

# Rectangular straight attenuator TUNE-S



## Description

TUNE-S has a conventional design with dimensions that not exceed the corresponding connection dimensions. The attenuator can be manufactured in all standard duct sizes.

## Design

Rectangular straight attenuator from the TUNE series. TUNE-S is built with the splitter TUNE-A. The attenuator is manufactured with the frame of galvanized sheet and mineral wool absorption material.

The TUNE-S is available with splitter width 100, 150 and 200 mm. Attenuator is equipped with joining profile RJFP.

To size the appropriate attenuator you can use our IT-online tool LindQST, where splitter distance, length and height can be optimized for the best performance.

Tested according to ISO 7235 standard.

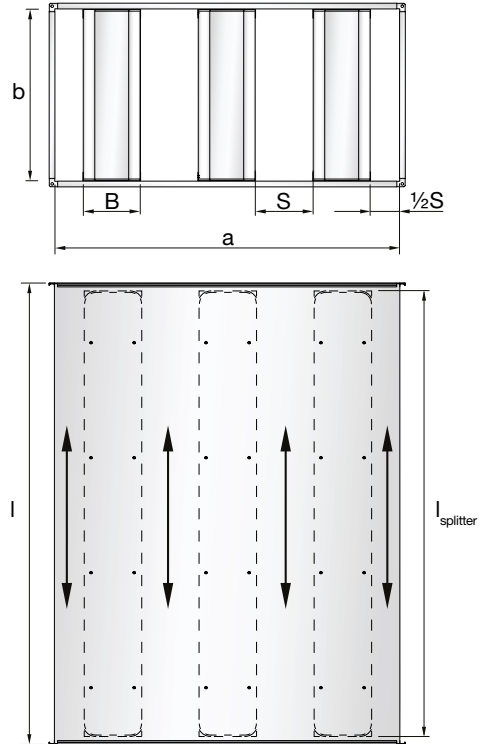
The appearance of odd-sized products may differ from the photo images.

## Order code

Product	TUNE-S	B	S	a	b	l	f
TUNE-S							
<b>Splitter width (B) in mm</b>							
100, 150 or 200 mm							
<b>Splitter distance (S) in mm</b>							
Calculate - see text							
<b>Width (a) in mm</b>							
Min. - Max. 400 - 2400 mm							
<b>Height (b) in mm</b>							
Min. - Max. 200 - 2400 mm							
<b>Length (l) in mm</b>							
Min. - Max. 500 - 2550 mm							
<b>Connection type</b>							
e.g. RJFP 20, 30 or 40							

Example: TUNE-S - 200 - 200 - 1200 - 900 - 1550 - RJFP30

## Dimensions



$l - 50 = l_{\text{splitter}}$  (length of splitter).

$b$  = Inner height of TUNE-S.

The splitter height is  $b - 5$  mm, to fit into duct.

Special materials and sizes, please contact Lindab sales.

Note that you can exceed maximum dimensions by combining several attenuators side by side or on top of each other. Please see installation instruction of rectangular attenuators / splitters.

# Rectangular straight attenuator TUNE-S

## Technical data

### Splitter Width (B) = 100

Splitter distance (S) = 60 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	1	4	7	14	25	27	21	16	4,3
1050	2	6	13	23	44	48	32	22	5,4
1550	4	8	19	31	50	50	43	29	6,5
2050	5	11	25	40	50	50	50	35	7,6
2550	7	13	32	48	50	50	50	41	8,7

### Splitter Width (B) = 100

Splitter distance (S) = 100 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	1	2	5	11	20	17	13	10	1,6
1050	2	4	9	18	34	30	19	13	2,1
1550	3	5	13	24	49	43	26	17	2,5
2050	4	6	17	31	50	50	32	21	2,9
2550	5	8	22	37	50	50	39	25	3,3

### Splitter Width (B) = 100

Splitter distance (S) = 140 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	1	2	4	10	17	12	9	7	0,9
1050	2	3	7	15	29	22	14	10	1,1
1550	3	4	10	21	41	32	18	12	1,3
2050	3	5	14	26	50	41	23	15	1,5
2550	4	6	17	32	50	50	28	18	1,7

NB. Max. attenuation specified is 50 dB in the tables above.

The pressure loss  $\Delta p$  in Pa can be calculated from the pressure value  $\xi$ :  $\Delta p = 0,6 \times v^2 \times \xi$ , where (v) is the velocity on the face area of the attenuator.

### Splitter Width (B) = 150

Splitter distance (S) = 60 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	2	5	9	21	28	28	18	15	8,2
1050	5	9	18	33	50	50	31	23	10,5
1550	8	14	26	46	50	50	45	31	12,9
2050	11	18	35	50	50	50	50	39	15,2
2550	14	23	44	50	50	50	50	47	17,6

### Splitter Width (B) = 150

Splitter distance (S) = 100 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	2	3	6	16	19	17	11	9	2,8
1050	4	6	13	26	39	33	19	14	3,6
1550	6	9	19	37	50	49	27	19	4,4
2050	8	12	26	47	50	50	35	23	5,2
2550	10	15	32	50	50	50	43	28	6,0

### Splitter Width (B) = 150

Splitter distance (S) = 140 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	2	2	5	14	14	12	8	6	8,2
1050	3	4	10	23	30	23	14	10	10,5
1550	5	7	16	31	46	35	19	13	12,9
2050	7	9	21	40	50	47	25	17	15,2
2550	9	11	26	49	50	50	31	20	17,6

# Rectangular straight attenuator TUNE-S

## Technical data

### Splitter Width (B) = 200

Splitter distance (S) = 60 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	2	6	12	24	36	38	28	18	17,5
1050	4	12	20	42	50	50	44	24	20,3
1550	5	17	27	50	50	50	50	31	23,2
2050	7	22	34	50	50	50	50	37	26,1
2550	8	27	41	50	50	50	50	44	29,0

### Splitter Width (B) = 200

Splitter distance (S) = 100 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	2	5	10	19	24	20	15	11	5,7
1050	3	8	15	33	44	36	23	15	6,6
1550	4	12	21	46	50	50	32	19	7,5
2050	5	16	27	50	50	50	40	23	8,5
2550	6	20	33	50	50	50	49	27	9,4

### Splitter Width (B) = 200

Splitter distance (S) = 140 mm

Length $l_{nom}$ [mm]	Insertion loss [dB] for centre frequency [Hz]								Pressure value $\xi$
	63	125	250	500	1k	2k	4k	8k	
550	1	4	8	16	18	14	10	8	2,7
1050	2	7	13	28	33	24	15	11	3,2
1550	3	10	18	39	49	35	21	14	3,6
2050	4	13	23	50	50	46	26	17	4,0
2550	5	16	28	50	50	50	32	20	4,5

# Rectangular straight attenuator

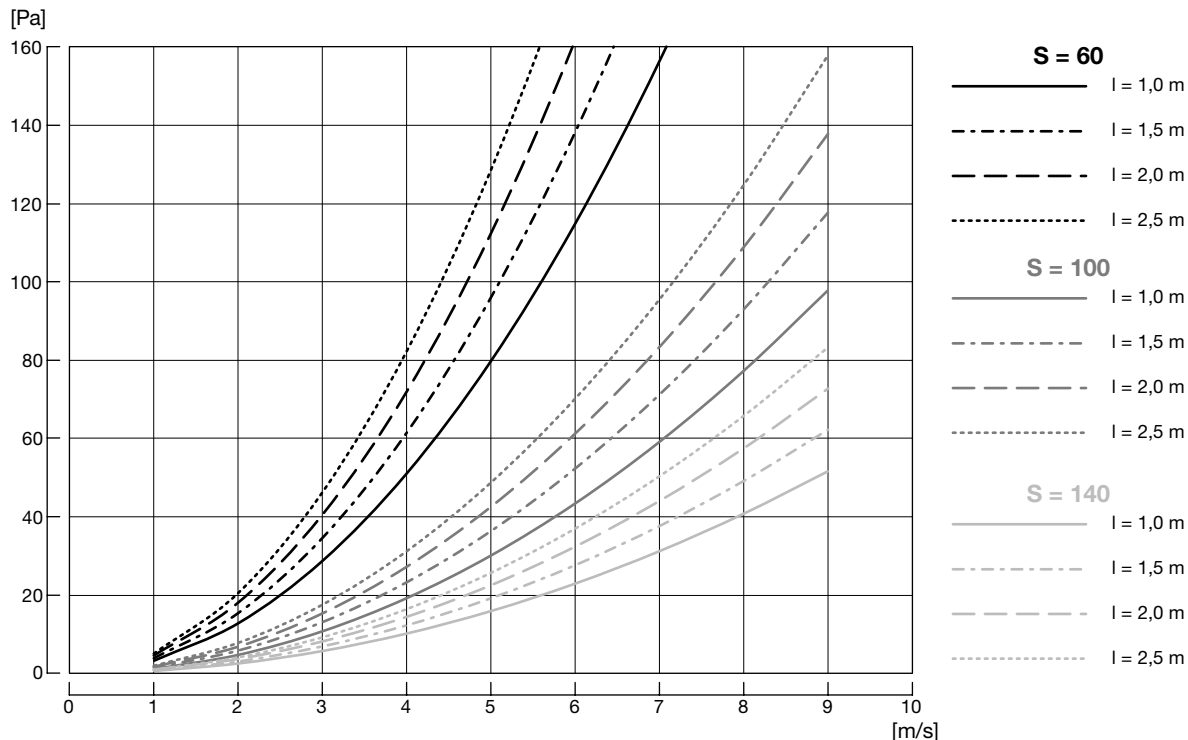
# TUNE-S

## Technical data

### Pressure loss

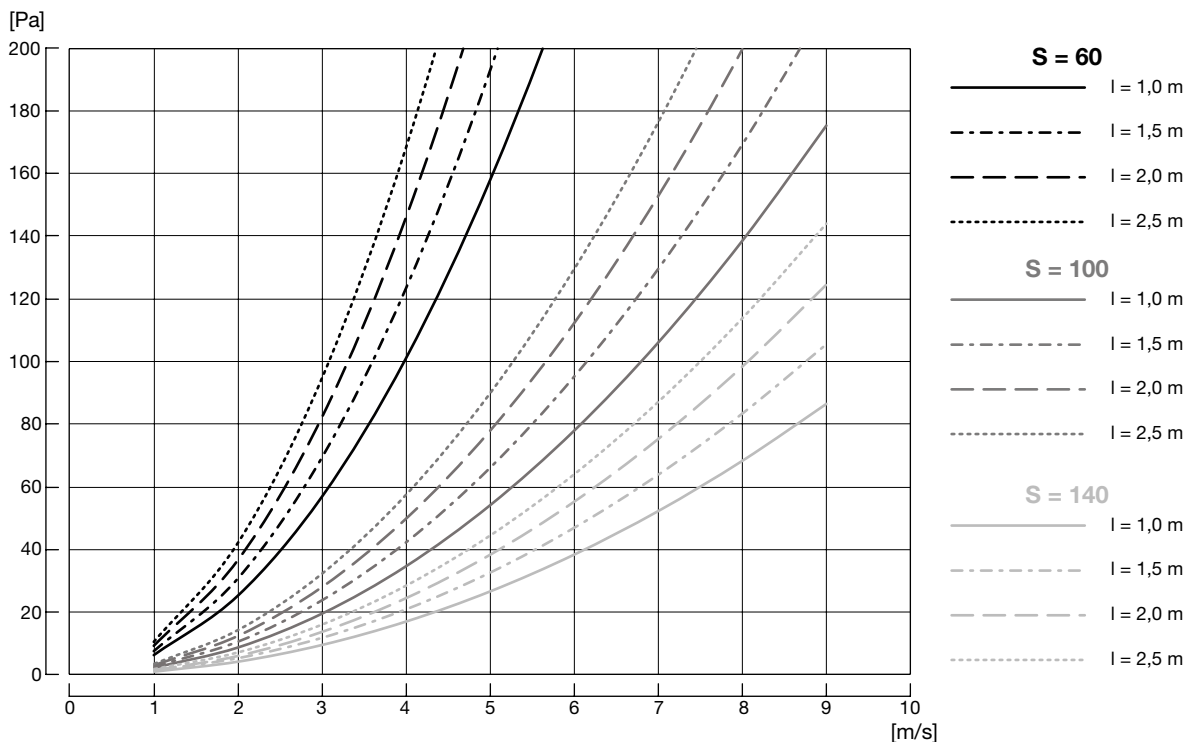
#### TUNE-S with splitter width (B) = 100

(S) is distance between splitters.



#### TUNE-PS with splitter width (B) = 150

(S) is distance between splitters.



# Rectangular straight attenuator

# TUNE-S

## Technical data

### TUNE-PS with splitter width (B) = 200

(S) is distance between splitters.

