



ROUND DUCT & FITTINGS



SPIRAL DUCT

Description

ECOVENT Vent must be assembled according to these instructions:

Before Assembly

The duct must be free from dirt.

Shortening Ducts

Ducts must be cut at right angles and carefully deburred.

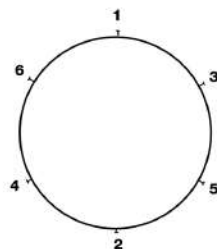
Assembly of Fittings

- Check that ducts and fittings are undamaged.
- Push the fittings into the duct right to the stop. Turning the fitting a little makes insertion easier.
- Fasten the fittings to the duct with self-tapping screws or pop rivets.

The following numbers and dimensions of steel screws and pop rivets are recommended:

Ø _d mm	Min. Diameter mm	Number
63 - 125	3,2	2
140 - 250	3,2	3
280 - 630	3,2	4
710 - 1250	4,0	6
1400 - 1600	4,8	12

Distribute the screws or pop rivets evenly around the circumference. In the event of incorrect assembly, holes caused by screws or pop rivets must be sealed.



STANDARDS FOR SPIRAL DUCT CONSTRUCTION

Comparison between the standards of various countries for spiral seam ventilation tubes in respect of the material thickness.

Dimensions	DW 144	BFS 1988:18	Din 24145	NF P-50-401	DS447	DVS 36002	SMACNA L/P	SMACNA H/P
63	0.6	0.4	0.4	0.5	0.5	0.5	28	28
71	0.6	0.4	0.4	0.5	0.5	0.5	28	28
80	0.6	0.4	0.4	0.5	0.5	0.5	28	28
90	0.6	0.5	0.4	0.5	0.5	0.5	28	28
100	0.6	0.5	0.6	0.5	0.5	0.5	28	28
112	0.6	0.5	0.6	0.5	0.5	0.5	28	28
125	0.6	0.5	0.6	0.5	0.5	0.5	28	28
140	0.6	0.5	0.6	0.5	0.5	0.5	28	28
160	0.6	0.5	0.6	0.5	0.5	0.5	28	28
180	0.6	0.6	0.6	0.6	0.5	0.5	28	28
200	0.6	0.6	0.6	0.6	0.5	0.6	28	28
224	0.8	0.6	0.6	0.6	0.5	0.6	28	28
250	0.8	0.6	0.6	0.6	0.5	0.6	28	28
280	0.8	0.6	0.8	0.6	0.6	0.6	28	26
315	0.8	0.6	0.8	0.6	0.6	0.6	28	26
355	0.8	0.8	0.8	0.6	0.6	0.6	28	26
400	0.8	0.8	0.8	0.8	0.6	0.8	26	24
450	0.8	0.8	0.8	0.8	0.6	0.8	26	24
500	0.8	0.8	0.8	0.8	0.6	0.8	26	24
560	0.8	0.8	0.8	0.8	0.7	0.8	26	24
630	0.8	0.8	1.0	0.8	0.7	0.8	26	24
710	0.8	0.8	1.0	1.0	0.7	0.8	24	22
800	1.0	0.8	1.0	1.0	0.7	0.9	24	22
900	1.0	0.9	1.0	1.0	0.9	0.9	24	22
1000	1.0	0.9	1.2	1.0	0.9	0.9	22	20
1120	1.2	0.9	1.2	1.0	0.9	0.9	22	20
1250	1.2	0.9	1.2	1.2	0.9	0.9	22	20
1400	1.2		1.5		0.9		20	18
1600	1.2		1.5		0.9		18	18
British Standard	Swedish Standard	German Standard	French Standard	Danish Standard	Danish Standard	American Standard	American Standard	



CONVERSION CHART

RECTANGULAR TO EQUIVALENT ROUND
FOR EQUAL FRICTION & CAPACITY

b \ a	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1200	1400	1600	1700	1800	1900	2000
100	109																							
125	122																							
150	133	164																						
175	143	177																						
200	152	189	219																					
225	161	200	232																					
250	169	210	244	273																				
275	176	220	256	287																				
300	183	229	266	299	328																			
350	195	245	286	322	354	383																		
400	207	260	305	343	378	409	437																	
450	217	274	321	363	400	433	464	492																
500	227	287	337	381	420	455	488	518	547															
550	236	299	352	398	439	477	511	543	573	601														
600	245	310	365	414	457	496	533	567	598	628	656													
650	253	321	378	429	474	515	553	589	622	653	683	711												
700	261	331	391	443	490	533	573	610	644	677	708	737	765											
750	268	341	402	457	506	550	592	630	666	700	732	763	792	820										
800	275	350	414	470	520	567	609	649	687	722	755	787	818	847	875									
900	289	367	435	494	548	597	643	686	726	763	799	833	866	897	927	954								
1000	301	384	454	517	574	626	674	719	762	802	840	876	911	944	976	1007	1033							
1100	313	399	473	539	598	652	703	751	795	838	878	916	953	988	1022	1056	1086	1114						
1200	324	413	490	558	620	677	731	780	827	872	914	954	993	1030	1066	1103	1136	1165	1192					
1300	334	426	506	577	642	701	757	808	857	904	948	990	1031	1069	1107	1146	1182	1215	1246	1275				
1400	344	439	522	595	662	724	781	835	886	934	980	1024	1066	1107	1146	1182	1215	1246	1275	1303				
1500	353	452	536	612	681	745	805	860	913	963	1011	1057	1100	1143	1183	1220	1256	1291	1324	1355	1384			
1600	362	463	551	629	700	766	827	885	939	991	1041	1088	1133	1177	1219	1259	1297	1334	1369	1403	1435	1466		
1700	371	475	564	644	718	785	849	908	964	1018	1069	1118	1164	1209	1253	1295	1335	1373	1410	1445	1479	1512	1544	
1800	379	485	577	660	735	804	869	930	988	1043	1096	1146	1195	1241	1286	1329	1371	1411	1450	1487	1523	1558	1592	1625
1900	387	496	590	674	751	823	889	952	1012	1068	1122	1174	1224	1271	1318	1363	1407	1450	1492	1533	1573	1612	1650	1687
2000	395	506	602	688	767	840	908	973	1034	1092	1147	1200	1252	1301	1348	1393	1438	1482	1525	1567	1608	1648	1687	1725
2100	402	516	614	702	782	857	927	993	1055	1115	1172	1226	1279	1329	1378	1425	1470	1515	1559	1602	1644	1685	1725	1764
2200	410	525	625	715	797	874	945	1013	1076	1137	1195	1251	1305	1356	1406	1454	1500	1545	1589	1633	1676	1718	1759	1800
2300	417	534	636	728	812	890	963	1031	1097	1159	1218	1275	1330	1383	1434	1483	1530	1576	1621	1665	1708	1750	1791	1832
2400	424	543	647	740	826	905	980	1050	1116	1180	1241	1299	1355	1409	1461	1511	1560	1608	1655	1701	1746	1790	1833	1875
2500	430	552	658	753	840	920	996	1068	1136	1200	1262	1322	1379	1434	1488	1541	1593	1645	1696	1746	1791	1835	1878	1921
2600	437	560	668	764	853	935	1012	1085	1154	1220	1283	1344	1402	1459	1513	1567	1620	1672	1724	1775	1820	1863	1906	1949
2700	443	569	679	776	866	950	1028	1102	1173	1240	1304	1366	1425	1483	1538	1593	1647	1700	1752	1805	1857	1900	1942	1985
2800	450	577	688	787	879	964	1043	1119	1190	1259	1324	1387	1447	1506	1562	1617	1672	1726	1780	1833	1886	1938	1990	2042
2900	456	585	697	798	891	977	1058	1135	1208	1277	1344	1408	1469	1529	1586	1643	1699	1754	1809	1863	1916	1969	2021	2074

$D_e = 1.30 [(ab)^{0.625} / (a+b)^{0.250}]$ where,
a = Length of one side of rectangular duct (mm)
b = Length of adjacent side of rectangular duct (mm)
 D_e = Circular equivalent of rectangular duct for equal friction and capacity (mm)

Example:

Convert rectangular duct 500 x 500 to equivalent round.
a = 500, b = 500; from above table D_e = 547



CONSTRUCTION STANDARDS

SPIRAL DUCTS & ROUND FITTINGS

Table 1-1: Spiral Duct Wall Thickness Schedule (Positive Pressure)

Duct Diameter (mm)	+500 Pa (2" W.G.) Positive Pressure			Duct Diameter (mm)	+1000 Pa (4" W.G.) Positive Pressure			Duct Diameter (mm)	+2500 Pa (10" W.G.) Positive Pressure			Transverse Joints
	Spiral Seam		Longitudinal Seam Gauge		Spiral Seam		Longitudinal Seam Gauge		Spiral Seam		Longitudinal Seam Gauge	
	Gauge	Profile			Gauge	Profile			Gauge	Profile		
051 - 497	26	KG	24	051 - 497	26	KG	24	051 - 497	26	KG	24	Coupling
500 - 608	26	PKG	24	500 - 608	26	PKG	24	500 - 608	26	PKG	24	Coupling
623 - 900	24	PKG	22	623 - 900	24	PKG	22	623 - 900	24	PKG	22	Coupling
936 - 1000	24	PKG	20	936 - 1000	24	PKG	20	936 - 1000	24	PKG	20	Coupling
1020 - 1062	24	PKG	20	1020 - 1062	24	PKG	20	1020 - 1062	24	PKG	20	Flange @ 6m
1100 - 1250	22	PKG	20	1100 - 1250	22	PKG	20	1100 - 1250	22	PKG	20	Flange @ 6m
1300 - 1700	22	PKG	18	1300 - 1700	22	PKG	18	1300 - 1700	22	PKG	18	Flange @ 6m
1750 - 2500	18	TR	18	1750 - 2500	18	TR	18	1750 - 2500	18	TR	18	Flange @ 3m

- Round fittings shall have a wall thickness not less than specified for longitudinal seam ducts in above Table 1-1.
- Longitudinal seam ducts are continuously welded and supplied in 1 meter as standard length.
- The standard size of flange for ducts in Table 1-1 is 50x50x50mm angles.
- The above schedule meets the requirements of SMACNA HVAC Duct Construction Standards, Metal and Flexible, Third Edition 2005.

NOTE

SMACNA Standards specify that the flange joint can be used in spiral ducts over 1524mm diameter to retain its circular shape.

Despite the above SMACNA Standards and in order to avoid potential damage or deformation of its circular shape due to transport or transferring of

products at the project site, we recommend that the spiral ducts over 1000mm diameter be paired with flange transverse joints. The transverse joints of spiral ducts applies to a maximum length of 6 meters.

CONSTRUCTION STANDARDS



SPIRAL DUCTS & ROUND FITTINGS

TABLE 1-2: SPIRAL DUCT WALL THICKNESS SCHEDULE (NEGATIVE PRESSURE)

Duct Diameter (mm)	-500 Pa (2" W.G.) Negative Pressure			Duct Diameter (mm)	-1000 Pa (4" W.G.) Negative Pressure			Duct Diameter (mm)	-2500 Pa (10" W.G.) Negative Pressure			Transverse Joints
	Spiral Seam Gauge	Longitudinal Seam Gauge	Profile		Spiral Seam Gauge	Longitudinal Seam Gauge	Profile		Spiral Seam Gauge	Longitudinal Seam Gauge	Profile	
051 - 305	26	KG	24	051 - 305	26	KG	24	051 - 180	26	KG	24	COUPLING
315 - 403	26	KG	24	315 - 403	24	KG	22	200 - 250	26	KG	24	COUPLING
418 - 497	24	KG	22	404 - 497	22	KG	20	280 - 305	24	KG	22	COUPLING
500 - 550	24	PKG	22	500 - 508	22	PKG	20	315 - 355	22	KG	20	COUPLING
552 - 900	24	PKG	22	518 - 1000	22	PKG	20	372 - 750	22	PKG	20	FLANGE @ 6M
936 - 1062	24	PKG	20	1020 - 1250	22	PKG	20	770 - 1000	20	PKG	20	FLANGE @ 6M
1100 - 1250	22	PKG	20	1300 - 1500	22	PKG	18	1020 - 1200	20	PKG	20	FLANGE @ 6M
1300 - 1700	22	PKG	18	1550 - 1700	20	PKG	18	1250 - 1700	20	PKG	18	FLANGE @ 6M
1750 - 1800	18	TRG	18	1750 - 1800	18	TRG	18	1750 - 1800	18	PKG	18	FLANGE @ 3M
1850 - 1900	18	TRG	18	1850 - 1900	18	TRG	18	1850 - 1900	18	TRG	18	FLANGE @ 3M
2000 - 2500	18	TRG	18	2000 - 2500	18	TRG	18	2000 - 2500	18	TRG	16	FLANGE @ 3M +1 REINF FOR 10"W.G.

- Round fittings shall have a wall thickness not less than specified for longitudinal seam ducts in above Table 1-2.
- Longitudinal seam ducts are continuously welded and supplied in 1 meter length.
- The above Schedule meets the requirements of SMACNA HVAC Duct Construction Standards Metal and Flexible, Third Edition 2005.

Consult [ecovent](#) for more details of flange transverse joints construction of ducts in above Table 1-2.



CONSTRUCTION STANDARD

SPIRAL DUCTS & ROUND FITTINGS

Table 1-3: Spiral Duct Wall Thickness Schedule (as per DW 144)

Maximum Diameter (mm)	Spiral Duct	Longitudinal Seam Low+ Medium Pressure	Longitudinal Seam High Pressure	Fittings
205	0.6 mm	0.6 mm	0.8 mm	0.7 mm
206 - 510	0.8 mm	0.8 mm	0.8 mm	0.7 mm
511 - 630	0.8 mm	0.8 mm	1.0 mm	0.8 mm
631 - 762	0.8 mm	0.8 mm	1.0 mm	1.0 mm
763 - 913	0.8 mm	0.8 mm	1.2 mm	1.0 mm
914 - 1020	1.0 mm	1.0 mm*	1.2 mm*	1.0 mm
1021 - 1525	1.2 mm*	1.2 mm*	1.2 mm*	1.2 mm*

- Longitudinal seam ducts are continuously welded and supplied in 1 meter length.
- The above schedule meets all requirements of DW/144 specifications for sheet metal ductworks.

*Spiral Ducts should be helically beaded (corrugated). Longitudinal ducts and fittings must be reinforced with angles. For more details on constructions schedule consult [ecovent](#).

Table 1-4: Spiral Duct Wall Thickness Schedule (Eurovent)

Diameter (mm)	Operating Pressure	
	160 mm W.G. Max	250 mm W.G. Max
63 - 125	0.60	0.75
180 - 259	0.75	0.88
280 - 500	0.88	1.00
560 - 1000	1.00	1.13
1120 - 1400	1.13	1.25
1600 - 2000	1.13	-

- Circular fittings shall be one gauge heavier than the spiral ducts gauge in above Table 1-4.
- Corrugated ducts are not reflected in the above schedule.
- Longitudinal seam ducts should be one gauge heavier than spiral duct gauge and shall be continuously welded and supplied in 1 meter length.

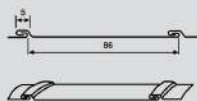
SPIRAL DUCT



PROFILE KG



Dimensions



- Types: KG, KH, KA
- Spirally Wound Round Duct
- Diameter Range: 51 - 1600 mm
- Thickness Range: 26 - 18 gauge
- Materials:
KG - Galvanized Steel
KH - Stainless Steel (max 20 gauge)
KA - Aluminum

Description

Standard products are normally manufactured from hot dip galvanized steel coil (as per ASTM A653) lock forming quality grade and as specified in SMACNA Standards and DW144 sheet metal ductworks.

Ordering

Product Code: KG - aaa

Type
°d

Duct Diameter (mm) KG, KH, KA

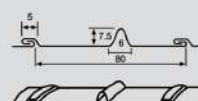
°d mm	L ₁ mm	L ₂ mm	Circumference nd m	Area nd ² /4 m ²
51	6	3	0.160	0.002
63	6	3	0.198	0.003
80	6	3	0.251	0.005
100	6	3	0.314	0.008
125	6	3	0.393	0.012
152	6	3	0.478	0.018
160	6	3	0.503	0.020
180	6	3	0.565	0.025
200	6	3	0.628	0.031
224	6	3	0.704	0.039
250	6	3	0.785	0.049
305	6	3	0.958	0.073
355	6	3	1.115	0.099
400	6	3	1.257	0.126
450	6	3	1.414	0.159
500	6	3	1.571	0.196
550	6	3	1.728	0.238
600	6	3	1.885	0.283

Non- standard lengths available on request.
Non-standard sizes available as longitudinally
seamed ducts with a maximum length of 1 meter.



SPIRAL DUCT

Dimensions



- Types: PKG, PKH, PKA
- Spirally Wound Corrugated Round Duct
- Diameter Range: 160 - 1600 mm
- Thickness Range: 26 - 18 gauge
- Materials:
PKG - Galvanized Steel
PKH - Stainless Steel (max 20 gauge)
PKA - Aluminum

Description

Standard products are normally manufactured from hot dip galvanized steel coil (as per ASTM A653) lock forming quality grade and as specified in SMACNA Standards and DW144 sheet metal ductworks.

Ordering

Product Code: PKG - aaa

Type
°d

PROFILE PKG



Duct Diameter (mm) PKG, PKH, PKA

°d mm	L ₁ mm	L ₂ mm	Circumference nd m	Area nd ² /4 m ²
160	6	3	0.503	0.020
180	6	3	0.565	0.025
200	6	3	0.628	0.031
224	6	3	0.704	0.039
250	6	3	0.785	0.049
280	6	3	0.880	0.062
305	6	3	0.958	0.073
350	6	3	1.100	0.096
400	6	3	1.257	0.126
450	6	3	1.414	0.159
500	6	3	1.571	0.196
550	6	3	1.728	0.238
560	6	3	1.759	0.246
600	6	3	1.885	0.283
630	6	3	1.979	0.312
650	6	3	2.042	0.332
700	6	3	2.199	0.385

Non- standard lengths available on request.
Non-standard sizes available as longitudinally
seamed ducts with a maximum length of 1 meter.

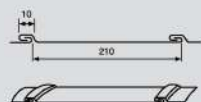
SPIRAL DUCT



PROFILE TRG



Dimensions



- Types: TRG, TRH
- Spirally Wound Heavy Duty Round Duct
- Diameter Range: 315 - 3150 mm
- Thickness Range: 20 - 12 gauge
- Materials:
TRG - Galvanized Steel
TRH - Stainless Steel

Description

Standard products are normally manufactured from hot dip galvanized steel coil (as per ASTM A653) lock forming quality grade and as specified in SMACNA Standards and DW144 sheet metal ductworks.

Ordering

Product Code: TRG - aaa

Type _____
ød _____

Duct Diameter (mm) TRG, TRH

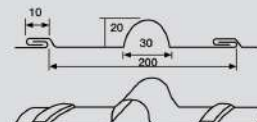
ød mm	L ₁ mm	L ₂ mm	Circumference nd m	Area nd ² /4 m ²
315	6	3	0.990	0.078
400	6	3	1.257	0.126
500	6	3	1.571	0.196
630	6	3	1.979	0.312
800	6	3	2.513	0.503
900	6	3	2.827	0.636
1000	6	3	3.142	0.785
1100	6	3	3.456	0.950
1250	6	3	3.927	1.227
1400	6	3	4.398	1.539
1600	6	3	5.027	2.011
1800	6	3	5.655	2.545
2000	6	3	6.283	3.142
2500	6	3	7.854	4.909
3150	6	3	9.896	7.793

Non- standard lengths available on request.
Non- standard sizes available as longitudinally
seamed ducts with a maximum length of 1 meter.



SPIRAL DUCT

Dimensions



- Types: PTRG, PTRH
- Spirally Wound Corrugated Heavy Duty Round Duct
- Diameter Range: 315 - 3150 mm
- Thickness Range: 20 - 12 gauge
- Materials:
PTRG - Galvanized Steel
PTRH - Stainless Steel

Description

Standard products are normally manufactured from hot dip galvanized steel coil (as per ASTM A653) lock forming quality grade and as specified in SMACNA Standards and DW144 sheet metal ductworks.

Ordering

Product Code: PTRG - aaa

Type _____
ød _____

PROFILE PTRG



Duct Diameter (mm) PTRG, PTRH

ød mm	L ₁ mm	L ₂ mm	Circumference nd m	Area nd ² /4 m ²
315	6	3	0.990	0.078
400	6	3	1.257	0.126
500	6	3	1.571	0.196
630	6	3	1.979	0.312
800	6	3	2.513	0.503
900	6	3	2.827	0.636
1000	6	3	3.142	0.785
1100	6	3	3.456	0.950
1250	6	3	3.927	1.227
1400	6	3	4.398	1.539
1600	6	3	5.027	2.011
1800	6	3	5.655	2.545
2000	6	3	6.283	3.142
2500	6	3	7.854	4.909
3150	6	3	9.896	7.793

Non- standard lengths available on request.
Non- standard sizes available as longitudinally
seamed ducts with a maximum length of 1 meter.

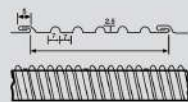


SPIRAL DUCT

PROFILE KKG



Dimensions



- Types: KKG
- Spirally Wound Multi-Corrugated Round Duct
- Diameter Range: 63 - 152 mm
- Thickness Range: 26 - 24 gauge
- Materials:

KKG - Galvanized Steel

Description

Standard products are normally manufactured from hot dip galvanized steel coil (as per ASTM A653) lock forming quality grade and as specified in SMACNA Standards and DW144 sheet metal ductworks.

Ordering

Product Code: KKG - aaa

Type _____
 Ød _____

Duct Diameter (mm) KKG

Ød mm	L mm	L ₂ mm	Circumference nd m	Area m ² /4 m ²
63	6	3	0.198	0.003
66	6	3	0.207	0.003
70	6	3	0.220	0.004
71	6	3	0.223	0.004
75	6	3	0.236	0.004
80	6	3	0.251	0.005
90	6	3	0.283	0.006
100	6	3	0.314	0.008
112	6	3	0.352	0.010
125	6	3	0.393	0.012
140	6	3	0.440	0.015
152	6	3	0.478	0.018

Non-standard lengths available on request.
 Non-standard sizes available as longitudinally
 seamed ducts with a maximum length of 1 meter.



SPIRAL DUCT | STANDARD SIZES

Duct Diameter (mm)
KG, KH, KA, PKG, PKH, PKA

Ød mm	Ød mm	Ød mm	Ød mm	Ød mm
51	341	570	833	1500
55	350	590	850	1600
63	355	600	860	
70	372	608	873	
71	385	623	900	
75	400	630	936	
80	403	645	950	
90	418	650	1000	
100	430	680	1020	
112	434	685	1062	
125	445	700	1100	
140	450	710	1120	
152	466	724	1124	
160	476	725	1150	
180	482	736	1187	
200	497	748	1200	
224	500	750	1250	
250	518	770	1300	
280	526	776	1315	
305	550	780	1350	
315	552	800	1400	
325	560	811	1450	

TRG, TRH, PTRG, PTRH

Ød mm	Ød mm	Ød mm	Ød mm
315	800	1250	2000
400	900	1400	2500
500	1000	1600	3150
630	1100	1800	

Standard Length - 6 meters

Non-standard lengths available on request.
 Non-standard sizes available as longitudinally
 seamed ducts with a maximum length of 1 meter.



SPIRAL DUCT



WEIGHTS

Table 1-5: Weights (kg/m)

Thickness Gauge / Dia (mm)	KG, KH				
	26	24	22	20	18
63	1.0				
80	1.3				
100	1.6	2.0			
112	1.8	2.3			
125	2.0	2.5			
140	2.2	2.8	3.4		
160	2.5	3.2	3.9		
180	2.8	3.7	4.4		
200	3.2	4.1	4.9	5.8	
224	3.5	4.5	5.5	6.5	
250	4.0	5.1	6.1	7.2	9.4
280	4.4	5.7	6.9	8.1	10.6
315	5.0	6.4	7.7	9.1	11.9
355	5.6	7.2	8.7	10.3	13.4
400	6.3	8.1	9.8	11.6	15.1
450	7.1	9.1	11.0	13.0	17.0
500	7.9	10.1	12.3	14.5	18.8
550	8.7	11.1	13.5	15.9	20.7
630	10.0	12.7	15.4	18.2	23.7
710			17.4	20.5	26.8
800			19.7	23.1	30.1
900			22.1	26.0	33.9
1000				28.9	37.7
1120				32.4	42.2
1250				36.2	47.1
1400					52.7
1600					60.3

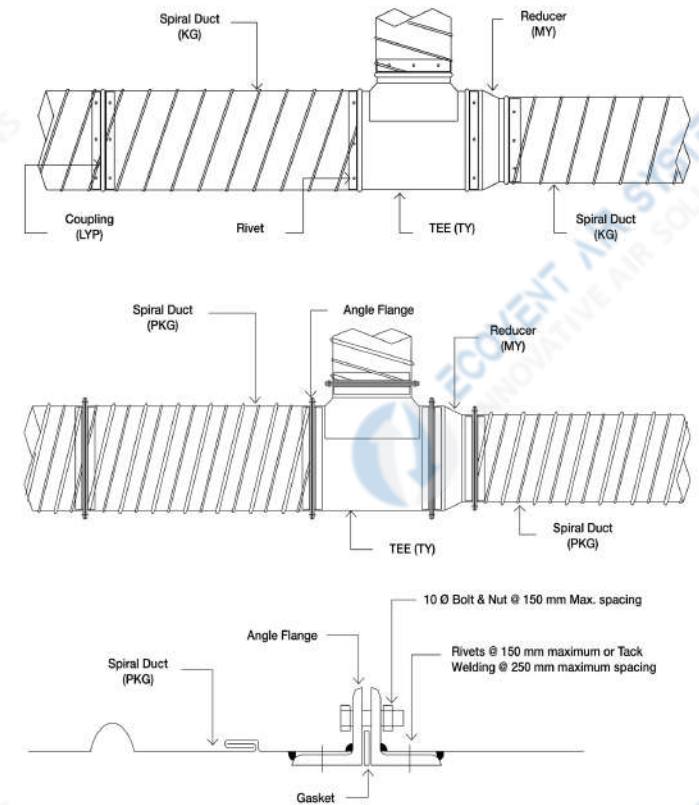
Above weights are per L.M. for galvanized steel and stainless steel spiral ducts.

SPIRAL DUCT



TRANSVERSE CONNECTIONS

Table 1-6: Typical Transverse Joints

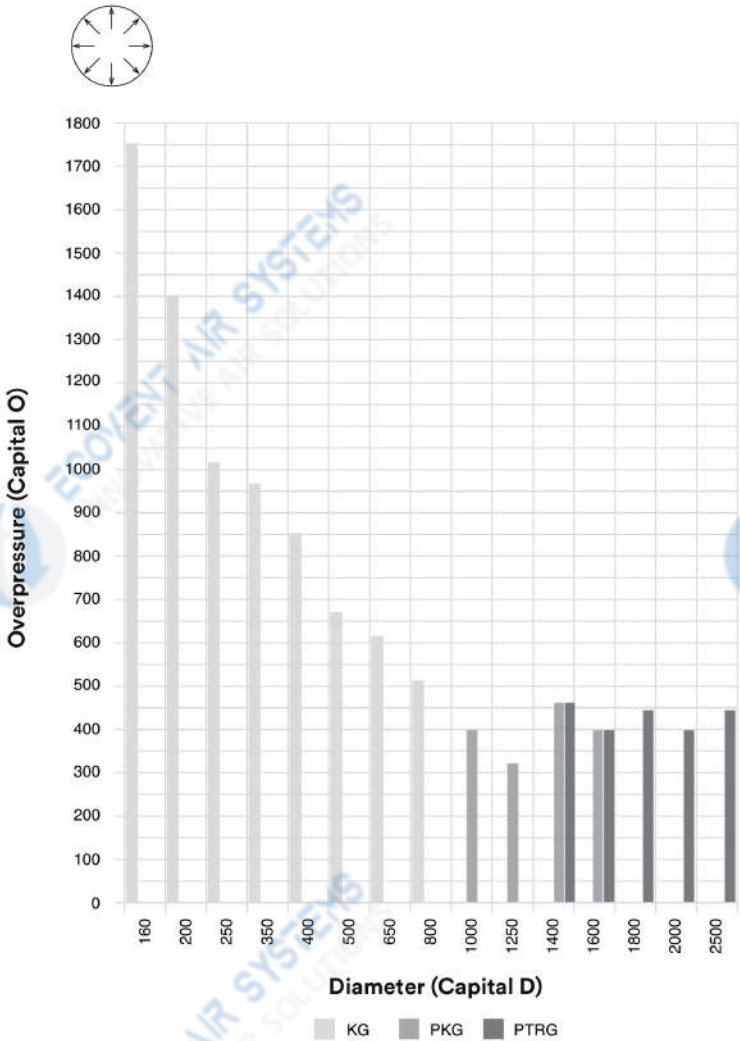


SPIRAL DUCT



PRESSURE CAPABILITIES

Table 1-7: Ultimate Overpressure Inside Duct

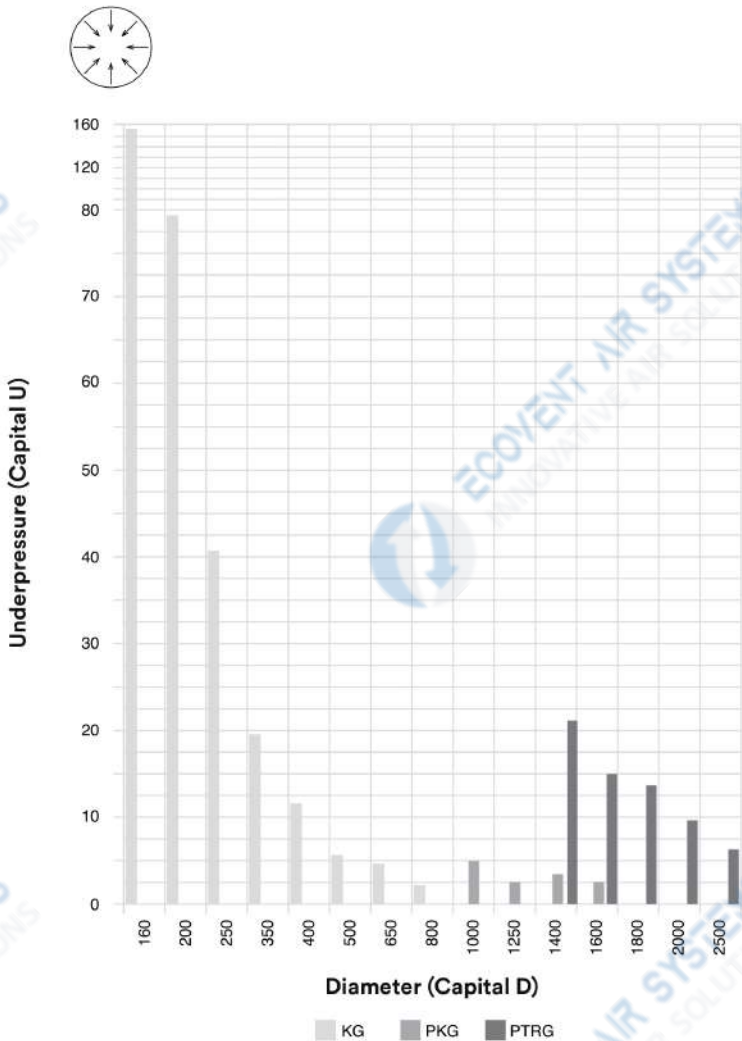


SPIRAL DUCT



PRESSURE CAPABILITIES

Table 1-8: Ultimate Underpressure Inside Duct



SPIRAL DUCT



ROUND FITTINGS

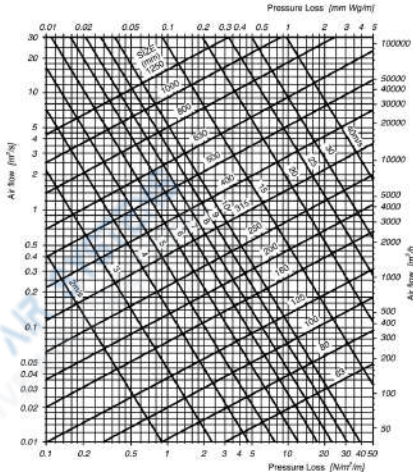
PRESSURE LOSS

PRESSURE LOSS

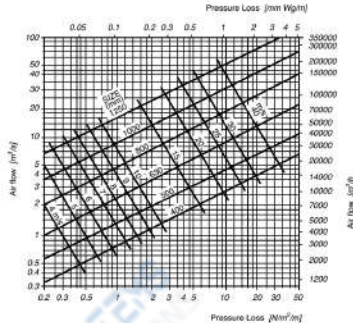
Technical Data

Technical Data

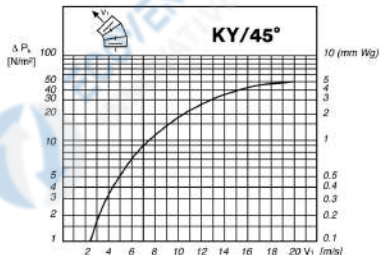
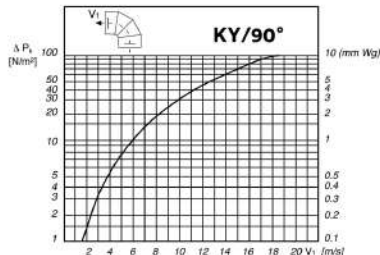
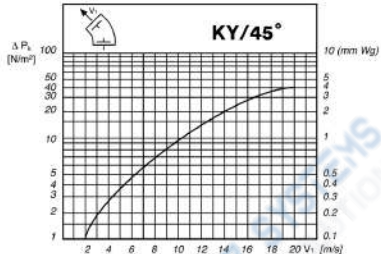
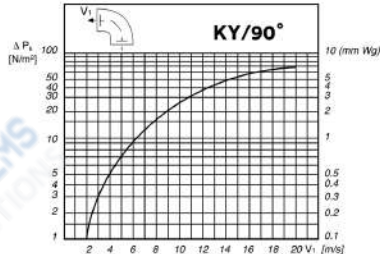
KG, KH, KA



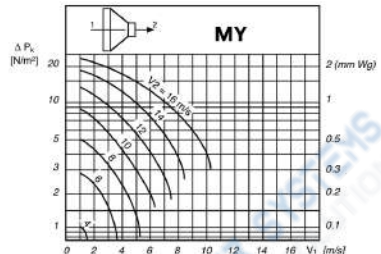
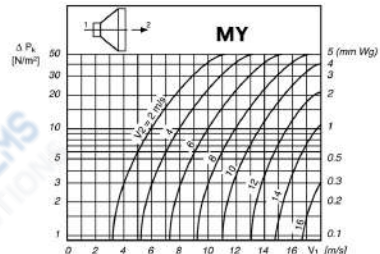
PKG, PKA



BENDS



REDUCERS



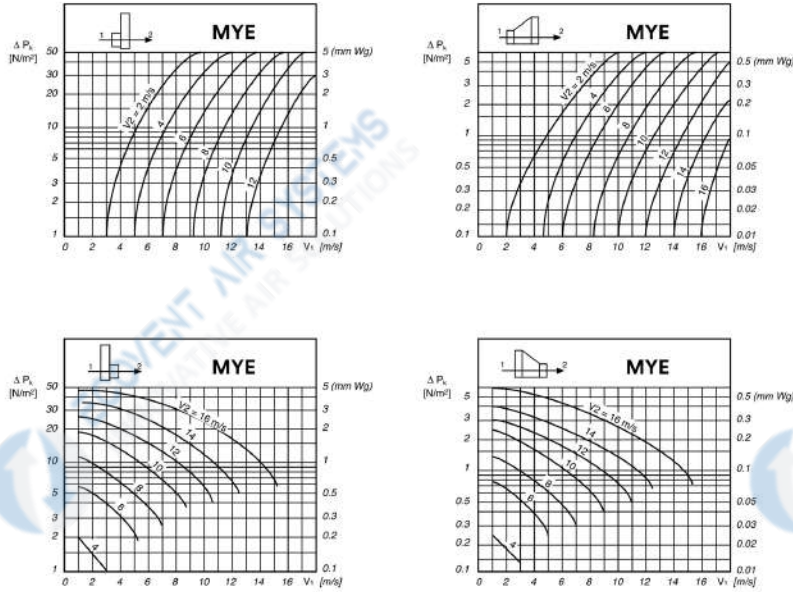
ROUND FITTINGS



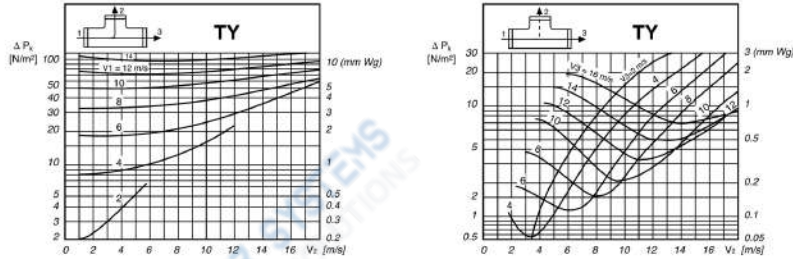
PRESSURE LOSS

Technical Data

Reducers



Tees

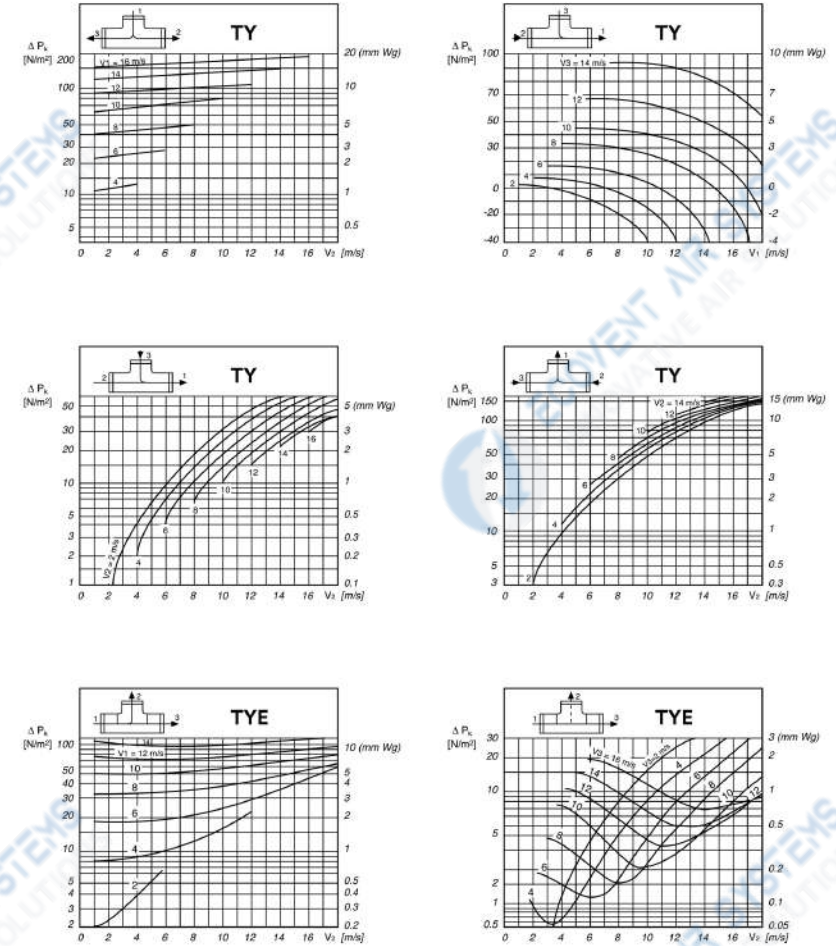


ROUND FITTINGS

PRESSURE LOSS

Technical Data

Tees

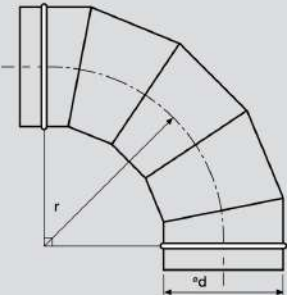


BEND 90°

KY/90°



Dimensions



Description

- 90° Bend
- $r = 1.5 d$
- 5 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KY/90 - aaa

Type
ød

ød mm	r mm
----------	---------

63	95
80	120
100	150
125	188
160	240
200	300
250	375
315	473
355	533
400	600
500	750
630	945
800	1200
1000	1500
1250	1875
1400	2100
1600	2400

* For other available sizes, see page 17.



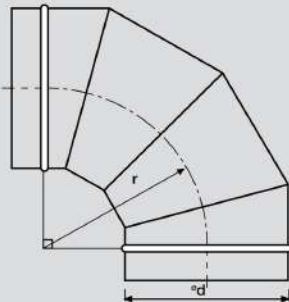
ECOVENT AIR SYSTEMS
INNOVATIVE AIR SOLUTIONS

BEND 90°

KYD/90°



Dimensions



Description

- 90° Bend
- $r = d$
- 4 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KYD/90 - aaa

Type
ød

ød mm	r mm
----------	---------

63	100
80	100
100	100
125	125
160	160
200	200
250	250
315	315
355	355
400	400
500	500
630	630
800	800
1000	1000
1250	1250
1400	1400
1600	1600

* For other available sizes, see page 17.

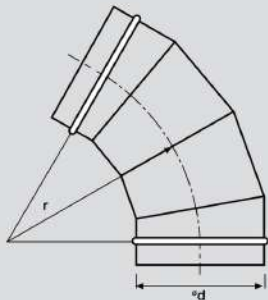


BEND 60°

KY/60°



Dimensions



Description

- 60° Bend
- $r = 1,5 d$
- 4 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

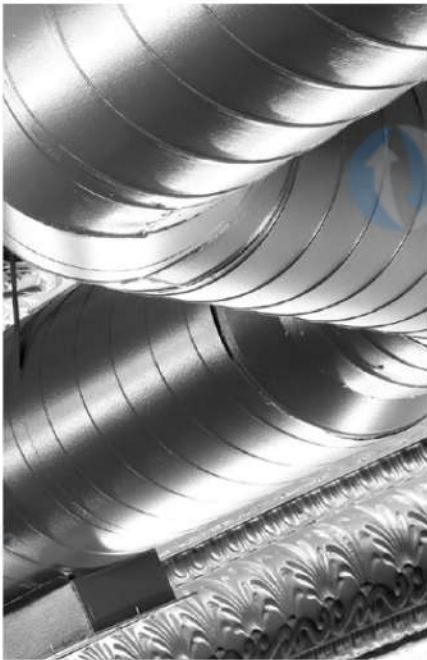
Ordering

Product Code: KY/60 - aaa

Type $^{\circ}d$

$^{\circ}d$ mm	r mm
63	95
80	120
100	150
125	188
160	240
200	300
250	375
315	473
355	533
400	600
500	750
630	945
800	1200
1000	1500
1250	1875
1400	2100
1600	2400

* For other available sizes, see page 17.

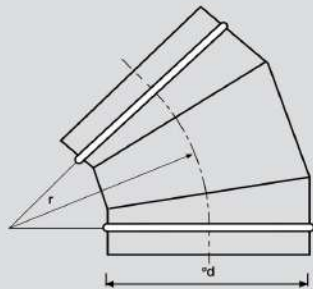


BEND 45°

KY/45°



Dimensions



Description

- 45° Bend
- $r = 1,5 d$
- 3 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KY/45 - aaa

Type $^{\circ}d$

$^{\circ}d$ mm	r mm
63	95
80	120
100	150
125	188
160	240
200	300
250	375
315	473
355	533
400	600
500	750
630	945
800	1200
1000	1500
1250	1875
1400	2100
1600	2400

* For other available sizes, see page 17.



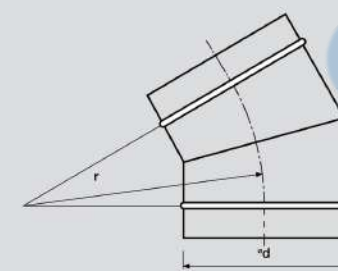
BEND 30°



KY/30°



Dimensions



Description

- 30° Bend
- $r = 1.5 d$
- 2 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KY/30 - aaa

Type

ød

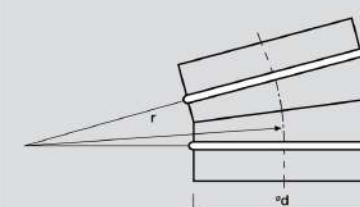
ød mm	r mm
63	95
80	120
100	150
125	188
160	240
200	300
250	375
315	473
355	533
400	600
500	750
630	945
800	1200
1000	1500
1250	1875
1400	2100
1600	2400

* For other available sizes, see page 17.



BEND 15°

Dimensions



KY/15°



Description

- 15° Bend
- $r = 1.5 d$
- 2 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KY/15 - aaa

Type

ød

ød mm	r mm
63	95
80	120
100	150
125	188
160	240
200	300
250	375
315	473
355	533
400	600
500	750
630	945
800	1200
1000	1500
1250	1875
1400	2100
1600	2400

* For other available sizes, see page 17.



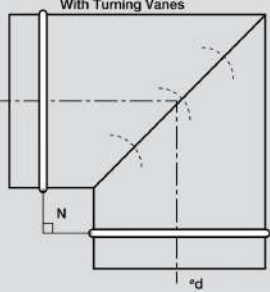
MITERED BEND 90°



KYM/90°



Dimensions



Description

- 90° Mitered Bend
- N=100
- 2 - Gore Bend (segmented) as a standard
- With turning vanes
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KYM/90 - aaa

Type $\varnothing d$

$\varnothing d$ mm	N mm
63	100
80	100
100	100
125	100
160	100
200	100
250	100
315	100
355	100
400	100
500	100
630	100
800	100
1000	100
1250	100
1400	100
1600	100

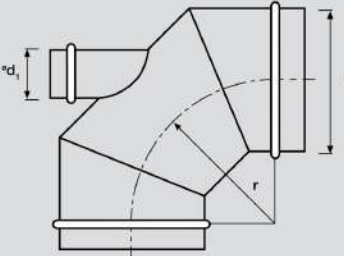
* For other available sizes, see page 17.



HEEL TAPPED BEND 90°



Dimensions



KYT/90°



Description

- 90° Heel Tapped Bend
- $r = d$
- 3 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KYT/90 - aaa / bbb

Type $\varnothing d$ $\varnothing d_1$



$\varnothing d$ mm	$\varnothing d_1$ mm	r mm
63	55	95
80	63	120
100	80	150
125	100	188
160	125	240
200	160	300
250	200	375
315	250	473
355	315	533
400	355	600
500	400	750
630	500	945
800	630	1200
1000	800	1500
1250	1000	1875
1400	1250	2100
1600	1400	2400

* For other available sizes , see page 17.

HEEL TAPPED BEND 45°



KYT/45°

Dimensions

Description

- 45° Heel Tapped Bend
- $r = d$
- 2 - Gore Bend (segmented) as a standard
- Fabricated with either standing seam, continuous seam or stitch welding.

Ordering

Product Code: KYT/45 - aaa / bbb

Type	
$\varnothing d$	
$\varnothing d_1$	

$\varnothing d$ mm	$\varnothing d_1$ mm	r mm
63	55	95
80	63	120
100	80	150
125	100	188
160	125	240
200	160	300
250	200	375
315	250	473
355	315	533
400	355	600
500	400	750
630	500	945
800	630	1200
1000	800	1500
1250	1000	1875
1400	1250	2100
1600	1400	2400

* For other available sizes, see page 17.



TEE



Dimensions

TY

Description

- Equal Tee
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: TY - aaa / bbb

Type	
$\varnothing d$	
$\varnothing d_1$	

$\varnothing d$ mm	$\varnothing d_1$ mm	L mm	H mm
63	63	233	106
80	80	250	115
	63	233	115
100	100	270	125
	80	250	125
	63	233	125
125	125	295	137
	100	270	137
	80	270	137
152	152	322	151
	125	295	151
	10	270	151
	80	250	151
160	160	330	155
	152	322	155
	125	395	155
	100	270	155
	80	250	155
180	180	370	165
	160	330	165
	152	322	165

$\varnothing d$ mm	$\varnothing d_1$ mm	L mm	H mm
	125	295	165
	100	270	165
	80	250	165
200	200	370	175
	180	350	175
	160	330	175
	152	322	175
	125	295	175
	100	270	175
	80	250	175
224	224	394	187
	200	370	187
	180	350	187
	160	330	187
	152	322	187
	125	295	187
	100	270	187
	80	250	187
250	250	420	200
	224	394	200

* For other available sizes, see page 17.

TEE

ød mm	ød _i mm	L mm	H mm
250	200	370	200
	180	350	200
	160	330	200
	152	322	200
	125	295	200
	100	270	200
	80	250	200
	280	450	215
280	250	420	215
	224	394	215
	200	370	215
	180	350	215
	160	330	215
	152	322	215
	125	295	215
	100	270	215
305	305	475	227
	280	450	227
	250	420	227
	224	394	227
	200	370	227
	180	350	227
	160	330	227
	152	322	227
315	125	295	227
	100	270	227
	315	485	232
	305	475	232
	280	450	232
	250	420	232
	224	394	232
	200	370	232
355	180	350	232
	160	330	232
	152	322	232
	125	295	232
	100	270	232
	355	525	252
	315	485	252
	305	475	232
280	450	252	



ød mm	ød _i mm	L mm	H mm
355	250	420	252
	224	394	252
	200	370	252
	180	350	252
	160	330	252
	152	322	252
	125	295	252
	100	270	252
400	400	570	275
	355	525	275
	315	485	275
	305	475	275
	280	450	275
	250	420	275
	224	394	275
	200	370	275
450	180	350	275
	160	330	275
	152	322	275
	450	620	300
	400	570	300
	355	525	300
	315	485	300
	305	475	300
500	280	450	300
	224	394	300
	200	370	300
	180	350	300
	160	330	300
	152	322	300
	500	670	325
	450	620	325
560	400	570	325
	355	525	325
	315	485	325
	305	475	325
	280	450	325
	250	420	325
	224	384	325
	200	370	325
160	330	325	

* For other available sizes, see page 17.



ød mm	ød _i mm	L mm	H mm
560	560	730	355
	500	670	355
	450	620	355
	400	570	355
	355	525	355
	315	485	355
	305	475	355
	280	450	355
600	250	420	355
	224	394	355
	200	370	355
	600	770	375
	560	730	375
	500	670	375
	450	620	375
	400	570	375
630	355	525	375
	315	485	375
	305	475	375
	630	800	390
	600	770	390
	560	730	390
	500	670	390
	450	620	390
650	400	570	390
	355	525	390
	315	485	390
	650	820	400
	630	800	400
	600	770	400
	560	730	400
	500	670	400
680	450	620	400
	400	570	400
	355	525	400
	680	850	415
	650	820	415
	630	800	415
	600	770	415
	560	730	415
500	670	415	

TY

ød mm	ød _i mm	L mm	H mm
680	450	620	415
	400	570	415
	355	525	415
	710	710	880
	680	850	430
	650	820	430
	630	800	430
	600	770	430
710	560	730	430
	500	670	430
	450	620	415
	400	570	430
	800	800	970
	710	880	475
	680	850	475
	650	820	475
800	630	800	475
	600	770	475
	560	730	475
	500	670	475
	450	620	475
	400	570	475
	850	850	1020
	800	970	500
850	710	880	500
	680	850	500
	650	820	500
	630	800	500
	600	770	500
	560	730	500
	500	670	500
	450	620	500
900	900	1070	525
	850	1020	525
	800	970	525
	750	920	525
	710	880	525
	680	850	525
	650	820	525
	630	800	525
600	770	525	

* For other available sizes, see page 17.

TEE/TY

ød mm	ød _i mm	L mm	H mm
900	569	730	525
	500	670	525
	450	620	525
950	950	1120	550
	900	1070	550
	850	1020	550
	800	970	550
	710	880	550
	680	850	550
	650	820	550
	630	800	550
	600	770	550
	560	730	550
	500	670	550
1000	1000	1170	575
	950	1120	575
	900	1070	575
	850	1020	575
	800	970	575
	710	880	575
	680	850	575
	650	820	575
	630	800	575
	600	770	575
	560	730	575
	500	670	575
1062	1062	1232	591
	1000	1170	591
	950	1120	591
	900	1070	591
	850	1020	591
	800	970	591
	710	880	591
	680	850	591
	650	820	591
	630	800	591
	600	770	591
1100	1100	1270	625
	1062	1232	625
	1000	1170	625
	950	1120	625



ød mm	ød _i mm	L mm	H mm
1100	900	1070	625
	850	1020	625
	800	970	625
	710	880	625
	680	850	625
	650	820	625
1200	1200	1370	675
	1100	1270	675
	1062	1232	675
	1000	1170	675
	950	1120	675
	900	1070	675
	850	1020	675
	800	970	675
1250	1250	1420	700
	1200	1370	700
	1100	1270	700
	1062	1232	700
	1000	1170	700
	950	1120	700
	900	1070	700
	850	1020	700
	800	970	700

* For other available sizes, see page 17.



ECCENTRIC TEE

Dimensions

TYE

Description

- Eccentric Tee
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: TYE - aaa / bbb

Type

ød

ød_i



ød mm	ød _i mm	L mm	H mm
400	315	485	280
	250	420	280
	200	375	280
500	400	570	330
	315	485	330
	250	420	330
630	500	670	395
	400	570	395
	315	485	395
800	630	800	480
	500	670	480
	400	570	480
1000	800	970	580
	630	800	580
	500	670	580
1250	1000	1220	730
	800	970	705
	630	800	705

* For other available sizes, see page 17.

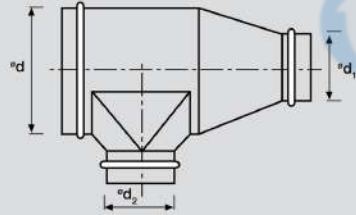
REDUCING TEE



TYR



Dimensions



Description

- Reducing Tee
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: TYR - aaa / bbb / ccc

Type	
$\varnothing d$	
$\varnothing d_1$	
$\varnothing d_2$	

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
80	63	63
100	80	80
	63	63
125	100	100
	80	80
160	125	125
	100	100
	80	80
200	160	160
	125	125
	100	100
250	200	200
	160	160
	125	125
	100	100
315	250	250
	200	200
	160	160
355	315	315
	250	250
	200	200

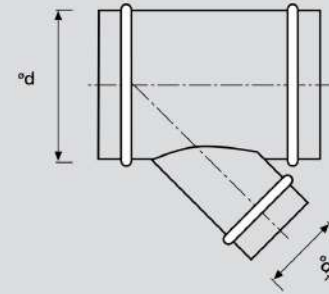
$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
400	355	355
	315	315
	250	250
	200	200
500	400	400
	355	355
	315	315
	250	250
630	500	500
	400	400
	355	355
	315	315
800	630	630
	500	500
	400	400
1000	800	800
	500	500
1250	1000	1000
	800	800
	630	630

* For other available sizes, see page 17.



LATERAL TEE

Dimensions



TY/45°



Description

- 45° Lateral Tee
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: TY/45 - aaa / bbb

Type	
$\varnothing d$	
$\varnothing d_1$	

$\varnothing d$ mm	$\varnothing d_1$ mm
80	63
100	80
	63
125	100
	80
160	125
	100
	80
200	160
	125
	100
250	200
	160
	125
	100
315	250
	200
	160
355	315
	250
	200

$\varnothing d$ mm	$\varnothing d_1$ mm
400	355
	315
	250
	200
500	400
	355
	315
	250
630	500
	400
	355
	315
800	630
	500
	400
1000	800
	500
1250	1000
	800
	630

* For other available sizes, see page 17.

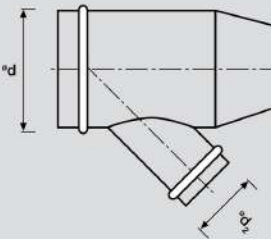
REDUCING LATERAL TEE



TYR/45°



Dimensions

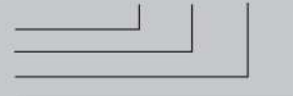


Description

- 45° Reducing Lateral Tee
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: TYR /45 - aaa / bbb / ccc

Type 

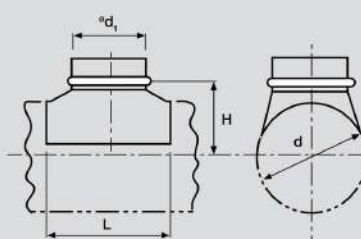
$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
80	63	63
100	80	80
	63	63
125	100	100
	80	80
160	125	125
	100	100
	80	80
200	160	160
	125	125
	100	100
250	200	200
	160	160
	125	125
	100	100
315	250	250
	200	200
	160	160
355	315	315
	250	250
	200	200

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
400	355	355
	315	315
	250	250
	200	200
500	400	400
	355	355
	315	315
	250	250
630	500	500
	400	400
	355	355
	315	315
800	630	630
	500	500
	400	400
1000	800	800
	500	500
1250	1000	1000
	800	800
	630	630

* For other available sizes, see page 17.



Dimensions



LKP



Description

- Collar Saddle
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: LKP - aaa / bbb

Type 

$\varnothing d$ mm	$\varnothing d_1$ mm	L mm	H mm
63	63	183	110
80	63	183	120
100	63	183	130
80	80	200	120
100	80	200	130
125	80	200	140
160	80	200	160
200	80	200	180
250	80	200	205
100	100	220	130
125	100	220	140
160	100	220	160
200	100	220	180
250	100	220	205
315	100	220	237
125	125	245	140
160	125	245	160
200	125	245	180
250	125	245	205
315	125	245	237
400	125	245	280

* For other available sizes, see page 17.

COLLAR SADDLE

COLLAR SADDLE | LKP

°d mm	°d ₁ mm	L mm	H mm
355	125	245	257
355	160	280	257
355	200	320	257
500	200	320	330
630	200	320	395
250	250	370	205
315	250	370	237
355	250	370	257
400	250	370	280
500	250	370	330
630	250	370	395
800	250	370	480
315	315	435	237
355	315	435	257
400	315	435	280
500	315	435	330
630	315	435	395
800	315	435	480
1000	315	435	580
1250	315	435	705
355	355	475	257
400	355	475	280
500	355	475	330
630	355	475	395
800	355	475	480
1000	355	475	580
1250	355	475	705
400	400	520	280
500	400	520	330
630	400	520	395
800	400	520	480
1000	400	520	580
1250	400	520	705
500	500	620	330
630	500	620	395
800	500	620	480
1000	500	620	580
1250	500	620	705
630	630	750	395
800	630	750	480
1000	630	750	580

* For other available sizes, see page 17.



°d mm	°d ₁ mm	L mm	H mm
1250	630	750	580
800	800	920	480
1000	800	920	580
1250	800	920	705
1000	1000	1170	730
1250	1000	1170	730
1250	1250	1420	730



REDUCER

Dimensions

MY

Description

- Reducer Centric = Female / Male
- °d₁ - Connected straight to spiral duct
- °d - Connected straight to fittings
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: MY - aaa / bbb

Type _____

°d _____

°d₁ _____

MYE

Dimensions

Description

- Reducer Eccentric = Female / Male
- °d₁ - Connected straight to spiral duct
- °d - Connected straight to fittings
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: MYE - aaa / bbb

Type _____

°d _____

°d₁ _____

REDUCER

°d mm	°d _i mm	MY L (mm)	MYE L (mm)
80	63	117	115
100	53	117	149
	80	122	120
112	63	127	170
	80	117	140
	100	107	130
125	63	139	192
	80	124	163
	100	132	128
	112	109	108
140	63	152	218
	80	137	189
	100	120	154
	112	134	134
	125	112	111
152	63	162	239
	80	147	210
	100	130	175
	112	120	154
	125	135	132
	140	107	130
160	63	169	253
	80	154	224
	100	137	189
	112	127	168
	125	115	146
	140	122	120
	152	115	115
180	80	172	258
	100	154	224
	112	144	203
	125	133	180
	140	120	154
	152	137	136
	160	122	120
200	80	189	293
	100	172	258
	112	161	238
	125	150	215
	140	137	189
	152	127	168



°d mm	°d _i mm	MY L (mm)	MYE L (mm)
200	160	120	154
	180	122	120
224	100	192	300
	112	182	279
	125	171	257
	140	158	231
	152	147	210
	160	140	196
	180	123	161
	200	130	127
250	100	215	345
	112	205	324
	125	193	302
	140	180	276
	152	170	255
	160	163	241
	180	146	206
	200	128	172
	224	134	130
280	125	133	180
	140	120	154
	152	196	307
	160	189	293
	180	172	258
	200	154	224
	224	134	182
	250	141	137
305	125	241	397
	140	228	371
	152	218	350
	160	211	336
	180	193	302
	200	176	267
	224	155	225
	250	133	180
	280	132	128
315	125	250	414
	140	237	388
	152	226	367
	160	219	354
	180	202	319

* For other available sizes, see page 17.



°d mm	°d _i mm	MY L (mm)	MYE L (mm)
315	200	185	285
	224	164	243
	250	141	198
	280	115	146
	305	123	122
355	160	254	423
	180	237	388
	200	219	354
	224	199	312
	250	176	267
	280	150	215
	305	128	172
	315	120	154
400	160	293	501
	180	276	466
	200	258	432
	224	238	390
	250	215	345
	280	189	293
	301	167	250
	315	159	232
	355	124	163
450	200	302	518
	224	281	477
	250	258	432
	280	232	380
	305	211	336
	315	202	319
	355	167	250
	300	128	172
500	200	345	605
	224	324	563
	250	302	518
	280	276	466
	305	254	423
	315	245	406
	355	211	336
	400	172	258
	450	128	172
550	250	345	605
	280	319	553

* For other available sizes, see page 17.

MY/MYE

°d mm	°d _i mm	MY L (mm)	MYE L (mm)
	305	297	510
	315	289	492
	355	254	423
	500	215	345
	450	172	258
	500	128	172
560	250	354	622
	280	328	570
	305	306	527
	315	297	510
	355	263	440
	400	224	362
	450	163	241
	500	137	189
600	250	388	692
	280	362	640
	305	341	596
	315	332	579
	355	297	510
	400	258	432
	450	215	345
	500	172	258
	550	128	172
	560	120	154
630	250	414	744
	280	388	692
	305	367	648
	315	358	631
	355	323	477
	400	284	484
	450	241	397
	500	198	310
	550	154	224
	560	146	206
	600	141	137
650	305	381	683
	315	375	666
	355	341	596
	400	302	518
	450	258	432
	500	215	345

REDUCER

°d mm	°d, mm	MY L (mm)	MYE L (mm)
650	550	172	258
	560	163	241
	600	128	172
	630	122	120
	680	305	410
680	305	410	735
	315	401	717
	355	367	648
	400	328	570
	450	284	484
700	500	241	397
	550	198	310
	560	189	293
	600	154	224
	630	128	172
710	650	141	137
	315	418	752
	355	384	683
	400	345	605
	450	302	518
750	500	258	432
	550	215	345
	560	206	328
	600	172	258
	630	146	206
710	650	128	172
	680	122	120
	355	393	700
	400	354	622
	450	310	536
750	500	267	449
	550	224	362
	560	215	345
	600	180	276
	630	154	224
750	650	137	189
	680	141	137
	400	388	692
	450	345	605
	500	302	518
750	550	258	432
	560	250	414

* For other available sizes, see page 17.



 ECOVENT AIR SYSTEMS
 INNOVATIVE AIR SOLUTIONS

°d mm	°d, mm	MY L (mm)	MYE L (mm)
750	600	215	345
	630	189	293
	650	172	258
	680	146	206
	700	128	172
800	710	120	154
	400	432	778
	450	388	692
	500	345	605
	550	302	518
850	560	293	501
	600	258	432
	630	232	380
	650	215	345
	680	189	293
850	700	172	258
	710	163	241
	750	128	172
	400	475	865
	450	432	778
900	500	388	692
	550	345	605
	560	336	588
	600	302	518
	630	276	466
900	650	258	432
	680	232	380
	700	215	345
	710	206	328
	750	172	258
900	800	128	172
	450	475	865
	500	432	778
	550	388	692
	560	380	674
900	600	345	605
	630	319	553
	650	302	518
	680	276	466
	700	258	432
900	710	250	414



 ECOVENT AIR SYSTEMS
 INNOVATIVE AIR SOLUTIONS

°d mm	°d, mm	MY L (mm)	MYE L (mm)
900	750	215	345
	800	172	258
	850	128	172
	950	450	518
	500	475	865
950	550	432	778
	560	423	761
	600	388	692
	630	362	640
	650	345	605
1000	680	319	553
	700	302	518
	710	293	501
	750	258	432
	800	215	345
1000	850	172	258
	900	128	172
	500	518	952
	550	475	865
	560	466	848
1050	600	432	778
	630	406	726
	650	388	692
	680	362	640
	700	345	605
1050	710	336	588
	750	302	518
	800	258	432
	850	215	345
	900	172	258
1050	950	128	172
	500	562	1038
	550	518	952
	560	510	934
	600	475	865
1050	630	449	813
	650	432	778
	680	406	726
	700	388	692
	710	380	674
1050	750	345	605

* For other available sizes, see page 17.

MY/MYE

°d mm	°d, mm	MY L (mm)	MYE L (mm)
1050	800	302	518
	850	258	432
	900	215	345
	950	172	258
	1000	128	172
1062	500	572	1059
	550	529	972
	560	520	955
	600	485	886
	630	459	834
1100	650	442	799
	680	416	747
	700	399	712
	710	390	695
	750	355	626
1100	800	312	539
	850	269	452
	900	225	366
	950	182	279
	1000	140	192
1100	600	518	9522
	630	492	900
	650	475	865
	700	432	778
	710	423	761
1120	750	388	692
	800	345	605
	850	302	528
	900	258	432
	950	215	345
1120	1000	172	258
	1062	118	151
	560	570	1056
	600	536	986
	630	510	934
1120	650	492	900
	680	466	848
	700	449	813
	710	440	796
	750	491	726
1120	800	362	640

REDUCER | MY/MYE

°d mm	°d _i mm	MY L (mm)	MYE L (mm)
1120	850	315	553
	900	276	466
	1000	189	293
	1050	146	206
	1062	135	185
1150	600	562	1038
	630	536	986
	650	518	952
	700	475	865
	710	466	848
	750	432	778
	800	388	692
	850	345	605
	900	302	518
	950	258	432
	1000	215	345
	1050	172	258
	1062	161	238
	1100	128	172
1200	600	605	1125
	630	579	1073
	650	562	1038
	680	536	986
	700	518	952
	710	510	934
	750	475	865
	800	432	778
	850	388	692
	900	345	605
	950	302	518
	1000	258	432
	1050	215	345
	1062	205	324
	1100	172	258
	1120	154	224
	1150	128	172
1250	600	648	1213
	630	622	1160
	650	605	1125
	680	579	1073
	700	562	1038

* For other available sizes, see page 17.



°d mm	°d _i mm	MY L (mm)	MYE L (mm)
1250	710	533	1021
	750	518	952
	800	475	865
	850	432	778
	900	388	692
	950	345	605
	1000	302	518
	1050	258	432
	1062	248	411
	1100	215	345
	1120	198	310
	1150	172	258
	1200	128	172



Dimensions

MYP

Description

- Reducer Centric = Male / Male
- °d_i - Connected straight to spiral duct
- °d - Connected straight to spiral ducts
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: MYP - aaa / bbb

Type

°d

°d_i

MYEP

Dimensions

Description

- Reducer Eccentric = Male / Male
- °d_i - Connected straight to spiral duct
- °d - Connected straight to spiral duct
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: MYEP - aaa / bbb

Type

°d

°d_i

REDUCER

ød mm	ød mm	MYP L (mm)	MYEP L (mm)
80	63	82	79
100	53	82	114
	80	87	85
112	63	92	135
	80	82	105
	100	72	95
125	63	104	157
	80	89	128
	100	97	98
	112	74	73
140	63	117	183
	80	102	154
	100	85	119
	112	99	99
	125	78	76
152	63	127	204
	80	112	175
	100	95	140
	112	85	119
	125	100	97
	140	72	95
160	63	134	218
	80	119	189
	100	102	154
	112	92	133
	125	80	111
	140	87	85
	152	80	80
180	80	137	223
	100	119	189
	112	109	168
	125	98	145
	140	85	119
	152	102	101
	160	87	85
200	80	154	258
	100	137	223
	112	126	203
	125	115	180
	140	102	154
	152	92	133

ød mm	ød mm	MYP L (mm)	MYEP L (mm)
200	160	85	119
	180	87	85
224	100	157	265
	112	197	244
	125	136	222
	140	123	196
	152	112	175
	160	105	161
	180	88	126
	200	95	92
250	100	180	310
	112	170	289
	125	158	267
	140	145	241
	152	135	220
	160	128	206
	180	111	171
	200	93	137
	224	99	95
280	125	98	145
	140	85	119
	152	161	272
	160	154	258
	180	137	223
	200	119	189
	224	99	147
	250	106	102
305	125	206	362
	140	193	336
	152	183	315
	160	176	301
	180	158	267
	200	141	232
	224	120	190
	250	98	145
	280	97	93
315	125	215	379
	140	202	353
	152	191	332
	160	184	319
	180	167	284

* For other available sizes, see page 17.

ød mm	ød mm	MYP L (mm)	MYEP L (mm)
315	200	150	250
	224	129	208
	250	106	163
	280	80	111
	305	88	87
355	160	219	388
	180	202	353
	200	184	319
	224	164	277
	250	141	232
	280	115	180
	305	93	137
	315	85	119
400	160	258	466
	180	241	431
	200	223	397
	224	203	355
	250	180	310
	280	154	258
	301	132	215
	315	124	197
	355	89	128
450	200	267	483
	224	246	442
	250	223	397
	280	197	345
	305	176	301
	315	167	284
	355	132	215
	300	93	137
500	200	310	570
	224	289	528
	250	267	483
	280	241	431
	305	219	388
	315	210	371
	355	176	301
	400	137	223
	450	93	137
550	250	310	570
	280	284	518

* For other available sizes, see page 17.

MYP/MYEP

ød mm	ød mm	MYP L (mm)	MYEP L (mm)
	305	262	475
	315	354	457
	355	219	388
	500	180	310
	450	137	223
	500	93	137
560	250	319	587
	280	293	535
	305	271	492
	315	262	475
	355	228	405
	400	189	327
	450	128	206
	500	102	154
600	250	353	657
	280	327	605
	305	306	561
	315	297	544
	355	262	475
	400	223	397
	450	180	310
	500	137	223
	550	93	137
	560	85	119
630	250	379	709
	280	353	657
	305	332	613
	315	323	596
	355	288	442
	400	249	449
	450	206	362
	500	163	275
	550	119	189
	560	111	171
	600	106	101
650	305	349	648
	315	340	631
	355	306	561
	400	267	483
	450	223	397
	500	180	310

REDUCER

°d mm	°d, mm	MYP L (mm)	MYEP L (mm)
650	550	137	223
	560	128	206
	600	93	137
	630	87	85
680	305	375	700
	315	366	682
	355	332	613
	400	293	535
	450	249	449
	500	206	362
	550	163	275
	560	157	258
	600	119	189
	630	93	137
	650	106	102
700	315	384	717
	355	349	648
	400	310	570
	450	267	483
	500	223	397
	550	180	310
	560	171	293
	600	137	223
	630	116	171
	650	93	137
	680	87	85
710	355	358	665
	400	319	587
	450	275	501
	500	232	414
	550	186	327
	560	180	310
	600	145	241
	630	119	189
	650	102	154
	680	106	102
750	400	353	667
	450	310	570
	500	267	483
	550	223	397
	560	215	379

°d mm	°d, mm	MYP L (mm)	MYEP L (mm)
750	600	180	310
	630	154	258
	650	137	223
	680	111	171
	700	93	137
	710	83	119
800	400	397	743
	450	335	667
	500	310	570
	550	267	483
	560	258	466
	600	223	397
	630	197	345
	650	180	310
	680	154	258
	700	137	223
	710	128	206
	750	93	137
850	400	440	830
	450	397	743
	500	353	667
	550	310	570
	560	301	553
	600	267	483
	630	241	431
	650	223	397
	680	197	345
	700	180	310
	710	171	293
	750	137	223
	800	93	137
900	450	440	830
	500	397	743
	550	353	667
	560	345	639
	600	310	570
	630	284	518
	650	267	483
	680	241	431
	700	223	397
	710	215	379

* For other available sizes, see page 17.

°d mm	°d, mm	MYP L (mm)	MYEP L (mm)
900	750	180	310
	800	137	223
	850	93	137
950	450	483	917
	500	440	830
	550	397	743
	560	388	726
	600	353	667
	630	327	605
	650	310	570
	680	284	518
	700	267	483
	710	258	466
	750	223	397
	800	280	310
	850	137	223
	900	93	137
1000	500	483	917
	550	440	830
	560	431	813
	600	397	743
	630	371	691
	650	353	667
	680	327	605
	700	310	570
	710	301	553
	750	267	483
	800	223	397
	850	180	310
	900	137	223
	950	93	137
1050	500	527	1003
	550	483	917
	560	475	899
	600	440	830
	630	414	778
	650	397	743
	680	371	591
	700	353	667
	710	345	639
	750	310	570

* For other available sizes, see page 17.

MYP/MYEP

°d mm	°d, mm	MYP L (mm)	MYEP L (mm)
1050	800	267	483
	850	223	397
	900	180	310
	950	137	223
	1000	93	137
1062	500	537	1024
	550	494	937
	560	485	920
	600	450	851
	630	424	799
	650	407	764
	680	381	712
	700	364	677
	710	355	660
	750	320	591
	800	277	504
	850	237	417
	900	190	331
	950	147	244
	1000	105	157
1100	600	483	915
	630	457	865
	650	440	830
	680	397	743
	700	388	726
	710	353	667
	750	310	570
	800	267	483
	850	223	397
	900	180	310
	950	137	223
	1000	83	116
1120	560	537	1021
	600	501	951
	630	475	899
	650	457	865
	680	431	813
	700	414	778
	710	405	761
	750	456	691
	800	327	605

REDUCER I MYP/MYEP

°d mm	°d ₁ mm	MYP L (mm)	MYEP L (mm)
1120	850	284	518
	900	241	431
	1000	154	258
	1050	111	171
	1062	100	150
1150	600	527	1003
	630	501	951
	650	483	917
	700	440	830
	710	431	813
	750	397	743
	800	353	667
	850	310	570
	900	267	483
	950	223	397
	1000	180	310
	1050	137	223
	1062	126	203
	1100	93	137
1200	600	570	1090
	630	544	1038
	650	527	1003
	680	501	951
	700	483	917
	710	475	899
	750	440	830
	800	397	743
	850	353	667
	900	310	570
	950	267	483
	1000	223	397
	1050	180	310
	1062	170	289
	1100	137	223
	1120	119	189
	1150	93	137
1250	600	613	1178
	630	587	1090
	650	570	1038
	680	544	1003
	700	527	

°d mm	°d ₁ mm	MYP L (mm)	MYEP L (mm)
1250	710	518	986
	750	483	917
	800	440	830
	850	397	743
	900	353	667
	950	310	570
	1000	267	483
	1050	223	397
	1062	213	376
	1100	180	310
	1120	163	275
	1150	137	223
	1200	93	137

* For other available sizes, see page 17.

ECOVENT AIR SYSTEMS
INNOVATIVE AIR SOLUTIONSECOVENT AIR SYSTEMS
INNOVATIVE AIR SOLUTIONS

CROSS

Dimensions

Description

- Cross
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: RK - aaa / bbb / ccc

Type

°d

°d₁

°d₂

RK

°d mm	°d ₁ mm	°d ₂ mm
80	63	63
100	80	80
	63	63
125	100	100
	80	80
160	125	125
	100	100
	80	80
200	160	160
	125	125
	100	100
250	200	200
	160	160
	125	125
	100	100
315	250	250
	200	200
	160	160
355	315	315
	250	250
	200	200

°d mm	°d ₁ mm	°d ₂ mm
400	355	355
	315	315
	250	250
	200	200
500	400	400
	355	355
	315	315
	250	250
630	500	500
	400	400
	355	355
	315	315
800	630	630
	500	500
	400	400
1000	800	800
	500	500
1250	1000	1000
	800	800
	630	630

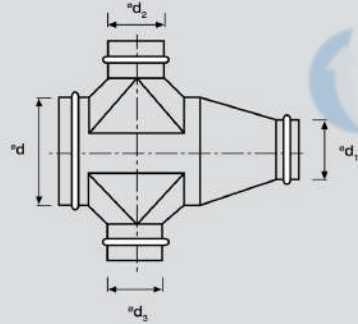
* For other available sizes, see page 17.

REDUCING CROSS

RKR



Dimensions



Description

- Reducing Cross
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: RKR - aaa / bbb / ccc / ddd

Type				
$\varnothing d_1$				
$\varnothing d_2$				
$\varnothing d_3$				

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm	$\varnothing d_3$ mm
80	63	55	55
100	80	63	63
112	100	80	80
125	112	100	100
140	125	112	112
160	140	125	125
180	160	140	140
200	180	160	160
224	200	180	180
250	224	200	200
280	250	224	224
315	280	250	250
355	315	280	280
400	355	315	315
450	400	355	355
500	450	400	400
560	500	450	450
630	560	500	500
710	630	560	560
800	710	630	630
900	800	710	710

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm	$\varnothing d_3$ mm
1000	900	800	800
1120	1000	900	900
1250	1120	1000	1000
1300	1250	1120	1120

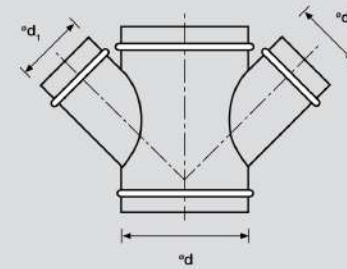
* For other available sizes, see page 17.

LATERAL CROSS

RK/45°



Dimensions



Description

- 45° Lateral Cross
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: RK/45 - aaa / bbb / ccc

Type			
$\varnothing d$			
$\varnothing d_1$			
$\varnothing d_2$			

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
80	63	63
100	80	80
	63	63
125	100	100
	80	80
160	125	125
	100	100
	80	80
200	160	160
	125	125
	100	100
250	200	200
	160	160
	125	125
	100	100
315	250	250
	200	200
	160	160
355	315	315
	250	250
	200	200

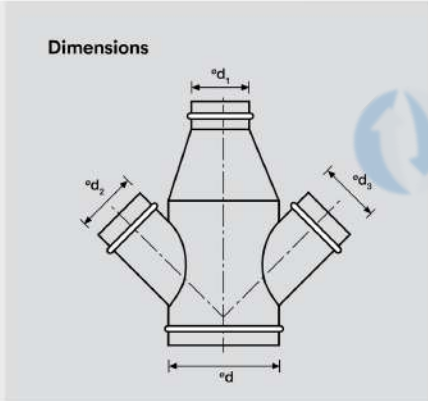
$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
400	355	355
	315	315
	250	250
	200	200
500	400	400
	355	355
	315	315
	250	250
630	500	500
	400	400
	355	355
	315	315
800	630	630
	500	500
	400	400
1000	800	800
	500	500
1250	1000	1000
	800	800
	630	630

* For other available sizes, see page 17.

LATERAL REDUCING CROSS



Dimensions

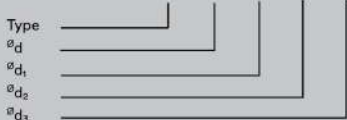


Description

- 45° Lateral Reducing Cross
- Fabricated with continuous seam or stitch welding.

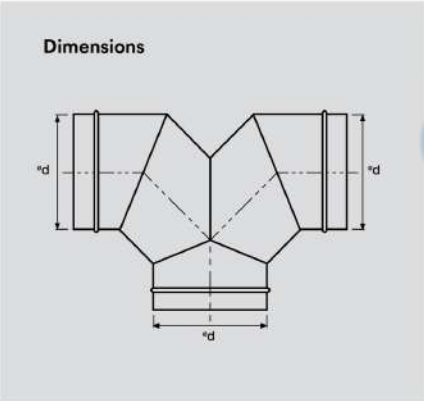
Ordering

Product Code: RKR/45 - aaa / bbb / ccc / ddd

Type 

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm	$\varnothing d_3$ mm
80	63	55	55
100	80	63	63
112	100	80	80
125	112	100	100
140	125	112	112
160	140	125	125
180	160	140	140
200	180	160	160
224	200	180	180
250	224	200	200
280	250	224	224
315	280	250	250
355	315	280	280
400	355	315	315
450	400	355	355
500	450	400	400
560	500	450	450
630	560	500	500
710	630	560	560
800	710	630	630
900	800	710	710

* For other available sizes, see page 17.



Dimensions



Description

- 90° Twin Bend
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: KKY/90 - aaa

Type 

$\varnothing d$ mm	$\varnothing d_1$ mm
63	800
80	1000
100	1120
112	1250
125	
140	
160	
180	
200	
224	
250	
280	
315	
355	
400	
450	
500	
560	
630	
710	

* For other available sizes, see page 17.



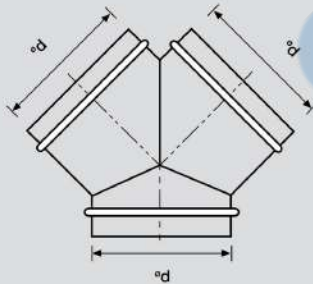
TWINBEND



KKY/45°



Dimensions



Description

- 45° Twinbend
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: KKY/45 - aaa

Type
 $\varnothing d$

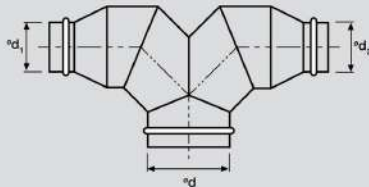
$\varnothing d$ mm	$\varnothing d$ mm
63	800
80	1000
100	1120
112	1250
125	
140	
160	
180	
200	
224	
250	
280	
315	
355	
400	
450	
500	
560	
630	
710	

* For other available sizes, see page 17.



REDUCING TWINBEND

Dimensions



KKYR/90°



Description

- 90° Reducing Twinbend
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: KKYR/90 - aaa / bbb / ccc

Type
 $\varnothing d_1$
 $\varnothing d_2$

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
80	63	55
100	80	63
112	100	80
125	112	100
140	125	112
160	140	125
180	160	140
200	180	160
224	200	180
250	224	200
280	250	224
315	280	250
355	315	280
400	355	315
450	400	355
500	450	400
560	500	450
630	560	500
710	630	560
800	710	630
900	800	710

* For other available sizes, see page 17.

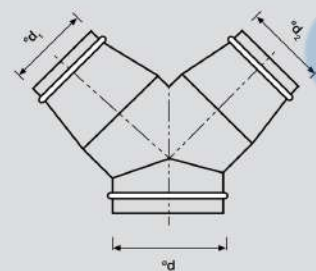
REDUCING TWINBEND



KKYR/45°



Dimensions



Description

- 45° Reducing Twinbend
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: KKYR/45- aaa / bbb / ccc

Type _____

$\varnothing d$ _____

$\varnothing d_1$ _____

$\varnothing d_2$ _____

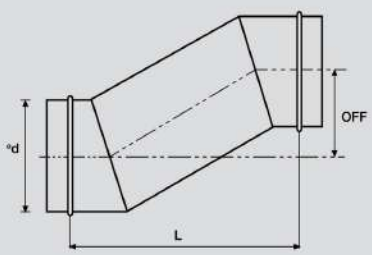
$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
80	63	55
100	80	63
112	100	80
125	112	100
140	125	112
160	140	125
180	160	140
200	180	160
224	200	180
250	224	200
280	250	224
315	280	250
355	315	280
400	355	315
450	400	355
500	450	400
560	500	450
630	560	500
710	630	560
800	710	630
900	800	710

$\varnothing d$ mm	$\varnothing d_1$ mm	$\varnothing d_2$ mm
1000	900	800
1120	1000	900
1250	1120	1000
1300	1250	1120

* For other available sizes, see page 17.



Dimensions



OFF



Description

- Offset
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: OFF - aaa / bbb / ccc

Type _____

$\varnothing d$ _____

$\varnothing d_1$ _____

$\varnothing d_2$ _____

$\varnothing d$ mm	OFF mm	L mm
63	250	519
80	250	524
100	250	529
112	250	532
125	250	536
140	250	540
160	250	546
180	250	551
200	250	556
224	250	562
250	250	570
280	250	578
315	250	587
355	250	598
400	250	610
450	250	623
500	250	636
560	250	652
630	250	671
710	250	692
800	250	716

* For other available sizes, see page 17.

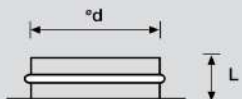
OFFSET

TAKE OFF

LYT



Dimensions



Description

- Take off
- To be fixed on rectangular duct.
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: LYT - aaa

Type °d

°d mm	L mm
63	85
80	85
100	85
112	85
125	85
140	85
160	85
180	85
200	85
224	85
250	85
280	85
315	85
355	85
400	85
450	85
500	85
560	85
630	85
710	85
800	85

°d mm	L mm
1000	85
1120	85
1250	85

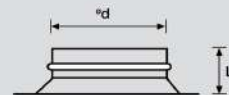
* For other available sizes, see page 17.

TAKE OFF

LKT



Dimensions



Description

- Take off
- With Radius.
- To be fixed on rectangular duct.
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: LKT - aaa

Type °d

°d mm	L mm
63	118
80	118
100	118
112	118
125	118
140	118
160	118
180	118
200	118
224	118
250	118
280	118
315	118
355	118
400	118
450	118
500	118
560	118
630	118
710	118
800	118

°d mm	L mm
1000	118
1120	118
1250	118

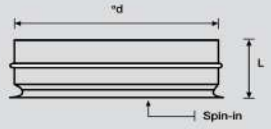
* For other available sizes, see page 17.

SPIN-IN FITTING



SFL

Dimensions



Description

- Spin-in Fitting
- To be fixed on rectangular duct.
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: SFL - aaa

Type ød

ød mm	L mm
63	85
80	85
100	85
112	85
125	85
140	85
160	85
180	85
200	85
224	85
250	85
280	85
315	85
355	85
400	85
450	85
500	85
560	85
630	85
710	85
800	85

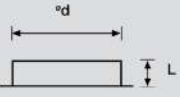
ød mm	L mm
1000	85
1120	85
1250	85

* For other available sizes, see page 17.



TP

Dimensions



Description

- End cap
- To be fixed on spiral duct.
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: TP - aaa

Type ød

ød mm	L mm
63	50
80	50
100	50
112	50
125	50
140	50
160	50
180	50
200	50
224	50
250	50
280	50
315	50
355	50
400	50
450	50
500	50
560	50
630	50
710	50
800	50

* For other available sizes, see page 17.

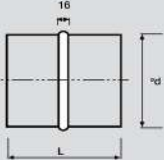
END CAP

COUPLING

LYP



Dimensions



Description

- Coupling
- Duct Connector
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: LYP - aaa

Type $\varnothing d$

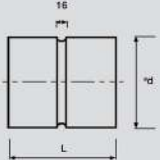
$\varnothing d$ mm	L mm
63	100
80	100
100	100
112	100
125	100
140	100
160	100
180	100
200	100
224	100
250	100
280	100
315	100
355	100
400	100
450	100
500	100
560	100
630	100
710	100
800	100

* For other available sizes, see page 17.

LYO



Dimensions



Description

- Coupling
- Fitting Connector
- Fabricated with continuous seam or stitch welding.

Ordering

Product Code: LYO - aaa

Type $\varnothing d$

$\varnothing d$ mm	L mm
63	100
80	100
100	100
112	100
125	100
140	100
160	100
180	100
200	100
224	100
250	100
280	100
315	100
355	100
400	100
450	100
500	100
560	100
630	100
710	100
800	100

* For other available sizes, see page 17.

COUPLING

SPECIFICATIONS FOR DUCT AND FITTINGS



I. General

A. All round supply, return and exhaust ductwork shall be ECOVENT Vent as manufactured by ECOVENT or approved equal. The duct system shall consist of fittings that are factory fabricated and spiral duct which, when installed according to the manufacturer's instruction (seal the duct joints with the use of duct sealer and cold shrink tape) will render an air tight system.

B. The contractor may, at his option convert any or all rectangular ductwork to round provided that the project space limitations are properly addressed and that the overall system design static pressure not be exceeded.

II. Materials

A. Unless otherwise noted, all duct and fittings shall be a minimum of G-90 galvanized steel in accordance with ASTM A-653 and A-924 (Formerly A527, A525).

B. When specified on contract documents, stainless steel type 304 or type 316 in accordance with ASTM A-240 shall be provided.

III. Construction

A. Unless otherwise noted, all duct and fittings shall be constructed as per "SMACNA HVAC Duct Construction Standards Metal and Flexible" from 500 Pa to 2500 Pa (+ 2 to 10 inch W.G.) shown in the following table:

Diameter (mm) inches	Galvanized Spiral Duct	Galvanized Fitting
51 - 608	26	24
623 - 900	24	22
936 - 1062	24	20
1100 - 1250	22	20
1300 - 1700	22	18
1750 - 2500	18	18

B. Fittings:

1. All fitting ends shall be calibrated to manufacturer's published dimensional tolerance standard and associated spiral duct.

2. All elbows from 75mm (3") to 305mm (12") Dia. to be either 2 piece die stamped and stitch welded or continuously welded.

All elbows 355mm and larger shall be either standing seam gore lock construction or continuously welded.

3. The radius of all 90°, 60° and 45° elbows shall be 1.5 times the elbow diameter, unless otherwise noted on the contract documents to be 1.0 times the elbow diameter. The radius of all 15° and 30° elbows shall be 1.0 times the elbow diameter.

4. All fittings that are of either spot welded or button punched construction shall be internally sealed, while fittings that are continuously welded shall be without internal sealant. When contract documents require divided flow fittings, only full body fittings will be accepted. The use of collarsaddles is unacceptable except for retrofit installations.

C. Spiral Duct

1. Spiral duct shall be calibrated to manufacturer's published dimensional tolerance standard.

2. All spiral duct 355mm Dia. and larger can be supplied corrugated for added strength and rigidity.

IV. Performance

A. Duct system performance shall meet SMACNA's Leakage or DW/142 requirements at the system design static pressure as indicated on the contract documents not to exceed -5000 pa. (-20 in W.G.) or 3000 pa. (+12 in W.G.).



SPECIFICATIONS FOR DUCT AND FITTINGS

Description

ECOVENT Double Wall must be assembled according to these instructions:

Before Assembly

The Duct must be free from dirt.

Assembly of Fittings

- Only use undamaged Double Wall duct and fittings. Double wall duct must be cut at a right angle and carefully deburred.
- Slip the inner shell of the double wall fitting into the inner shell of the double wall spiral duct. Use the inner shell extension to aid in guiding the outer shells together.
- Slip the outer shell of the double wall fitting into the outer shell of the double wall spiral duct up to the bead. Slightly rotating the fitting makes insertion easier.
- Fasten the duct and fitting together with self tapping sheet metal screws or pressure proof pop rivets. Quantities and sizes to be used are in the following table:

Ød mm	Min. Diameter mm	Number
63 - 125	3.2	2
140 - 250	3.2	3
280 - 630	3.2	4
710 - 1250	4.0	6
1400 - 1600	4.8	12



Placement of the fastening screws should be opposite from one another evenly spaced around the circumference, much like the procedure for tightening lug nuts on a tire (see diagram below). Start where the distance between the duct and the fitting is largest. In the event of incorrect installation, holescaused by screws or pop rivets must be sealed before re-assembly.

