



Duct silencer

RS



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Duct silencer RS

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Duct silencer RS

Description

Silencing of the duct silencer type RS in accordance with the absorption principle is done by means of an annular chamber filled with mineral wool according to DIN 4102 A2 non-flammable, mineral wool with glass silk cover. The RSM type contains an additional central baffle with mineral wool filling and glass silk cover, which is covered with a galvanised perforated sheet in abrasion-resistant manner toward the air flow.

For maintenance, service, retrofitting, etc., inspection openings in sufficient number and size must be provided on-site.

Duct silencers have been tested according to DIN EN 1751:2014 tightness class "C".

Construction

Outer jacket

- Galvanised sheet steel (-SV)

Perforated plate

- Galvanised sheet steel (-SV)

Central baffle (for RS-M only)

- Mineral wool covered with glass silk and galvanised sheet steel (-SV)

Connection piece

- Galvanised sheet steel (-SV)

Model

RS-N-...	- Annular chamber with mineral wool filling
RS-M-...	- Annular chamber with mineral wool filling and additional central baffle
...-0500	- Length 500 mm
...-0950	- Length 950 mm
...-1450	- Length 1450 mm
...-1950	- Length 1950 mm
...-50	- Packing thickness 50 mm
...-100	- Packing thickness 100 mm
...-150	- Packing thickness 150 mm

Accessories

Flat flange (-FF1) only possible without counter flange

- on both sides, according to DIN 24 154/5, not possible for NW 71, 90, 112 and 350

Metu flange (-MF1)

- on both sides, duct flange type AF

Counter flange (-GF1) (pair) loose

- on both sides, only possible for Metu flange

Tension ring (-SR1) (pair) loose

- to connect Metu flange to counter flange

Rubber lip seal (-GD1)

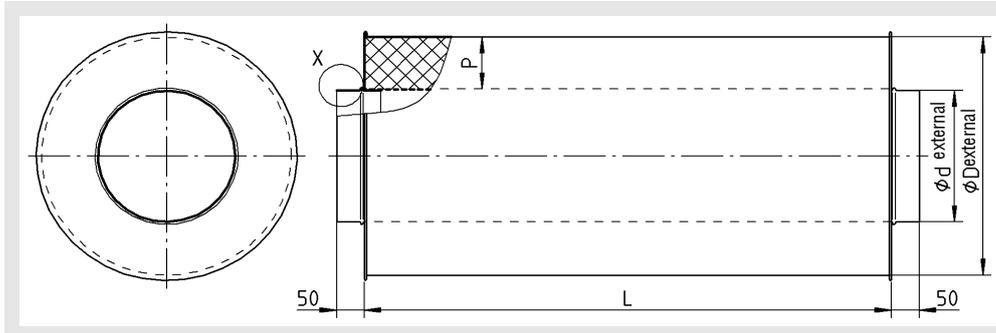
- on both sides, special rubber

Duct silencer RS

Models and dimensions

Dimensions

RS-N-...



Available sizes

NW	ϕd	ϕD		
		P (mm)		
		50	100	150
0071	69	175	275	-
0080	78	180	280	-
0090	88	190	290	-
0100	98	200	300	-
0112	110	212	312	-
0125	123	225	325	-
0140	138	240	340	-
0150	148	250	350	-
0160	158	260	360	-
0180	178	280	380	-
0200	198	300	400	-
0224	222	325	425	-
0250	248	350	450	-
0280	278	380	480	580
0300	298	400	500	600
0315	313	415	515	615
0350	348	450	550	650
0355	353	455	555	655
0400	398	500	600	700
0450	448	-	650	750
0500	498	-	700	800
0560	558	-	760	860
0600	598	-	800	900
0630	628	-	830	930
0710	708	-	910	1010
0800	798	-	1000	1100
0900	898	-	1110	1200
1000	998	-	1260	1300
1120	1118	-	1320	1420
1250	1248	-	1450	1550

Selection chart packing thickness

NW	L=500			L=950			L=1450			L=1950		
	P (mm)			P (mm)			P (mm)			P (mm)		
	50	100	150	50	100	150	50	100	150	50	100	150
0071	X	X	-	X	X	-	X	-	-	X	-	-
0080	X	X	-	X	X	-	X	-	-	X	-	-
0090	X	X	-	X	X	-	X	-	-	X	-	-
0100	X	X	-	X	X	-	X	-	-	X	-	-
0112	X	X	-	X	X	-	X	-	-	X	-	-
0125	X	X	-	X	X	-	X	-	-	X	-	-
0140	X	X	-	X	X	-	X	-	-	X	-	-
0150	X	X	-	X	X	-	X	X	-	-	X	-
0160	X	X	-	X	X	-	X	X	-	-	X	-
0180	X	X	-	X	X	-	X	X	-	-	X	-
0200	X	X	-	X	X	-	X	X	-	-	X	-
0224	X	X	-	X	X	-	X	X	-	-	X	-
0250	X	X	-	X	X	-	X	X	-	-	X	-
0280	X	X	-	X	X	X	X	X	X	-	X	X
0300	X	X	-	X	X	X	X	X	X	-	X	X
0315	X	X	-	X	X	X	X	X	X	-	X	X
0350	X	X	-	X	X	X	X	X	X	-	X	X
0355	X	X	-	X	X	X	X	X	X	-	X	X
0400	X	X	-	X	X	X	X	X	X	-	X	X
0450	-	-	-	-	X	X	-	X	X	-	X	X
0500	-	-	-	-	X	X	-	X	X	-	X	X
0560	-	-	-	-	-	X	-	X	X	-	X	X
0600	-	-	-	-	-	X	-	X	X	-	X	X
0630	-	-	-	-	-	X	-	X	X	-	X	X
0710	-	-	-	-	-	X	-	X	X	-	X	X
0800	-	-	-	-	-	X	-	X	X	-	X	X
0900	-	-	-	-	-	X	-	X	X	-	X	X
1000	-	-	-	-	-	X	-	X	X	-	X	X
1120	-	-	-	-	-	X	-	X	X	-	X	X
1250	-	-	-	-	-	X	-	X	X	-	X	X

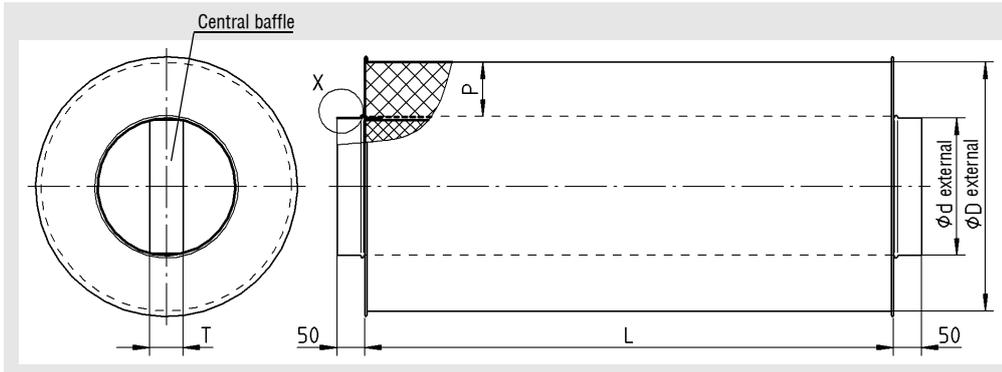
x = available

P = Packing thickness

- = Special model, only upon request

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RS-M-...



Available sizes

NW	ϕd	ϕD			T (mm)
		P (mm)			
		50	100	150	
0350	348	450	550	650	60
0355	353	455	555	655	60
0400	398	500	600	700	60
0450	448	550	650	750	60
0500	498	600	700	800	75
0560	558	-	760	860	100
0600	598	-	800	900	100
0630	628	-	830	930	100
0710	708	-	910	1010	150
0800	798	-	1000	1100	150
0900	898	-	1100	1200	150
1000	989	-	1200	1300	150
1120	1118	-	1320	1420	150
1250	1248	-	1450	1550	150

Selection chart packing thickness

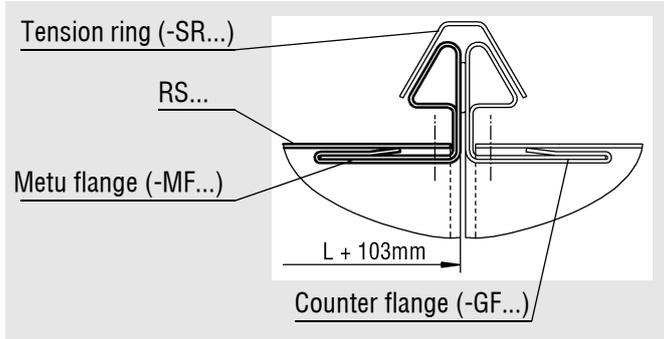
NW	L=950			L=1450			L=1950		
	P (mm)			P (mm)			P (mm)		
	50	100	150	50	100	150	50	100	150
0350	x	x	x	x	x	x	-	-	x
0355	x	x	x	x	x	x	-	-	x
0400	x	x	x	x	x	x	-	-	x
0450	x	x	x	x	x	x	-	-	x
0500	x	x	x	x	x	x	-	-	x
0560	-	x	x	-	x	x	-	-	x
0600	-	x	x	-	x	x	-	-	x
0630	-	x	x	-	x	x	-	-	x
0710	-	x	x	-	x	x	-	-	x
0800	-	-	x	-	x	x	-	-	x
0900	-	-	x	-	x	x	-	-	x
1000	-	-	x	-	x	x	-	-	x
1120	-	-	x	-	x	x	-	-	x
1250	-	-	x	-	x	x	-	-	x

- x = available
- P = Packing thickness
- T = Baffle width
- = Special model, only upon request

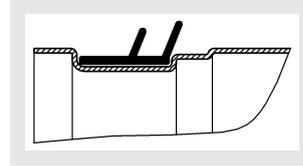
Duct silencer RS

Accessories - dimensions

Metu flange (-MF...) / counter flange (-GF...) (pair) loose /
tension ring (-SR...) (pair) loose on both sides



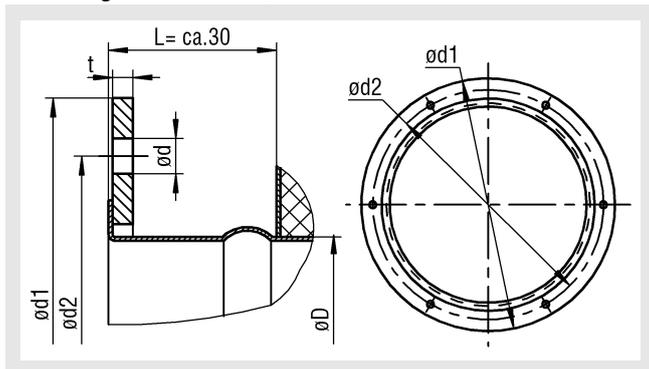
Rubber lip seal (-GD1) Detail X



Please note!

Tension rings and counter flanges must be ordered separately
and are supplied loose!

Flat flange (-FF...), on both sides
according to DIN 24 154/5



Available sizes flat flange (-FF...)

NW	$\text{ø}D$	$\text{ø}d1$	$\text{ø}d2$	$\text{ø}d$	LOA	t
0080	78	132	108	7	4	3
0100	98	154	129	7	4	3
0125	123	177	155	7	4	3
0160	158	222	194	7	6	4
0200	198	263	235	7	6	4
0225	223	287	259	7	6	4
0250	248	313	286	7	6	4
0280	278	353	322	9,5	8	5
0315	313	388	356	9,5	8	5
0355	353	428	395	9,5	8	5
0400	398	474	438	9,5	12	5
0500	498	574	541	9,5	12	5
0630	628	726	698	11,5	16	6
0710	708	804	775	11,5	16	6
0800	798	894	861	11,5	24	6
0900	898	994	958	11,5	24	6
1000	998	1095	1067	11,5	24	6
1120	1118	1235	1200	11,5	32	8
1250	1248	1365	1337	11,5	32	8

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Technical data

Pressure loss and velocity

RS-N-..., L=500, without central baffle

	Δp_t (Pa)												
	v_s (m/s)												
	4	5	6	7	8	9	10	11	12	13	14		
NW 0071	2	3	4	6	7	9	11	14	16	18	22		
0080	2	3	4	5	6	8	10	12	14	16	19		
0090	2	2	3	4	6	7	8	10	12	14	16		
0100	1	2	3	4	5	6	7	9	10	12	14		
0125	1	2	2	3	4	5	6	7	8	9	11		
0140	1	1	2	3	3	4	5	6	7	8	9		
0150	1	1	2	2	3	4	4	5	6	7	8		
0160	1	1	2	2	3	3	4	5	6	7	8		
0180	1	1	1	2	2	3	4	4	5	6	7		
0200	1	1	1	2	2	3	3	4	4	5	6		
0225	1	1	1	1	2	2	3	3	4	4	5		
0250	1	1	1	1	2	2	2	3	3	4	5		
0280	1	1	1	1	1	2	2	3	3	3	4		
0315	1	1	1	1	1	1	2	2	3	3	3		
0355	1	1	1	1	1	1	1	2	2	3	3		
0400	1	1	1	1	1	1	1	2	2	2	3		

RS-N-..., L=950, without central baffle

	Δp_t (Pa)												
	v_s (m/s)												
	4	5	6	7	8	9	10	11	12	13	14		
NW 0071	4	6	9	12	15	19	23	28	32	38	43		
0080	4	5	7	10	13	16	20	24	28	33	37		
0090	3	5	6	9	11	14	17	20	24	28	32		
0100	3	4	6	8	10	12	15	18	21	25	28		
0125	2	3	4	6	7	9	11	13	16	19	21		
0140	2	3	4	5	6	8	10	12	14	16	18		
0150	2	2	3	5	6	7	9	11	13	15	17		
0160	1	2	3	4	5	7	8	10	12	14	16		
0180	1	2	3	4	5	6	7	9	10	12	14		
0200	1	2	2	3	4	5	6	7	8	10	12		
0225	1	2	2	3	4	4	5	6	8	9	10		
0250	1	1	2	2	3	4	5	6	7	8	9		
0280	1	1	2	2	3	3	4	5	6	7	8		
NW 0315	1	1	1	2	2	3	4	4	5	6	7		
0355	1	1	1	2	2	3	3	4	4	5	6		
0400	1	1	1	1	2	2	3	3	4	4	5		
0450	1	1	1	1	2	2	2	3	3	4	4		
0500	1	1	1	1	1	2	2	2	3	3	4		
0560	1	1	1	1	1	1	2	2	3	3	3		
0630	1	1	1	1	1	1	2	2	2	3	3		
0710	1	1	1	1	1	1	1	2	2	2	3		
0800	1	1	1	1	1	1	1	1	1	2	2		
0900	1	1	1	1	1	1	1	1	1	2	2		
1000	1	1	1	1	1	1	1	1	1	2	2		
1120	1	1	1	1	1	1	1	1	1	2	2		
1250	1	1	1	1	1	1	1	1	1	2	2		

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RS-N-..., L=1450, without central baffle

		Δp_i (Pa)													
		v_s (m/s)													
		4	5	6	7	8	9	10	11	12	13	14			
NW	0071	6	9	12	17	21	26	32	39	45	53	61			
	0080	5	8	10	14	18	23	27	33	39	45	52			
	0090	4	7	9	12	15	20	24	29	33	39	45			
	0100	4	6	8	11	13	17	21	25	29	34	39			
	0125	3	4	6	8	10	13	16	19	22	26	30			
	0140	2	4	5	7	9	11	14	16	19	22	26			
	0150	2	3	5	6	8	10	12	15	18	21	24			
	0160	2	3	4	6	7	9	11	14	16	19	22			
	0180	2	3	4	5	6	8	10	12	14	16	19			
	0200	2	2	3	4	6	7	9	10	11	14	17			
	0225	1	2	3	4	5	6	7	9	11	12	14			
	0250	1	2	3	3	4	5	7	8	9	11	13			
	0280	1	2	2	3	4	5	6	7	8	10	11			
	0315	1	2	2	3	3	4	5	6	7	8	9			
	0355	1	1	2	2	3	3	4	5	6	7	8			
	0400	1	1	1	2	2	3	4	4	5	6	7			
	0450	1	1	1	2	2	3	3	4	4	5	6			
	0500	1	1	1	1	2	2	3	3	4	5	5			
	0560	1	1	1	1	2	2	2	3	4	4	5			
	0630	1	1	1	1	1	2	2	3	3	4	4			
0710	1	1	1	1	1	1	2	2	3	3	4				
0800	1	1	1	1	1	1	2	2	2	2	3				
0900	1	1	1	1	1	1	2	2	2	2	3				
1000	1	1	1	1	1	1	2	2	2	2	3				
1120	1	1	1	1	1	1	2	2	2	2	3				
1250	1	1	1	1	1	1	2	2	2	2	3				

RS-N-..., L=1950, without central baffle

		Δp_i (Pa)													
		v_s (m/s)													
		4	5	6	7	8	9	10	11	12	13	14			
NW	0071	8	13	17	23	29	37	45	54	63	74	85			
	0080	7	11	15	20	25	32	38	46	54	64	73			
	0090	6	9	13	17	22	27	33	40	47	55	63			
	0100	5	8	11	15	19	24	29	35	41	48	55			
	0125	4	6	8	11	14	18	22	26	31	36	42			
	0140	3	5	7	10	12	16	19	23	27	31	36			
	0150	3	5	6	9	11	14	17	21	25	29	33			
	0160	3	4	6	8	10	13	16	19	23	27	31			
	0180	2	4	5	7	9	11	14	17	20	23	26			
	0200	2	3	5	6	8	10	12	14	16	20	23			
	0225	2	3	4	5	7	9	10	13	15	17	20			
	0250	1	2	4	5	6	8	9	11	13	15	18			
	0280	1	2	3	4	5	7	8	10	11	13	15			
	0315	1	2	3	4	5	6	7	8	10	11	13			
	0355	1	2	2	3	4	5	6	7	8	10	11			
	0400	1	1	1	2	3	4	5	6	7	9	10			
	0450	1	1	1	2	3	4	5	5	6	7	8			
	0500	1	1	1	2	3	3	4	5	5	6	7			
	0560	1	1	1	2	2	3	3	4	5	6	6			
	0630	1	1	1	1	1	2	3	4	4	5	6			
0710	1	1	1	1	1	2	3	3	4	4	5				
0800	1	1	1	1	1	2	3	2	2	3	4				
0900	1	1	1	1	1	2	3	2	2	3	4				
1000	1	1	1	1	1	2	3	2	2	3	4				
1120	1	1	1	1	1	2	3	2	2	3	4				
1250	1	1	1	1	1	2	3	2	2	3	4				

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Pressure loss and velocity

RS-M-..., L=950, with central baffle

		Δp_t (Pa)											
		v_s (m/s)											
		4	5	6	7	8	9	10	11	12	13	14	
NW	0355	15	24	32	46	60	76	91	111	131	160	189	
	0400	13	22	30	42	54	69	84	103	121	148	175	
	0450	13	21	29	40	51	65	79	97	114	140	165	
	0500	12	20	28	39	49	63	77	94	110	135	159	
	0560	12	20	27	37	47	61	74	91	107	131	155	
	0630	11	19	26	36	45	59	72	88	104	127	150	
	0710	11	18	24	33	42	56	69	85	100	123	145	
	0800	10	17	23	31	40	53	66	80	95	116	138	
	0900	10	16	22	30	38	50	62	76	90	111	131	
	1000	9	15	21	28	36	48	59	72	86	105	124	
	1120	9	14	20	27	34	45	56	69	81	100	118	
	1250	9	14	19	26	32	43	53	65	77	95	112	

RS-M-..., L=1450, with central baffle

		Δp_t (Pa)											
		v_s (m/s)											
		4	5	6	7	8	9	10	11	12	13	14	
NW	0355	18	29	39	56	73	92	111	135	159	195	230	
	0400	16	27	38	52	65	87	109	133	157	192	227	
	0450	15	25	34	47	60	77	93	114	134	164	194	
	0500	14	24	33	45	57	74	90	110	130	159	188	
	0560	14	23	31	43	55	71	86	106	125	153	181	
	0630	12	21	30	41	52	68	83	102	120	147	174	
	0710	12	20	27	38	48	64	79	97	115	141	166	
	0800	11	19	26	36	46	60	75	92	109	133	158	
	0900	11	18	24	34	43	57	71	88	104	127	150	
	1000	10	17	23	32	41	54	68	83	99	120	142	
	1120	10	16	22	31	39	52	64	79	94	114	135	
	1250	9	15	21	29	37	49	61	75	89	109	128	

RS-M-..., L=1950, with central baffle

		Δp_t (Pa)											
		v_s (m/s)											
		4	5	6	7	8	9	10	11	12	13	14	
NW	0355	22	35	48	68	89	112	135	165	194	237	281	
	0400	19	32	46	62	78	104	131	160	188	230	272	
	0450	18	29	40	55	71	90	110	134	158	194	229	
	0500	17	28	39	53	67	87	106	130	153	188	222	
	0560	16	26	36	50	64	82	101	123	146	179	212	
	0630	14	24	35	48	60	78	96	118	139	171	202	
	0710	14	22	31	43	55	73	91	112	132	162	191	
	0800	13	21	29	41	52	69	86	106	126	153	181	
	0900	12	20	28	39	50	66	82	101	119	146	172	
	1000	12	19	27	37	47	63	78	96	113	139	164	
	1120	11	18	25	35	45	59	74	91	108	132	155	
	1250	11	17	24	33	43	57	70	86	102	125	148	

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Insertion loss

RS-N-...-50, L=500, without central

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0071	5	8	13	20	28	35	20	22
	0080	4	7	12	18	26	33	17	15
	0090	4	7	11	16	24	31	15	14
	0100	3	6	10	16	22	30	14	13
	0112	3	6	9	15	21	27	13	12
	0125	3	5	9	14	20	24	12	11
	0140	3	5	8	13	19	22	11	10
	0150	2	4	7	13	19	20	11	9
	0160	2	4	7	12	18	19	10	9
	0180	2	3	6	11	17	16	9	8
	0200	1	3	6	10	16	15	7	6
	0224	1	3	5	9	15	13	6	5
	0250	1	2	4	9	15	11	4	3
	0280	1	2	4	8	14	10	4	2
	0300	1	1	4	8	13	9	4	2
	0315	1	1	3	8	12	8	3	2
0350	1	1	3	7	12	8	3	2	
0355	1	1	3	7	11	7	3	1	
0400	1	1	3	7	10	7	2	1	

RS-N-...-100, L=500, without central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0071	7	17	19	24	40	39	35	22
	0080	6	16	18	23	39	36	33	20
	0090	6	14	16	20	35	32	27	17
	0100	5	13	15	19	33	31	25	15
	0112	4	12	14	18	30	28	22	14
	0125	4	10	13	18	29	25	18	12
	0140	4	9	12	17	28	23	16	11
	0150	3	9	11	16	27	22	14	11
	0160	3	9	11	16	26	19	14	10
	0180	3	8	10	15	25	18	13	10
	0200	3	7	9	15	25	17	11	9
	0224	3	6	9	15	24	16	10	8
	0250	2	6	8	14	23	15	9	7
	0280	2	5	7	14	21	14	8	6
	0300	2	5	7	13	20	13	7	6
	0315	2	4	7	13	20	12	7	5
0350	2	3	6	13	19	11	6	5	
0355	2	3	6	13	19	10	6	4	
0400	1	3	6	12	18	9	4	4	

RS-N-...-50, L=950, without central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0071	6	15	28	44	50	50	41	26
	0080	5	14	27	42	50	50	40	24
	0090	5	13	25	39	50	50	36	22
	0100	5	12	23	36	50	50	34	21
	0112	5	12	22	35	50	50	33	20
	0125	4	11	21	33	50	50	32	19
	0140	4	10	17	27	39	36	25	16
	0150	3	9	16	26	37	31	22	15
	0160	3	8	15	23	34	29	18	14
	0180	3	7	13	20	31	26	15	13
	0200	2	5	11	18	30	24	14	11
	0224	2	4	10	17	29	20	12	10
	0250	2	4	9	15	27	18	11	9
	0280	2	3	7	13	25	15	8	7
	0300	2	3	6	13	24	15	8	6
	0315	1	3	6	12	24	14	7	6
0350	1	2	5	12	23	13	6	5	
0355	1	2	5	11	21	11	5	5	
0400	1	2	4	10	19	10	4	4	

RS-N-...-100, L=950, without central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0071	10	23	32	49	50	50	50	41
	0080	9	22	30	45	50	50	50	39
	0090	8	20	29	41	50	50	50	36
	0100	7	19	28	40	50	50	50	32
	0112	7	18	27	38	50	50	44	27
	0125	6	17	25	34	49	50	36	22
	0140	6	15	22	31	45	50	33	18
	0150	5	13	19	30	44	50	28	16
	0160	5	12	18	28	41	48	26	16
	0180	4	11	16	25	37	43	23	14
	0200	4	10	15	24	35	41	22	13
	0224	3	9	14	22	33	38	21	12
	0250	3	8	13	20	31	35	20	11
	0280	3	6	10	17	29	32	18	9
	0300	3	6	9	16	27	29	16	8
	0315	2	6	8	15	26	27	14	8
0350	2	5	7	13	25	24	12	7	
0355	2	5	7	12	24	21	11	7	
0400	2	4	6	11	23	20	10	6	
0450	1	4	5	10	19	18	9	5	
0500	1	3	4	9	17	12	6	4	

RS-N-...-150, L=950, without central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0280	3	6	11	19	30	34	19	10
	0300	3	6	11	18	28	33	18	9
	0315	3	6	10	17	27	31	17	9
	0350	3	5	9	16	25	29	16	8
	0355	3	5	9	15	24	28	16	8
	0400	3	5	9	14	23	27	15	7
	0450	3	4	8	13	21	25	14	7
	0500	3	4	7	11	18	21	12	6
	0560	2	3	6	10	16	19	10	5
	0600	1	3	5	9	15	18	9	5
	0630	1	3	5	9	14	17	9	5
	0710	0	2	5	8	13	15	8	4
	0800	0	2	5	8	11	14	7	4
	0900	0	2	4	7	10	12	6	3
	1000	0	2	4	6	9	10	4	3
	1120	0	1	3	5	8	7	4	3
1250	0	1	3	5	6	4	3	2	

Duct silencer RS

Insertion loss

RS-N-...-50, L=1450, without central baf-

	D _e (dB/oct)							
	f _m (Hz)							
	63	125	250	500	1000	2000	4000	8000
NW 0071	9	27	50	50	50	50	50	33
0080	9	26	50	50	50	50	50	31
0090	8	23	47	50	50	50	49	30
0100	8	22	44	50	50	50	46	28
0112	8	21	40	50	50	50	42	26
0125	7	20	39	50	50	50	39	25
0140	7	18	36	50	50	50	37	23
0150	6	15	31	48	50	47	32	20
0160	6	14	27	42	48	42	26	18
0180	5	11	22	38	43	36	22	16
0200	4	6	15	29	42	30	17	14
0224	3	5	12	23	39	28	15	12
0250	3	4	10	20	37	24	13	11
0280	2	4	9	18	35	22	12	9
0300	2	4	9	17	35	21	11	8
0315	2	4	8	16	34	19	10	7
0350	2	4	7	15	30	17	9	6
0355	1	3	7	15	28	15	9	5
0400	1	2	6	15	27	13	8	5

RS-N-...-150, L=1450, without central baffle

	D _e (dB/oct)							
	f _m (Hz)							
	63	125	250	500	1000	2000	4000	8000
NW 0280	4	11	20	33	42	37	22	12
0300	4	11	19	32	40	35	22	11
0315	3	10	18	31	39	34	21	11
0350	3	9	17	29	37	32	20	10
0355	3	9	17	28	36	31	20	10
0400	3	8	15	25	33	29	18	9
0450	3	7	13	22	28	26	16	8
0500	3	7	12	19	25	24	13	8
0560	2	6	10	18	22	21	12	7
0600	2	5	9	17	21	20	12	6
0630	2	4	9	17	21	19	12	5
0710	2	4	8	14	18	17	11	5
0800	1	3	7	13	17	15	9	4
0900	1	3	6	12	14	12	8	3
1000	1	2	5	11	12	10	6	3
1120	0	2	4	9	8	7	4	2
1250	0	1	4	8	8	5	3	1

RS-N-...-100, L=1450, without central baffle

	D _e (dB/oct)							
	f _m (Hz)							
	63	125	250	500	1000	2000	4000	8000
NW 0150	7	18	34	50	50	50	35	21
0160	6	17	30	47	50	49	30	18
0180	6	17	29	46	50	47	30	18
0200	5	14	26	42	50	46	28	16
0224	5	13	24	38	49	44	26	15
0250	4	12	22	36	46	43	25	14
0280	3	10	18	30	39	35	20	10
0300	3	9	16	29	37	33	19	10
0315	2	8	15	27	35	32	17	9
0350	2	7	14	25	33	29	15	8
0355	2	7	14	25	32	28	15	7
0400	2	6	12	23	30	25	13	7
0450	2	5	10	20	28	22	11	6
0500	1	4	9	18	25	20	10	5
0560	1	3	8	17	23	18	8	4
0600	1	3	7	15	20	15	7	4
0630	1	2	6	13	18	12	6	4
0710	0	2	5	11	15	9	5	3
0800	0	2	5	9	10	9	5	3
0900	0	2	4	9	10	9	4	3
1000	0	1	4	8	8	8	4	2
1120	0	1	4	7	7	6	3	2
1250	0	1	2	5	5	4	2	1

Duct silencer RS

RS-N-...-50, L=1950, without central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0071	10	35	50	50	50	50	50	48
	0080	9	33	50	50	50	50	50	45
	0090	9	31	50	50	50	50	50	42
	0100	9	30	50	50	50	50	50	38
	0112	9	28	50	50	50	50	50	34
	0125	8	26	50	50	50	50	50	33
	0140	8	25	47	50	50	50	49	30

RS-N-...-100, L=1950, without central

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0150	8	25	45	50	50	50	45	28
	0160	8	23	39	50	50	50	41	25
	0180	7	22	38	50	50	50	39	24
	0200	7	19	34	50	50	50	37	21
	0224	7	17	32	50	50	50	35	20
	0250	6	16	29	48	50	49	33	18
	0280	5	13	23	40	44	40	24	14
	0300	5	12	20	35	40	36	20	12
	0315	5	12	19	31	36	33	20	12
	0350	5	10	18	28	33	32	18	9
	0355	4	10	18	28	33	32	18	9
	0400	3	9	15	25	27	29	16	7
	0450	3	9	13	22	23	25	14	6
	0500	3	7	11	21	19	21	12	6
	0560	3	7	9	19	17	19	11	5
	0600	2	6	9	16	16	16	10	5
	0630	2	5	8	15	14	15	10	4
	0710	1	4	8	13	12	12	12	3
	0800	1	3	7	11	11	10	8	3
	0900	1	3	6	10	11	9	6	3
1000	1	3	5	9	10	8	5	3	
1120	0	2	4	8	9	7	4	2	
1250	0	1	3	6	6	5	3	2	

RS-N-...-150, L=1950, without central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0280	6	15	26	43	50	43	29	16
	0300	6	15	25	41	50	41	29	15
	0315	5	14	24	39	50	39	28	14
	0350	5	12	23	38	48	38	27	13
	0355	5	12	22	37	48	38	26	13
	0400	5	11	20	33	43	33	24	12
	0450	5	10	17	29	37	30	21	11
	0500	5	9	16	25	33	27	18	9
	0560	4	7	14	23	30	24	16	8
	0600	4	6	13	21	26	23	15	7
	0630	4	6	12	20	25	22	15	7
	0710	4	5	10	18	22	19	12	6
	0800	3	4	10	15	20	18	11	5
	0900	3	4	9	14	17	16	10	4
	1000	2	3	8	13	14	13	9	4
	1120	1	3	6	11	11	8	7	3
	1250	0	2	6	9	9	6	5	2

Duct silencer RS

Insertion loss

RS-M-...-50, L=950, with central baffle

	D _e (dB/oct)								
	f _m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
NW	0350	2	5	8	17	36	34	14	6
	0355	2	5	8	17	35	33	13	6
	0400	2	5	7	13	30	28	10	5
	0450	1	4	6	12	26	23	9	4
	0500	1	3	5	10	24	21	7	4

RS-M-...-100, L=950, with central baffle

	D _e (dB/oct)								
	f _m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
NW	0350	3	8	14	23	39	35	15	8
	0355	2	8	14	23	38	34	14	8
	0400	2	7	12	25	36	31	12	6
	0450	2	7	11	23	34	28	10	6
	0500	2	6	12	22	30	23	8	5
	0560	1	5	11	20	25	20	7	4
	0600	1	7	10	18	22	18	7	4
	0630	1	6	9	18	19	16	6	3
	0710	1	4	7	15	16	14	5	2

RS-M-...-150, L=950, with central baffle

	D _e (dB/oct)								
	f _m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
NW	0350	3	12	22	28	48	39	16	9
	0355	3	12	22	37	48	38	15	9
	0400	3	11	20	33	43	35	13	8
	0450	3	10	17	29	39	30	12	7
	0500	2	9	16	25	34	27	10	6
	0560	2	7	14	23	30	24	9	6
	0600	2	7	13	21	29	23	9	5
	0630	2	6	12	20	27	22	8	5
	0710	2	6	10	18	24	19	7	4
	0800	0	5	9	15	20	17	7	4
	0900	0	4	8	12	18	15	7	4
	1000	0	4	7	11	15	13	6	4
	1120	0	3	5	8	11	10	6	3
	1250	0	2	4	6	9	8	4	2

RS-M-...-50, L=1450, with central baffle

	D _e (dB/oct)								
	f _m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
NW	0350	4	8	11	30	46	39	19	10
	0355	4	8	11	29	44	37	18	10
	0400	3	6	9	27	39	32	16	8
	0450	3	5	8	22	34	30	15	7
	0500	2	4	7	20	30	27	14	6

RS-M-...-100, L=1450, with central baffle

	D _e (dB/oct)								
	f _m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
NW	0350	5	13	19	37	50	48	20	11
	0355	5	12	19	37	50	48	19	11
	0400	5	10	17	33	50	44	17	10
	0450	4	9	17	32	48	39	15	9
	0500	4	8	16	31	44	35	14	9
	0560	3	7	15	28	38	30	12	7
	0600	3	6	13	26	34	28	11	6
	0630	2	5	12	24	30	26	10	6
	0710	1	5	10	21	27	23	9	5
	0800	1	5	8	15	20	16	8	4
	0900	1	4	7	12	18	13	7	4
	1000	1	3	6	10	14	10	6	3
	1120	1	2	5	8	10	9	6	3
	1250	0	1	3	7	8	6	4	2

RS-M-...-150, L=1450, with central baffle

	D _e (dB/oct)								
	f _m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
NW	0350	6	18	35	50	50	50	23	13
	0355	6	18	34	50	50	50	22	13
	0400	6	17	29	50	50	50	20	12
	0450	6	15	26	42	50	44	17	11
	0500	5	13	22	38	49	40	15	9
	0560	5	11	20	34	45	36	14	8
	0600	5	10	18	33	42	33	13	7
	0630	4	10	17	31	39	32	12	7
	0710	4	8	16	27	36	28	11	6
	0800	3	8	15	25	30	25	10	6
	0900	3	6	12	21	25	20	9	5
	1000	3	5	11	18	21	15	8	5
	1120	2	4	9	12	16	11	6	4
	1250	1	3	8	9	10	8	5	3

Duct silencer RS

RS-M-...-150, L=1950, with central baffle

		D _e (dB/oct)							
		f _m (Hz)							
		63	125	250	500	1000	2000	4000	8000
NW	0350	8	25	44	50	50	50	30	19
	0355	8	25	44	50	50	50	29	18
	0400	8	22	40	50	50	50	26	17
	0450	8	19	34	50	50	50	23	14
	0500	7	18	31	50	50	50	20	12
	0560	7	15	28	47	50	47	18	11
	0600	6	14	26	43	50	45	17	10
	0630	5	12	24	39	50	43	16	10
	0710	5	11	20	36	48	38	15	8
	0800	4	10	19	31	39	33	14	7
	0900	4	9	16	27	31	24	12	6
	1000	3	7	14	22	25	20	11	6
	1120	2	6	12	15	19	15	10	5
	1250	1	4	10	11	15	11	7	4

Duct silencer RS

Flow generated noise

v_s (m/s)	L_W [dB/Okt]								L_{WA} [dB(A)]
	f_m (Hz)								
	63	125	250	500	1000	2000	4000	8000	
5	37	34	30	26	21				28
6	42	39	35	31	26	21			33
8	48	46	43	39	35	29	23		41
10	53	52	49	45	41	36	30	24	47
12	58	56	54	50	46	41	36	29	52
14	62	61	58	55	51	46	41	35	55

The flow generated noise in each octave band must be 7 to 10 dB lower than the reduced noise behind the silencer.

Correction factor for RS-N-...

NW	0100	0112	0125	0140	0160	0180	0200	0225	0250	0280	0315	0355	0400	0450	0500	0560	0630	0710	0800
K_f (dB)	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10

NW	0900	1000	1120	1250
K_f (dB)	+10	+11	+12	+12

Correction factor for RS-M-...

NW	0355	0400	0450	0500	0560	0630	0710	0800	0900	1000	1120	1250
K_f (dB)	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+12

Legend

V_{ZU}	(m ³ /h)	= Supply air volume
V_{ZU}	[l/s]	= Supply air volume
Δp_t	(Pa)	= Pressure loss
f_m	(Hz)	= Frequency
L	(mm)	= Length
NW	(mm)	= Nominal width
D_e	[dB/Okt]	= Insertion loss
P	(mm)	= Packing thickness
v_s	(m/s)	= Velocity in the free cross-section of the silencer
L_{WA}	[dB(A)]	= Weighted sound power level
L_W	[dB/Okt]	= Sound power level / octave
T	(mm)	= Baffle thickness

Duct silencer RS

Order details

01	02	03	04	05	06	07	08	09
Type	Model	Length	Nominal width	Packing thickness	Baffle thickness	Material	Paint	Duct connection
Example								
RS	-N	-0500	-0071	-050	-000	-SV	-0000	-KA0

Sample

RS-N-0500-0071-050-000-SV-0000-KA0

Rigid duct silencer | without central baffle | length 500 mm | nominal width 71 mm | packing thickness 50 mm | without central baffle | galvanised sheet steel | without paint | without rubber lip seal / without flange

Order details

01 - Type

RS = Rigid duct silencer

02 - Model

N = without central baffle (standard)

M = with central baffle (available from NW350 mm)

03 - Length

0500 = Length 500 mm (only possible with model RS-N)

0950 = Length 950 mm

1450 = Length 1450 mm

1950 = Length 1950 mm

04 - Nominal width

0071 = NW 71 mm

0080 = NW 80 mm

0090 = NW 90 mm

0100 = NW 100 mm

0112 = NW 112 mm

0125 = NW 125 mm

0140 = NW 140 mm

0150 = NW 150 mm

0160 = NW 160 mm

0180 = NW 180 mm

0200 = NW 200 mm

0224 = NW 224 mm

0250 = NW 250 mm

0280 = NW 280 mm

0300 = NW 300 mm

0315 = NW 315 mm

0350 = NW 350 mm

0355 = NW 355 mm

0400 = NW 400 mm

0450 = NW 450 mm

0500 = NW 500 mm

0560 = NW 560 mm

0600 = NW 600 mm

0630 = NW 630 mm

0710 = NW 710 mm

0800 = NW 800 mm

0900 = NW 900 mm

1000 = NW 1000 mm

1120 = NW 1120 mm

1250 = NW 1250 mm

Duct silencer RS

05 - Packing thickness

- 050 = 50 mm
- 100 = 100 mm
- 150 = 150 mm

06 - Baffle thickness

- 000 = without central baffle (only possible with model RS-N)
- 060 = 60 mm (only for NW 350-450)
- 075 = 75 mm (only for NW 500)
- 100 = 100 mm (only for NW 560-630)
- 150 = 150 mm (from NW 710-1250)

07 - Material

- SV = Galvanised sheet steel (standard)

08 – Paint

- 0000 = Without paint (standard)

09 - Duct connection

- KA0 = without rubber lip seal / without flange (standard)
- GD1 = with rubber lip seal
- MF1 = Metu flange, on both sides, galvanised sheet steel
- FF1 = Flat flange, on both sides, galvanised sheet steel (not possible for NW 71, 90,112 and 350)

Please note!

Tension rings and counter flanges must be ordered separately and are supplied loose!

Duct silencer RS

Specification texts

Duct silencer type RS with sound absorption according to the absorption principle, by means of an annular chamber filled with mineral wool according to DIN 4102 A2 non-flammable, mineral wool with glass silk cover. Consisting of 1.0 mm thick outer jacket with a perforated plate covered in abrasion-resistant manner toward the air flow direction. Connection to the duct via 50 mm long connection pieces.

Duct silencers have been tested according to DIN EN 1751:2014 tightness class "C".

Product: SCHAKO **type RS-N-...**

- additionally with central baffle with mineral wool filling and glass silk cover.

Product: SCHAKO **type RS-M-...**

- Outer jacket, perforated sheet, connection piece and central baffle made of:
 - Galvanised sheet steel (-SV)
- Packing thickness:
 - 50 mm (...-50)
 - 100 mm (...-100)
 - 150 mm (...-150)
- Baffle thickness
 - without central baffle (only possible with model RS-N) (-000)
 - 60 mm (-060)
 - 75 mm (-075)
 - 100 mm (-100)
 - 150 mm (-150)

Accessories:

- Metu flange (-MF1), on both sides, duct flange AF
- Counter flange (-GF1) (pair), loose, on both sides, only possible for Metu flange
- Tension ring (-SR1) (pair), loose, to connect Metu flange to counter flange
- Flat flange (-FF1), on both sides, according to DIN 24 154/5, only possible without counter flange, not possible for NW 71, 90, 112 and 350
- Rubber lip seal (-GD1), on both sides, made of special rubber