



Description

The silencers are delivered with the SPIRAL® system seals in the standard version. The diameter sizes $d_1 > 315$ mm require ordering the NSL male couplings which need to be installed in the silencer before connecting the silencer to the ductwork. The male fittings are available separately. They are not delivered with the silencers. Glass wool thickness inside the silencer: **50 mm for SIL-50** - depends on the outer cladding size. **100 mm for SIL-100** - depends on the outer cladding size.

Insulation:

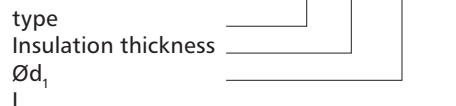
Insulation material: glass wool.
 Insulation type: trimmed from reel, flexible.
 Reaction to fire: A1 acc. to EN 13162

Available materials - Product code examples

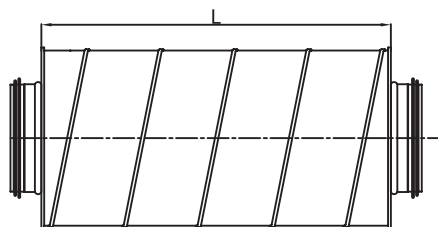
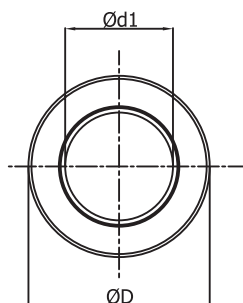
- SIL-..... - galvanized steel sheet
- SIL-K-..... - 1.4301/304 stainless steel sheet
- SIL-K-.....-316L - 1.4404/316L stainless steel sheet
- SIL-A-..... - aluminium sheet
- SIL-CU-..... - copper sheet

Product code examples

Product code: **SIL - iii - aaa - bbb**

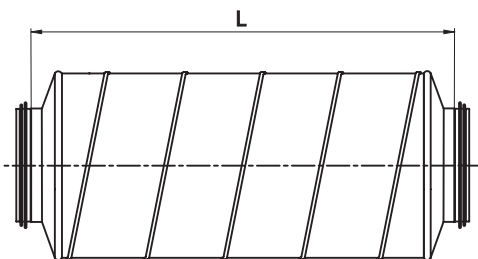
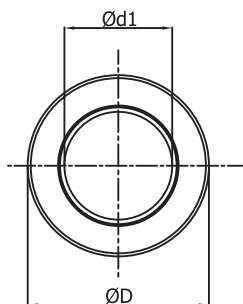


Dimensions



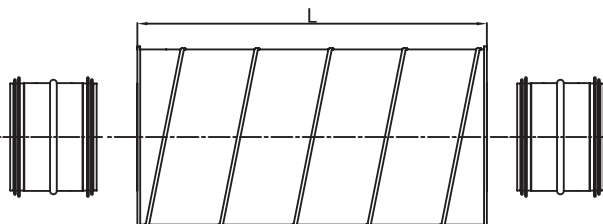
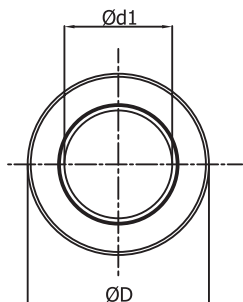
Cross-section for specific types of SIL and SIRL, $d_1 \leq 315$ mm.

Not applicable to the diameter sizes: D-100, D-125, D-160, D-200, D-250 with 50 mm thick insulation.



Cross-section of SIL and SIRL with 50 mm thick insulation; applies to the diameter sizes: D-100, D-125, D-160, D-200, D-250.

The silencers are fabricated with press-formed covers.



Cross-section for specific types of SIL and SIRL, $d_1 > 315$ mm

The female joint silencer versions for $d_1 < 315$ mm are designated SILF and SIRLF

For diameter $d_1 \leq 315$ mm

Round silencers

SIL

Dimensions

SIL-50 - 50 mm insulation

Description	Ød, nom (mm)	D _{nom} (mm)	L (mm)	Sound insulation (dB) at frequency (Hz)								Weight (kg)
				125	250	500	1000	2000	4000	8000		
SIL 080-300	80	180	300	6	15	29	45	50	26	28	2	
080-500	80	180	500	9	18	32	48	53	29	31	3	
080-600	80	180	600	11	19	33	49	54	30	32	3	
080-900	80	180	900	13	22	36	52	57	33	35	5	
080-1000	80	180	1000	14	23	37	53	58	34	36	6	
080-1200	80	180	1200								7	
SIL *100-300	100	200	350	5	13	26	41	44	22	24	2	
*100-500	100	200	550	8	16	29	44	47	26	27	3	
*100-600	100	200	650	9	17	30	45	49	27	29	3	
*100-900	100	200	950	12	19	32	48	51	29	31	5	
*100-1000	100	200	1050	13	21	34	49	52	30	32	6	
*100-1200	100	200	1250								7	
SIL *125-300	125	224	350	4	11	22	37	41	19	21	3	
*125-500	125	224	550	7	14	26	40	44	22	24	4	
*125-600	125	224	650	8	15	27	41	45	24	25	4	
*125-900	125	224	950	11	18	29	44	47	26	28	7	
*125-1000	125	224	1050	12	19	31	45	49	27	29	7	
*125-1200	125	224	1250								9	
SIL 150-300	150	250	300	4	11	23	34	36	18	19	4	
150-500	150	250	500	7	14	26	37	39	21	22	4	
150-600	150	250	600	8	15	27	39	41	22	23	6	
150-900	150	250	900	11	18	29	42	43	25	26	8	
150-1000	150	250	1000	12	19	30	42	44	26	27	8	
150-1200	150	250	1200								10	
SIL *160-300	160	250	350	3	9	20	33	35	16	18	3	
*160-500	160	250	550	6	12	23	36	38	19	21	5	
*160-600	160	250	650	7	14	24	37	39	21	22	6	
*160-900	160	250	950	10	16	26	40	42	23	25	8	
*160-1000	160	250	1050	11	17	28	41	43	24	26	8	
*160-1200	160	250	1250								10	
SIL *200-300	200	300	350	2	7	16	31	31	15	16	4	
*200-500	200	300	550	5	10	19	34	34	18	19	6	
*200-600	200	300	650	6	11	20	35	35	19	20	7	
*200-900	200	300	950	8	13	23	38	38	22	23	10	
*200-1000	200	300	1050	9	15	24	39	39	23	24	11	
*200-1200	200	300	1250								12	
SIL *250-500	250	355	550	4	9	18	29	27	15	16	9	
*250-600	250	355	650	5	11	19	30	28	16	18	11	
*250-900	250	355	950	8	13	22	33	31	19	20	14	
*250-1000	250	355	1050	9	14	23	33	32	20	21	12	
*250-1200	250	355	1250	11	17	25	35	34	21	23	17	
*250-1500	250	355	1550	12	18	26	37	35	23	24	20	

Description	Ød, nom (mm)	D _{nom} (mm)	L (mm)	Sound insulation (dB) at frequency (Hz)								Weight (kg)
				125	250	500	1000	2000	4000	8000		
SIL 300-500	300	400	500	4	8	16	25	23	13	15	13	
300-600	300	400	600	5	10	18	27	25	14	16	15	
300-900	300	400	900	7	12	20	30	27	17	18	16	
300-1000	300	400	1000	8	13	21	30	28	18	19	19	
300-1200	300	400	1200	10	15	23	32	30	20	21	22	
300-1500	300	400	1500	12	17	24	34	32	21	23	25	
SIL 315-500	315	400	500	4	7	14	23	21	13	14	11	
315-600	315	400	600	5	8	16	25	19	14	15	12	
315-900	315	400	900	7	11	18	28	21	17	18	16	
315-1000	315	400	1000	8	12	19	28	22	18	19	16	
315-1200	315	400	1200	10	14	21	30	24	19	21	19	
315-1500	315	400	1500	12	16	23	32	26	21	22	25	
SIL 355-600	355	450	600	4	9	16	22	17	13	14	13	
355-900	355	450	900	7	11	19	25	19	16	17	18	
355-1000	355	450	1000	8	12	20	26	21	17	18	20	
355-1200	355	450	1200	10	15	22	27	22	18	20	22	
355-1500	355	450	1500	11	16	23	29	24	20	21	27	
SIL 400-600	400	500	600	4	8	15	20	15	12	13	15	
400-900	400	500	900	6	10	18	23	17	15	16	20	
400-1000	400	500	1000	8	12	19	24	18	16	17	22	
400-1200	400	500	1200	9	14	21	25	20	17	19	25	
400-1500	400	500	1500	11	15	22	27	22	19	20	31	
SIL 450-600	450	560	600	4	8	16	18	13	12	12	23	
450-900	450	560	900	6	11	18	21	16	15	15	27	
450-1000	450	560	1000	7	12	19	22	17	16	16	29	
450-1200	450	560	1200	9	14	21	23	18	17	17	31	
450-1500	450	560	1500	11	16	23	25	20	19	19	36	
SIL 500-600	500	600	600	3	7	14	17	11	11	12	32	
500-900	500	600	900	6	9	16	20	14	13	14	42	
500-1000	500	600	1000	7	11	17	21	15	14	15	51	
500-1200	500	600	1250	9	13	19	22	17	16	17	59	
500-1500	500	600	1500	10	14	20	24	18	17	19	72	
SIL 560-900	560	630	900	6	9	15	19	13	12	14	31	
560-1000	560	630	1000	7	10	16	20	14	13	15	34	
560-1200	560	630	1200	9	13	18	21	15	15	16	39	
SIL 630-900	630	710	900	5	8	14	18	11	12	13	34	
630-1000	630	710	1000	6	10	16	18	12	13	14	39	
630-1200	630	710	1200	8	12	17	20	14	14	15	42	

*press-formed covers

Round silencers

SIL

Pressure drop

SIL-50 - 50 mm insulation

Description	Pressure loss (Pa) at air flow velocity (m/s)				
	2	4	8	10	12
SIL-50-080-300	0.43	1.74	6.95	10.86	15.64
SIL-50-080-500	0.44	1.77	7.07	11.04	15.90
SIL-50-080-600	0.45	1.80	7.18	11.22	16.16
SIL-50-080-900	0.48	1.93	7.72	12.06	17.37
SIL-50-080-1000	0.50	2.01	8.03	12.54	18.06
SIL-50-080-1200					
SIL-50-100-300	0.36	1.42	5.68	8.88	12.79
SIL-50-100-500	0.36	1.44	5.76	9.00	12.96
SIL-50-100-600	0.37	1.47	5.88	9.18	13.22
SIL-50-100-900	0.40	1.61	6.45	10.08	14.52
SIL-50-100-1000	0.42	1.68	6.72	10.50	15.12
SIL-50-100-1200					
SIL-50-125-300	0.29	1.15	4.61	7.20	10.37
SIL-50-125-500	0.29	1.17	4.68	7.32	10.54
SIL-50-125-600	0.30	1.20	4.80	7.50	10.80
SIL-50-125-900	0.34	1.34	5.38	8.40	12.10
SIL-50-125-1000	0.35	1.41	5.64	8.82	12.70
SIL-50-125-1200					
SIL-50-150-300	0.34	1.34	5.38	8.40	12.10
SIL-50-150-500	0.34	1.36	5.45	8.52	12.27
SIL-50-150-600	0.35	1.39	5.57	8.70	12.53
SIL-50-150-900	0.38	1.54	6.14	9.60	13.82
SIL-50-150-1000	0.40	1.61	6.45	10.08	14.52
SIL-50-150-1200					
SIL-50-160-300	0.24	0.96	3.84	6.00	8.64
SIL-50-160-500	0.25	0.99	3.96	6.18	8.90
SIL-50-160-600	0.25	1.02	4.07	6.36	9.16
SIL-50-160-900	0.29	1.15	4.61	7.20	10.37
SIL-50-160-1000	0.31	1.23	4.92	7.68	11.06
SIL-50-160-1200					
SIL-50-200-300	0.17	0.67	2.69	4.20	6.05
SIL-50-200-500	0.17	0.69	2.76	4.32	6.22
SIL-50-200-600	0.18	0.72	2.88	4.50	6.48
SIL-50-200-900	0.22	0.86	3.46	5.40	7.78
SIL-50-200-1000	0.24	0.94	3.76	5.88	8.47
SIL-50-200-1200					
SIL-50-250-500	0.18	0.74	2.96	4.62	6.65
SIL-50-250-600	0.19	0.77	3.07	4.80	6.91
SIL-50-250-900	0.23	0.91	3.65	5.70	8.21
SIL-50-250-1000	0.25	0.99	3.96	6.18	8.90
SIL-50-250-1200	0.35	1.39	5.57	8.70	12.53
SIL-50-250-1500	0.40	1.58	6.34	9.90	14.26

Description	Pressure loss (Pa) at air flow velocity (m/s)				
	2	4	8	10	12
SIL-50-300-500	0.15	0.59	2.34	3.66	5.27
SIL-50-300-600	0.16	0.62	2.50	3.90	5.62
SIL-50-300-900	1.90	7.58	30.34	47.40	68.26
SIL-50-300-1000	0.21	0.84	3.34	5.22	7.52
SIL-50-300-1200	0.31	1.24	4.95	7.74	11.15
SIL-50-300-1500	0.37	1.50	5.99	9.36	13.48
SIL-50-315-500	0.12	0.50	2.00	3.12	4.49
SIL-50-315-600	0.13	0.53	2.11	3.30	4.75
SIL-50-315-900	0.17	0.67	2.69	4.20	6.05
SIL-50-315-1000	0.19	0.75	3.00	4.68	6.74
SIL-50-315-1200	0.29	1.15	4.61	7.20	10.37
SIL-50-315-1500	0.35	1.39	5.57	8.70	12.53
SIL-50-355-600	0.11	0.43	1.73	2.70	3.89
SIL-50-355-900	0.14	0.57	2.27	3.54	5.10
SIL-50-355-1000	0.16	0.64	2.57	4.02	5.79
SIL-50-355-1200	0.26	1.05	4.19	6.54	9.42
SIL-50-355-1500	0.33	1.33	5.34	8.34	12.01
SIL-50-400-600	0.09	0.37	1.50	2.34	3.37
SIL-50-400-900	0.13	0.52	2.07	3.24	4.67
SIL-50-400-1000	0.15	0.59	2.34	3.66	5.27
SIL-50-400-1200	0.25	1.00	3.99	6.24	8.99
SIL-50-400-1500	0.33	1.31	5.22	8.16	11.75
SIL-50-450-600	0.08	0.34	1.34	2.10	3.02
SIL-50-450-900	1.20	4.80	19.20	30.00	43.20
SIL-50-450-1000	0.14	0.56	2.23	3.48	5.01
SIL-50-450-1200	0.24	0.96	3.84	6.00	8.64
SIL-50-450-1500	0.31	1.25	4.99	7.80	11.23
SIL-50-500-600	0.07	0.29	1.15	1.80	2.59
SIL-50-500-900	0.11	0.43	1.73	2.70	3.89
SIL-50-500-1000	0.12	0.50	2.00	3.12	4.49
SIL-50-500-1200	0.23	0.91	3.65	5.70	8.21
SIL-50-500-1500	0.30	1.21	4.84	7.56	10.89
SIL-50-560-900	0.10	0.39	1.57	2.46	3.54
SIL-50-560-1000	0.12	0.47	1.88	2.94	4.23
SIL-50-560-1200	0.22	0.87	3.49	5.46	7.86
SIL-50-630-900	0.09	0.36	1.42	2.22	3.20
SIL-50-630-1000	0.11	0.43	1.73	2.70	3.89
SIL-50-630-1200	0.21	0.84	3.34	5.22	7.52