PERFORMANCE PIPE™ Municipal & Industrial Series/DIPS Pipe Data

Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter calculated using nominal OD and minimum wall plus 6% for use in estimating fluid flows. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimensions and tolerances in applicable pipe specifications.

Pressure Ratings are for water at 73.4 °F. For other fluid and service temperature, ratings may differ. Refer to Engineering Manual for Chemical and Environmental Considerations.

Pressure Rating		200 psi DR 9.0			160 psi DR 11.0			130 psi DR 13.5			
DIPS Pipe Size	Nominal OD (in)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	DIPS Pipe Size
4"	4.80	0.533	3.670	3.11	0.436	3.876	2.61	0.356	4.045	2.17	4"
6"	6.90	0.767	5.274	6.44	0.627	5.571	5.39	0.511	5.817	4.48	6"
8"	9.05	1.006	6.917	11.07	0.823	7.305	9.28	0.670	7.630	7.70	8"
10"	11.10	1.233	8.486	16.65	1.009	8.961	13.95	0.822	9.357	11.59	10"
12"	13.20	1.467	10.090	23.55	1.200	10.656	19.73	0.978	11.127	16.40	12"
14"	15.30	1.700	11.696	31.64	1.391	12.351	26.51	1.133	12.898	22.02	14"
16"	17.40	1.933	13.302	40.91	1.582	14.046	34.29	1.289	14.667	28.49	16"
18"	19.50	2.167	14.906	51.40	1.773	15.741	43.07	1.444	16.439	35.77	18"
20"	21.60	2.400	16.512	63.05	1.964	17.436	52.85	1.600	18.208	43.91	20"
24"	25.80	2.867	19.722	89.97	2.345	20.829	75.38	1.911	21.749	62.64	24"
30"	32.00				2.909	25.833	115.97	2.370	26.976	96.35	30"
†36"	38.30							2.837	32.286	138.04	36"
†42"	44.50										42"
†48"	50.80										48"

Pressure Rating		100 psi DR 17.0			80 psi DR 21.0			65 psi DR 26.0			
DIPS Pipe Size	Nominal OD (in)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	DIPS Pipe Size
4"	4.80	0.282	4.202	1.75	0.229	4.315	1.44	0.185	4.408	1.17	4"
6"	6.90	0.406	6.039	3.62	0.329	6.203	2.97	0.265	6.338	2.42	6"
8"	9.05	0.532	7.922	6.22	0.431	8.136	5.11	0.348	8.312	4.17	8"
10"	11.10	0.653	9.716	9.37	0.529	9.979	7.69	0.427	10.195	6.27	10"
12"	13.20	0.776	11.555	13.24	0.629	11.867	10.87	0.508	12.123	8.87	12"
14"	15.30	0.900	13.392	17.80	0.729	13.755	14.60	0.588	14.053	11.90	14"
16"	17.40	1.024	15.229	23.03	0.829	15.643	18.88	0.669	15.982	15.39	16"
18"	19.50	1.147	17.068	28.91	0.929	17.531	23.71	0.750	17.910	19.34	18"
20"	21.60	1.271	18.905	35.49	1.029	19.419	29.10	0.831	19.838	23.74	20"
24"	25.80	1.518	22.582	50.63	1.229	23.195	41.51	0.992	23.697	33.85	24"
30"	32.00	1.882	28.010	77.86	1.524	28.769	63.84	1.231	29.390	52.10	30"
†36"	38.30	2.253	33.524	111.55	1.824	34.433	91.45	1.473	35.177	74.61	36"
†42"	44.50	2.618	38.950	150.60	2.119	40.008	123.44	1.712	40.871	100.75	42"
†48"	50.80	2.988	44.465	196.23	2.419	45.672	160.87	1.954	46.658	131.28	48"

† - OD's available upon special request

Performance Pipe can produce to specialized pipe dimensions. Check with your Performance Pipe contact for availability of dimensions not listed.

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PERFORMANCE PIPE™ Municipal & Industrial Series/IPS Pipe Data

Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter calculated using nominal OD and minimum wall plus 6% for use in estimating fluid flows. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimensions and tolerances in applicable pipe specifications.

Pressure Ratings are for water at 73.4 °F. For other fluid and service temperature, ratings may differ. Refer to Engineering Manual for Chemical and Environmental Considerations.

Pressure Rating		255 psi DR 7.3			200 psi DR 9.0			160 psi DR 11.0			130 psi DR 13.5			
IPS Pipe Size	Nominal OD (in)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	IPS Pipe Size
1 1/4"	1.660	0.227	1.179	0.44	0.184	1.270	0.37	0.151	1.340	0.31	0.123	1.399	0.26	1 1/4"
1 1/2"	1.900	0.260	1.349	0.58	0.211	1.453	0.49	0.173	1.533	0.41	0.141	1.601	0.34	1 1/2"
2"	2.375	0.325	1.686	0.91	0.264	1.815	0.76	0.216	1.917	0.64	0.176	2.002	0.53	2"
3"	3.500	0.479	2.485	1.98	0.389	2.675	1.66	0.318	2.826	1.39	0.259	2.951	1.15	3"
4"	4.500	0.616	3.194	3.27	0.500	3.440	2.74	0.409	3.633	2.29	0.333	3.794	1.90	4"
5 3/8"	5.375	0.736	3.815	4.66	0.597	4.109	3.90	0.489	4.338	3.27	0.398	4.531	2.72	5 3/8"
5"	5.563	0.762	3.948	5.00	0.618	4.253	4.18	0.506	4.490	3.51	0.412	4.690	2.91	5"
6"	6.625	0.908	4.700	7.09	0.736	5.065	5.93	0.602	5.349	4.97	0.491	5.584	4.13	6"
7 1/8"	7.125	0.976	5.056	8.20	0.792	5.446	6.86	0.648	5.751	5.75	0.528	6.006	4.78	7 1/8"
8"	8.625	1.182	6.119	12.01	0.958	6.594	10.05	0.784	6.963	8.42	0.639	7.270	7.00	8"
10"	10.750	1.473	7.627	18.66	1.194	8.219	15.61	0.977	8.679	13.09	0.796	9.062	10.87	10"
12"	12.750	1.747	9.046	26.25	1.417	9.746	21.97	1.159	10.293	18.41	0.944	10.749	15.29	12"
13 3/8"	13.375	1.832	9.491	28.88	1.486	10.225	24.18	1.216	10.797	20.26	0.991	11.274	16.84	13 3/8"
14"	14.000	1.918	9.934	31.64	1.556	10.701	26.50	1.273	11.301	22.20	1.037	11.802	18.44	14"
16"	16.000	2.192	11.353	41.33	1.778	12.231	34.60	1.455	12.915	29.00	1.185	13.488	24.09	16"
18"	18.000	2.466	12.772	52.31	2.000	13.760	43.79	1.636	14.532	36.69	1.333	15.174	30.48	18"
20"	20.000	2.740	14.191	64.58	2.222	15.289	54.05	1.818	16.146	45.30	1.481	16.860	37.63	20"
22"	22.000	3.014	15.610	78.14	2.444	16.819	65.40	2.000	17.760	54.82	1.630	18.544	45.56	22"
24"	24.000	3.288	17.029	93.00	2.667	18.346	77.85	2.182	19.374	65.24	1.778	20.231	54.21	24"
26"	26.000				2.889	19.875	91.36	2.364	20.988	76.57	1.926	21.917	63.62	26"
28"	28.000				3.111	21.405	105.95	2.545	22.605	88.78	2.074	23.603	73.78	28"
30"	30.000				3.333	22.934	121.62	2.727	24.219	101.92	2.222	25.289	84.69	30"
32"	32.000							2.909	25.833	115.97	2.370	26.976	96.35	32"
34"	34.000							3.091	27.447	130.93	2.519	28.660	108.81	34"
36"	36.000							3.273	29.061	146.80	2.667	30.346	121.98	36"
42"	42.000										3.111	35.405	166.00	42"
48"	48.000													48"
54"	54.000													54"

Performance Pipe can produce to specialized pipe dimensions. Check with your Performance Pipe contact for availability of dimensions not listed.

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Pressure Ratings are for water at 73.4 °F. For other fluid and service temperature, ratings may differ. Refer to Engineering Manual for Chemical and Environmental Considerations.

Pressure Rating		100 psi DR 17.0			80 psi DR 21.0			65 psi DR 26.0			50 psi DR 32.5			
IPS Pipe Size	Nominal OD (in)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	Minimum Wall (in)	Average ID (in)	Weight (lbs/ft)	IPS Pipe Size
1 1/4"	1.660													1 1/4"
1 1/2"	1.900													1 1/2"
2"	2.375	0.140	2.078	0.43										2"
3"	3.500	0.206	3.063	0.93										3"
4"	4.500	0.265	3.938	1.54	0.214	4.046	1.26							4"
5 3/8"	5.375	0.316	4.705	2.20	0.256	4.832	1.80	0.207	4.936	1.47				5 3/8"
5"	5.563	0.327	4.870	2.35	0.265	5.001	1.93	0.214	5.109	1.57				5"
6"	6.625	0.390	5.798	3.34	0.315	5.957	2.73	0.255	6.084	2.23	0.204	6.193	1.80	6"
7 1/8"	7.125	0.419	6.237	3.86	0.339	6.406	3.16	0.274	6.544	2.58	0.219	6.661	2.08	7 1/8"
8"	8.625	0.507	7.550	5.65	0.411	7.754	4.64	0.332	7.921	3.79	0.265	8.063	3.05	8"
10"	10.750	0.632	9.410	8.78	0.512	9.665	7.21	0.413	9.874	5.87	0.331	10.048	4.75	10"
12"	12.750	0.750	11.160	12.36	0.607	11.463	10.13	0.490	11.711	8.26	0.392	11.919	6.67	12"
13 3/8"	13.375	0.787	11.707	13.61	0.637	12.025	11.15	0.514	12.285	9.09	0.412	12.502	7.35	13 3/8"
14"	14.000	0.824	12.253	14.91	0.667	12.586	12.22	0.538	12.859	9.96	0.431	13.086	8.05	14"
16"	16.000	0.941	14.005	19.46	0.762	14.385	15.96	0.615	14.696	13.01	0.492	14.957	10.50	16"
18"	18.000	1.059	15.755	24.64	0.857	16.183	20.19	0.692	16.533	16.47	0.554	16.826	13.30	18"
20"	20.000	1.176	17.507	30.41	0.952	17.982	24.93	0.769	18.370	20.34	0.615	18.696	16.41	20"
22"	22.000	1.294	19.257	36.80	1.048	19.778	30.18	0.846	20.206	24.61	0.677	20.565	19.86	22"
24"	24.000	1.412	21.007	43.81	1.143	21.577	35.91	0.923	22.043	29.30	0.738	22.435	23.62	24"
26"	26.000	1.529	22.759	51.39	1.238	23.375	42.14	1.000	23.880	34.39	0.800	24.304	27.74	26"
28"	28.000	1.647	24.508	59.62	1.333	25.174	48.86	1.077	25.717	39.88	0.862	26.173	32.19	28"
30"	30.000	1.765	26.258	68.45	1.429	26.971	56.12	1.154	27.554	45.78	0.923	28.043	36.93	30"
32"	32.000	1.882	28.010	77.86	1.524	28.769	63.84	1.231	29.390	52.10	0.985	29.912	42.04	32"
34"	34.000	2.000	29.760	87.91	1.619	30.568	72.06	1.308	31.227	58.81	1.046	31.782	47.43	34"
36"	36.000	2.118	31.510	98.57	1.714	32.366	80.78	1.385	33.064	65.94	1.108	33.651	53.20	36"
42"	42.000	2.471	36.761	134.16	2.000	37.760	109.97	1.615	38.576	89.71	1.292	39.261	72.37	42"
48"	48.000	2.824	42.013	175.23	2.286	43.154	143.65	1.846	44.086	117.18	1.477	44.869	94.56	48"
54"	54.000				2.571	48.549	181.75	2.077	49.597	148.33	1.662	50.477	119.70	54"

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DRISCOPLEX™ PE 3408 HDPE Data Sheet

Typical Material Physical Properties of DRISCOPLEX™ HDPE High Density Polyethylene Material

Property		Units	Standard	Typical Value†
Material Designation		–	ASTM F 412	PE 3408
Cell Classification		–	ASTM D 3350	345464C (black) 345464E (color)
Density	[3]	gm/cm^3	ASTM D 1505	0.955 (black) 0.947 (color)
Melt Index	[4]	g/10 minutes	ASTM D 1238	0.1
Flexural Modulus	[5]	lb/in^2	ASTM D 790	>130,000
Tensile Strength	[4]	lb/in^2	ASTM D 638	3200
SCG (PENT)	[6]	hours	ASTM F 1473	>100
HDB at 73°F (23°C)	[4]	lb/in^2	ASTM D 2837	1600
Color; UV Stabilizer	[C] [E]	– –	ASTM D 3350	Black with minimum 2% carbon black Color with UV stabilizer
Linear Thermal Expansion		inch/inch/°F	ASTM D 696	9×10^{-5}
Elastic Modulus		lb/in^2	ASTM D 638	110,000
Brittleness Temperature		°F (°C)	ASTM D 746	<-180°F (,-118°C)
Hardness		Shore D	ASTM D 2240	65

†NOTICE. This data sheet provides typical physical property information for polyethylene resins used to manufacture PERFORMANCE PIPE™ polyethylene piping products. It is intended for comparing polyethylene piping resins. It is not a product specification, and it does not establish minimum or maximum values or manufacturing tolerances for resins or for piping products. These typical physical property values were determined using compression-molded plaques prepared from resin. Values obtained from tests of specimens taken from piping products can vary from these typical values. Performance Pipe has made every reasonable effort to ensure the accuracy of this data sheet, but this data sheet may not provide all necessary information, particularly with respect to special or unusual applications. This data sheet may be changed from time to time without notice. Contact Performance Pipe to determine if you have the most recent edition.

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DRISCOPLEX™ PE 3408 HDPE Data Sheet

Municipal and Industrial Applications & Standards

Typical Markets for Pipe and Fittings	DRISCOPLEX™ Series	Typical Features
FMA Approved Underground Fire Main	DRISCOPLEX™ 1500	2, 8, 10
		2, 8, 17
	DRISCOPLEX™ 1600	6, 10, 18
		6, 17, 18
Mining	DRISCOPLEX™ 1700	1, 3
Perforated Pipe	DRISCOPLEX™ 1900	1, 4
Water Distribution	DRISCOPLEX™ 4000	5, 6, 7
Municipal & Industrial, Water Distribution	DRISCOPLEX™ 4100	1, 8, 19, 20
Sanitary Sewer & Trenchless Rehabilitation	DRISCOPLEX™ 4200	8, 9
	DRISCOPLEX™ 4300	5, 6, 9
Treated/Reclaimed Water	DRISCOPLEX™ 4400	8, 11
	DRISCOPLEX™ 4500	5, 6, 11
Industrial Sewer, Municipal Sewer, Sliplining & Trenchless Rehabilitation	DRISCOPLEX™ 4600	1, 12
	DRISCOPLEX™ 4700	5, 6, 12, 15
	DRISCOPLEX™ 1200	1, 13
	DRISCOPLEX™ 1400	5, 13
Dual Containment	DRISCOPLEX™ 2400	1, 14
Industrial Specialty	DRISCOPLEX™ 1000	1, 16

NOTICE. *Capabilities vary from manufacturing plant to manufacturing plant. Contact Performance Pipe to determine the availability of specific products and the availability of particular stripe or shell colors, striping patterns, and IPS or DIPS sizing.*

Legend for Typical Features:

1. IPS sizing system.
2. FMR Approved Class 150 or Class 200 in 2" – 24" IPS pipe sizes.
3. A single longitudinal color stripe is extruded into the pipe OD to identify DR.
4. Various perforation patterns are available.
5. DIPS sizing system.
6. The DIPS longitudinal color stripe pattern is three equally spaced pairs of color stripes extruded into the pipe OD.
7. Blue color stripes are standard. A blue color shell is available on special order.
8. The IPS longitudinal color stripe pattern is four equally spaced single color stripes extruded into the pipe OD.
9. Green color stripes are standard. A green color shell is available on special order.
10. Red color stripes standard.
11. Purple color stripes are standard. A lavender color shell is available on special order.
12. Solid light gray color.
13. Light gray color lining extruded into pipe ID.
14. Factory assembled casing and carrier.
15. Green color stripes are standard.
16. 1-1/2" IPS and smaller sizes only. Black is standard.
17. FMR & NSF Approved Class 150 or Class 200. Blue color stripes standard.
18. FMR Approved Class 150 or Class 200 in 4" – 24" DIPS pipe sizes.
19. Black is standard. Blue color stripes or blue color shell available on special order.
20. 2" IPS and 3" IPS made to ASTM D 3035, AWWA C901 and NSF 61. 4" IPS and larger made to ASTM F 714, AWWA C906 and NSF 61.

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