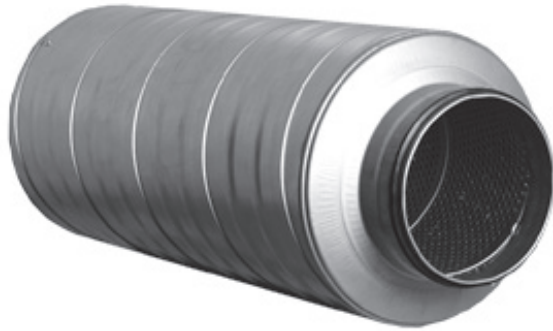


# Round silencers

## SIL



### Description

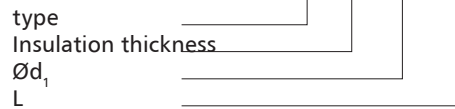
The silencers are delivered with the SPIRAL® system seals in the standard version. The diameter sizes  $d_1 > 315$  mm require ordering the NSL male couplings which need to be installed in the silencer before connecting the silencer to the ductwork. The male fittings are available separately. They are 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.

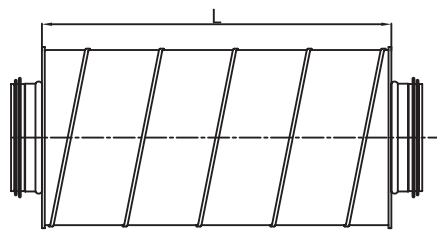
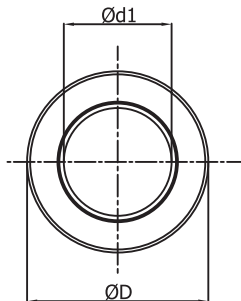
**Available materials — Product code examples**  
 SIL-...-...-... — galvanized steel sheet  
 SIL-K-...-...-... — 1.4301/304 stainless steel sheet  
 SIL-K-...-...-...-316L — 1.4404/316L stainless steel sheet

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



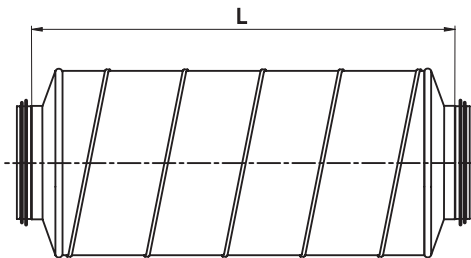
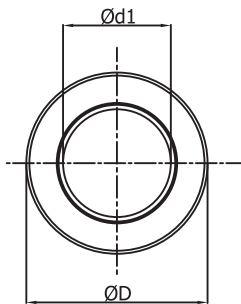
For diameter  $d_1 \leq 315$  mm

### Dimensions



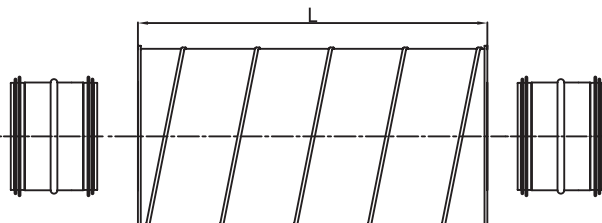
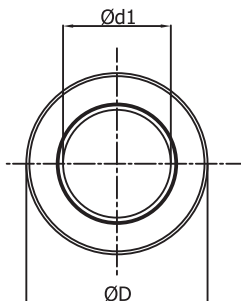
Cross-section for specific types of SIL and SIRC,  $d_1 \leq 315$  mm.

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 SIRC 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 SIRC,  $d_1 > 315$  mm

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

## Round silencers

**SIL****Dimensions****SIL-50 — 50 mm insulation**

Description	Ød <sub>1</sub> nom (mm)	D <sub>nom</sub> (mm)	L (mm)	Sound insulation (dB) at frequency (Hz)							
				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

Description	Ød <sub>1</sub> nom (mm)	D <sub>nom</sub> (mm)	L (mm)	Sound insulation (dB) at frequency (Hz)							
				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

# Round silencers SIL

## Dimensions

### SIL-100 — 100 mm insulation

Description	Ød <sub>1</sub> nom (mm)	D <sub>nom</sub> (mm)	L (mm)	Sound insulation (dB) at frequency (Hz)							
				125	250	500	1000	2000	4000	8000	
SIL 100-500	100	300	500	20	29	40	44	52	27	27	6
100-600	100	300	600	21	30	44	48	53	29	28	7
100-900	100	300	900	22	34	52	57	57	32	31	9
100-1000	100	300	1000	22	34	55	60	58	33	33	11
100-1200	100	300	1200	24	37	58	64	61	34	34	12
SIL 125-300	125	315	300	17	24	38	42	51	26	28	5
125-500	125	315	500	18	26	36	42	49	25	25	8
125-600	125	315	600	18	26	36	42	49	25	25	8
125-900	125	315	900	20	30	48	55	54	29	30	11
125-1000	125	315	1000	20	31	51	58	55	31	31	13
125-1200	125	315	1200	21	34	54	62	58	31	33	13
SIL 150-300	150	355	300	15	21	33	37	44	23	25	5
150-500	150	355	500	20	29	40	44	52	27	27	9
150-600	150	355	600	17	25	36	41	43	23	24	10
150-900	150	355	900	18	28	44	50	47	26	27	13
150-1000	150	355	1000	18	28	47	53	48	28	28	15
150-1200	150	355	1200	24	37	58	64	61	34	34	18
SIL 160-300	160	355	300	16	21	29	34	41	20	23	7
160-500	160	355	500	17	23	28	34	39	19	20	9
160-600	160	355	600	17	24	32	38	40	21	21	10
160-900	160	355	900	18	27	40	47	44	24	25	14
160-1000	160	355	1000	19	28	43	50	45	25	26	14
160-1200	160	355	1200	20	31	46	54	48	26	28	17
SIL 200-300	200	400	300	13	18	27	29	36	18	21	8
200-500	200	400	500	14	20	25	28	34	17	18	12
200-600	200	400	600	14	21	29	33	35	19	19	12
200-900	200	400	900	15	25	38	42	39	22	22	16
200-1000	200	400	1000	16	25	41	45	40	23	24	16
200-1200	200	400	1200	17	28	43	48	43	24	26	20
SIL 250-500	250	450	500	11	17	22	26	29	15	16	16
250-600	250	450	600	12	18	26	30	30	17	17	14
250-900	250	450	900	13	22	34	39	34	20	20	20
250-1000	250	450	1000	14	22	37	42	35	21	22	17
250-1200	250	450	1200	15	25	40	46	38	22	23	24
250-1500	250	450	1500	16	29	44	51	42	23	26	28
SIL 315-500	315	500	500	10	16	17	22	25	13	14	14
315-600	315	500	600	14	17	21	26	26	15	15	16
315-900	315	500	900	12	20	39	35	30	18	19	21
315-1000	315	500	1000	12	21	32	38	31	19	20	22
315-1200	315	500	1200	14	24	35	42	34	22	23	26
315-1500	315	500	1500	15	28	39	47	38	21	25	35

Description	Ød <sub>1</sub> nom (mm)	D <sub>nom</sub> (mm)	L (mm)	Sound insulation (dB) at frequency (Hz)							
				125	250	500	1000	2000	4000	8000	
SIL 355-600	355	560	600	10	15	20	23	23	13	14	26
355-900	355	560	900	11	19	28	32	27	16	18	29
355-1000	355	560	1000	11	19	31	35	28	18	19	33
355-1200	355	560	1200	13	22	34	39	31	18	21	33
355-1500	355	560	1500	14	26	38	44	35	19	24	47
SIL 400-600	400	600	600	9	15	18	21	20	12	11	21
400-900	400	600	900	11	18	26	30	24	14	14	30
400-1000	400	600	1000	11	18	29	33	25	16	16	29
400-1200	400	600	1200	12	22	32	37	28	16	17	41
400-1500	400	600	1500	14	26	36	42	32	17	20	51
SIL 450-600	450	630	600	9	14	16	18	17	10	10	32
450-900	450	630	900	10	17	24	27	21	13	13	40
450-1000	450	630	1000	10	18	27	30	22	15	15	36
450-1200	450	630	1200	11	21	30	34	25	15	16	46
450-1500	450	630	1500	13	25	34	39	29	16	19	56
SIL 500-600	500	710	600	8	13	14	15	15	10	9	23
500-900	500	710	900	10	16	22	24	19	13	13	35
500-1000	500	710	1000	10	17	25	27	20	14	14	39
500-1200	500	710	1200	11	20	28	31	23	15	16	43
500-1500	500	710	1500	13	24	32	36	27	16	19	50
SIL 560-900	560	800	900								39
560-1000	560	800	1000								53
560-1200	560	800	1200								56
560-1500	560	800	1500								46
SIL 630-900	630	800	900	8	15	20	22	17	11	11	50
630-1000	630	800	1000	9	15	23	25	18	12	12	48
630-1200	630	800	1200	10	18	26	29	21	13	14	58
630-1500	630	800	1500	11	22	29	34	25	14	17	66
SIL 710-1000	710	900	1000	8	14	20	23	16	11	10	59
710-1200	710	900	1200	9	17	23	27	18	11	12	64
710-1500	710	900	1500	11	21	26	30	22	12	15	73
SIL 800-1000	800		1000	8	14	20	22	15	10	10	0
800-1200	800		1200	9	17	22	25	18	11	12	73
800-1500	800		1500	10	21	26	30	22	12	15	103
SIL 900-1000	900	1120	1000	7	13	19	20	13	9	10	80
900-1200	900	1120	1200	8	16	22	24	16	10	11	88
900-1500	900	1120	1500	10	20	26	29	20	11	14	95

# Round silencers

## SIL

### Pressure drop

#### SIL-100 — 100 mm insulation

Description	Pressure loss (Pa) at air flow velocity (m/s)				
	2	4	8	10	12
SIL-100-100-500	0.26	1.04	4.15	6.48	9.33
SIL-100-100-600	0.28	1.13	4.53	7.08	10.20
SIL-100-100-900	0.34	1.34	5.38	8.40	12.10
SIL-100-100-1000	0.35	1.40	5.61	8.76	12.61
SIL-100-100-1200	0.37	1.50	5.99	9.36	13.48
SIL-100-125-300	0.19	0.77	3.07	4.80	6.91
SIL-100-125-500	0.25	0.99	3.96	6.18	8.90
SIL-100-125-600	0.27	1.08	4.34	6.78	9.76
SIL-100-125-900	0.33	1.31	5.22	8.16	11.75
SIL-100-125-1000	0.34	1.36	5.45	8.52	12.27
SIL-100-125-1200	0.36	1.46	5.84	9.12	13.13
SIL-100-150-300	0.18	0.72	2.88	4.50	6.48
SIL-100-150-500	0.24	0.94	3.76	5.88	8.47
SIL-100-150-600	0.26	1.04	4.15	6.48	9.33
SIL-100-150-900	0.31	1.25	4.99	7.80	11.23
SIL-100-150-1000	0.33	1.31	5.22	8.16	11.75
SIL-100-150-1200	0.35	1.40	5.61	8.76	12.61
SIL-100-160-300	0.17	0.67	2.69	4.20	6.05
SIL-100-160-500	0.23	0.91	3.65	5.70	8.21
SIL-100-160-600	0.25	1.01	4.03	6.30	9.07
SIL-100-160-900	0.31	1.23	4.92	7.68	11.06
SIL-100-160-1000	0.32	1.29	5.15	8.04	11.58
SIL-100-160-1200	0.35	1.38	5.53	8.64	12.44
SIL-100-200-300	0.16	0.64	2.57	4.02	5.79
SIL-100-200-500	0.20	0.82	3.26	5.10	7.34
SIL-100-200-600	0.23	0.91	3.65	5.70	8.21
SIL-100-200-900	0.28	1.12	4.49	7.02	10.11
SIL-100-200-1000	0.30	1.18	4.72	7.38	10.63
SIL-100-200-1200	0.32	1.28	5.11	7.98	11.49
SIL-100-250-500	0.17	0.67	2.69	4.20	6.05
SIL-100-250-600	0.19	0.77	3.07	4.80	6.91
SIL-100-250-900	0.24	0.98	3.92	6.12	8.81
SIL-100-250-1000	0.26	1.04	4.15	6.48	9.33
SIL-100-250-1200	0.28	1.13	4.53	7.08	10.20
SIL-100-250-1500	0.31	1.25	4.99	7.80	11.23
SIL-100-315-600	0.14	0.57	2.27	3.54	5.10
SIL-100-315-900	0.19	0.78	3.11	4.86	7.00
SIL-100-315-1000	0.21	0.84	3.34	5.22	7.52
SIL-100-315-1200	0.23	0.93	3.72	5.82	8.38
SIL-100-315-1500	0.26	1.05	4.19	6.54	9.42

Description	Pressure loss (Pa) at air flow velocity (m/s)				
	2	4	8	10	12
SIL-100-355-500	0.12	0.47	1.88	2.94	4.23
SIL-100-355-600	0.11	0.44	1.77	2.76	3.97
SIL-100-355-900	0.17	0.66	2.65	4.14	5.96
SIL-100-355-1000	0.18	0.71	2.84	4.44	6.39
SIL-100-355-1200	0.20	0.81	3.23	5.04	7.26
SIL-100-355-1500	0.23	0.93	3.72	5.82	8.38
SIL-100-400-600	0.08	0.32	1.27	1.98	2.85
SIL-100-400-900	0.13	0.53	2.11	3.30	4.75
SIL-100-400-1000	0.15	0.59	2.34	3.66	5.27
SIL-100-400-1200	0.17	0.68	2.73	4.26	6.13
SIL-100-400-1500	0.20	0.80	3.19	4.98	7.17
SIL-100-450-600	0.05	0.19	0.77	1.20	1.73
SIL-100-450-900	0.10	0.40	1.61	2.52	3.63
SIL-100-450-1000	0.12	0.46	1.84	2.88	4.15
SIL-100-450-1200	0.14	0.56	2.23	3.48	5.01
SIL-100-450-1500	0.17	0.67	2.69	4.20	6.05
SIL-100-500-600	0.02	0.08	0.31	0.48	0.69
SIL-100-500-900	0.07	0.29	1.15	1.80	2.59
SIL-100-500-1000	0.09	0.35	1.38	2.16	3.11
SIL-100-500-1200	0.11	0.44	1.77	2.76	3.97
SIL-100-500-1500	0.14	0.56	2.23	3.48	5.01
SIL-100-560-900					
SIL-100-560-1000					
SIL-100-630-900	0.02	0.10	0.38	0.60	0.86
SIL-100-630-1000	0.04	0.14	0.58	0.90	1.30
SIL-100-630-1200	0.06	0.24	0.96	1.50	2.16
SIL-100-630-1500	0.09	0.36	1.46	2.28	3.28
SIL-100-710-1000	0.02	0.08	0.31	0.48	0.69
SIL-100-710-1200	0.04	0.17	0.69	1.08	1.56
SIL-100-710-1500	0.07	0.30	1.19	1.86	2.68
SIL-100-800-1000	0.01	0.04	0.15	0.24	0.35
SIL-100-800-1200	0.03	0.13	0.54	0.84	1.21
SIL-100-800-1500	0.06	0.25	1.00	1.56	2.25
SIL-100-900-1000	0.00	0.01	0.04	0.06	0.09
SIL-100-900-1200	0.03	0.11	0.42	0.66	0.95
SIL-100-900-1500	0.06	0.23	0.92	1.44	2.07