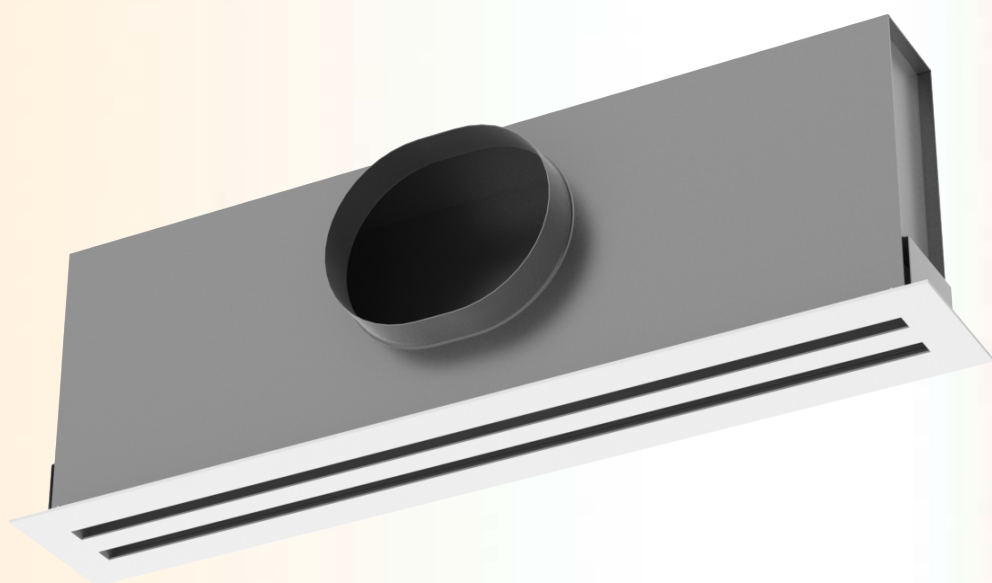




MLP



LINEAR > Linear ceiling Deffuser

Modulinear Plenums Description, Dimensions

Modulinear Diffuser Plenums

Models:

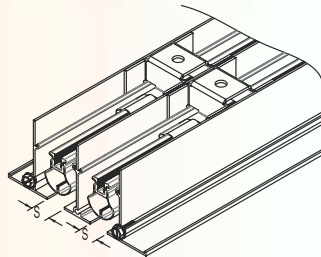
MLP-37	Q ₁ 1/42" Slot
MLP-38	Q ₃ 1/44" Slot
MLP-39	Q ₁ 1" Slot

Special Performance Models:

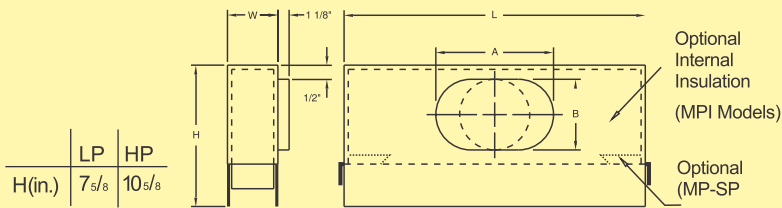
MLP-37-SPQ ₁ 1/42" Slot
MLP-38-SPQ ₃ 1/44" Slot
MLP-39-SPQ ₁ 1" Slot

MASTER GRILLE Series MP plenums are designed specifically for field attachment of ML or MLR Modulinear diffusers.

Utilizes the Modulinear diffuser's excellent variable air volume performance. The air stays on the ceiling in a tight, horizontal pattern, even at low



Model MP or MP-SP Plenum for ML and MLR Diffusers
Border Types 1A, 1B, 3, 4, 6, 7A, 7B, 11, 9A, 9B, 12, 15



Note: End caps are not insulated.

Widths available to fit Models ML and MLR Modulinear diffusers with 1, 2, 3, or 4 slots.

Standard nominal lengths are 24", 36", 48", and 60".

End caps can be turned up to allow plenums to be installed on continuous runs of ML diffusers.

Optional internal insulation (MPI and MPI-SP models).

Optional field mounted inlet dampers are available.

Material is galvanized steel.

Optional MP-SP models maximize air diffusion by shortening the throw and widening the spread of the discharge air. This is accomplished by internal baffling.

The result is improved comfort in short-throw applications.

With the air directed against an outside wall, the ML diffuser mounted in an MP-SP allows effective handling of the thermal load by thoroughly blanketing the wall or window surface.

All Border Types

Nominal Length N (Inches)	Standard Inlets
24	6, 8
36	6, 8
48	6, 8, 10, 12
60	6, 8, 10, 12

Standard Inlet Size	Dimensions	
	A	B
6 Oval	6 1/4	5 1/4
8 Oval	9 3/8	5 1/4
10 Oval	12 1/2	5 1/4

Border Types 1A, 1B, 9A, 9B, 12, 15

ML / MLR End Fabrication	L
XX	N - 7/8
XY	N - 7/8
YY	N - 1/4
ZZ	N - 1/4

ML / MLR Type	W (width)			
	Number of Slots			
	1	2	3	4
MP-37	1 7/16	2 11/16	3 15/16	5 3/16
MP-38	1 11/16	3 3/16	4 11/16	6 3/16
MP-39	1 15/16	3 11/16	5 7/16	7 3/16

Border Types 3, 4, 6, 7A, 7B, 11 End Fabrication

ML / MLR End Fabrication	L
XX	N - 1/4
XY	N - 1/4
YY	N - 1/4

ML/MLR Type	W (width)			
	Number of Slots			
	1	2	3	4
MP-37	2 3/16	3 7/16	4 11/16	5 15/16
MP-38	2 7/16	3 15/16	5 7/16	6 15/16
MP-39	2 11/16	4 7/16	6 3/16	7 15/16

Modulinear Plenums ► Installation Aids

Trimming, Cutting, Hanging

Model MP or MP-SP Plenum for ML and MLR Diffusers
Border Types 2A, 2B

	H	LP	HP
(in.)	8	8	11

ML/MLR Type	W Width			
	Number of Slots			
	1	2	3	4
MP-37	2 3/16	3 7/16	4 11/16	5 15/16
MP-38	2 7/16	3 15/16	5 7/16	6 15/16
MP-39	2 11/16	4 7/16	6 3/16	7 15/16

Border Types 2A, 2B
ML/MLR Fabrication

ML / MLR End Fabrication	L
XX	N-7/8
XY	N-7/8
YY	N-1/4
ZZ	N-1/4

Nominal Length N (Inches)	Standard Inlets
24	6, 8, 10
36	6, 8, 10
48	6, 8, 10, 12
60	6, 8, 10, 12
72	6, 8, 10, 12

Standard Inlet Size	Dimensions	
	A	B
6 Oval	6 1/4	5 1/4
8 Oval	9 3/8	5 1/4
10 Oval	12 1/2	5 1/4
12 Oval	14 1/8	7 7/8

Note: Units with 12" inlets are 11" high.

Note: End caps are not insulated.

Installation Details

Border Types 1A, 1B, 9A, 9B, 12, 15

W=Duct Size

Border Types 2A, 2B

W=Duct Size

1/8" to 1/2"

Concealed Mounting

Frame Border Types 3, 4, 6, 7A, 7B, 11

W=Duct Size

MP-SP Performance

Elevation, MP-SP

Plenum Mounted on Diffuser

Airflow Spread for Maximum Diffusion

MP-SP models maximize air diffusion by shortening the throw and widening the spread of the discharge air. This is accomplished by internal baffling. The result is improved comfort in short-throw applications, as in exterior zones.

Plan View

At a given CFM, the MP-SP plenum shortens the throw and widens the spread of the air leaving the diffuser (as compared with the MP plenum or standard plenum).

Modulinear Plenums > Performance Data

MLP 37- ■ ½" Slot ■ One Slot ■ Supply

6" Inlet 1 Slot

2/1" Slot Width	2 ft	Airflo, FM						
		Total Pressure	0.017	0.046	0.087	0.143	0.212	0.294
		Static Pressure	0.017	0.044	0.084	0.137	0.203	0.282
		NC (Noise Criteria)	-	21	29	34	39	43
	4 ft	Throw	3-6-12	7-10-20	9-14-24	12-18-27	14-21-30	17-23-32
		Airflo, FM						
		Total Pressure	0.017	0.043	0.081	0.131	0.193	0.266
		Static Pressure	0.016	0.039	0.074	0.119	0.175	0.241
		NC (Noise Criteria)	-	19	27	32	37	41
		Throw	2-5-11	5-9-15	8-12-17	10-14-19	12-15-21	13-16-23

8" Inlet 1 Slot

2/1" Slot Width	2 ft	Airflo, FM						
		Total Pressure	0.028	0.063	0.111	0.174	0.251	0.341
		Static Pressure	0.027	0.062	0.110	0.171	0.247	0.336
		NC (Noise Criteria)	-	20	27	32	37	40
	4 ft	Throw	4-8-15	8-12-22	10-15-25	13-19-28	15-22-31	18-23-33
		Airflo, FM						
		Total Pressure	0.015	0.037	0.068	0.110	0.161	0.222
		Static Pressure	0.014	0.035	0.065	0.104	0.152	0.209
		NC (Noise Criteria)	-	19	26	32	36	40
		Throw	3-6-13	7-10-16	9-13-18	11-15-21	13-16-23	14-17-25

10" Inlet 1 Slot

2/1" Slot Width	2 ft	Airflo, FM						
		Total Pressure	0.039	0.077	0.127	0.190	0.265	0.353
		Static Pressure	0.039	0.076	0.126	0.189	0.264	0.351
		NC (Noise Criteria)	-	16	22	27	31	34
	4 ft	Throw	4-8-15	7-11-21	9-14-24	11-17-26	13-20-29	15-22-31
		Airflo, FM						
		Total Pressure	0.017	0.044	0.085	0.138	0.205	0.285
		Static Pressure	0.016	0.043	0.082	0.134	0.198	0.275
		NC (Noise Criteria)	-	20	28	34	38	42
		Throw	4-7-13	8-12-17	11-14-20	13-16-23	14-18-25	16-19-27

12" Inlet 1 Slot

2/1" Slot Width	4 ft	Airflo, FM						
		Total Pressure	0.025	0.060	0.111	0.176	0.257	0.354
		Static Pressure	0.025	0.059	0.109	0.174	0.255	0.350
		NC (Noise Criteria)	-	18	25	30	35	39
		Throw	5-8-14	8-13-18	11-15-21	13-16-23	15-18-26	16-20-28

MLP 38- ■ ¾" Slot ■ One Slot ■ Supply

6" Inlet 1 Slot

4/3" Slot Width	2 ft	Airflo, FM						
		Total Pressure	0.015	0.045	0.091	0.154	0.233	0.328
		Static Pressure	0.014	0.042	0.087	0.146	0.222	0.312
		NC (Noise Criteria)	-	18	26	32	37	41
	4 ft	Throw	1-3-10	4-9-18	8-13-25	11-16-29	13-20-32	16-24-34
		Airflo, FM						
		Total Pressure	0.018	0.041	0.072	0.113	0.163	0.222
		Static Pressure	0.015	0.034	0.061	0.095	0.137	0.187
		NC (Noise Criteria)	-	20	27	32	36	40
		Throw	2-5-12	5-9-16	8-12-19	10-15-21	12-16-23	14-18-25

8" Inlet 1 Slot

4/3" Slot Width	2 ft	Airflo, FM						
		Total Pressure	0.037	0.072	0.118	0.177	0.247	0.329
		Static Pressure	0.036	0.071	0.117	0.175	0.244	0.325
		NC (Noise Criteria)	-	14	20	24	28	32
	4 ft	Throw	2-5-13	4-9-18	7-11-23	9-14-26	11-16-29	13-19-31
		Airflo, FM						
		Total Pressure	0.014	0.041	0.080	0.134	0.200	0.280
		Static Pressure	0.013	0.037	0.074	0.123	0.185	0.259
		NC (Noise Criteria)	-	19	27	33	38	42
		Throw	2-5-12	6-10-17	9-14-21	12-17-23	15-18-26	16-20-28

10" Inlet 1 Slot

4/3" Slot Width	2 ft	Airflo, FM						
		Total Pressure	0.115	0.157	0.205	0.259	0.320	0.387
		Static Pressure	0.115	0.156	0.204	0.258	0.319	0.386
		NC (Noise Criteria)	-	11	14	17	19	22
	4 ft	Throw	3-7-15	4-9-18	6-10-20	7-11-23	8-13-25	9-14-26
		Airflo, FM						
		Total Pressure	0.015	0.044	0.086	0.143	0.215	0.301
		Static Pressure	0.015	0.042	0.083	0.138	0.207	0.289
		NC (Noise Criteria)	-	16	24	30	35	39
		Throw	2-5-12	6-10-17	9-14-21	12-17-23	15-18-26	16-20-28

12" Inlet 1 Slot

4/3" Slot Width	4 ft	Airflo, FM						
		Total Pressure	0.067	0.112	0.169	0.236	0.316	0.406
		Static Pressure	0.067	0.111	0.167	0.235	0.313	0.403
		NC (Noise Criteria)	-	15	20	24	27	30
		Throw	5-9-16	8-11-19	9-14-21	11-16-23	13-17-24	15-18-26

Modulinear Plenums > Performance Data

MLP39- ■ 1" Slot ■ One Slot ■ Supply

6" Inlet 1 Slot

1" Slot Width	2 ft.	Airflo, FM						
		Total Pressure	0.008	0.025	0.051	0.086	0.130	0.183
		Static Pressure	0.007	0.023	0.046	0.078	0.118	0.167
		NC (Noise Criteria)	-	18	27	33	38	42
		Throw	1-2-8	3-6-15	6-11-22	9-14-28	12-17-32	14-21-34
	4 ft.							
		Total Pressure	0.010	0.026	0.048	0.076	0.112	0.154
		Static Pressure	0.008	0.020	0.037	0.060	0.088	0.121
		NC (Noise Criteria)	-	18	26	31	36	40
		Throw	1-2-9	2-6-14	5-10-18	7-12-21	10-15-23	12-17-25

8" Inlet 1 Slot

1" Slot Width	2 ft.	Airflo, FM						
		Total Pressure	0.021	0.046	0.082	0.128	0.185	0.251
		Static Pressure	0.020	0.045	0.080	0.124	0.179	0.244
		NC (Noise Criteria)	-	20	27	32	36	40
		Throw	2-5-13	5-10-20	8-13-26	11-16-31	13-20-34	15-23-36
	4 ft.							
		Total Pressure	0.009	0.023	0.045	0.074	0.109	0.151
		Static Pressure	0.008	0.021	0.039	0.064	0.096	0.133
		NC (Noise Criteria)	-	18	26	32	36	40
		Throw	1-3-10	3-8-17	7-12-20	10-15-23	12-18-25	14-19-27

10" Inlet 1 Slot

1" Slot Width	2 ft.	Airflo, FM						
		Total Pressure	0.031	0.071	0.126	0.197	0.283	0.385
		Static Pressure	0.031	0.070	0.124	0.194	0.280	0.381
		NC (Noise Criteria)	-	17	24	29	34	37
		Throw	2-5-13	5-10-20	8-13-26	11-16-31	13-20-34	15-23-36
	4 ft.							
		Total Pressure	0.012	0.030	0.055	0.088	0.128	0.176
		Static Pressure	0.012	0.028	0.051	0.081	0.119	0.163
		NC (Noise Criteria)	-	20	27	32	37	41
		Throw	2-5-13	5-10-19	9-13-22	11-17-24	14-19-27	16-21-29

12" Inlet 1 Slot

1" Slot Width	4 ft.	Airflo, FM						
		Total Pressure	0.023	0.052	0.093	0.145	0.209	0.284
		Static Pressure	0.023	0.051	0.091	0.142	0.205	0.278
		NC (Noise Criteria)	-	19	26	31	35	39
		Throw	3-7-15	7-12-20	10-15-23	13-18-26	15-20-28	18-22-31