



lindab | we simplify construction

Offset Calculations

made easy by Lindab

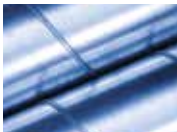


Product range



Air Duct Systems

The Air Duct Systems product area consists of a range of circular ducts and fittings, complemented by e.g. rectangular duct products and hoods. The products are used for the construction of ventilation systems and are the business area's core business.



Comfort

The Comfort product area includes three product programs - Air systems, Water systems and Acoustics - all contributing to create a pleasant, healthy and productive indoor climate.



Air systems – products for supplying and extracting air to and from a ventilated area – such as diffusers, grilles and VAV systems – in order to achieve the required demands for the indoor climate.



Water systems – products that use water for achieving the required indoor climate, such as chilled beams, chilled panels, induction units, heating panels and regulation equipment.



Acoustics – a complete range of silencers which provide the basis for a quiet and pleasant ventilation system.



IT solutions

Lindab offers a large range of intelligent and rational tools and services that make your day-to-day work easier. We want to give you the opportunity to develop optimal, reliable and economical ventilation solutions in the shortest possible time.

One part of our offer is a software package for the design, calculation, quantification and planning of complete ventilation and indoor climate systems.

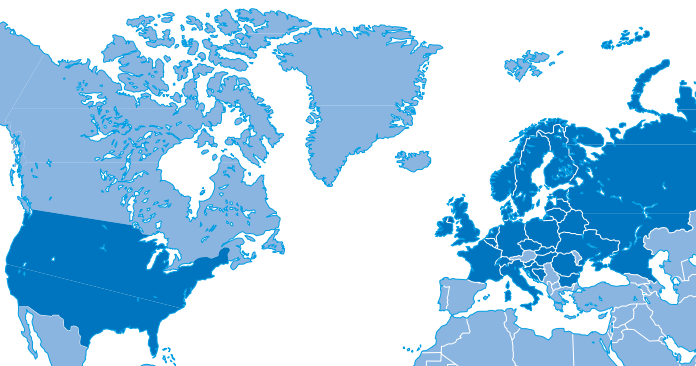


Ventilation Accessories

Some of our markets offer a network of branches, or One Stop Shops, where we keep a wide assortment of our standard products on stock, as well as all the tools and accessories needed for installation of ventilation equipment.

At Lindab branch shops we aim to offer our customers everything they need, all collected at one place.

Contact



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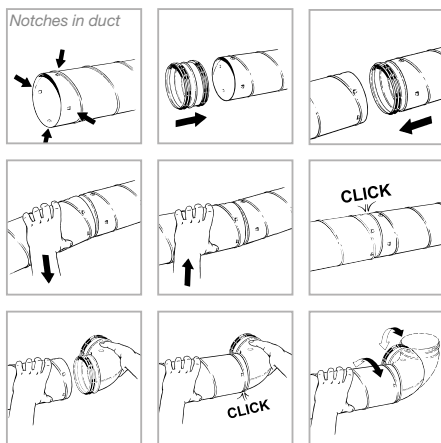
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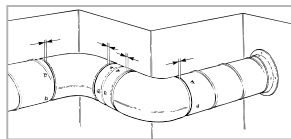
Lindab Safe® Click

Assembly



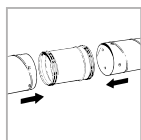
After assembly it's possible to rotate the fittings.

Test assembly

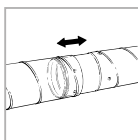


It's possible to do a trial assembly without "clicking". Mount to check - but don't push the parts together all the way so that they snap together, test, and then take apart and adjust if necessary.

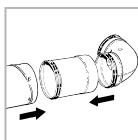
Lengthwise adjusting



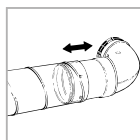
Slide-in coupling



Fix with screws or blind rivets

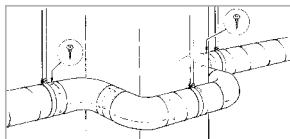


Slide-in female coupling



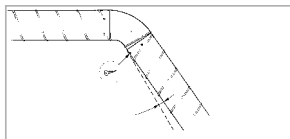
Fix with screws or blind rivets

The joint must be locked



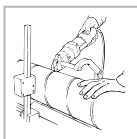
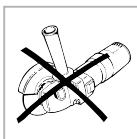
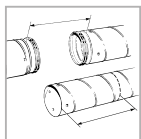
In situations where the mounting must be locked, e.g. when a bend is mounted to a duct and it twists towards the floor. Mount the first hanger and mount the bend, then lock the joint with a screw or blind rivet.

Corners out of angle and curved walls

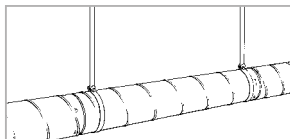


Mount the next piece of duct at an angle, but make sure that the rubber sealant is not visible. Put screws or blind rivets where the notches have not clicked in position.

Cutting duct with the SR Cutter

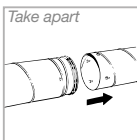
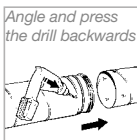
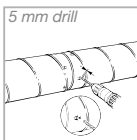
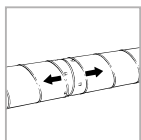


Suspension



Mount the hangers in a straight line and as close to every joint as possible. Fix with an extra screw when needed for extra stability.

Dismantling

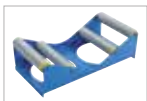


Drill a 5 mm hole 4 mm behind two of the notches with the drill angled backwards. At the same time angle the drill back so that the fitting and the duct are somewhat separated without damaging the fitting. Cut the duct clean with the SR Cutter.



SR Cutter

The SR Cutter is a tool which gives you better working conditions and makes it faster, easier and physically less demanding to cut ducts. You get a perfect cut - every time. The cutting device on the SR Cutter cuts ducts up to 0,9 mm thickness and up to 3 metres in length to within \varnothing 80 - 315 mm.



SR Roller

The SRR is a cradle for cutting of ducts with \varnothing 315–1250 mm. The duct is placed on two or three cradles for simple, fast and ergonomically correct rotating at marking of cut length and at cutting.



Carrying handle

The SRH is a carrying handle which makes it substantially easier to manually move circular ventilation ducts at the building site. The handle fit ducts \varnothing 315–1250, but it is adequate to limit its use to the sizes \varnothing 400–800.



Heavy duty knife

The KNIFE is a sturdy and durably sharpened knife for tough tasks e.g. hole-making in ventilation ducts. The blade is manufactured of 3 mm carbon steel and sharpened with double edge angles.

The handle and sheath are manufactured of extra impact resistant PP plastic.



Spanner

SPANN is a ring spanner produced with ratcheting mechanism for sheet metal screws $\frac{1}{4}$ " hexagon head, which makes it suitable in cramped spaces where there is no room for a common electric screwdriver. The stem is angled 15° for easier handling.



Markingmeasure

TALMET is a marking measure which makes measuring and marking of ducts faster and more efficient. A combination tool for measuring and marking of lengths up to 3 m. Measures both external and internal lengths. Equipped with three steel scribing edges for marking. Locks the setting automatically and has a two-step release mechanism. π -scale for direct reading of the diameter when measuring the circumference.



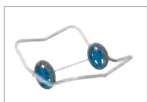
Leakage Tester

LTEST is a complete equipment set for field measuring of leakage in duct systems. All delivered in two aluminum trunks. Simple to handle, carry and store. The fully automated operation makes the whole measurement process considerably faster and easier. The unit automatically runs the measurement cycle according to the standards EN 12237 and EN 1507.



Duct cover

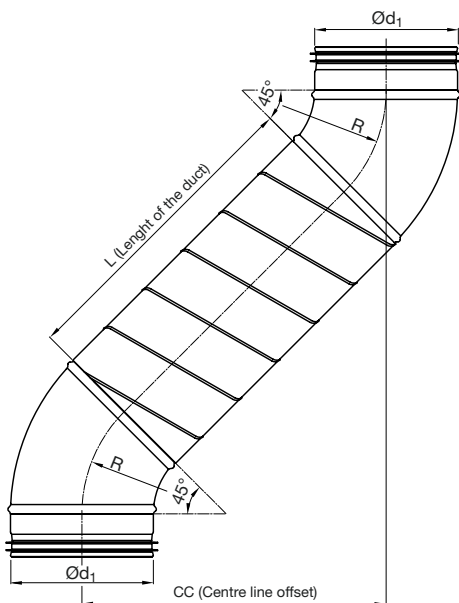
The Duct cover protects your ducts in bad weather conditions, and keeps the ducts clean during transport and storage.



Trolley

TRO is a trolley which makes it substantially easier and more ergonomic to manually move circular ventilation ducts and other heavy products at the building site. The trolley is suitable for ducts \varnothing 400–1250 mm. Trolley with loaded duct is easily moved by one person.

Offset assembly



When jacking or offsetting the run of a duct it may be difficult to estimate the length of the duct to cut. The following tables help you to find the right length for duct diameters 80–1250 mm and bend angles 90–15°.

Look up the wanted centerline offset and find the cut length.

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 80 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	305	95	800	590
	310	100	810	600
100	320	110	820	610
	330	120	830	620
125	340	130	840	630
	350	140	850	640
150	360	150	860	650
	370	160	870	660
200	380	170	880	670
	390	180	890	680
250	400	190	900	690
	410	200	910	700
315	420	210	920	710
	430	220	930	720
400	440	230	940	730
	450	240	950	740
500	460	250	960	750
	470	260	970	760
630	480	270	980	770
	490	280	990	780
800	500	290	1000	790
	510	300	1010	800
1000	520	310	1020	810
	530	320	1030	820
1250	540	330	1040	830
	550	340	1050	840
	560	350	1060	850
	570	360	1070	860
	580	370	1080	870
	590	380	1090	880
	600	390	1100	890
	610	400	1110	900
	620	410	1120	910
	630	420	1130	920
	640	430	1140	930
	650	440	1150	940
	660	450	1160	950
	670	460	1170	960
	680	470	1180	970
	690	480	1190	980
	700	490	1200	990
	710	500	1210	1000
	720	510	1220	1010
	730	520	1230	1020
	740	530	1240	1030
	750	540	1250	1040
	760	550	1260	1050
	770	560	1270	1060
	780	570	1280	1070
	790	580	1290	1080

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 80 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
183	95	680	669
190	103	690	681
200	115	700	692
210	126	710	704
220	138	720	715
230	150	730	727
240	161	740	738
250	173	750	750
260	184	760	762
270	196	770	773
280	207	780	785
290	219	790	796
300	230	800	808
310	242	810	819
320	254	820	831
330	265	830	842
340	277	840	854
350	288	850	865
360	300	860	877
370	311	870	889
380	323	880	900
390	334	890	912
400	346	900	923
410	357	910	935
420	369	920	946
430	381	930	958
440	392	940	969
450	404	950	981
460	415	960	993
470	427	970	1004
480	438	980	1016
490	450	990	1027
500	461	1000	1039
510	473	1010	1050
520	484	1020	1062
530	496	1030	1073
540	508	1040	1085
550	519	1050	1096
560	531	1060	1108
570	542	1070	1120
580	554	1080	1131
590	565	1090	1143
600	577	1100	1154
610	588	1110	1166
620	600	1120	1177
630	611	1130	1189
640	623	1140	1200
650	635	1150	1212
660	646	1160	1223
670	658	1170	1235

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 80 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	125	95	620	795
	130	102	630	809
100	140	116	640	823
	150	130	650	837
125	160	144	660	851
	170	158	670	866
150	180	173	680	880
	190	187	690	894
200	200	201	700	908
	210	215	710	922
250	220	229	720	936
	230	243	730	950
315	240	257	740	965
	250	272	750	979
400	260	286	760	993
	270	300	770	1007
500	280	314	780	1021
	290	328	790	1035
630	300	342	800	1049
	310	356	810	1064
800	320	371	820	1078
	330	385	830	1092
1000	340	399	840	1106
	350	413	850	1120
1250	360	427	860	1134
	370	441	870	1148
	380	455	880	1163
	390	470	890	1177
	400	484	900	1191
	410	498	910	1205
	420	512	920	1219
	430	526	930	1233
	440	540	940	1247
	450	554	950	1262
	460	569	960	1276
	470	583	970	1290
	480	597	980	1304
	490	611	990	1318
	500	625	1000	1332
	510	639	1010	1346
	520	653	1020	1360
	530	668	1030	1375
	540	682	1040	1389
	550	696	1050	1403
	560	710	1060	1417
	570	724	1070	1431
	580	738	1080	1445
	590	752	1090	1459
	600	767	1100	1474
	610	781	1110	1488

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 80 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
75	95	570	1086
80	106	580	1106
90	126	590	1126
100	146	600	1146
110	166	610	1166
120	186	620	1186
130	206	630	1206
140	226	640	1226
150	246	650	1246
160	266	660	1266
170	286	670	1286
180	306	680	1306
190	326	690	1326
200	346	700	1346
210	366	710	1366
220	386	720	1386
230	406	730	1406
240	426	740	1426
250	446	750	1446
260	466	760	1466
270	486	770	1486
280	506	780	1506
290	526	790	1526
300	546	800	1546
310	566	810	1566
320	586	820	1586
330	606	830	1606
340	626	840	1626
350	646	850	1646
360	666	860	1666
370	686	870	1686
380	706	880	1706
390	726	890	1726
400	746	900	1746
410	766	910	1766
420	786	920	1786
430	806	930	1806
440	826	940	1826
450	846	950	1846
460	866	960	1866
470	886	970	1886
480	906	980	1906
490	926	990	1926
500	946	1000	1946
510	966	1010	1966
520	986	1020	1986
530	1006	1030	2006
540	1026	1040	2026
550	1046	1050	2046
560	1066	1060	2066

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 80 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	31	95	530	2022
	40	129	540	2060
100	50	167	550	2099
	60	206	560	2138
125	70	244	570	2176
	80	283	580	2215
150	90	322	590	2254
	100	360	600	2292
200	110	399	610	2331
	120	438	620	2369
250	130	476	630	2408
	140	515	640	2447
	150	554	650	2485
315	160	592	660	2524
	170	631	670	2563
400	180	669	680	2601
	190	708	690	2640
	200	747	700	2679
500	210	785	710	2717
	220	824	720	2756
630	230	863	730	2795
	240	901	740	2833
	250	940	750	2872
800	260	979	760	2910
	270	1017	770	2949
1000	280	1056	780	2988
	290	1094	790	3026
1250	300	1133	800	3065
	310	1172	810	3104
	320	1210	820	3142
	330	1249	830	3181
	340	1288	840	3220
	350	1326	850	3258
	360	1365	860	3297
	370	1404	870	3335
	380	1442	880	3374
	390	1481	890	3413
	400	1519	900	3451
	410	1558	910	3490
	420	1597	920	3529
	430	1635	930	3567
	440	1674	940	3606
	450	1713	950	3645
	460	1751	960	3683
	470	1790	970	3722
	480	1829	980	3760
	490	1867	990	3799
	500	1906	1000	3838
	510	1944	1010	3876
	520	1983	1020	3915

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 100 mm 90° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
295	95	790	590
300	100	800	600
310	110	810	610
320	120	820	620
330	130	830	630
340	140	840	640
350	150	850	650
360	160	860	660
370	170	870	670
380	180	880	680
390	190	890	690
400	200	900	700
410	210	910	710
420	220	920	720
430	230	930	730
440	240	940	740
450	250	950	750
460	260	960	760
470	270	970	770
480	280	980	780
490	290	990	790
500	300	1000	800
510	310	1010	810
520	320	1020	820
530	330	1030	830
540	340	1040	840
550	350	1050	850
560	360	1060	860
570	370	1070	870
580	380	1080	880
590	390	1090	890
600	400	1100	900
610	410	1110	910
620	420	1120	920
630	430	1130	930
640	440	1140	940
650	450	1150	950
660	460	1160	960
670	470	1170	970
680	480	1180	980
690	490	1190	990
700	500	1200	1000
710	510	1210	1010
720	520	1220	1020
730	530	1230	1030
740	540	1240	1040
750	550	1250	1050
760	560	1260	1060
770	570	1270	1070
780	580	1280	1080

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 100 mm 60° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	219	95	710	662
	220	96	720	673
100	230	108	730	685
	240	119	740	696
125	250	131	750	708
	260	142	760	720
150	270	154	770	731
	280	165	780	743
200	290	177	790	754
	300	188	800	766
	310	200	810	777
250	320	212	820	789
	330	223	830	800
315	340	235	840	812
	350	246	850	823
400	360	258	860	835
	370	269	870	847
	380	281	880	858
500	390	292	890	870
	400	304	900	881
630	410	315	910	893
	420	327	920	904
	430	339	930	916
800	440	350	940	927
	450	362	950	939
1000	460	373	960	951
	470	385	970	962
1250	480	396	980	974
	490	408	990	985
	500	419	1000	997
	510	431	1010	1008
	520	442	1020	1020
	530	454	1030	1031
	540	466	1040	1043
	550	477	1050	1054
	560	489	1060	1066
	570	500	1070	1078
	580	512	1080	1089
	590	523	1090	1101
	600	535	1100	1112
	610	546	1110	1124
	620	558	1120	1135
	630	569	1130	1147
	640	581	1140	1158
	650	593	1150	1170
	660	604	1160	1181
	670	616	1170	1193
	680	627	1180	1205
	690	639	1190	1216
	700	650	1200	1228

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 100 mm 45° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
125	95	620	795
130	102	630	809
140	116	640	823
150	130	650	837
160	144	660	851
170	158	670	866
180	173	680	880
190	187	690	894
200	201	700	908
210	215	710	922
220	229	720	936
230	243	730	950
240	257	740	965
250	272	750	979
260	286	760	993
270	300	770	1007
280	314	780	1021
290	328	790	1035
300	342	800	1049
310	356	810	1064
320	371	820	1078
330	385	830	1092
340	399	840	1106
350	413	850	1120
360	427	860	1134
370	441	870	1148
380	455	880	1163
390	470	890	1177
400	484	900	1191
410	498	910	1205
420	512	920	1219
430	526	930	1233
440	540	940	1247
450	554	950	1262
460	569	960	1276
470	583	970	1290
480	597	980	1304
490	611	990	1318
500	625	1000	1332
510	639	1010	1346
520	653	1020	1360
530	668	1030	1375
540	682	1040	1389
550	696	1050	1403
560	710	1060	1417
570	724	1070	1431
580	738	1080	1445
590	752	1090	1459
600	767	1100	1474
610	781	1110	1488

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 100 mm 30° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	75	95	570	1086
	80	106	580	1106
100	90	126	590	1126
	100	146	600	1146
125	110	166	610	1166
	120	186	620	1186
150	130	206	630	1206
	140	226	640	1226
200	150	246	650	1246
	160	266	660	1266
250	170	286	670	1286
	180	306	680	1306
315	190	326	690	1326
	200	346	700	1346
400	210	366	710	1366
	220	386	720	1386
500	230	406	730	1406
	240	426	740	1426
630	250	446	750	1446
	260	466	760	1466
800	270	486	770	1486
	280	506	780	1506
1000	290	526	790	1526
	300	546	800	1546
1250	310	566	810	1566
	320	586	820	1586
	330	606	830	1606
	340	626	840	1626
	350	646	850	1646
	360	666	860	1666
	370	686	870	1686
	380	706	880	1706
	390	726	890	1726
	400	746	900	1746
	410	766	910	1766
	420	786	920	1786
	430	806	930	1806
	440	826	940	1826
	450	846	950	1846
	460	866	960	1866
	470	886	970	1886
	480	906	980	1906
	490	926	990	1926
	500	946	1000	1946
	510	966	1010	1966
	520	986	1020	1986
	530	1006	1030	2006
	540	1026	1040	2026
	550	1046	1050	2046
	560	1066	1060	2066

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 100 mm 15° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
31	95	530	2022
40	129	540	2060
50	167	550	2099
60	206	560	2138
70	244	570	2176
80	283	580	2215
90	321	590	2253
100	360	600	2292
110	399	610	2331
120	437	620	2369
130	476	630	2408
140	515	640	2447
150	553	650	2485
160	592	660	2524
170	631	670	2563
180	669	680	2601
190	708	690	2640
200	746	700	2678
210	785	710	2717
220	824	720	2756
230	862	730	2794
240	901	740	2833
250	940	750	2872
260	978	760	2910
270	1017	770	2949
280	1056	780	2988
290	1094	790	3026
300	1133	800	3065
310	1172	810	3104
320	1210	820	3142
330	1249	830	3181
340	1288	840	3219
350	1326	850	3258
360	1365	860	3297
370	1403	870	3335
380	1442	880	3374
390	1481	890	3413
400	1519	900	3451
410	1558	910	3490
420	1597	920	3529
430	1635	930	3567
440	1674	940	3606
450	1712	950	3644
460	1751	960	3683
470	1790	970	3722
480	1828	980	3760
490	1867	990	3799
500	1906	1000	3838
510	1944	1010	3876
520	1983	1020	3915

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 125 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	345	95	840	590
	350	100	850	600
100	360	110	860	610
	370	120	870	620
125	380	130	880	630
	390	140	890	640
150	400	150	900	650
	410	160	910	660
200	420	170	920	670
	430	180	930	680
250	440	190	940	690
	450	200	950	700
315	460	210	960	710
	470	220	970	720
400	480	230	980	730
	490	240	990	740
500	500	250	1000	750
	510	260	1010	760
630	520	270	1020	770
	530	280	1030	780
800	540	290	1040	790
	550	300	1050	800
1000	560	310	1060	810
	570	320	1070	820
1250	580	330	1080	830
	590	340	1090	840
	600	350	1100	850
	610	360	1110	860
	620	370	1120	870
	630	380	1130	880
	640	390	1140	890
	650	400	1150	900
	660	410	1160	910
	670	420	1170	920
	680	430	1180	930
	690	440	1190	940
	700	450	1200	950
	710	460	1210	960
	720	470	1220	970
	730	480	1230	980
	740	490	1240	990
	750	500	1250	1000
	760	510	1260	1010
	770	520	1270	1020
	780	530	1280	1030
	790	540	1290	1040
	800	550	1300	1050
	810	560	1310	1060
	820	570	1320	1070
	830	580	1330	1080

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 125 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
236	95	730	665
240	99	740	676
250	111	750	688
260	122	760	700
270	134	770	711
280	145	780	723
290	157	790	734
300	168	800	746
310	180	810	757
320	192	820	769
330	203	830	780
340	215	840	792
350	226	850	803
360	238	860	815
370	249	870	827
380	261	880	838
390	272	890	850
400	284	900	861
410	295	910	873
420	307	920	884
430	319	930	896
440	330	940	907
450	342	950	919
460	353	960	931
470	365	970	942
480	376	980	954
490	388	990	965
500	399	1000	977
510	411	1010	988
520	422	1020	1000
530	434	1030	1011
540	446	1040	1023
550	457	1050	1034
560	469	1060	1046
570	480	1070	1058
580	492	1080	1069
590	503	1090	1081
600	515	1100	1092
610	526	1110	1104
620	538	1120	1115
630	549	1130	1127
640	561	1140	1138
650	573	1150	1150
660	584	1160	1161
670	596	1170	1173
680	607	1180	1185
690	619	1190	1196
700	630	1200	1208
710	642	1210	1219
720	653	1220	1231

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 125 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	141	95	640	801
	150	108	650	815
100	160	122	660	829
	170	136	670	844
125	180	151	680	858
	190	165	690	872
150	200	179	700	886
	210	193	710	900
200	220	207	720	914
	230	221	730	928
250	240	235	740	943
	250	250	750	957
315	260	264	760	971
	270	278	770	985
400	280	292	780	999
	290	306	790	1013
500	300	320	800	1027
	310	334	810	1042
630	320	349	820	1056
	330	363	830	1070
800	340	377	840	1084
	350	391	850	1098
1000	360	405	860	1112
	370	419	870	1126
1250	380	433	880	1141
	390	448	890	1155
	400	462	900	1169
	410	476	910	1183
	420	490	920	1197
	430	504	930	1211
	440	518	940	1225
	450	532	950	1240
	460	547	960	1254
	470	561	970	1268
	480	575	980	1282
	490	589	990	1296
	500	603	1000	1310
	510	617	1010	1324
	520	631	1020	1338
	530	646	1030	1353
	540	660	1040	1367
	550	674	1050	1381
	560	688	1060	1395
	570	702	1070	1409
	580	716	1080	1423
	590	730	1090	1437
	600	745	1100	1452
	610	759	1110	1466
	620	773	1120	1480
	630	787	1130	1494

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 125 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
81	95	580	1093
90	113	590	1113
100	133	600	1133
110	153	610	1153
120	173	620	1173
130	193	630	1193
140	213	640	1213
150	233	650	1233
160	253	660	1253
170	273	670	1273
180	293	680	1293
190	313	690	1313
200	333	700	1333
210	353	710	1353
220	373	720	1373
230	393	730	1393
240	413	740	1413
250	433	750	1433
260	453	760	1453
270	473	770	1473
280	493	780	1493
290	513	790	1513
300	533	800	1533
310	553	810	1553
320	573	820	1573
330	593	830	1593
340	613	840	1613
350	633	850	1633
360	653	860	1653
370	673	870	1673
380	693	880	1693
390	713	890	1713
400	733	900	1733
410	753	910	1753
420	773	920	1773
430	793	930	1793
440	813	940	1813
450	833	950	1833
460	853	960	1853
470	873	970	1873
480	893	980	1893
490	913	990	1913
500	933	1000	1933
510	953	1010	1953
520	973	1020	1973
530	993	1030	1993
540	1013	1040	2013
550	1033	1050	2033
560	1053	1060	2053
570	1073	1070	2073

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 125 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	33	95	530	2016
	40	123	540	2054
100	50	161	550	2093
	60	200	560	2132
125	70	238	570	2170
	80	277	580	2209
150	90	316	590	2248
	100	354	600	2286
200	110	393	610	2325
	120	432	620	2363
250	130	470	630	2402
	140	509	640	2441
315	150	548	650	2479
	160	586	660	2518
400	170	625	670	2557
	180	663	680	2595
500	190	702	690	2634
	200	741	700	2673
630	210	779	710	2711
	220	818	720	2750
800	230	857	730	2789
	240	895	740	2827
1000	250	934	750	2866
	260	973	760	2904
1250	270	1011	770	2943
	280	1050	780	2982
	290	1088	790	3020
	300	1127	800	3059
	310	1166	810	3098
	320	1204	820	3136
	330	1243	830	3175
	340	1282	840	3214
	350	1320	850	3252
	360	1359	860	3291
	370	1398	870	3329
	380	1436	880	3368
	390	1475	890	3407
	400	1513	900	3445
	410	1552	910	3484
	420	1591	920	3523
	430	1629	930	3561
	440	1668	940	3600
	450	1707	950	3639
	460	1745	960	3677
	470	1784	970	3716
	480	1823	980	3754
	490	1861	990	3793
	500	1900	1000	3832
	510	1938	1010	3870
	520	1977	1020	3909

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 160 mm 90° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
415	95	910	590
420	100	920	600
430	110	930	610
440	120	940	620
450	130	950	630
460	140	960	640
470	150	970	650
480	160	980	660
490	170	990	670
500	180	1000	680
510	190	1010	690
520	200	1020	700
530	210	1030	710
540	220	1040	720
550	230	1050	730
560	240	1060	740
570	250	1070	750
580	260	1080	760
590	270	1090	770
600	280	1100	780
610	290	1110	790
620	300	1120	800
630	310	1130	810
640	320	1140	820
650	330	1150	830
660	340	1160	840
670	350	1170	850
680	360	1180	860
690	370	1190	870
700	380	1200	880
710	390	1210	890
720	400	1220	900
730	410	1230	910
740	420	1240	920
750	430	1250	930
760	440	1260	940
770	450	1270	950
780	460	1280	960
790	470	1290	970
800	480	1300	980
810	490	1310	990
820	500	1320	1000
830	510	1330	1010
840	520	1340	1020
850	530	1350	1030
860	540	1360	1040
870	550	1370	1050
880	560	1380	1060
890	570	1390	1070
900	580	1400	1080

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 160 mm 60° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	242	95	740	670
	250	105	750	682
100	260	116	760	694
	270	128	770	705
125	280	139	780	717
	290	151	790	728
160	300	162	800	740
	310	174	810	751
200	320	186	820	763
	330	197	830	774
250	340	209	840	786
	350	220	850	797
315	360	232	860	809
	370	243	870	821
400	380	255	880	832
	390	266	890	844
500	400	278	900	855
	410	289	910	867
630	420	301	920	878
	430	313	930	890
800	440	324	940	901
	450	336	950	913
1000	460	347	960	925
	470	359	970	936
1250	480	370	980	948
	490	382	990	959
	500	393	1000	971
	510	405	1010	982
	520	416	1020	994
	530	428	1030	1005
	540	440	1040	1017
	550	451	1050	1028
	560	463	1060	1040
	570	474	1070	1052
	580	486	1080	1063
	590	497	1090	1075
	600	509	1100	1086
	610	520	1110	1098
	620	532	1120	1109
	630	543	1130	1121
	640	555	1140	1132
	650	567	1150	1144
	660	578	1160	1155
	670	590	1170	1167
	680	601	1180	1179
	690	613	1190	1190
	700	624	1200	1202
	710	636	1210	1213
	720	647	1220	1225
	730	659	1230	1236

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 160 mm 45° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
161	95	660	801
170	108	670	815
180	122	680	829
190	136	690	843
200	150	700	857
210	164	710	872
220	179	720	886
230	193	730	900
240	207	740	914
250	221	750	928
260	235	760	942
270	249	770	956
280	263	780	971
290	278	790	985
300	292	800	999
310	306	810	1013
320	320	820	1027
330	334	830	1041
340	348	840	1055
350	362	850	1070
360	377	860	1084
370	391	870	1098
380	405	880	1112
390	419	890	1126
400	433	900	1140
410	447	910	1154
420	461	920	1169
430	476	930	1183
440	490	940	1197
450	504	950	1211
460	518	960	1225
470	532	970	1239
480	546	980	1253
490	560	990	1268
500	575	1000	1282
510	589	1010	1296
520	603	1020	1310
530	617	1030	1324
540	631	1040	1338
550	645	1050	1352
560	659	1060	1367
570	674	1070	1381
580	688	1080	1395
590	702	1090	1409
600	716	1100	1423
610	730	1110	1437
620	744	1120	1451
630	758	1130	1466
640	773	1140	1480
650	787	1150	1494

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 160 mm 30° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	91	95	590	1094
	100	114	600	1114
100	110	134	610	1134
	120	154	620	1154
125	130	174	630	1174
	140	194	640	1194
160	150	214	650	1214
	160	234	660	1234
	170	254	670	1254
200	180	274	680	1274
	190	294	690	1294
250	200	314	700	1314
	210	334	710	1334
315	220	354	720	1354
	230	374	730	1374
400	240	394	740	1394
	250	414	750	1414
	260	434	760	1434
500	270	454	770	1454
	280	474	780	1474
630	290	494	790	1494
	300	514	800	1514
	310	534	810	1534
800	320	554	820	1554
	330	574	830	1574
1000	340	594	840	1594
	350	614	850	1614
1250	360	634	860	1634
	370	654	870	1654
	380	674	880	1674
	390	694	890	1694
	400	714	900	1714
	410	734	910	1734
	420	754	920	1754
	430	774	930	1774
	440	794	940	1794
	450	814	950	1814
	460	834	960	1834
	470	854	970	1854
	480	874	980	1874
	490	894	990	1894
	500	914	1000	1914
	510	934	1010	1934
	520	954	1020	1954
	530	974	1030	1974
	540	994	1040	1994
	550	1014	1050	2014
	560	1034	1060	2034
	570	1054	1070	2054
	580	1074	1080	2074

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 160 mm 15° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
35	95	530	2006
40	113	540	2044
50	151	550	2083
60	190	560	2122
70	228	570	2160
80	267	580	2199
90	306	590	2238
100	344	600	2276
110	383	610	2315
120	422	620	2354
130	460	630	2392
140	499	640	2431
150	537	650	2469
160	576	660	2508
170	615	670	2547
180	653	680	2585
190	692	690	2624
200	731	700	2663
210	769	710	2701
220	808	720	2740
230	847	730	2779
240	885	740	2817
250	924	750	2856
260	963	760	2895
270	1001	770	2933
280	1040	780	2972
290	1078	790	3010
300	1117	800	3049
310	1156	810	3088
320	1194	820	3126
330	1233	830	3165
340	1272	840	3204
350	1310	850	3242
360	1349	860	3281
370	1388	870	3320
380	1426	880	3358
390	1465	890	3397
400	1503	900	3435
410	1542	910	3474
420	1581	920	3513
430	1619	930	3551
440	1658	940	3590
450	1697	950	3629
460	1735	960	3667
470	1774	970	3706
480	1813	980	3745
490	1851	990	3783
500	1890	1000	3822
510	1929	1010	3861
520	1967	1020	3899

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 200 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	495	95	990	590
	500	100	1000	600
100	510	110	1010	610
	520	120	1020	620
125	530	130	1030	630
	540	140	1040	640
150	550	150	1050	650
	560	160	1060	660
200	570	170	1070	670
	580	180	1080	680
	590	190	1090	690
250	600	200	1100	700
	610	210	1110	710
315	620	220	1120	720
	630	230	1130	730
400	640	240	1140	740
	650	250	1150	750
500	660	260	1160	760
	670	270	1170	770
630	680	280	1180	780
	690	290	1190	790
800	700	300	1200	800
	710	310	1210	810
1000	720	320	1220	820
	730	330	1230	830
1250	740	340	1240	840
	750	350	1250	850
	760	360	1260	860
	770	370	1270	870
	780	380	1280	880
	790	390	1290	890
	800	400	1300	900
	810	410	1310	910
	820	420	1320	920
	830	430	1330	930
	840	440	1340	940
	850	450	1350	950
	860	460	1360	960
	870	470	1370	970
	880	480	1380	980
	890	490	1390	990
	900	500	1400	1000
	910	510	1410	1010
	920	520	1420	1020
	930	530	1430	1030
	940	540	1440	1040
	950	550	1450	1050
	960	560	1460	1060
	970	570	1470	1070
	980	580	1480	1080

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 200 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
281	95	780	671
290	105	790	682
300	116	800	694
310	128	810	705
320	140	820	717
330	151	830	728
340	163	840	740
350	174	850	751
360	186	860	763
370	197	870	775
380	209	880	786
390	220	890	798
400	232	900	809
410	243	910	821
420	255	920	832
430	267	930	844
440	278	940	855
450	290	950	867
460	301	960	879
470	313	970	890
480	324	980	902
490	336	990	913
500	347	1000	925
510	359	1010	936
520	370	1020	948
530	382	1030	959
540	394	1040	971
550	405	1050	982
560	417	1060	994
570	428	1070	1006
580	440	1080	1017
590	451	1090	1029
600	463	1100	1040
610	474	1110	1052
620	486	1120	1063
630	497	1130	1075
640	509	1140	1086
650	521	1150	1098
660	532	1160	1109
670	544	1170	1121
680	555	1180	1133
690	567	1190	1144
700	578	1200	1156
710	590	1210	1167
720	601	1220	1179
730	613	1230	1190
740	624	1240	1202
750	636	1250	1213
760	648	1260	1225
770	659	1270	1236

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 200 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	185	95	680	796
	190	103	690	810
100	200	117	700	824
	210	131	710	838
125	220	145	720	853
	230	160	730	867
150	240	174	740	881
	250	188	750	895
200	260	202	760	909
	270	216	770	923
	280	230	780	937
250	290	244	790	952
	300	259	800	966
315	310	273	810	980
	320	287	820	994
400	330	301	830	1008
	340	315	840	1022
	350	329	850	1036
500	360	343	860	1051
	370	358	870	1065
630	380	372	880	1079
	390	386	890	1093
	400	400	900	1107
800	410	414	910	1121
	420	428	920	1135
1000	430	442	930	1150
	440	457	940	1164
1250	450	471	950	1178
	460	485	960	1192
	470	499	970	1206
	480	513	980	1220
	490	527	990	1234
	500	541	1000	1249
	510	556	1010	1263
	520	570	1020	1277
	530	584	1030	1291
	540	598	1040	1305
	550	612	1050	1319
	560	626	1060	1333
	570	640	1070	1348
	580	655	1080	1362
	590	669	1090	1376
	600	683	1100	1390
	610	697	1110	1404
	620	711	1120	1418
	630	725	1130	1432
	640	739	1140	1447
	650	754	1150	1461
	660	768	1160	1475
	670	782	1170	1489

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 200 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
102	95	600	1092
110	112	610	1112
120	132	620	1132
130	152	630	1152
140	172	640	1172
150	192	650	1192
160	212	660	1212
170	232	670	1232
180	252	680	1252
190	272	690	1272
200	292	700	1292
210	312	710	1312
220	332	720	1332
230	352	730	1352
240	372	740	1372
250	392	750	1392
260	412	760	1412
270	432	770	1432
280	452	780	1452
290	472	790	1472
300	492	800	1492
310	512	810	1512
320	532	820	1532
330	552	830	1552
340	572	840	1572
350	592	850	1592
360	612	860	1612
370	632	870	1632
380	652	880	1652
390	672	890	1672
400	692	900	1692
410	712	910	1712
420	732	920	1732
430	752	930	1752
440	772	940	1772
450	792	950	1792
460	812	960	1812
470	832	970	1832
480	852	980	1852
490	872	990	1872
500	892	1000	1892
510	912	1010	1912
520	932	1020	1932
530	952	1030	1952
540	972	1040	1972
550	992	1050	1992
560	1012	1060	2012
570	1032	1070	2032
580	1052	1080	2052
590	1072	1090	2072

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
95 = Length of an MF

Ø 200 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	38	95	530	1996
	40	103	540	2034
100	50	141	550	2073
	60	180	560	2112
125	70	218	570	2150
	80	257	580	2189
150	90	296	590	2228
	100	334	600	2266
200	110	373	610	2305
	120	412	620	2343
	130	450	630	2382
250	140	489	640	2421
	150	528	650	2459
315	160	566	660	2498
	170	605	670	2537
400	180	643	680	2575
	190	682	690	2614
500	200	721	700	2653
	210	759	710	2691
	220	798	720	2730
630	230	837	730	2769
	240	875	740	2807
	250	914	750	2846
800	260	953	760	2884
	270	991	770	2923
1000	280	1030	780	2962
	290	1068	790	3000
1250	300	1107	800	3039
	310	1146	810	3078
	320	1184	820	3116
	330	1223	830	3155
	340	1262	840	3194
	350	1300	850	3232
	360	1339	860	3271
	370	1378	870	3309
	380	1416	880	3348
	390	1455	890	3387
	400	1493	900	3425
	410	1532	910	3464
	420	1571	920	3503
	430	1609	930	3541
	440	1648	940	3580
	450	1687	950	3619
	460	1725	960	3657
	470	1764	970	3696
	480	1803	980	3734
	490	1841	990	3773
	500	1880	1000	3812
	510	1918	1010	3850
	520	1957	1020	3889

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
140 = Length of an MF

Ø 250 mm 90° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
640	156	1140	656
650	166	1150	666
660	176	1160	676
670	186	1170	686
680	196	1180	696
690	206	1190	706
700	216	1200	716
710	226	1210	726
720	236	1220	736
730	246	1230	746
740	256	1240	756
750	266	1250	766
760	276	1260	776
770	286	1270	786
780	296	1280	796
790	306	1290	806
800	316	1300	816
810	326	1310	826
820	336	1320	836
830	346	1330	846
840	356	1340	856
850	366	1350	866
860	376	1360	876
870	386	1370	886
880	396	1380	896
890	406	1390	906
900	416	1400	916
910	426	1410	926
920	436	1420	936
930	446	1430	946
940	456	1440	956
950	466	1450	966
960	476	1460	976
970	486	1470	986
980	496	1480	996
990	506	1490	1006
1000	516	1500	1016
1010	526	1510	1026
1020	536	1520	1036
1030	546	1530	1046
1040	556	1540	1056
1050	566	1550	1066
1060	576	1560	1076
1070	586	1570	1086
1080	596	1580	1096
1090	606	1590	1106
1100	616	1600	1116
1110	626	1610	1126
1120	636	1620	1136
1130	646	1630	1146

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
140 = Length of an MF

Ø 250 mm 60° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	371	140	870	717
	380	151	880	728
100	390	162	890	740
	400	174	900	751
125	410	185	910	763
	420	197	920	774
150	430	209	930	786
	440	220	940	797
200	450	232	950	809
	460	243	960	821
250	470	255	970	832
	480	266	980	844
	490	278	990	855
315	500	289	1000	867
	510	301	1010	878
400	520	312	1020	890
	530	324	1030	901
500	540	336	1040	913
	550	347	1050	924
630	560	359	1060	936
	570	370	1070	948
	580	382	1080	959
800	590	393	1090	971
	600	405	1100	982
1000	610	416	1110	994
	620	428	1120	1005
1250	630	439	1130	1017
	640	451	1140	1028
	650	463	1150	1040
	660	474	1160	1051
	670	486	1170	1063
	680	497	1180	1075
	690	509	1190	1086
	700	520	1200	1098
	710	532	1210	1109
	720	543	1220	1121
	730	555	1230	1132
	740	566	1240	1144
	750	578	1250	1155
	760	590	1260	1167
	770	601	1270	1178
	780	613	1280	1190
	790	624	1290	1202
	800	636	1300	1213
	810	647	1310	1225
	820	659	1320	1236
	830	670	1330	1248
	840	682	1340	1259
	850	693	1350	1271
	860	705	1360	1282

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
140 = Length of an MF

Ø 250 mm 45° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
226	140	720	838
230	145	730	852
240	159	740	867
250	174	750	881
260	188	760	895
270	202	770	909
280	216	780	923
290	230	790	937
300	244	800	951
310	258	810	966
320	273	820	980
330	287	830	994
340	301	840	1008
350	315	850	1022
360	329	860	1036
370	343	870	1050
380	357	880	1065
390	372	890	1079
400	386	900	1093
410	400	910	1107
420	414	920	1121
430	428	930	1135
440	442	940	1149
450	456	950	1164
460	471	960	1178
470	485	970	1192
480	499	980	1206
490	513	990	1220
500	527	1000	1234
510	541	1010	1248
520	555	1020	1262
530	570	1030	1277
540	584	1040	1291
550	598	1050	1305
560	612	1060	1319
570	626	1070	1333
580	640	1080	1347
590	654	1090	1361
600	669	1100	1376
610	683	1110	1390
620	697	1120	1404
630	711	1130	1418
640	725	1140	1432
650	739	1150	1446
660	753	1160	1460
670	768	1170	1475
680	782	1180	1489
690	796	1190	1503
700	810	1200	1517
710	824	1210	1531

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
140 = Length of an MF

Ø 250 mm 30° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	137	140	630	1126
	140	146	640	1146
100	150	166	650	1166
	160	186	660	1186
125	170	206	670	1206
	180	226	680	1226
150	190	246	690	1246
	200	266	700	1266
200	210	286	710	1286
	220	306	720	1306
	230	326	730	1326
250	240	346	740	1346
	250	366	750	1366
315	260	386	760	1386
	270	406	770	1406
400	280	426	780	1426
	290	446	790	1446
	300	466	800	1466
500	310	486	810	1486
	320	506	820	1506
630	330	526	830	1526
	340	546	840	1546
	350	566	850	1566
800	360	586	860	1586
	370	606	870	1606
1000	380	626	880	1626
	390	646	890	1646
1250	400	666	900	1666
	410	686	910	1686
	420	706	920	1706
	430	726	930	1726
	440	746	940	1746
	450	766	950	1766
	460	786	960	1786
	470	806	970	1806
	480	826	980	1826
	490	846	990	1846
	500	866	1000	1866
	510	886	1010	1886
	520	906	1020	1906
	530	926	1030	1926
	540	946	1040	1946
	550	966	1050	1966
	560	986	1060	1986
	570	1006	1070	2006
	580	1026	1080	2026
	590	1046	1090	2046
	600	1066	1100	2066
	610	1086	1110	2086
	620	1106	1120	2106

Necessary duct length, L, by S-bend (BU)

Note: All measures in mm
140 = Length of an MF

Ø 250 mm 15° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
57	140	550	2043
60	150	560	2082
70	188	570	2120
80	227	580	2159
90	266	590	2198
100	304	600	2236
110	343	610	2275
120	382	620	2313
130	420	630	2352
140	459	640	2391
150	498	650	2429
160	536	660	2468
170	575	670	2507
180	613	680	2545
190	652	690	2584
200	691	700	2623
210	729	710	2661
220	768	720	2700
230	807	730	2739
240	845	740	2777
250	884	750	2816
260	923	760	2854
270	961	770	2893
280	1000	780	2932
290	1038	790	2970
300	1077	800	3009
310	1116	810	3048
320	1154	820	3086
330	1193	830	3125
340	1232	840	3164
350	1270	850	3202
360	1309	860	3241
370	1348	870	3279
380	1386	880	3318
390	1425	890	3357
400	1463	900	3395
410	1502	910	3434
420	1541	920	3473
430	1579	930	3511
440	1618	940	3550
450	1657	950	3589
460	1695	960	3627
470	1734	970	3666
480	1773	980	3704
490	1811	990	3743
500	1850	1000	3782
510	1888	1010	3820
520	1927	1020	3859
530	1966	1030	3898
540	2004	1040	3936

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
140 = Length of an MF

Ø 315 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	770	140	1270	640
	780	150	1280	650
100	790	160	1290	660
	800	170	1300	670
125	810	180	1310	680
	820	190	1320	690
150	830	200	1330	700
	840	210	1340	710
200	850	220	1350	720
	860	230	1360	730
250	870	240	1370	740
	880	250	1380	750
	890	260	1390	760
315	900	270	1400	770
	910	280	1410	780
	920	290	1420	790
400	930	300	1430	800
	940	310	1440	810
500	950	320	1450	820
	960	330	1460	830
630	970	340	1470	840
	980	350	1480	850
	990	360	1490	860
800	1000	370	1500	870
	1010	380	1510	880
1000	1020	390	1520	890
	1030	400	1530	900
1250	1040	410	1540	910
	1050	420	1550	920
	1060	430	1560	930
	1070	440	1570	940
	1080	450	1580	950
	1090	460	1590	960
	1100	470	1600	970
	1110	480	1610	980
	1120	490	1620	990
	1130	500	1630	1000
	1140	510	1640	1010
	1150	520	1650	1020
	1160	530	1660	1030
	1170	540	1670	1040
	1180	550	1680	1050
	1190	560	1690	1060
	1200	570	1700	1070
	1210	580	1710	1080
	1220	590	1720	1090
	1230	600	1730	1100
	1240	610	1740	1110
	1250	620	1750	1120
	1260	630	1760	1130

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
140 = Length of an MF

Ø 315 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
436	140	930	710
440	144	940	721
450	156	950	733
460	167	960	745
470	179	970	756
480	190	980	768
490	202	990	779
500	213	1000	791
510	225	1010	802
520	236	1020	814
530	248	1030	825
540	260	1040	837
550	271	1050	848
560	283	1060	860
570	294	1070	872
580	306	1080	883
590	317	1090	895
600	329	1100	906
610	340	1110	918
620	352	1120	929
630	363	1130	941
640	375	1140	952
650	387	1150	964
660	398	1160	975
670	410	1170	987
680	421	1180	999
690	433	1190	1010
700	444	1200	1022
710	456	1210	1033
720	467	1220	1045
730	479	1230	1056
740	490	1240	1068
750	502	1250	1079
760	514	1260	1091
770	525	1270	1102
780	537	1280	1114
790	548	1290	1126
800	560	1300	1137
810	571	1310	1149
820	583	1320	1160
830	594	1330	1172
840	606	1340	1183
850	617	1350	1195
860	629	1360	1206
870	641	1370	1218
880	652	1380	1229
890	664	1390	1241
900	675	1400	1253
910	687	1410	1264
920	698	1420	1276

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
140 = Length of an MF

Ø 315 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	283	140	780	843
	290	150	790	857
100	300	164	800	871
	310	178	810	886
125	320	193	820	900
	330	207	830	914
150	340	221	840	928
	350	235	850	942
200	360	249	860	956
	370	263	870	970
	380	277	880	985
250	390	292	890	999
	400	306	900	1013
315	410	320	910	1027
	420	334	920	1041
	430	348	930	1055
400	440	362	940	1069
	450	376	950	1084
500	460	391	960	1098
	470	405	970	1112
630	480	419	980	1126
	490	433	990	1140
	500	447	1000	1154
800	510	461	1010	1168
	520	475	1020	1182
1000	530	490	1030	1197
	540	504	1040	1211
1250	550	518	1050	1225
	560	532	1060	1239
	570	546	1070	1253
	580	560	1080	1267
	590	574	1090	1281
	600	589	1100	1296
	610	603	1110	1310
	620	617	1120	1324
	630	631	1130	1338
	640	645	1140	1352
	650	659	1150	1366
	660	673	1160	1380
	670	688	1170	1395
	680	702	1180	1409
	690	716	1190	1423
	700	730	1200	1437
	710	744	1210	1451
	720	758	1220	1465
	730	772	1230	1479
	740	787	1240	1494
	750	801	1250	1508
	760	815	1260	1522
	770	829	1270	1536

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
140 = Length of an MF

Ø 315 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
154	140	650	1132
160	152	660	1152
170	172	670	1172
180	192	680	1192
190	212	690	1212
200	232	700	1232
210	252	710	1252
220	272	720	1272
230	292	730	1292
240	312	740	1312
250	332	750	1332
260	352	760	1352
270	372	770	1372
280	392	780	1392
290	412	790	1412
300	432	800	1432
310	452	810	1452
320	472	820	1472
330	492	830	1492
340	512	840	1512
350	532	850	1532
360	552	860	1552
370	572	870	1572
380	592	880	1592
390	612	890	1612
400	632	900	1632
410	652	910	1652
420	672	920	1672
430	692	930	1692
440	712	940	1712
450	732	950	1732
460	752	960	1752
470	772	970	1772
480	792	980	1792
490	812	990	1812
500	832	1000	1832
510	852	1010	1852
520	872	1020	1872
530	892	1030	1892
540	912	1040	1912
550	932	1050	1932
560	952	1060	1952
570	972	1070	1972
580	992	1080	1992
590	1012	1090	2012
600	1032	1100	2032
610	1052	1110	2052
620	1072	1120	2072
630	1092	1130	2092
640	1112	1140	2112

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
140 = Length of an MF

Ø 315 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	57	140	550	2043
	60	150	560	2082
100	70	188	570	2120
	80	227	580	2159
125	90	266	590	2198
	100	304	600	2236
150	110	343	610	2275
	120	382	620	2313
200	130	420	630	2352
	140	459	640	2391
	150	498	650	2429
250	160	536	660	2468
	170	575	670	2507
315	180	613	680	2545
	190	652	690	2584
	200	691	700	2623
400	210	729	710	2661
	220	768	720	2700
500	230	807	730	2739
	240	845	740	2777
630	250	884	750	2816
	260	923	760	2854
	270	961	770	2893
800	280	1000	780	2932
	290	1038	790	2970
1000	300	1077	800	3009
	310	1116	810	3048
1250	320	1154	820	3086
	330	1193	830	3125
	340	1232	840	3164
	350	1270	850	3202
	360	1309	860	3241
	370	1348	870	3279
	380	1386	880	3318
	390	1425	890	3357
	400	1463	900	3395
	410	1502	910	3434
	420	1541	920	3473
	430	1579	930	3511
	440	1618	940	3550
	450	1657	950	3589
	460	1695	960	3627
	470	1734	970	3666
	480	1773	980	3704
	490	1811	990	3743
	500	1850	1000	3782
	510	1888	1010	3820
	520	1927	1020	3859
	530	1966	1030	3898
	540	2004	1040	3936

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 400 mm 90° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
980	180	1480	680
990	190	1490	690
1000	200	1500	700
1010	210	1510	710
1020	220	1520	720
1030	230	1530	730
1040	240	1540	740
1050	250	1550	750
1060	260	1560	760
1070	270	1570	770
1080	280	1580	780
1090	290	1590	790
1100	300	1600	800
1110	310	1610	810
1120	320	1620	820
1130	330	1630	830
1140	340	1640	840
1150	350	1650	850
1160	360	1660	860
1170	370	1670	870
1180	380	1680	880
1190	390	1690	890
1200	400	1700	900
1210	410	1710	910
1220	420	1720	920
1230	430	1730	930
1240	440	1740	940
1250	450	1750	950
1260	460	1760	960
1270	470	1770	970
1280	480	1780	980
1290	490	1790	990
1300	500	1800	1000
1310	510	1810	1010
1320	520	1820	1020
1330	530	1830	1030
1340	540	1840	1040
1350	550	1850	1050
1360	560	1860	1060
1370	570	1870	1070
1380	580	1880	1080
1390	590	1890	1090
1400	600	1900	1100
1410	610	1910	1110
1420	620	1920	1120
1430	630	1930	1130
1440	640	1940	1140
1450	650	1950	1150
1460	660	1960	1160
1470	670	1970	1170

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 400 mm 60° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	556	180	1050	750
	560	185	1060	762
100	570	196	1070	774
	580	208	1080	785
125	590	219	1090	797
	600	231	1100	808
150	610	242	1110	820
	620	254	1120	831
200	630	265	1130	843
	640	277	1140	854
	650	289	1150	866
250	660	300	1160	877
	670	312	1170	889
315	680	323	1180	901
	690	335	1190	912
400	700	346	1200	924
	710	358	1210	935
500	720	369	1220	947
	730	381	1230	958
	740	392	1240	970
630	750	404	1250	981
	760	416	1260	993
800	770	427	1270	1004
	780	439	1280	1016
	790	450	1290	1028
1000	800	462	1300	1039
	810	473	1310	1051
1250	820	485	1320	1062
	830	496	1330	1074
	840	508	1340	1085
	850	519	1350	1097
	860	531	1360	1108
	870	543	1370	1120
	880	554	1380	1131
	890	566	1390	1143
	900	577	1400	1155
	910	589	1410	1166
	920	600	1420	1178
	930	612	1430	1189
	940	623	1440	1201
	950	635	1450	1212
	960	647	1460	1224
	970	658	1470	1235
	980	670	1480	1247
	990	681	1490	1259
	1000	693	1500	1270
	1010	704	1510	1282
	1020	716	1520	1293
	1030	727	1530	1305
	1040	739	1540	1316

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 400 mm 45° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
362	180	860	884
370	191	870	898
380	205	880	913
390	220	890	927
400	234	900	941
410	248	910	955
420	262	920	969
430	276	930	983
440	290	940	997
450	304	950	1012
460	319	960	1026
470	333	970	1040
480	347	980	1054
490	361	990	1068
500	375	1000	1082
510	389	1010	1096
520	403	1020	1110
530	418	1030	1125
540	432	1040	1139
550	446	1050	1153
560	460	1060	1167
570	474	1070	1181
580	488	1080	1195
590	502	1090	1209
600	517	1100	1224
610	531	1110	1238
620	545	1120	1252
630	559	1130	1266
640	573	1140	1280
650	587	1150	1294
660	601	1160	1308
670	616	1170	1323
680	630	1180	1337
690	644	1190	1351
700	658	1200	1365
710	672	1210	1379
720	686	1220	1393
730	700	1230	1407
740	715	1240	1422
750	729	1250	1436
760	743	1260	1450
770	757	1270	1464
780	771	1280	1478
790	785	1290	1492
800	799	1300	1506
810	814	1310	1521
820	828	1320	1535
830	842	1330	1549
840	856	1340	1563
850	870	1350	1577

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 400 mm 30° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	197	180	690	1166
	200	186	700	1186
100	210	206	710	1206
	220	226	720	1226
125	230	246	730	1246
	240	266	740	1266
150	250	286	750	1286
	260	306	760	1306
200	270	326	770	1326
	280	346	780	1346
	290	366	790	1366
250	300	386	800	1386
	310	406	810	1406
315	320	426	820	1426
	330	446	830	1446
400	340	466	840	1466
	350	486	850	1486
500	360	506	860	1506
	370	526	870	1526
	380	546	880	1546
630	390	566	890	1566
	400	586	900	1586
	410	606	910	1606
800	420	626	920	1626
	430	646	930	1646
1000	440	666	940	1666
	450	686	950	1686
1250	460	706	960	1706
	470	726	970	1726
	480	746	980	1746
	490	766	990	1766
	500	786	1000	1786
	510	806	1010	1806
	520	826	1020	1826
	530	846	1030	1846
	540	866	1040	1866
	550	886	1050	1886
	560	906	1060	1906
	570	926	1070	1926
	580	946	1080	1946
	590	966	1090	1966
	600	986	1100	1986
	610	1006	1110	2006
	620	1026	1120	2026
	630	1046	1130	2046
	640	1066	1140	2066
	650	1086	1150	2086
	660	1106	1160	2106
	670	1126	1170	2126
	680	1146	1180	2146

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 400 mm 15° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
74	180	570	2096
80	203	580	2135
90	242	590	2174
100	280	600	2212
110	319	610	2251
120	358	620	2289
130	396	630	2328
140	435	640	2367
150	474	650	2405
160	512	660	2444
170	551	670	2483
180	589	680	2521
190	628	690	2560
200	667	700	2599
210	705	710	2637
220	744	720	2676
230	783	730	2715
240	821	740	2753
250	860	750	2792
260	899	760	2830
270	937	770	2869
280	976	780	2908
290	1014	790	2946
300	1053	800	2985
310	1092	810	3024
320	1130	820	3062
330	1169	830	3101
340	1208	840	3140
350	1246	850	3178
360	1285	860	3217
370	1324	870	3255
380	1362	880	3294
390	1401	890	3333
400	1439	900	3371
410	1478	910	3410
420	1517	920	3449
430	1555	930	3487
440	1594	940	3526
450	1633	950	3565
460	1671	960	3603
470	1710	970	3642
480	1749	980	3680
490	1787	990	3719
500	1826	1000	3758
510	1864	1010	3796
520	1903	1020	3835
530	1942	1030	3874
540	1980	1040	3912
550	2019	1050	3951
560	2058	1060	3990

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 500 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	1180	180	1680	680
	1190	190	1690	690
100	1200	200	1700	700
	1210	210	1710	710
125	1220	220	1720	720
	1230	230	1730	730
150	1240	240	1740	740
	1250	250	1750	750
200	1260	260	1760	760
	1270	270	1770	770
	1280	280	1780	780
250	1290	290	1790	790
	1300	300	1800	800
315	1310	310	1810	810
	1320	320	1820	820
	1330	330	1830	830
400	1340	340	1840	840
	1350	350	1850	850
500	1360	360	1860	860
	1370	370	1870	870
630	1380	380	1880	880
	1390	390	1890	890
	1400	400	1900	900
800	1410	410	1910	910
	1420	420	1920	920
1000	1430	430	1930	930
	1440	440	1940	940
1250	1450	450	1950	950
	1460	460	1960	960
	1470	470	1970	970
	1480	480	1980	980
	1490	490	1990	990
	1500	500	2000	1000
	1510	510	2010	1010
	1520	520	2020	1020
	1530	530	2030	1030
	1540	540	2040	1040
	1550	550	2050	1050
	1560	560	2060	1060
	1570	570	2070	1070
	1580	580	2080	1080
	1590	590	2090	1090
	1600	600	2100	1100
	1610	610	2110	1110
	1620	620	2120	1120
	1630	630	2130	1130
	1640	640	2140	1140
	1650	650	2150	1150
	1660	660	2160	1160
	1670	670	2170	1170

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 500 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
656	180	1150	750
660	184	1160	761
670	196	1170	773
680	207	1180	785
690	219	1190	796
700	230	1200	808
710	242	1210	819
720	253	1220	831
730	265	1230	842
740	276	1240	854
750	288	1250	865
760	300	1260	877
770	311	1270	888
780	323	1280	900
790	334	1290	912
800	346	1300	923
810	357	1310	935
820	369	1320	946
830	380	1330	958
840	392	1340	969
850	403	1350	981
860	415	1360	992
870	427	1370	1004
880	438	1380	1015
890	450	1390	1027
900	461	1400	1039
910	473	1410	1050
920	484	1420	1062
930	496	1430	1073
940	507	1440	1085
950	519	1450	1096
960	531	1460	1108
970	542	1470	1119
980	554	1480	1131
990	565	1490	1143
1000	577	1500	1154
1010	588	1510	1166
1020	600	1520	1177
1030	611	1530	1189
1040	623	1540	1200
1050	634	1550	1212
1060	646	1560	1223
1070	658	1570	1235
1080	669	1580	1246
1090	681	1590	1258
1100	692	1600	1270
1110	704	1610	1281
1120	715	1620	1293
1130	727	1630	1304
1140	738	1640	1316

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 500 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	434	180	930	881
	440	188	940	895
100	450	202	950	910
	460	217	960	924
125	470	231	970	938
	480	245	980	952
150	490	259	990	966
	500	273	1000	980
200	510	287	1010	994
	520	301	1020	1008
250	530	316	1030	1023
	540	330	1040	1037
315	550	344	1050	1051
	560	358	1060	1065
400	570	372	1070	1079
	580	386	1080	1093
	590	400	1090	1107
500	600	415	1100	1122
	610	429	1110	1136
	620	443	1120	1150
630	630	457	1130	1164
	640	471	1140	1178
	650	485	1150	1192
800	660	499	1160	1206
	670	514	1170	1221
1000	680	528	1180	1235
	690	542	1190	1249
1250	700	556	1200	1263
	710	570	1210	1277
	720	584	1220	1291
	730	598	1230	1305
	740	613	1240	1320
	750	627	1250	1334
	760	641	1260	1348
	770	655	1270	1362
	780	669	1280	1376
	790	683	1290	1390
	800	697	1300	1404
	810	712	1310	1419
	820	726	1320	1433
	830	740	1330	1447
	840	754	1340	1461
	850	768	1350	1475
	860	782	1360	1489
	870	796	1370	1503
	880	811	1380	1518
	890	825	1390	1532
	900	839	1400	1546
	910	853	1410	1560
	920	867	1420	1574

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 500 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
224	180	720	1172
230	192	730	1192
240	212	740	1212
250	232	750	1232
260	252	760	1252
270	272	770	1272
280	292	780	1292
290	312	790	1312
300	332	800	1332
310	352	810	1352
320	372	820	1372
330	392	830	1392
340	412	840	1412
350	432	850	1432
360	452	860	1452
370	472	870	1472
380	492	880	1492
390	512	890	1512
400	532	900	1532
410	552	910	1552
420	572	920	1572
430	592	930	1592
440	612	940	1612
450	632	950	1632
460	652	960	1652
470	672	970	1672
480	692	980	1692
490	712	990	1712
500	732	1000	1732
510	752	1010	1752
520	772	1020	1772
530	792	1030	1792
540	812	1040	1812
550	832	1050	1832
560	852	1060	1852
570	872	1070	1872
580	892	1080	1892
590	912	1090	1912
600	932	1100	1932
610	952	1110	1952
620	972	1120	1972
630	992	1130	1992
640	1012	1140	2012
650	1032	1150	2032
660	1052	1160	2052
670	1072	1170	2072
680	1092	1180	2092
690	1112	1190	2112
700	1132	1200	2132
710	1152	1210	2152

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
180 = Length of an MF

Ø 500 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	81	180	580	2109
	90	216	590	2148
100	100	254	600	2186
	110	293	610	2225
125	120	332	620	2263
	130	370	630	2302
150	140	409	640	2341
	150	448	650	2379
200	160	486	660	2418
	170	525	670	2457
	180	563	680	2495
250	190	602	690	2534
	200	641	700	2573
315	210	679	710	2611
	220	718	720	2650
400	230	757	730	2689
	240	795	740	2727
500	250	834	750	2766
	260	873	760	2804
	270	911	770	2843
630	280	950	780	2882
	290	988	790	2920
800	300	1027	800	2959
	310	1066	810	2998
1000	320	1104	820	3036
	330	1143	830	3075
1250	340	1182	840	3114
	350	1220	850	3152
	360	1259	860	3191
	370	1298	870	3229
	380	1336	880	3268
	390	1375	890	3307
	400	1413	900	3345
	410	1452	910	3384
	420	1491	920	3423
	430	1529	930	3461
	440	1568	940	3500
	450	1607	950	3539
	460	1645	960	3577
	470	1684	970	3616
	480	1723	980	3654
	490	1761	990	3693
	500	1800	1000	3732
	510	1838	1010	3770
	520	1877	1020	3809
	530	1916	1030	3848
	540	1954	1040	3886
	550	1993	1050	3925
	560	2032	1060	3964
	570	2070	1070	4002

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
170 = Length of an MF

Ø 630 mm 90° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
1430	170	1930	670
1440	180	1940	680
1450	190	1950	690
1460	200	1960	700
1470	210	1970	710
1480	220	1980	720
1490	230	1990	730
1500	240	2000	740
1510	250	2010	750
1520	260	2020	760
1530	270	2030	770
1540	280	2040	780
1550	290	2050	790
1560	300	2060	800
1570	310	2070	810
1580	320	2080	820
1590	330	2090	830
1600	340	2100	840
1610	350	2110	850
1620	360	2120	860
1630	370	2130	870
1640	380	2140	880
1650	390	2150	890
1660	400	2160	900
1670	410	2170	910
1680	420	2180	920
1690	430	2190	930
1700	440	2200	940
1710	450	2210	950
1720	460	2220	960
1730	470	2230	970
1740	480	2240	980
1750	490	2250	990
1760	500	2260	1000
1770	510	2270	1010
1780	520	2280	1020
1790	530	2290	1030
1800	540	2300	1040
1810	550	2310	1050
1820	560	2320	1060
1830	570	2330	1070
1840	580	2340	1080
1850	590	2350	1090
1860	600	2360	1100
1870	610	2370	1110
1880	620	2380	1120
1890	630	2390	1130
1900	640	2400	1140
1910	650	2410	1150
1920	660	2420	1160

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
170 = Length of an MF

Ø 630 mm 60° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	778	170	1270	738
	780	173	1280	750
100	790	184	1290	762
	800	196	1300	773
125	810	207	1310	785
	820	219	1320	796
150	830	230	1330	808
	840	242	1340	819
200	850	253	1350	831
	860	265	1360	842
250	870	277	1370	854
	880	288	1380	865
315	890	300	1390	877
	900	311	1400	889
400	910	323	1410	900
	920	334	1420	912
500	930	346	1430	923
	940	357	1440	935
630	950	369	1450	946
	960	381	1460	958
800	970	392	1470	969
	980	404	1480	981
1000	990	415	1490	993
	1000	427	1500	1004
1000	1010	438	1510	1016
	1020	450	1520	1027
1250	1030	461	1530	1039
	1040	473	1540	1050
	1050	484	1550	1062
	1060	496	1560	1073
	1070	508	1570	1085
	1080	519	1580	1096
	1090	531	1590	1108
	1100	542	1600	1120
	1110	554	1610	1131
	1120	565	1620	1143
	1130	577	1630	1154
	1140	588	1640	1166
	1150	600	1650	1177
	1160	611	1660	1189
	1170	623	1670	1200
	1180	635	1680	1212
	1190	646	1690	1223
	1200	658	1700	1235
	1210	669	1710	1247
	1220	681	1720	1258
	1230	692	1730	1270
	1240	704	1740	1281
	1250	715	1750	1293
	1260	727	1760	1304

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
170 = Length of an MF

Ø 630 mm 45° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
489	170	980	864
490	171	990	878
500	185	1000	892
510	199	1010	906
520	213	1020	920
530	228	1030	935
540	242	1040	949
550	256	1050	963
560	270	1060	977
570	284	1070	991
580	298	1080	1005
590	312	1090	1019
600	327	1100	1034
610	341	1110	1048
620	355	1120	1062
630	369	1130	1076
640	383	1140	1090
650	397	1150	1104
660	411	1160	1118
670	426	1170	1133
680	440	1180	1147
690	454	1190	1161
700	468	1200	1175
710	482	1210	1189
720	496	1220	1203
730	510	1230	1217
740	525	1240	1232
750	539	1250	1246
760	553	1260	1260
770	567	1270	1274
780	581	1280	1288
790	595	1290	1302
800	609	1300	1316
810	624	1310	1331
820	638	1320	1345
830	652	1330	1359
840	666	1340	1373
850	680	1350	1387
860	694	1360	1401
870	708	1370	1415
880	723	1380	1430
890	737	1390	1444
900	751	1400	1458
910	765	1410	1472
920	779	1420	1486
930	793	1430	1500
940	807	1440	1514
950	822	1450	1529
960	836	1460	1543
970	850	1470	1557

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
170 = Length of an MF

Ø 630 mm 30° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	254	170	750	1162
	260	182	760	1182
100	270	202	770	1202
	280	222	780	1222
125	290	242	790	1242
	300	262	800	1262
150	310	282	810	1282
	320	302	820	1302
200	330	322	830	1322
	340	342	840	1342
	350	362	850	1362
250	360	382	860	1382
	370	402	870	1402
315	380	422	880	1422
	390	442	890	1442
	400	462	900	1462
400	410	482	910	1482
	420	502	920	1502
500	430	522	930	1522
	440	542	940	1542
630	450	562	950	1562
	460	582	960	1582
	470	602	970	1602
800	480	622	980	1622
	490	642	990	1642
1000	500	662	1000	1662
	510	682	1010	1682
1250	520	702	1020	1702
	530	722	1030	1722
	540	742	1040	1742
	550	762	1050	1762
	560	782	1060	1782
	570	802	1070	1802
	580	822	1080	1822
	590	842	1090	1842
	600	862	1100	1862
	610	882	1110	1882
	620	902	1120	1902
	630	922	1130	1922
	640	942	1140	1942
	650	962	1150	1962
	660	982	1160	1982
	670	1002	1170	2002
	680	1022	1180	2022
	690	1042	1190	2042
	700	1062	1200	2062
	710	1082	1210	2082
	720	1102	1220	2102
	730	1122	1230	2122
	740	1142	1240	2142

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
170 = Length of an MF

Ø 630 mm 15° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
87	170	580	2075
90	182	590	2114
100	220	600	2152
110	259	610	2191
120	298	620	2229
130	336	630	2268
140	375	640	2307
150	414	650	2345
160	452	660	2384
170	491	670	2423
180	529	680	2461
190	568	690	2500
200	607	700	2539
210	645	710	2577
220	684	720	2616
230	723	730	2655
240	761	740	2693
250	800	750	2732
260	839	760	2770
270	877	770	2809
280	916	780	2848
290	954	790	2886
300	993	800	2925
310	1032	810	2964
320	1070	820	3002
330	1109	830	3041
340	1148	840	3080
350	1186	850	3118
360	1225	860	3157
370	1264	870	3195
380	1302	880	3234
390	1341	890	3273
400	1379	900	3311
410	1418	910	3350
420	1457	920	3389
430	1495	930	3427
440	1534	940	3466
450	1573	950	3505
460	1611	960	3543
470	1650	970	3582
480	1689	980	3620
490	1727	990	3659
500	1766	1000	3698
510	1804	1010	3736
520	1843	1020	3775
530	1882	1030	3814
540	1920	1040	3852
550	1959	1050	3891
560	1998	1060	3930
570	2036	1070	3968

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
219 = Length of an MF

Ø 800 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	1819	219	2310	710
	1820	220	2320	720
100	1830	230	2330	730
	1840	240	2340	740
125	1850	250	2350	750
	1860	260	2360	760
150	1870	270	2370	770
	1880	280	2380	780
200	1890	290	2390	790
	1900	300	2400	800
	1910	310	2410	810
250	1920	320	2420	820
	1930	330	2430	830
315	1940	340	2440	840
	1950	350	2450	850
400	1960	360	2460	860
	1970	370	2470	870
500	1980	380	2480	880
	1990	390	2490	890
630	2000	400	2500	900
	2010	410	2510	910
	2020	420	2520	920
800	2030	430	2530	930
	2040	440	2540	940
	2050	450	2550	950
1000	2060	460	2560	960
	2070	470	2570	970
1250	2080	480	2580	980
	2090	490	2590	990
	2100	500	2600	1000
	2110	510	2610	1010
	2120	520	2620	1020
	2130	530	2630	1030
	2140	540	2640	1040
	2150	550	2650	1050
	2160	560	2660	1060
	2170	570	2670	1070
	2180	580	2680	1080
	2190	590	2690	1090
	2200	600	2700	1100
	2210	610	2710	1110
	2220	620	2720	1120
	2230	630	2730	1130
	2240	640	2740	1140
	2250	650	2750	1150
	2260	660	2760	1160
	2270	670	2770	1170
	2280	680	2780	1180
	2290	690	2790	1190
	2300	700	2800	1200

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
219 = Length of an MF

Ø 800 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
990	219	1490	797
1000	231	1500	808
1010	242	1510	820
1020	254	1520	831
1030	265	1530	843
1040	277	1540	854
1050	288	1550	866
1060	300	1560	877
1070	312	1570	889
1080	323	1580	900
1090	335	1590	912
1100	346	1600	924
1110	358	1610	935
1120	369	1620	947
1130	381	1630	958
1140	392	1640	970
1150	404	1650	981
1160	415	1660	993
1170	427	1670	1004
1180	439	1680	1016
1190	450	1690	1027
1200	462	1700	1039
1210	473	1710	1051
1220	485	1720	1062
1230	496	1730	1074
1240	508	1740	1085
1250	519	1750	1097
1260	531	1760	1108
1270	542	1770	1120
1280	554	1780	1131
1290	566	1790	1143
1300	577	1800	1154
1310	589	1810	1166
1320	600	1820	1178
1330	612	1830	1189
1340	623	1840	1201
1350	635	1850	1212
1360	646	1860	1224
1370	658	1870	1235
1380	669	1880	1247
1390	681	1890	1258
1400	693	1900	1270
1410	704	1910	1281
1420	716	1920	1293
1430	727	1930	1305
1440	739	1940	1316
1450	750	1950	1328
1460	762	1960	1339
1470	773	1970	1351
1480	785	1980	1362

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
219 = Length of an MF

Ø 800 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	641	219	1140	924
	650	231	1150	938
100	660	245	1160	952
	670	260	1170	967
125	680	274	1180	981
	690	288	1190	995
150	700	302	1200	1009
	710	316	1210	1023
200	720	330	1220	1037
	730	344	1230	1051
250	740	359	1240	1066
	750	373	1250	1080
315	760	387	1260	1094
	770	401	1270	1108
400	780	415	1280	1122
	790	429	1290	1136
500	800	443	1300	1150
	810	458	1310	1165
630	820	472	1320	1179
	830	486	1330	1193
800	840	500	1340	1207
	850	514	1350	1221
1000	860	528	1360	1235
	870	542	1370	1249
1250	880	557	1380	1264
	890	571	1390	1278
	900	585	1400	1292
	910	599	1410	1306
	920	613	1420	1320
	930	627	1430	1334
	940	641	1440	1348
	950	656	1450	1363
	960	670	1460	1377
	970	684	1470	1391
	980	698	1480	1405
	990	712	1490	1419
	1000	726	1500	1433
	1010	740	1510	1447
	1020	754	1520	1462
	1030	769	1530	1476
	1040	783	1540	1490
	1050	797	1550	1504
	1060	811	1560	1518
	1070	825	1570	1532
	1080	839	1580	1546
	1090	853	1590	1561
	1100	868	1600	1575
	1110	882	1610	1589
	1120	896	1620	1603
	1130	910	1630	1617

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
219 = Length of an MF

Ø 800 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
324	219	820	1212
330	232	830	1232
340	252	840	1252
350	272	850	1272
360	292	860	1292
370	312	870	1312
380	332	880	1332
390	352	890	1352
400	372	900	1372
410	392	910	1392
420	412	920	1412
430	432	930	1432
440	452	940	1452
450	472	950	1472
460	492	960	1492
470	512	970	1512
480	532	980	1532
490	552	990	1552
500	572	1000	1572
510	592	1010	1592
520	612	1020	1612
530	632	1030	1632
540	652	1040	1652
550	672	1050	1672
560	692	1060	1692
570	712	1070	1712
580	732	1080	1732
590	752	1090	1752
600	772	1100	1772
610	792	1110	1792
620	812	1120	1812
630	832	1130	1832
640	852	1140	1852
650	872	1150	1872
660	892	1160	1892
670	912	1170	1912
680	932	1180	1932
690	952	1190	1952
700	972	1200	1972
710	992	1210	1992
720	1012	1220	2012
730	1032	1230	2032
740	1052	1240	2052
750	1072	1250	2072
760	1092	1260	2092
770	1112	1270	2112
780	1132	1280	2132
790	1152	1290	2152
800	1172	1300	2172
810	1192	1310	2192

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
219 = Length of an MF

Ø 800 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	111	219	610	2147
	120	254	620	2185
100	130	292	630	2224
	140	331	640	2263
125	150	370	650	2301
	160	408	660	2340
150	170	447	670	2379
	180	485	680	2417
200	190	524	690	2456
	200	563	700	2495
	210	601	710	2533
250	220	640	720	2572
	230	679	730	2611
315	240	717	740	2649
	250	756	750	2688
400	260	795	760	2726
	270	833	770	2765
500	280	872	780	2804
	290	910	790	2842
630	300	949	800	2881
	310	988	810	2920
	320	1026	820	2958
800	330	1065	830	2997
	340	1104	840	3036
	350	1142	850	3074
1000	360	1181	860	3113
	370	1220	870	3151
1250	380	1258	880	3190
	390	1297	890	3229
	400	1335	900	3267
	410	1374	910	3306
	420	1413	920	3345
	430	1451	930	3383
	440	1490	940	3422
	450	1529	950	3461
	460	1567	960	3499
	470	1606	970	3538
	480	1645	980	3576
	490	1683	990	3615
	500	1722	1000	3654
	510	1760	1010	3692
	520	1799	1020	3731
	530	1838	1030	3770
	540	1876	1040	3808
	550	1915	1050	3847
	560	1954	1060	3886
	570	1992	1070	3924
	580	2031	1080	3963
	590	2070	1090	4001
	600	2108	1100	4040

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1000 mm 90° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
2255	255	2750	750
2260	260	2760	760
2270	270	2770	770
2280	280	2780	780
2290	290	2790	790
2300	300	2800	800
2310	310	2810	810
2320	320	2820	820
2330	330	2830	830
2340	340	2840	840
2350	350	2850	850
2360	360	2860	860
2370	370	2870	870
2380	380	2880	880
2390	390	2890	890
2400	400	2900	900
2410	410	2910	910
2420	420	2920	920
2430	430	2930	930
2440	440	2940	940
2450	450	2950	950
2460	460	2960	960
2470	470	2970	970
2480	480	2980	980
2490	490	2990	990
2500	500	3000	1000
2510	510	3010	1010
2520	520	3020	1020
2530	530	3030	1030
2540	540	3040	1040
2550	550	3050	1050
2560	560	3060	1060
2570	570	3070	1070
2580	580	3080	1080
2590	590	3090	1090
2600	600	3100	1100
2610	610	3110	1110
2620	620	3120	1120
2630	630	3130	1130
2640	640	3140	1140
2650	650	3150	1150
2660	660	3160	1160
2670	670	3170	1170
2680	680	3180	1180
2690	690	3190	1190
2700	700	3200	1200
2710	710	3210	1210
2720	720	3220	1220
2730	730	3230	1230
2740	740	3240	1240

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1000 mm 60° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	1220	255	1720	832
	1230	266	1730	844
100	1240	278	1740	855
	1250	289	1750	867
125	1260	301	1760	878
	1270	312	1770	890
150	1280	324	1780	901
	1290	336	1790	913
200	1300	347	1800	924
	1310	359	1810	936
	1320	370	1820	948
250	1330	382	1830	959
	1340	393	1840	971
315	1350	405	1850	982
	1360	416	1860	994
	1370	428	1870	1005
400	1380	439	1880	1017
	1390	451	1890	1028
500	1400	463	1900	1040
	1410	474	1910	1051
630	1420	486	1920	1063
	1430	497	1930	1075
	1440	509	1940	1086
800	1450	520	1950	1098
	1460	532	1960	1109
1000	1470	543	1970	1121
	1480	555	1980	1132
1250	1490	567	1990	1144
	1500	578	2000	1155
	1510	590	2010	1167
	1520	601	2020	1178
	1530	613	2030	1190
	1540	624	2040	1202
	1550	636	2050	1213
	1560	647	2060	1225
	1570	659	2070	1236
	1580	670	2080	1248
	1590	682	2090	1259
	1600	694	2100	1271
	1610	705	2110	1282
	1620	717	2120	1294
	1630	728	2130	1306
	1640	740	2140	1317
	1650	751	2150	1329
	1660	763	2160	1340
	1670	774	2170	1352
	1680	786	2180	1363
	1690	797	2190	1375
	1700	809	2200	1386
	1710	821	2210	1398

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1000 mm 45° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
766	255	1260	954
770	261	1270	968
780	275	1280	982
790	289	1290	996
800	303	1300	1010
810	318	1310	1025
820	332	1320	1039
830	346	1330	1053
840	360	1340	1067
850	374	1350	1081
860	388	1360	1095
870	402	1370	1109
880	417	1380	1124
890	431	1390	1138
900	445	1400	1152
910	459	1410	1166
920	473	1420	1180
930	487	1430	1194
940	501	1440	1208
950	516	1450	1223
960	530	1460	1237
970	544	1470	1251
980	558	1480	1265
990	572	1490	1279
1000	586	1500	1293
1010	600	1510	1307
1020	614	1520	1322
1030	629	1530	1336
1040	643	1540	1350
1050	657	1550	1364
1060	671	1560	1378
1070	685	1570	1392
1080	699	1580	1406
1090	713	1590	1421
1100	728	1600	1435
1110	742	1610	1449
1120	756	1620	1463
1130	770	1630	1477
1140	784	1640	1491
1150	798	1650	1505
1160	812	1660	1520
1170	827	1670	1534
1180	841	1680	1548
1190	855	1690	1562
1200	869	1700	1576
1210	883	1710	1590
1220	897	1720	1604
1230	911	1730	1619
1240	926	1740	1633
1250	940	1750	1647

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1000 mm 30° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	396	255	890	1244
	400	264	900	1264
100	410	284	910	1284
	420	304	920	1304
125	430	324	930	1324
	440	344	940	1344
150	450	364	950	1364
	460	384	960	1384
200	470	404	970	1404
	480	424	980	1424
	490	444	990	1444
250	500	464	1000	1464
	510	484	1010	1484
315	520	504	1020	1504
	530	524	1030	1524
400	540	544	1040	1544
	550	564	1050	1564
500	560	584	1060	1584
	570	604	1070	1604
630	580	624	1080	1624
	590	644	1090	1644
	600	664	1100	1664
800	610	684	1110	1684
	620	704	1120	1704
1000	630	724	1130	1724
	640	744	1140	1744
	650	764	1150	1764
1250	660	784	1160	1784
	670	804	1170	1804
	680	824	1180	1824
	690	844	1190	1844
	700	864	1200	1864
	710	884	1210	1884
	720	904	1220	1904
	730	924	1230	1924
	740	944	1240	1944
	750	964	1250	1964
	760	984	1260	1984
	770	1004	1270	2004
	780	1024	1280	2024
	790	1044	1290	2044
	800	1064	1300	2064
	810	1084	1310	2084
	820	1104	1320	2104
	830	1124	1330	2124
	840	1144	1340	2144
	850	1164	1350	2164
	860	1184	1360	2184
	870	1204	1370	2204
	880	1224	1380	2224

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1000 mm 15° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
134	255	630	2170
140	277	640	2209
150	316	650	2247
160	354	660	2286
170	393	670	2325
180	431	680	2363
190	470	690	2402
200	509	700	2441
210	547	710	2479
220	586	720	2518
230	625	730	2557
240	663	740	2595
250	702	750	2634
260	741	760	2672
270	779	770	2711
280	818	780	2750
290	856	790	2788
300	895	800	2827
310	934	810	2866
320	972	820	2904
330	1011	830	2943
340	1050	840	2982
350	1088	850	3020
360	1127	860	3059
370	1166	870	3097
380	1204	880	3136
390	1243	890	3175
400	1281	900	3213
410	1320	910	3252
420	1359	920	3291
430	1397	930	3329
440	1436	940	3368
450	1475	950	3407
460	1513	960	3445
470	1552	970	3484
480	1591	980	3522
490	1629	990	3561
500	1668	1000	3600
510	1706	1010	3638
520	1745	1020	3677
530	1784	1030	3716
540	1822	1040	3754
550	1861	1050	3793
560	1900	1060	3832
570	1938	1070	3870
580	1977	1080	3909
590	2016	1090	3947
600	2054	1100	3986
610	2093	1110	4025
620	2131	1120	4063

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1250 mm 90° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	2755	255	3250	750
	2760	260	3260	760
100	2770	270	3270	770
	2780	280	3280	780
125	2790	290	3290	790
	2800	300	3300	800
150	2810	310	3310	810
	2820	320	3320	820
200	2830	330	3330	830
	2840	340	3340	840
	2850	350	3350	850
250	2860	360	3360	860
	2870	370	3370	870
315	2880	380	3380	880
	2890	390	3390	890
400	2900	400	3400	900
	2910	410	3410	910
	2920	420	3420	920
500	2930	430	3430	930
	2940	440	3440	940
630	2950	450	3450	950
	2960	460	3460	960
	2970	470	3470	970
800	2980	480	3480	980
	2990	490	3490	990
1000	3000	500	3500	1000
	3010	510	3510	1010
1250	3020	520	3520	1020
	3030	530	3530	1030
	3040	540	3540	1040
	3050	550	3550	1050
	3060	560	3560	1060
	3070	570	3570	1070
	3080	580	3580	1080
	3090	590	3590	1090
	3100	600	3600	1100
	3110	610	3610	1110
	3120	620	3620	1120
	3130	630	3630	1130
	3140	640	3640	1140
	3150	650	3650	1150
	3160	660	3660	1160
	3170	670	3670	1170
	3180	680	3680	1180
	3190	690	3690	1190
	3200	700	3700	1200
	3210	710	3710	1210
	3220	720	3720	1220
	3230	730	3730	1230
	3240	740	3740	1240

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1250 mm 60° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
1471	255	1970	831
1480	265	1980	842
1490	277	1990	854
1500	288	2000	865
1510	300	2010	877
1520	311	2020	888
1530	323	2030	900
1540	334	2040	912
1550	346	2050	923
1560	357	2060	935
1570	369	2070	946
1580	380	2080	958
1590	392	2090	969
1600	404	2100	981
1610	415	2110	992
1620	427	2120	1004
1630	438	2130	1016
1640	450	2140	1027
1650	461	2150	1039
1660	473	2160	1050
1670	484	2170	1062
1680	496	2180	1073
1690	507	2190	1085
1700	519	2200	1096
1710	531	2210	1108
1720	542	2220	1119
1730	554	2230	1131
1740	565	2240	1143
1750	577	2250	1154
1760	588	2260	1166
1770	600	2270	1177
1780	611	2280	1189
1790	623	2290	1200
1800	634	2300	1212
1810	646	2310	1223
1820	658	2320	1235
1830	669	2330	1246
1840	681	2340	1258
1850	692	2350	1270
1860	704	2360	1281
1870	715	2370	1293
1880	727	2380	1304
1890	738	2390	1316
1900	750	2400	1327
1910	761	2410	1339
1920	773	2420	1350
1930	785	2430	1362
1940	796	2440	1373
1950	808	2450	1385
1960	819	2460	1397

80
100
125
160
200
250
315
400
500
630
800
1000
1250

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1250 mm 45° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	943	255	1440	958
	950	266	1450	973
100	960	280	1460	987
	970	294	1470	1001
125	980	308	1480	1015
	990	322	1490	1029
150	1000	336	1500	1043
	1010	350	1510	1057
200	1020	364	1520	1072
	1030	379	1530	1086
	1040	393	1540	1100
250	1050	407	1550	1114
	1060	421	1560	1128
315	1070	435	1570	1142
	1080	449	1580	1156
	1090	463	1590	1171
400	1100	478	1600	1185
	1110	492	1610	1199
500	1120	506	1620	1213
	1130	520	1630	1227
630	1140	534	1640	1241
	1150	548	1650	1255
	1160	562	1660	1270
800	1170	577	1670	1284
	1180	591	1680	1298
1000	1190	605	1690	1312
	1200	619	1700	1326
1250	1210	633	1710	1340
	1220	647	1720	1354
	1230	661	1730	1369
	1240	676	1740	1383
	1250	690	1750	1397
	1260	704	1760	1411
	1270	718	1770	1425
	1280	732	1780	1439
	1290	746	1790	1453
	1300	760	1800	1468
	1310	775	1810	1482
	1320	789	1820	1496
	1330	803	1830	1510
	1340	817	1840	1524
	1350	831	1850	1538
	1360	845	1860	1552
	1370	859	1870	1567
	1380	874	1880	1581
	1390	888	1890	1595
	1400	902	1900	1609
	1410	916	1910	1623
	1420	930	1920	1637
	1430	944	1930	1651

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1250 mm 30° bend

Centre line offset	Length of duct	Centre line offset	Length of duct
463	255	960	1250
470	270	970	1270
480	290	980	1290
490	310	990	1310
500	330	1000	1330
510	350	1010	1350
520	370	1020	1370
530	390	1030	1390
540	410	1040	1410
550	430	1050	1430
560	450	1060	1450
570	470	1070	1470
580	490	1080	1490
590	510	1090	1510
600	530	1100	1530
610	550	1110	1550
620	570	1120	1570
630	590	1130	1590
640	610	1140	1610
650	630	1150	1630
660	650	1160	1650
670	670	1170	1670
680	690	1180	1690
690	710	1190	1710
700	730	1200	1730
710	750	1210	1750
720	770	1220	1770
730	790	1230	1790
740	810	1240	1810
750	830	1250	1830
760	850	1260	1850
770	870	1270	1870
780	890	1280	1890
790	910	1290	1910
800	930	1300	1930
810	950	1310	1950
820	970	1320	1970
830	990	1330	1990
840	1010	1340	2010
850	1030	1350	2030
860	1050	1360	2050
870	1070	1370	2070
880	1090	1380	2090
890	1110	1390	2110
900	1130	1400	2130
910	1150	1410	2150
920	1170	1420	2170
930	1190	1430	2190
940	1210	1440	2210
950	1230	1450	2230

Necessary duct length, L, by S-bend (BFU)

Note: All measures in mm
255 = Length of an MF

Ø 1250 mm 15° bend

	Centre line offset	Length of duct	Centre line offset	Length of duct
80	151	255	650	2181
	160	288	660	2220
100	170	327	670	2259
	180	365	680	2297
125	190	404	690	2336
	200	443	700	2375
150	210	481	710	2413
	220	520	720	2452
200	230	559	730	2491
	240	597	740	2529
	250	636	750	2568
250	260	675	760	2606
	270	713	770	2645
315	280	752	780	2684
	290	790	790	2722
400	300	829	800	2761
	310	868	810	2800
500	320	906	820	2838
	330	945	830	2877
	340	984	840	2916
630	350	1022	850	2954
	360	1061	860	2993
800	370	1100	870	3031
	380	1138	880	3070
1000	390	1177	890	3109
	400	1215	900	3147
1250	410	1254	910	3186
	420	1293	920	3225
	430	1331	930	3263
	440	1370	940	3302
	450	1409	950	3341
	460	1447	960	3379
	470	1486	970	3418
	480	1525	980	3456
	490	1563	990	3495
	500	1602	1000	3534
	510	1640	1010	3572
	520	1679	1020	3611
	530	1718	1030	3650
	540	1756	1040	3688
	550	1795	1050	3727
	560	1834	1060	3766
	570	1872	1070	3804
	580	1911	1080	3843
	590	1950	1090	3881
	600	1988	1100	3920
	610	2027	1110	3959
	620	2065	1120	3997
	630	2104	1130	4036
	640	2143	1140	4075



Good Thinking

At Lindab, good thinking is a philosophy that guides us in everything we do. We have made it our mission to create a healthy indoor climate – and to simplify the construction of sustainable buildings. We do that by designing innovative products and solutions that are easy to use, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment. We use steel in our products. It's one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

We simplify construction