	22.000	3.143	15.337	81.230	2.444	16.819	65.680	2.000	17.760	55.050
24	24.000	3.429	16.732	96.670	2.667	18.346	78.180	2.182	19.374	65.520
26	26.000	—	—	—	2.889	19.875	91.750	2.364	20.988	76.900
28	28.000	—	—	—	3.111	21.405	106.400	2.545	22.605	89.150
30	30.000	—	—	—	3.333	22.934	122.130	2.727	24.219	102.350
32	32.000	—	—	—	3.556	24.462	139.12	2.909	25.833	116.460
34	34.000	—	—	—	3.778	25.991	157.05	3.091	27.447	131.480
36	36.000	—	—	—	4.000	27.520	176.07	3.273	29.061	147.410

For data, sizes or classes not reflected in these charts, please contact your local Ferguson Industrial Sales Associate.

This size and dimension chart is intended for reference purposes. It should not be used in place of the advice from a licensed Professional Engineer. Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter is calculated using IPS OD and minimum wall, plus 6% for use in estimating fluid lows. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimension and tolerances in the applicable pipe manufacturing specifications.

FERGUSON INDUSTRIAL

Iron Pipe Size (IPS) and Dimension Data

PE4710

Pressure Ratings are calculated using 0.63 design factor for HDS at 73°F as listed in PPI TR-4 for PE 4710 materials. HDPE can accommodate up to 1.5 times the pipe pressure rating for a recurring surge and up to 2.0 times the pipe pressure rating for an occasional surge. Temperature, Chemical and Environmental use considerations may require use of additional design factors.

PE 4710		DR 13.5 (160 psi)			DR 17 (125 psi)		
PIPE SIZE	AVE. O.D.	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT
1/2	0.84	—	—	—	—	—	—
3/4	1.05	0.078	0.885	0.100	—	—	—
1	1.315	0.097	1.109	0.160	—	—	—
1 1/4	1.66	0.123	1.399	0.260	—	—	—
1 1/2	1.9	0.141	1.601	0.340	—	—	—
2	2.375	0.176	2.002	0.530	0.140	2.078	0.430
3	3.5	0.259	2.951	1.160	0.206	3.063	0.940
4	4.5	0.333	3.794	1.910	0.265	3.938	1.550
5	5.563	0.412	4.690	2.920	0.327	4.870	2.360
6	6.625	0.491	5.584	4.150	0.390	5.798	3.350
7	7.125	0.528	6.006	4.800	0.419	6.237	3.880
8	8.625	0.639	7.270	7.030	0.507	7.550	5.680
10	10.75	0.796	9.062	10.920	0.632	9.410	8.820
12	12.75	0.944	10.749	15.360	0.750	11.160	12.410
14	14	1.037	11.802	18.520	0.824	12.253	14.980
16	16	1.185	13.488	24.190	0.941	14.005	19.550
18	18	1.333	15.174	30.610	1.059	15.755	24.750
20	20	1.481	16.860	37.790	1.176	17.507	30.530
22	22	1.630	18.544	45.750	1.294	19.257	36.860
24	24	1.778	20.231	54.440	1.412	21.007	43.990
26	26	1.926	21.917	63.890	1.529	22.759	51.610
28	28	2.074	23.603	74.090	1.647	24.508	59.870
30	30	2.222	25.289	85.040	1.765	26.258	68.740
32	32	2.370	26.976	96.760	1.882	28.010	78.180
34	34	2.519	28.660	109.260	2.000	29.760	88.280
36	36	2.667	30.346	122.490	2.118	31.510	98.980
42	42	3.111	35.404	166.700	2.471	36.761	134.720
48	48	3.556	40.462	217.760	2.824	42.013	175.970
54	54	—	—	—	3.177	47.265	222.670

For data, sizes or classes not reflected in these charts, please contact your local Ferguson Industrial Sales Associate.

This size and dimension chart is intended for reference purposes. It should not be used in place of the advice from a licensed Professional Engineer. Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter is calculated using IPS OD and minimum wall, plus 6% for use in estimating fluid lows. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimension and tolerances in the applicable pipe manufacturing specifications.

FERGUSON INDUSTRIAL

Iron Pipe Size (IPS) and Dimension Data

PE4710

Pressure Ratings are calculated using 0.63 design factor for HDS at 73°F as listed in PPI TR-4 for PE 4710 materials. HDPE can accommodate up to 1.5 times the pipe pressure rating for a recurring surge and up to 2.0 times the pipe pressure rating for an occasional surge. Temperature, Chemical and Environmental use considerations may require use of additional design factors.

PE 4710		DR 21 (100 psi)			DR 26 (80 psi)			DR 32.5 (63 psi)		
PIPE SIZE	AVE. O.D.	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT
3	3.5	0.167	3.146	0.770	0.135	3.214	0.630	0.108	3.271	0.510
4	4.5	0.214	4.046	1.270	0.173	4.133	1.030	0.138	4.207	0.830
5	5.563	0.265	5.001	1.940	0.214	5.109	1.580	0.171	5.200	1.270
6	6.625	0.315	5.957	2.740	0.255	6.084	2.240	0.204	6.193	1.810
7	7.125	0.339	6.406	3.180	0.274	6.544	2.590	0.219	6.661	2.090
8	8.625	0.411	7.754	4.660	0.332	7.921	3.800	0.265	8.063	3.060
10	10.75	0.512	9.665	7.240	0.413	9.874	5.900	0.331	10.048	4.770
12	12.75	0.607	11.463	10.170	0.490	11.711	8.300	0.392	11.919	6.690
14	14	0.667	12.586	12.280	0.538	12.859	10.000	0.431	13.086	8.080
16	16	0.762	14.385	16.030	0.615	14.696	13.070	0.492	14.957	10.540
18	18	0.857	16.183	20.280	0.692	16.533	16.540	0.554	16.826	13.360
20	20	0.952	17.982	25.030	0.769	18.370	20.430	0.615	18.696	16.480
22	22	1.048	19.778	30.310	0.846	20.206	24.720	0.677	20.565	19.950
24	24	1.143	21.577	36.060	0.923	22.043	29.420	0.738	22.435	23.720
26	26	1.238	23.375	42.320	1.000	23.880	34.530	0.800	24.304	27.860
28	28	1.333	25.174	49.070	1.077	25.717	40.050	0.862	26.173	32.330
30	30	1.429	26.971	56.360	1.154	27.554	45.980	0.923	28.043	37.090
32	32	1.542	28.730	64.110	1.231	29.390	52.310	0.985	29.912	42.220
34	34	1.619	30.568	72.360	1.308	31.227	59.060	1.046	31.782	47.630
36	36	1.714	32.366	81.120	1.385	33.064	66.220	1.108	33.651	53.420
42	42	2.000	37.760	110.430	1.615	38.576	90.080	1.292	39.261	72.680
48	48	2.286	43.154	144.250	1.846	44.086	117.680	1.477	44.869	94.950
54	54	2.571	48.549	182.510	2.077	49.597	148.950	1.662	50.477	120.200
63	63	3.000	56.640	248.460	2.423	57.863	202.730	1.938	58.891	163.530

For data, sizes or classes not reflected in these charts, please contact your local Ferguson Industrial Sales Associate.

This size and dimension chart is intended for reference purposes. It should not be used in place of the advice from a licensed Professional Engineer. Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter is calculated using IPS OD and minimum wall, plus 6% for use in estimating fluid lows. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimension and tolerances in the applicable pipe manufacturing specifications.

FERGUSON INDUSTRIAL

Ductile Iron Pipe Size (DIPS) and Dimension Data

PE4710

Pressure Ratings are calculated using 0.63 design factor for HDS at 73°F as listed in PPI TR-4 for PE 4710 materials. HDPE can accommodate up to 1.5 times the pipe pressure rating for a recurring surge and up to 2.0 times the pipe pressure rating for an occasional surge. Temperature, Chemical and Environmental use considerations may require use of additional design factors.

PE 4710		DR 7 (333 psi)			DR 9 (250 psi)			DR 11 (200 psi)		
PIPE SIZE	AVE. O.D.	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT
4	4.80	0.686	3.346	3.870	0.533	3.670	3.130	0.436	3.876	2.620
6	6.90	0.946	4.894	7.990	0.767	5.274	6.460	0.627	5.571	5.410
8	9.05	1.293	6.309	13.750	1.006	6.917	11.120	0.823	7.305	9.320
10	11.10	1.586	7.738	20.680	1.233	8.486	16.720	1.009	8.961	14.010
12	13.20	1.886	9.202	29.250	1.467	10.090	23.650	1.200	10.656	19.820
14	15.30	2.186	10.666	39.290	1.700	11.696	31.770	1.391	12.351	26.630
16	17.40	2.486	12.130	50.820	1.933	13.302	41.080	1.582	14.046	34.440
18	19.50	2.786	13.594	63.820	2.167	14.906	51.610	1.773	15.741	43.250
20	21.60	3.086	15.058	78.310	2.400	16.512	63.320	1.964	17.436	53.070
24	25.80	—	—	—	2.867	19.722	90.350	2.345	20.829	75.690
30	32.00	—	—	—	—	—	—	2.909	25.833	116.460
36	38.30	—	—	—	—	—	—	3.482	31.330	166.840

PE 4710		DR 13.5 (160 psi)			DR 17 (125 psi)			DR 19 (111 psi)		
PIPE SIZE	AVE. O.D.	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT
4	4.80	0.356	4.045	2.180	0.282	4.202	1.760	0.253	4.264	1.590
6	6.90	0.511	5.817	4.500	0.406	6.039	3.640	0.363	6.130	3.270
8	9.05	0.670	7.630	7.740	0.532	7.922	6.250	0.476	8.041	5.630
10	11.10	0.822	9.357	11.640	0.653	9.761	9.410	0.584	9.862	8.470
12	13.20	0.978	11.127	16.470	0.776	11.555	13.300	0.695	11.727	11.990
14	15.30	1.133	12.898	22.120	0.900	13.392	17.880	0.805	13.593	16.100
16	17.40	1.289	14.667	28.610	1.024	15.229	23.130	0.916	15.458	20.840
18	19.50	1.444	16.439	35.920	1.147	17.068	29.040	1.026	17.325	26.150
20	21.60	1.600	18.208	44.090	1.271	18.905	35.640	1.137	19.190	32.100
24	25.80	1.911	21.749	62.900	1.518	22.582	50.840	1.358	22.921	45.800
30	32.00	2.370	26.976	96.760	1.880	28.014	78.180	1.684	28.430	70.450
36	38.30	2.837	32.286	138.620	2.253	33.524	112.020	2.016	34.026	100.940
42	44.50	3.296	37.512	187.33	2.618	38.950	151.240	2.342	39.535	136.240
48	50.80	—	—	—	2.988	44.465	197.050	2.674	45.131	177.570

PE 4710		DR 21 (100 psi)			DR 26 (80 psi)			DR 32.5 (63 psi)		
PIPE SIZE	AVE. O.D.	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT	MIN. WALL	AVG. I.D.	WEIGHT LB/FT
4	4.80	0.229	4.315	1.440	0.185	4.408	1.180	0.148	4.486	0.950
6	6.90	0.329	6.203	2.980	0.265	6.338	2.430	0.212	6.451	1.960
8	9.05	0.431	8.136	5.130	0.348	8.312	4.180	0.278	8.461	3.370
10	11.10	0.529	9.979	7.720	0.427	10.195	6.290	0.342	10.375	5.080
12	13.20	0.629	11.867	10.910	0.508	12.123	8.910	0.406	12.339	7.180
14	15.30	0.729	13.755	14.660	0.588	14.053	11.950	0.471	14.301	9.650
16	17.40	0.829	15.643	18.960	0.669	15.982	15.460	0.536	16.264	12.490
18	19.50	0.929	17.531	23.810	0.750	17.910	19.950	0.600	18.228	15.670
20	21.60	1.029	19.419	29.220	0.831	19.838	23.840	0.665	20.190	19.240
24	25.80	1.229	23.195	41.680	0.992	23.697	33.990	0.794	24.117	27.440
30	32.00	1.524	28.769	64.110	1.231	29.390	52.310	0.985	29.912	42.220
36	38.30	1.824	34.433	91.840	1.473	35.177	74.920	1.179	35.801	60.430
42	44.50	2.119	40.008	123.960	1.712	40.871	101.170	1.370	41.596	81.590
48	50.80	2.419	45.672	161.550	1.954	46.658	131.830	1.563	47.486	106.340

For data, sizes or classes not reflected in these charts, please contact your local Ferguson Industrial Sales Associate.

This size and dimension chart is intended for reference purposes. It should not be used in place of the advice from a licensed Professional Engineer. Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter is calculated using IPS OD and minimum wall, plus 6% for use in estimating fluid lows. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimension and tolerances in the applicable pipe manufacturing specifications.

FERGUSON INDUSTRIAL

Trust Earned Through Performance

FERGUSONINDUSTRIAL.COM/HDPE

Lakeland, FL
(863) 667-1686

La Porte, TX
(713) 491-1970

Washington, NC
(252) 946-8071

Washougal, WA
(360) 835-2129

©2022 Ferguson Enterprises, LLC 0422 3999110