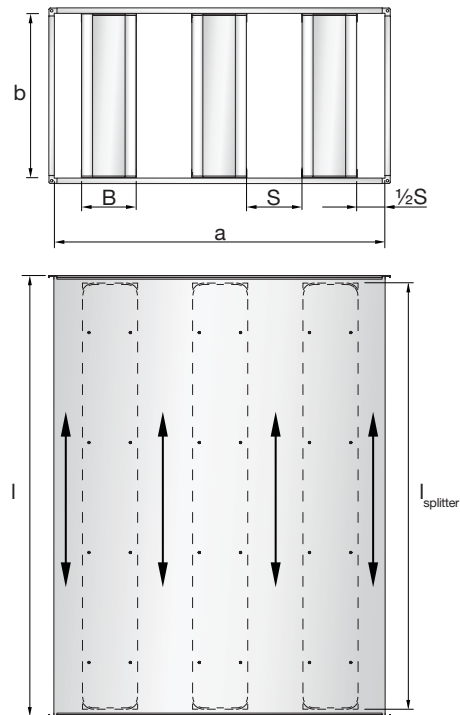


# Rectangular straight silencer

# TUNE-S



## Dimensions



## Description

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

## Design

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

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

To calculate the silencer, you can use our IT-program lindQST or DIMsilencer, where splitter distance, length and height can be optimized for the best performance.

Tested according to ISO 7235 standard.

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

$b$  = Inner height of TUNE-S.

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

Standard lengths ( $l$ ): 550, 1050, 1550, 2050, 2550 mm.  
(Shown in tables on next page).

Standard heights ( $b$ ): 300, 600, 900, 1200 mm.

Special materials and sizes, please contact Lindab sales.

**Other lengths and heights are available. See min. - max. dimensions in order code. Note that you can exceed the max. dimensions by building together several TUNE-S silencers.**

## Order code

Product	Tune-S	aaa	bbb	cccc	dddd	eeee	ff
TUNE-S							
<b>Splitter width (B) in mm</b>							
100 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. 550 - 2550 mm							
<b>Connection type</b>							
e.g. RJFP 20, 30 or 40							

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

The max. height can be increased by building two splitters on top of each other.

# Rectangular straight silencer

## Technical data

### TUNE-S silencers

#### Splitter Width (B) = 100

Splitter distance (S) = 60 mm

Length l <sub>nom</sub> mm	Insertion loss [dB] for centre frequency [Hz]								Pressure value ξ
	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 <sub>nom</sub> mm	Insertion loss [dB] for centre frequency [Hz]								Pressure value ξ
	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 <sub>nom</sub> mm	Insertion loss [dB] for centre frequency [Hz]								Pressure value ξ
	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 Δp in Pa can be calculated from the pressure value ξ:  $\Delta p = 0,6 \times v^2 \times \xi$ , where (v) is the velocity on the face area of the silencer.

#### Splitter Width (B) = 200

Splitter distance (S) = 60 mm

Length l <sub>nom</sub> mm	Insertion loss [dB] for centre frequency [Hz]								Pressure value ξ
	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 <sub>nom</sub> mm	Insertion loss [dB] for centre frequency [Hz]								Pressure value ξ
	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 <sub>nom</sub> mm	Insertion loss [dB] for centre frequency [Hz]								Pressure value ξ
	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 silencer

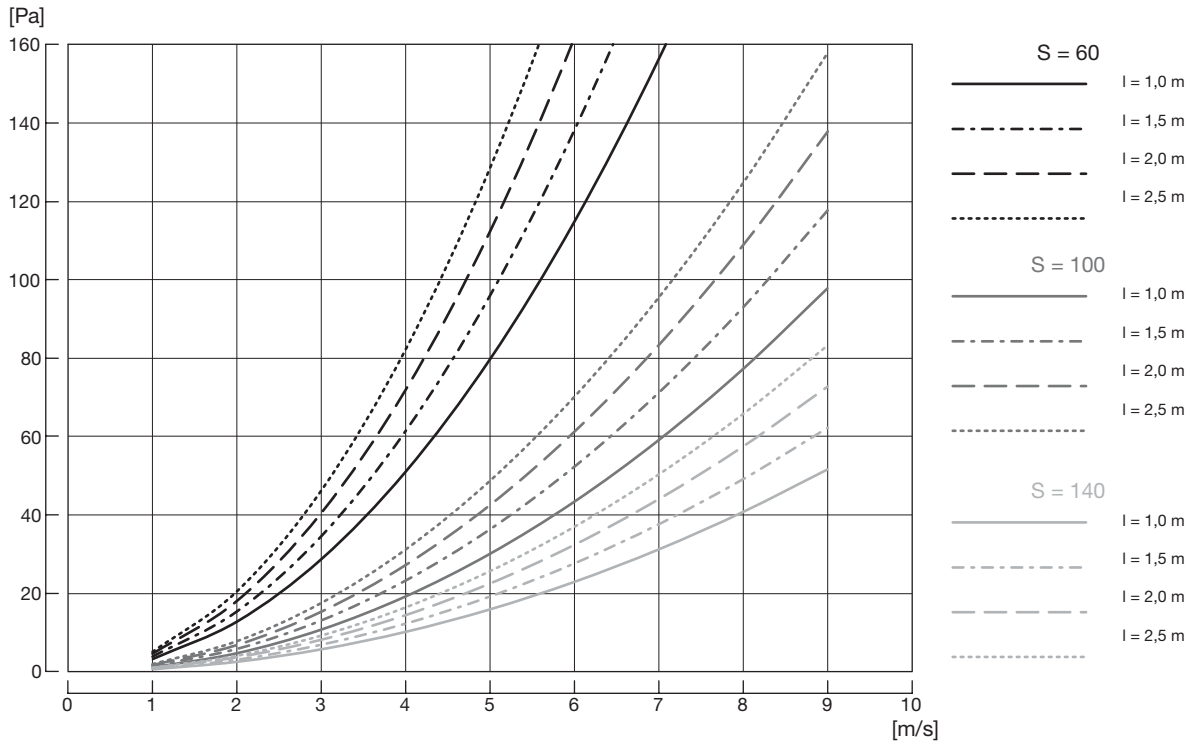
# TUNE-S

## Technical data

Pressure loss

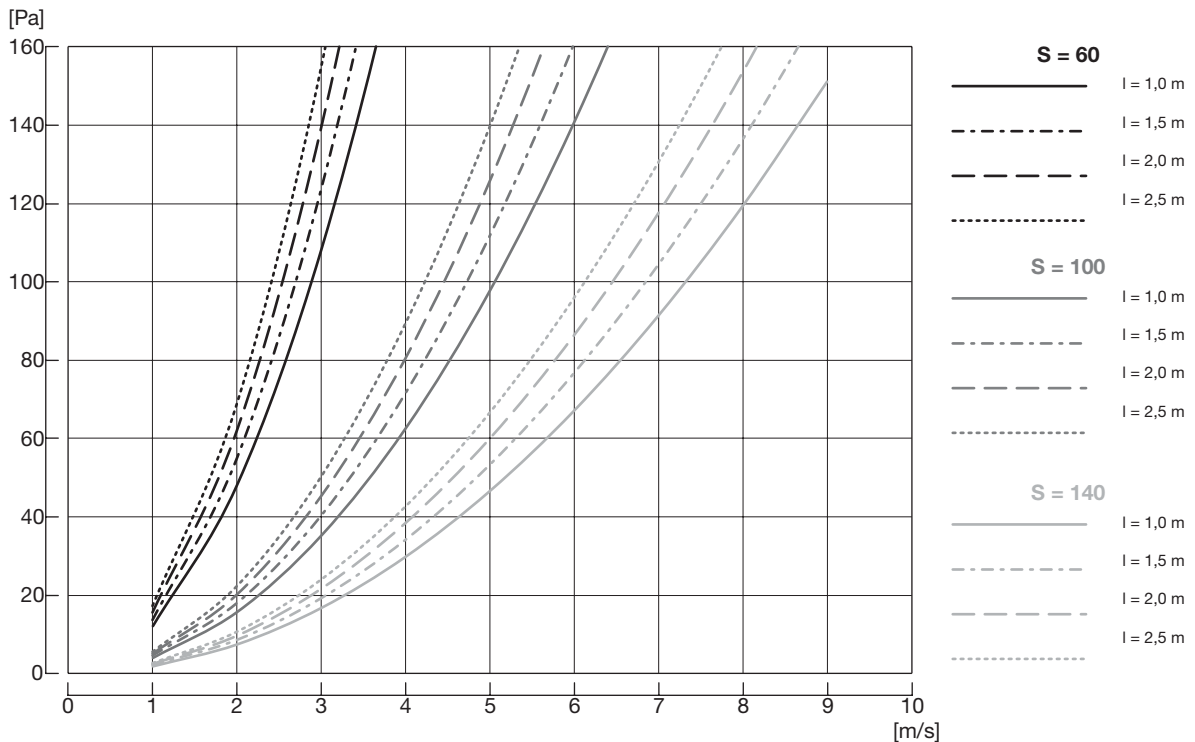
**TUNE-S with splitter width (B) = 100**

(S) is distance between splitters



**TUNE-S with splitter width (B) = 200**

(S) is distance between splitters



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18