

Sound Attenuator HA40

In today's large handling systems, the air moving device such as fans, blowers, cooling towers, dust extraction systems and the like, usually produce undesirable high noise levels that may be transmitted through both the supply and return air systems serving the conditioned areas of the building. To control the passage of noise along such air paths, OLSON Acoustics has developed a line of Sound Attenuators which can provide proper acoustical environment in the occupied areas of the buildings.

CONSTRUCTION

OLSON Acoustics' Sound Attenuators comes with aerodynamic splitters that have bell-mouth entrances and tapered ends. This aerodynamic design ensures maximum sound attenuation with less airflow resistance and lower generated noise. The splitters are constructed with perforated metal to prevent erosion and enhance low frequencies attenuation. OLSON Acoustics' Sound Attenuator are constructed using high quality galvanised sheetmetal casing with acoustic infill material meeting the requirements of NFPA 90A. Other materials are also available, upon customer's request.

FEATURES

- Acoustic infill material meeting requirements of NFPA 90A
- Aerodynamically designed splitters with rounded nose and tapered ends
- Solid noise and bellmouth entrance ensure minimum pressure loss and generated noise
- Galvanized sheetmetal casing of highest quality. Other materials are available upon request
- Perforated galvanised steel interior linings to prevent erosion and enhance low frequencies attenuation

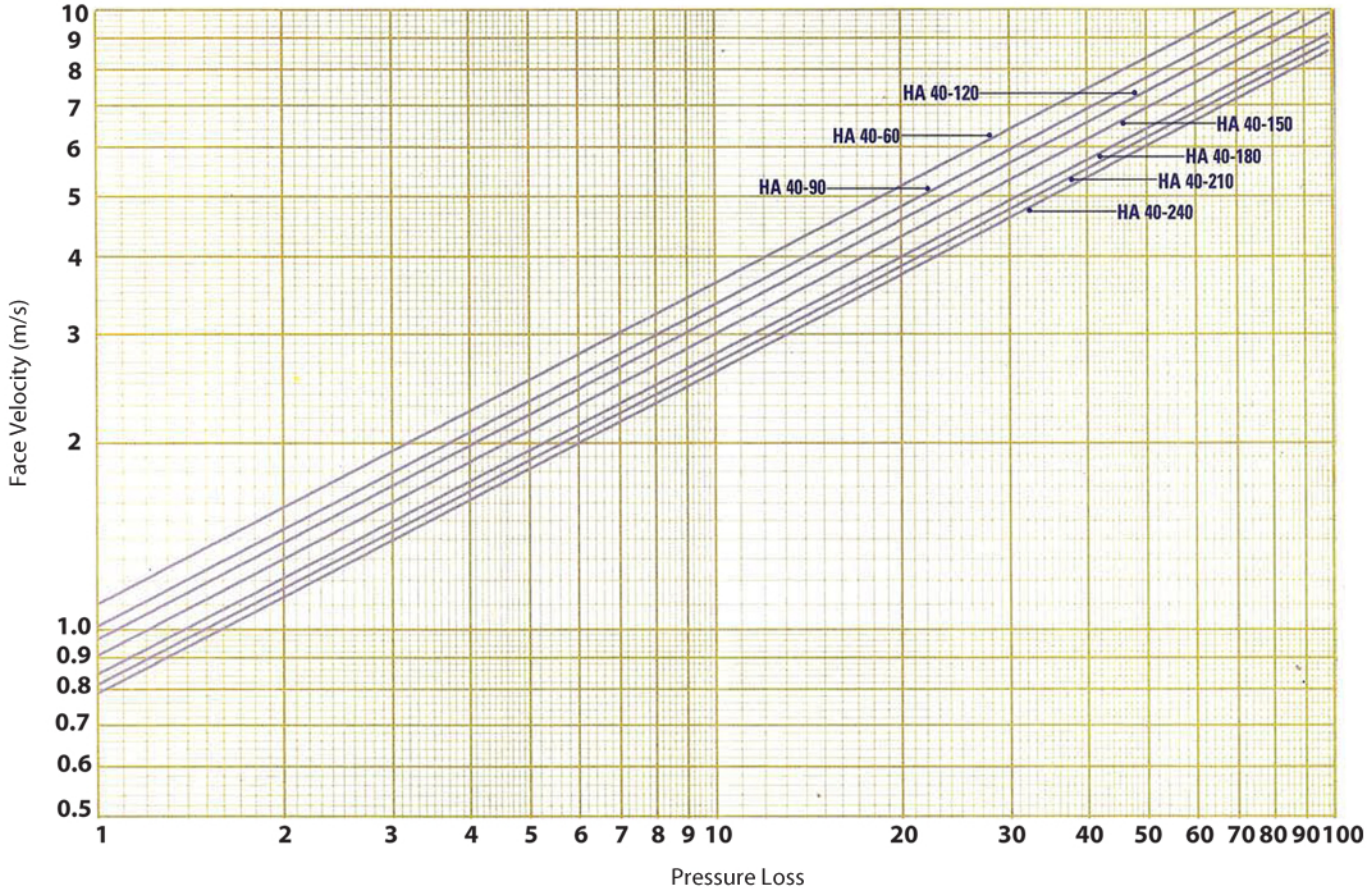
HA40 Insertion Loss

MODEL	LENGTH (mm)	VELOCITY (m/s)	PRESS LOSS (Pa)	FLOW	DYNAMIC INSERTION LOSS IN DB						
					125	250	500	1000	2000	4000	8000
HA40-60	600	7.5	40	Return	7	10	16	17	14	10	10
		5	19.5	Return	7	10	15	16	14	11	11
		0			7	10	14	15	15	12	13
		5	19.5	Supply	6	9	14	15	15	12	13
		7.5	40	Supply	5	9	14	14	15	12	13
HA40-90	900	7.5	46	Return	9	17	25	25	18	13	12
		5	22.5	Return	8	16	23	25	19	14	12
		0			8	12	20	22	19	14	11
		5	22.5	Supply	7	11	19	22	19	15	11
		7.5	46	Supply	7	11	17	21	19	15	11
HA40-120	1200	7.5	52	Return	12	20	30	28	20	14	13
		5	25.5	Return	11	20	29	29	23	16	14
		0			11	17	27	30	25	17	13
		5	25.5	Supply	10	15	25	29	25	17	13
		7.5	52	Supply	10	14	23	28	25	18	13
HA40-150	1500	7.5	59	Return	15	23	34	31	22	16	14
		5	28.5	Return	14	23	34	35	26	18	15
		0			13	21	33	37	30	18	15
		5	28.5	Supply	13	18	30	36	30	20	15
		7.5	59	Supply	12	17	29	34	30	20	15
HA40-180	1800	7.5	68	Return	17	27	37	40	28	17	15
		5	32	Return	16	26	37	40	30	18	16
		0			16	24	36	40	33	19	16
		5	32	Supply	15	21	34	38	32	21	16
		7.5	68	Supply	14	20	32	36	31	21	16
HA40-210	2100	7.5	72	Return	19	32	43	43	30	18	16
		5	34	Return	18	30	42	43	32	19	16
		0			18	28	40	43	35	21	17
		5	34	Supply	117	25	37	41	35	23	17
		7.5	72	Supply	16	24	35	38	32	24	17
HA40-240	2400	7.5	76	Return	22	35	44	45	32	19	17
		5	36	Return	21	33	43	45	34	20	17
		0			21	31	43	46	38	22	18
		5	36	Supply	19	28	41	43	37	24	18
		7.5	76	Supply	18	27	38	40	33	25	18

Generated Sound Power Level - dB re 10^{-12} watts

AIRFLOW	FACE VELOCITY (m/s)	OCTAVE BAND						
		2	3	4	5	6	7	8
		125	250	500	1000	2000	4000	8000
Supply	5	47	43	43	45	45	44	37
Supply	7.5	57	51	49	50	55	55	45
Supply	10	59	55	54	54	59	58	53
Return	5	45	41	42	45	46	46	39
Return	7.5	55	49	48	49	56	57	47
Return	10	57	53	53	53	60	60	55

Static Pressure Drop through Rectangular Sound Absorbers for model HA40



Weight of Type HA40 Silencers

Width (mm)	Height (mm)	Length (mm)	Unit Wt (kg)
600	600	600	30
		900	38
		1200	47
1200	600	600	57
		900	74
		1200	92
1200	1200	600	91
		1200	146
		1800	200
		2400	260
1800	600	600	90
		1200	143
		1800	197

Width (mm)	Height (mm)	Length (mm)	Unit Wt (kg)
1800	1200	600	140
		900	221
		1200	302
		2400	391
1800	1800	600	190
		1200	299
		1800	408
		2400	525
2400	600	600	115
		1200	184
		1800	253
		2400	332

Width (mm)	Height (mm)	Length (mm)	Unit Wt (kg)
2400	1200	600	178
		1200	282
		1800	385
		2400	499
2400	1800	600	242
		1200	380
		1800	517
		2400	665
2400	2400	600	324
		1200	497
		1800	669
		2400	852

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