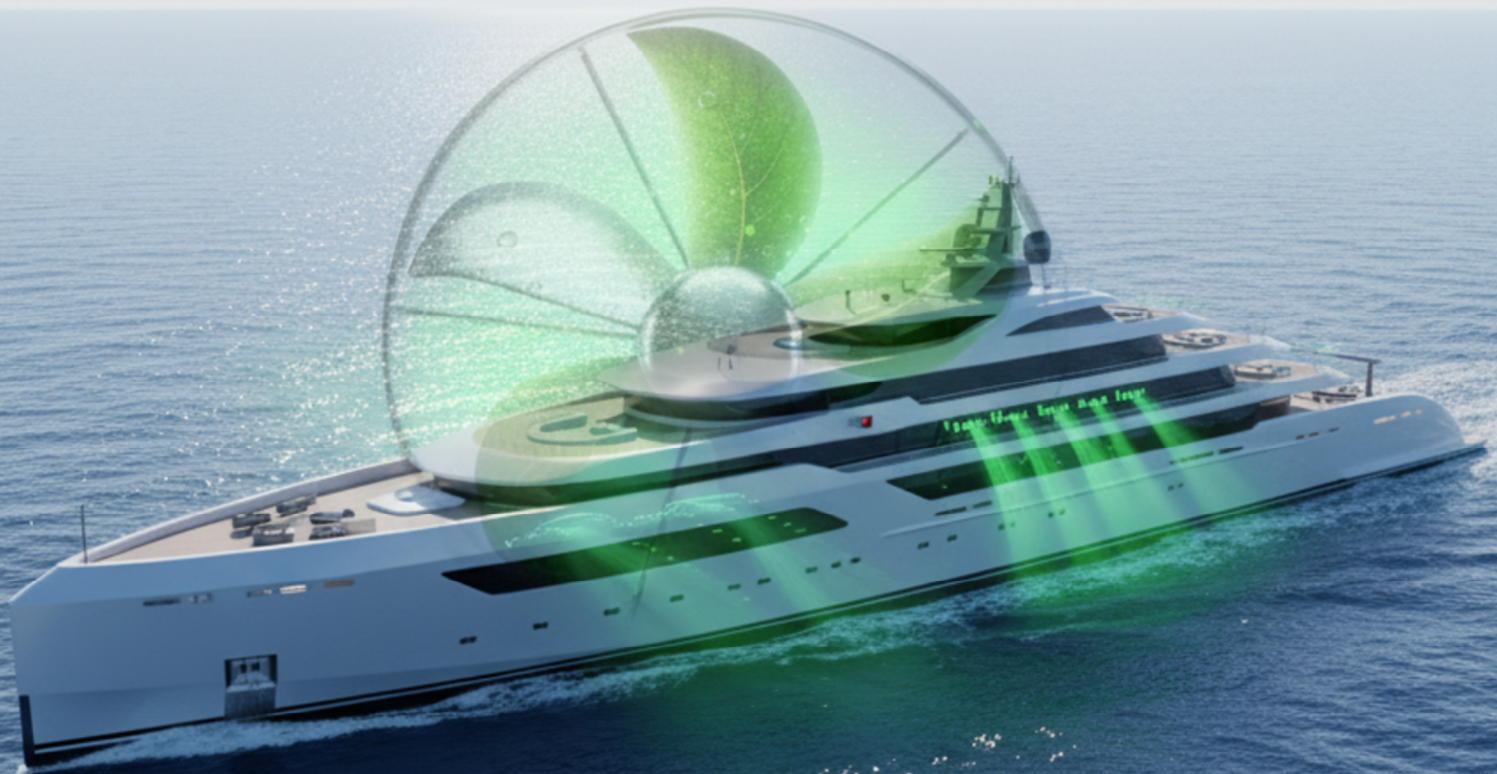




YESIR

end-to-end HVAC&R Solution Partner





YESIR

end-to-end HVAC&R Solution Partner

AIR DUCT



Index

0. INTRODUCTION	1
1. SINGLE SKIN CIRCULAR DUCT	3
2. SINGLE SKIN 90° ELBOW- BFU 90° - BU 90°	4
3. SINGLE SKIN 60° ELBOW - BFU 60° - BU 60°	5
4. SINGLE SKIN 45° ELBOW-BFU 45° - BU 45°	6
5. SINGLE SKIN 30° ELBOW-BFU 30°-BU 30°.....	7
6. SINGLE SKIN 15° ELBOW-BFU 15°-BU 15	8
7. RCLU & RLU SINGLE SKIN REDUCER	9
8. TCPU & TVU & XCPL SINGLE SKIN T-JOINT	12
9. NPU SINGLE WALLED COUPLING (GASKET INCLUDED)	17
10. DSU SINGLE WALLED REGULATING DAMPER(GASKET INCLUDED)	17
11. ESU SINGLE WALLED END CAP(GASKET INCLUDED).....	18
12. DOUBLE SKIN CIRCULAR DUCT	19
13. DOUBLE SKIN 90° ELBOW-DBFU 90°.....	19
14. DOUBLE SKIN 60° ELBOW-DBFU 60°.....	20
15. DOUBLE SKIN 45° ELBOW-DBFU 45°.....	20
16. DOUBLE SKIN 30° ELBOW-DBFU 30°.....	21
17. DOUBLE SKIN 15° ELBOW-DBFU 15°.....	21
18. RCLU&RLU DOUBLE SKIN REDUCER	22
19. TCPU&TVU 45&XCPL DOUBLE SKIN T-JOINT	23
20. NPU DOUBLE WALLED COUPLING(2 PARTS GASKET INCLUDED)	24
21. NPU DOUBLE WALLED REGULATING DAMPER.....	24
22. ESL DOUBLE WALLED END CAP(GASKET INCLUDED).....	25
23. CLAMP	25



YESIR

end-to-end HVAC&R Solution Partner

0. INTRODUCTION



Our ventilation systems are engineered to meet the most rigorous industry standards. Available in both single-wall and double-walled (insulated) configurations, they are manufactured using only premium galvanized steel to ensure longevity and performance.

All Spiro air ducts are manufactured using original duct machinery from SPIRO INTERNATIONAL. This specific brand and manufacturing technique guarantee the superior quality of the system.

Spiro pipe covers diameters ranging from 80 mm to 1600 mm, available in both galvanized and stainless steel.

Standard Length: 3 meters

The SPIRO sealing system relies on a homogeneous EPDM rubber profile. The rubber gasket is precisely positioned within a groove at the end of the fitting and securely locked in place by a return edge. This design ensures that the gasket remains in the correct position at all times, guaranteeing a leak-free seal.

DOUBLE WALLED SPIRO DUCT

Stone wool board faced with aluminium foil on one side used for external thermal insulation, internal sound insulation of air conditioning and ventilation ducts.



YESIR

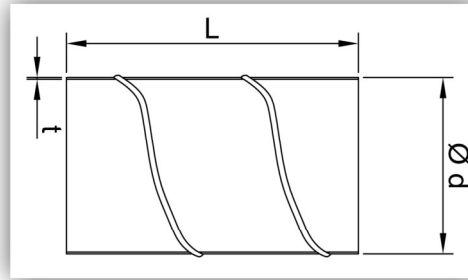
end-to-end HVAC&R Solution Partner

Properties	Symbol	Unit	Description							Tolerance	Standard
Material	-	-	Stone Wool							-	TS EN 14303
Density	ρ	kg/m ³	70							+/-10%	-
Width	w	mm	600							+/-1,5%	TS EN 822
Length	l	mm	1200							+/-2%	TS EN 822
Thickness	t	mm	25	30	40	50			T3 *	TS EN 823	
Facing	-	-	Al-foil							-	-
Reaction to fire	-	-	A1							-	TS EN 13501-1
Declared Thermal Conductivity (10 °C)	T_{ort}	°C	50	100	150	200	250	-	-	-	TS EN 12667/12939 13787
	λ	W/m.K	0,046	0,056	0,070	0,08	0,101	-	-		
Specific Heat **	c	kJ/(kg.K)	-							-	EN 12524
Squareness	S_b	mm/m	max. 5							-	TS EN 824
Packaging Material	-	-	PE Film							-	-
Other Information	Maximum service temperature on the side faced with aluminium foil is 90 °C.										

(*) T3; -3% or -3 mm^a; +10% or +10 mm^b. The biggest value is chosen at minus tolerance, the smallest value is chosen at plus tolerance.



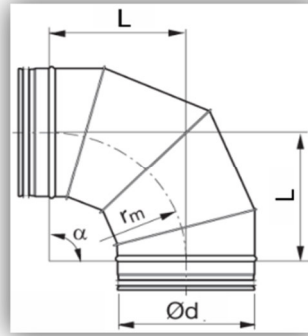
1. SINGLE SKIN CIRCULAR DUCT



No.	Ød	Length	No.	Ød	Length
	[mm]	[mm]		[mm]	[mm]
1.1	Ø100	3000	1.14	Ø450	3000
1.2	Ø125	3000	1.15	Ø500	3000
1.3	Ø150	3000	1.16	Ø560	3000
1.4	Ø160	3000	1.17	Ø600	3000
1.5	Ø180	3000	1.18	Ø630	3000
1.6	Ø200	3000	1.19	Ø710	3000
1.7	Ø224	3000	1.20	Ø800	3000
1.8	Ø250	3000	1.21	Ø900	3000
1.9	Ø280	3000	1.22	Ø1000	3000
1.10	Ø300	3000	1.23	Ø1120	3000
1.11	Ø315	3000	1.24	Ø1250	3000
1.12	Ø355	3000	1.25	Ø1400	3000
1.13	Ø400	3000	1.26	Ø1500	3000

(T)Duct thickness is 0.70 mm.
Material: Galvanized Steel

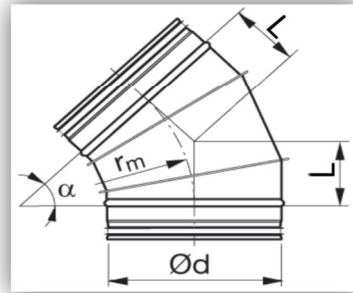
2. SINGLE SKIN 90° ELBOW- BFU 90° - BU 90°



No.	Ød ₁	L	No.	Ød ₁	L
	mm	mm		mm	mm
2.1	150	150	2.13	500	500
2.2	160	160	2.14	560	560
2.3	180	180	2.15	600	600
2.4	200	200	2.16	630	630
2.5	224	225	2.17	710	710
2.6	250	250	2.18	800	800
2.7	280	280	2.19	900	900
2.8	300	300	2.20	1000	1000
2.9	315	315	2.21	1120	1120
2.10	355	355	2.22	1250	1250
2.11	400	400	2.23	1400	1400
2.12	450	450	2.24	1500	1500
*2.25	100	100	*2.28	160	160
*2.26	125	125	*2.29	180	180
*2.27	150	150	*2.30	200	200

Note(*): pressed elbow(BU 90°). Others are segmented elbows.

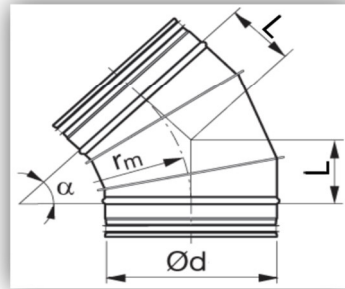
3. SINGLE SKIN 60° ELBOW - BFU 60° - BU 60°



No.	Ød1	L	No.	Ød1	L
	mm	mm		mm	mm
3.1	150	87	3.13	500	289
3.2	160	92	3.14	560	323
3.3	180	104	3.15	600	346
3.4	200	115	3.16	630	364
3.5	224	130	3.17	710	410
3.6	250	144	3.18	800	462
3.7	280	162	3.19	900	520
3.8	300	173	3.20	1000	577
3.9	315	182	3.21	1120	647
3.10	355	205	3.22	1250	722
3.11	400	231	3.23	1400	808
3.12	450	260	3.24	1500	866
*3.25	100	58	*3.28	160	92
*3.26	125	72	*3.29	180	104
*3.27	150	87	*3.30	200	115

Note(*): pressed elbow(BU 60°). Others are segmented elbows.

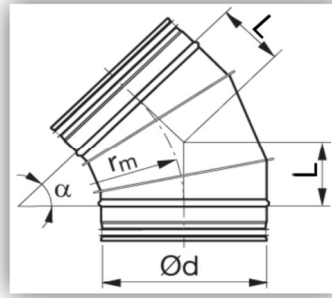
4. SINGLE SKIN 45° ELBOW-BFU 45° - BU 45°



No.	Ød1	L	No.	Ød1	L
	mm	mm		mm	mm
4.1	150	62	4.13	500	207
4.2	160	66	4.14	560	232
4.3	180	76	4.15	600	249
4.4	200	83	4.16	630	261
4.5	224	93	4.17	710	294
4.6	250	103	4.18	800	331
4.7	280	116	4.19	900	373
4.8	300	125	4.20	1000	414
4.9	315	130	4.21	1120	464
4.10	355	147	4.22	1250	518
4.11	400	166	4.23	1400	579
4.12	450	186	4.24	1500	621
*4.25	100	41	*4.28	160	66
*4.26	125	52	*4.29	180	76
*4.27	150	62	*4.30	200	83

Note(*): pressed elbow(BU 45°). Others are segmented elbows.

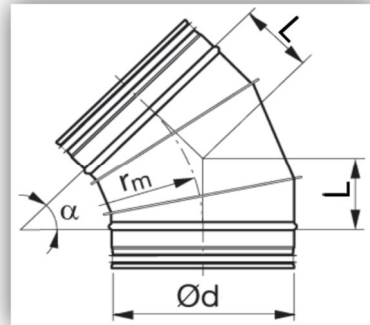
5. SINGLE SKIN 30° ELBOW-BFU 30°-BU 30°



No.	Ød ₁	L	No.	Ød ₁	L
	mm	mm		mm	mm
5.1	150	27	5.13	500	134
5.2	160	33	5.14	560	150
5.3	180	40	5.15	600	161
5.4	200	43	5.16	630	169
5.5	224	48	5.17	710	190
5.6	250	54	5.18	800	214
5.7	280	60	5.19	900	241
5.8	300	80	5.20	1000	268
5.9	315	84	5.21	1120	300
5.10	355	95	5.22	1250	335
5.11	400	107	5.23	1400	375
5.12	450	121	5.24	1500	402
*5.25	100	27	*5.28	160	33
*5.26	125	33	*5.29	180	40
*5.27	150	27	*5.30	200	43

Note(*): pressed elbow(BU 30°). Others are segmented elbows.

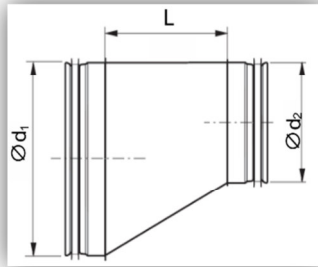
6. SINGLE SKIN 15° ELBOW-BFU 15°-BU 15



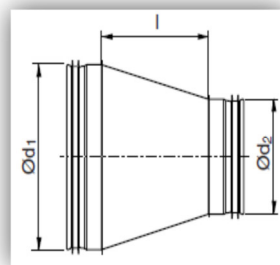
No.	Ød ₁	L	No.	Ød ₁	L
	mm	mm		mm	mm
6.1	150	20	6.13	500	66
6.2	160	21	6.14	560	74
6.3	180	24	6.15	600	79
6.4	200	26	6.16	630	83
6.5	224	30	6.17	710	96
6.6	250	33	6.18	800	105
6.7	280	37	6.19	900	118
6.8	300	39	6.20	1000	132
6.9	315	41	6.21	1120	147
6.10	355	47	6.22	1250	165
6.11	400	53	6.23	1400	184
6.12	450	59	6.24	1500	198
*6.25	100	13	*6.28	160	21
*6.26	125	16	*6.29	180	24
*6.27	150	20	*6.30	200	26

Note(*): pressed elbow(BU 15°). Others are segmented elbows.

7. RCLU & RLU SINGLE SKIN REDUCER



RLU



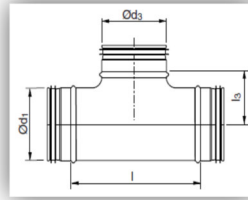
RCLU

No.	Ød1	Ød2	L	No.	Ød1	Ød2	L
	mm	mm			mm	mm	
7.1	125	100	64	7.17	224	125	166
7.2	150	100		7.18	224	150	132
7.3	150	125		7.19	224	160	118
7.4	160	100	112	7.20	224	180	90
7.5	160	125	75	7.21	224	200	63
7.6	160	150		7.22	250	100	236
7.7	180	100	140	7.23	250	125	202
7.8	180	125	106	7.24	250	150	167
7.9	180	150	71	7.25	250	160	154
7.10	180	160	58	7.26	250	180	126
7.11	200	100	167	7.27	250	200	99
7.12	200	125	133	7.28	250	224	66
7.13	200	150		7.29	300	100	290
7.14	200	160	85	7.30	300	125	270
7.15	200	180	58	7.31	300	150	236
7.16	224	100	200	7.32	300	160	222

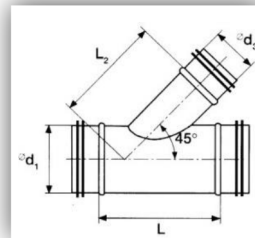
No.	Ød1 mm	Ød2 mm	L mm	No.	Ød1 mm	Ød2 mm	L mm
7.33	300	180	195	7.58	355	315	85
7.34	300	200	167	7.59	400	100	
7.35	300	224	135	7.60	400	125	
7.36	300	250	99	7.61	400	150	
7.37	300	280	58	7.62	400	160	365
7.38	315	100	311	7.63	400	180	337
7.39	315	125	291	7.64	400	200	310
7.40	315	150	257	7.65	400	224	277
7.41	315	160	243	7.66	400	250	241
7.42	315	180	216	7.67	400	280	200
7.43	315	200	188	7.68	400	300	172
7.44	315	224	155	7.69	400	315	152
7.45	315	250	119	7.70	400	355	97
7.46	315	280	78	7.71	450	100	
7.47	315	300	51	7.72	450	125	
7.48	355	100		7.73	450	150	
7.49	355	125		7.74	450	160	
7.50	355	150		7.75	450	180	
7.51	355	160	298	7.76	450	200	378
7.52	355	180	270	7.77	450	224	346
7.53	355	200	243	7.78	450	250	310
7.54	355	224	210	7.79	450	280	269
7.55	355	250	174	7.80	450	300	241
7.56	355	280	133	7.81	450	315	221
7.57	355	300	106	7.82	450	355	166
7.83	450	400	109	7.98	560	200	
7.84	500	150		7.99	560	224	
7.85	500	160		7.100	560	250	461
7.86	500	180		7.101	560	280	420
7.87	500	200	447	7.102	560	300	392
7.88	500	224	414	7.103	560	315	371
7.89	500	250	378	7.104	560	355	317
7.90	500	280	337	7.105	560	400	260
7.91	500	300	310	7.106	560	450	191
7.92	500	315	289	7.107	560	500	122
7.93	500	355	234	7.108	600	180	
7.94	500	400	177	7.109	600	200	
7.95	500	450	109	7.110	600	224	
7.96	560	160		7.111	600	250	516
7.97	560	180		7.112	600	280	475

No.	Ød1	Ød2	L	No.	Ød1	Ød2	L
	mm	mm	mm		mm	mm	mm
7.113	600	300	447	7.153	800	560	375
7.114	600	315	427	7.154	800	600	320
7.115	600	355	372	7.155	800	630	279
7.116	600	400	315	7.156	800	710	174
7.117	600	450	246	7.157	900	400	
7.118	600	500	177	7.158	900	450	663
7.119	600	560	95	7.159	900	500	594
7.120	630	180		7.160	900	560	512
7.121	630	200		7.161	900	600	457
7.122	630	224		7.162	900	630	416
7.123	630	250	557	7.162	900	710	311
7.124	630	280	516	7.163	900	800	187
7.125	630	300	488	7.164	1000	500	732
7.126	630	315	468	7.165	1000	560	649
7.127	630	355	413	7.166	1000	600	594
7.128	630	400	356	7.167	1000	630	553
7.129	630	450	287	7.168	1000	710	448
7.13	630	500	219	7.169	1000	800	325
7.131	630	560	413	7.170	1000	900	187
7.132	630	600	356	7.171	1120	500	
7.133	710	180		7.172	1120	560	814
7.134	710	200		7.173	1120	600	759
7.135	710	224		7.174	1120	630	718
7.136	710	250		7.175	1120	710	613
7.137	710	280		7.176	1120	800	490
7.138	710	300		7.177	1120	900	352
7.139	710	315		7.178	1120	1000	215
7.140	710	355	528	7.179	1250	500	
7.141	710	400	471	7.180	1250	560	
7.142	710	450	402	7.181	1250	600	938
7.143	710	500	333	7.182	1250	630	897
7.144	710	560	251	7.183	1250	710	792
7.145	710	600	196	7.184	1250	800	668
7.146	710	630	155	7.185	1250	900	531
7.147	800	300		7.186	1250	1000	393
7.148	800	315		7.187	1250	1120	229
7.149	800	355		7.188	1500	900	
7.150	800	400	594	7.189	1500	1000	
7.151	800	450	526	7.190	1500	1120	
7.152	800	500	457	7.191	1500	1250	

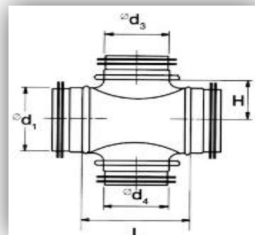
8. TCPU & TVU & XCPL SINGLE SKIN T-JOINT



TCPU



TVU



XCPL

No	Ød1	Ød2	l	l3	No	Ød1	Ød2	l	l3
	mm	mm	mm	mm		mm	mm	mm	mm
8.1	100	100	130	65	8.13	200	150	260	120
8.2	125	100	130	78	8.14	200	160	209	125
8.3	125	125	165	83	8.15	200	180	285	125
8.4	150	100	175	90	8.16	200	200	249	125
8.5	150	125	215	95	8.17	224	100	175	127
8.6	150	150	260	95	8.18	224	125	215	132
8.7	160	100	130	95	8.19	224	150	260	132
8.8	160	125	166	100	8.20	224	160	260	137
8.9	160	150	260	100	8.21	224	180	285	137
8.10	160	160	209	105	8.22	224	200	346	137
8.11	200	100	175	115	8.23	250	100	175	140
8.12	200	125	215	115	8.24	250	125	220	145

No	Ød1	Ød2	l	l3	No	Ød1	Ød2	l	l3
8.25	250	150	255	145	8.68	400	180	306	225
8.26	250	160	256	150	8.69	400	200	306	225
8.27	250	180	306	150	8.70	400	224	350	225
8.28	250	200	306	150	8.71	400	250	350	225
8.29	250	224	350	150	8.72	400	280	390	200
8.30	250	250	296	150	8.73	400	300	430	225
8.31	300	100	175	165	8.74	400	315	415	225
8.32	300	125	220	170	8.75	400	355	470	225
8.33	300	150	255	170	8.76	400	400	510	225
8.34	300	160	256	175	8.77	450	100	175	240
8.35	300	180	306	175	8.78	450	125	225	245
8.36	300	200	306	175	8.79	450	150	266	245
8.37	300	224	350	175	8.80	450	160	300	250
8.38	300	250	350	175	8.81	450	180	306	250
8.39	300	280	390	150	8.82	450	200	306	250
8.40	300	300	430	175	8.83	450	224	350	250
8.41	315	100	175	173	8.84	450	250	350	250
8.42	315	125	220	178	8.85	450	280	390	225
8.43	315	150	255	178	8.86	450	300	430	250
8.44	315	160	256	182	8.87	450	315	415	250
8.45	315	180	306	182	8.88	450	355	470	250
8.46	315	200	306	182	8.89	450	400	510	250
8.47	315	224	350	182	8.90	450	450	550	225
8.48	315	250	350	182	8.91	500	150	266	270
8.49	315	280	390	182	8.92	500	160	266	275
8.50	315	300	430	182	8.93	500	180	306	275
8.51	315	315	363	182	8.94	500	200	306	275
8.52	355	100	175	193	8.95	500	224	350	275
8.53	355	125	220	198	8.96	500	250	350	275
8.54	355	150	255	198	8.97	500	280	390	275
8.55	355	160	256	203	8.98	500	300	430	275
8.56	355	180	306	203	8.99	500	315	415	275
8.57	355	200	306	203	8.100	500	355	470	275
8.58	355	224	350	203	8.101	500	400	510	275
8.59	355	250	350	203	8.102	500	450	550	250
8.60	355	280	390	178	8.103	500	500	552	290
8.61	355	300	430	203	8.104	560	160	266	305
8.62	355	315	455	203	8.105	560	180	306	305
8.63	355	355	470	203	8.106	560	200	306	305
8.64	400	100	175	215	8.107	560	224	350	305
8.65	400	125	225	220	8.108	560	250	350	305
8.66	400	150	266	220	8.109	560	280	390	305
8.67	400	160	300	225	8.110	560	300	430	280

No	Ød1	Ød2	l	l3	No	Ød1	Ød2	l	l3
8.111	560	315	415	305	8.154	710	630	860	445
8.112	560	355	470	305	8.155	710	710	940	445
8.113	560	400	510	305	8.156	800	250	455	465
8.114	560	450	550	280	8.157	800	280	495	475
8.115	560	500	552	280	8.158	800	300	515	475
8.116	560	560	610	280	8.159	800	315	530	475
8.117	600	200	300	325	8.160	800	355	580	485
8.118	600	224	350	325	8.161	800	400	625	485
8.119	600	250	350	325	8.162	800	450	675	485
8.120	600	280	390	325	8.163	800	500	730	490
8.121	600	300	430	300	8.164	800	560	790	490
8.122	600	315	415	325	8.165	800	600	830	490
8.123	600	355	470	300	8.166	800	630	860	490
8.124	600	400	510	325	8.167	800	710	940	490
8.125	600	450	550	300	8.168	800	800	1030	490
8.126	600	500	552	300	8.169	900	300	350	340
8.127	600	560	610	300	8.170	900	315	530	425
8.128	600	600	650	300	8.171	900	355	580	535
8.129	630	200	300	340	8.172	900	400	625	535
8.130	630	224	350	340	8.173	900	450	675	535
8.131	630	250	350	340	8.174	900	500	730	540
8.132	630	280	390	340	8.175	900	560	790	540
8.133	630	300	450	315	8.176	900	600	830	540
8.134	630	315	415	340	8.177	900	630	860	540
8.135	630	355	470	315	8.178	900	710	940	540
8.136	630	400	510	340	8.179	900	800	1030	540
8.137	630	450	555	315	8.180	900	900	1150	540
8.138	630	500	552	340	8.181	1000	315	530	575
8.139	630	560	610	315	8.182	1000	355	580	585
8.140	630	600	650	315	8.183	1000	400	625	585
8.141	630	630	680	340	8.184	1000	450	675	585
8.142	710	200	300	340	8.185	1000	500	730	590
8.143	710	224	350	340	8.186	1000	560	790	590
8.144	710	250	455	420	8.187	1000	600	830	590
8.145	710	280	495	420	8.188	1000	630	860	590
8.146	710	300	515	430	8.189	1000	710	940	590
8.147	710	315	530	430	8.190	1000	800	1030	590
8.148	710	355	580	440	8.191	1000	900	1150	590
8.149	710	400	625	440	8.192	1000	1000	1250	590
8.150	710	450	675	440	8.193	1120	355	580	650
8.151	710	500	730	445	8.194	1120	400	625	650
8.152	710	560	790	445	8.195	1120	450	675	650
8.153	710	600	830	445	8.196	1120	500	730	650

No	Ød1	Ød2	l	l3	No	Ød1	Ød2	l	l3
8.111	560	315	415	305	8.154	710	630	860	445
8.112	560	355	470	305	8.155	710	710	940	445
8.113	560	400	510	305	8.156	800	250	455	465
8.114	560	450	550	280	8.157	800	280	495	475
8.115	560	500	552	280	8.158	800	300	515	475
8.116	560	560	610	280	8.159	800	315	530	475
8.117	600	200	300	325	8.160	800	355	580	485
8.118	600	224	350	325	8.161	800	400	625	485
8.119	600	250	350	325	8.162	800	450	675	485
8.120	600	280	390	325	8.163	800	500	730	490
8.121	600	300	430	300	8.164	800	560	790	490
8.122	600	315	415	325	8.165	800	600	830	490
8.123	600	355	470	300	8.166	800	630	860	490
8.124	600	400	510	325	8.167	800	710	940	490
8.125	600	450	550	300	8.168	800	800	1030	490
8.126	600	500	552	300	8.169	900	300	350	340
8.127	600	560	610	300	8.170	900	315	530	425
8.128	600	600	650	300	8.171	900	355	580	535
8.129	630	200	300	340	8.172	900	400	625	535
8.130	630	224	350	340	8.173	900	450	675	535
8.131	630	250	350	340	8.174	900	500	730	540
8.132	630	280	390	340	8.175	900	560	790	540
8.133	630	300	450	315	8.176	900	600	830	540
8.134	630	315	415	340	8.177	900	630	860	540
8.135	630	355	470	315	8.178	900	710	940	540
8.136	630	400	510	340	8.179	900	800	1030	540
8.137	630	450	555	315	8.180	900	900	1150	540
8.138	630	500	552	340	8.181	1000	315	530	575
8.139	630	560	610	315	8.182	1000	355	580	585
8.140	630	600	650	315	8.183	1000	400	625	585
8.141	630	630	680	340	8.184	1000	450	675	585
8.142	710	200	300	340	8.185	1000	500	730	590
8.143	710	224	350	340	8.186	1000	560	790	590
8.144	710	250	455	420	8.187	1000	600	830	590
8.145	710	280	495	420	8.188	1000	630	860	590
8.146	710	300	515	430	8.189	1000	710	940	590
8.147	710	315	530	430	8.190	1000	800	1030	590
8.148	710	355	580	440	8.191	1000	900	1150	590
8.149	710	400	625	440	8.192	1000	1000	1250	590
8.150	710	450	675	440	8.193	1120	355	580	650
8.151	710	500	730	445	8.194	1120	400	625	650
8.152	710	560	790	445	8.195	1120	450	675	650
8.153	710	600	830	445	8.196	1120	500	730	650

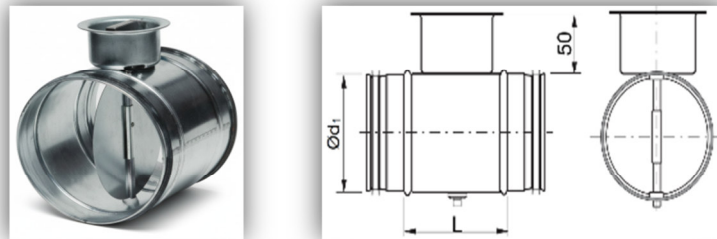
No	Ød1	Ød2	l	l3	No	Ød1	Ød2	l	l3
8.197	1120	560	790	650	8.216	1250	1000	1250	715
8.198	1120	600	830	650	8.217	1250	1120	1370	715
8.199	1120	630	860	650	8.218	1250	1250	1500	715
8.200	1120	710	940	650	8.219	1500	400	625	780
8.201	1120	800	1030	650	8.220	1500	450	675	780
8.202	1120	900	1150	650	8.221	1500	500	730	780
8.205	1120	1000	1250	650	8.222	1500	560	790	780
8.206	1120	1120	1370	650	8.223	1500	600	830	780
8.207	1250	400	625	715	8.224	1500	630	860	780
8.208	1250	450	675	715	8.225	1500	710	940	780
8.209	1250	500	730	715	8.226	1500	800	1030	780
8.210	1250	560	790	715	8.227	1500	900	1150	780
8.211	1250	600	830	715	8.228	1500	1000	1250	780
8.212	1250	630	860	715	8.229	1500	1120	1370	780
8.213	1250	710	940	715	8.230	1500	1250	1500	780
8.214	1250	800	1030	715	8.231	1500	1500	1750	780
8.215	1250	900	1150	715					

9. NPU SINGLE WALLED COUPLING (GASKET INCLUDED)



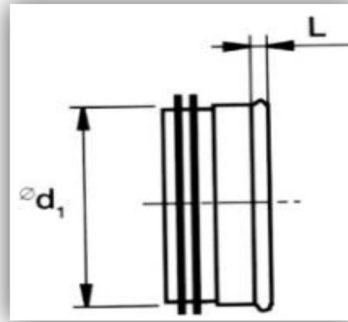
No	Ød1 (mm)	No	Ød1 (mm)
9.1	100	9.5	224
9.2	125	9.6	250
9.3	160	9.7	315
9.4	200		

10. DSU SINGLE WALLED REGULATING DAMPER(GASKET INCLUDED)



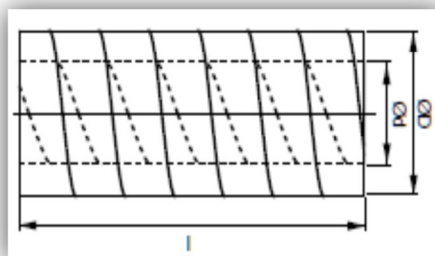
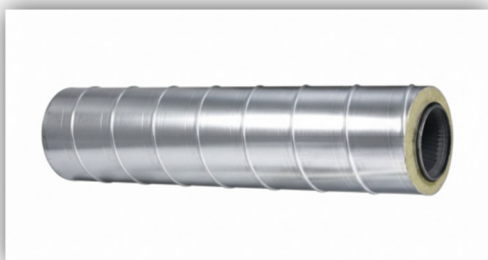
No	Ød (mm)	l (mm)	No	Ød (mm)	l (mm)
10.1	100	100	10.5	224	100
10.2	125	100	10.6	250	100
10.3	160	100	10.7	315	100
10.4	200	100			

11. ESU SINGLE WALLED END CAP(GASKET INCLUDED)



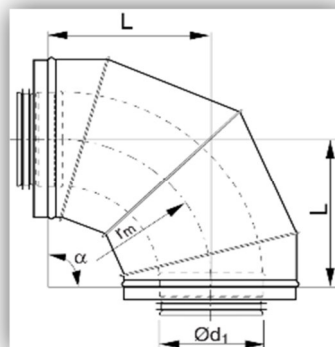
No	Ød	l	No	Ød	l
	(mm)	(mm)		(mm)	(mm)
11.1	100	100	11.5	224	100
11.2	125	100	11.6	250	100
11.3	160	100	11.7	315	100
11.4	200	100			

12. DOUBLE SKIN CIRCULAR DUCT



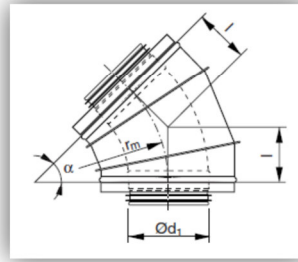
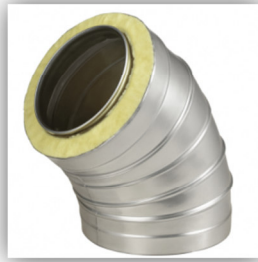
No	Ød	ØD	l	No	Ød	ØD	l
	mm	mm			mm	mm	
12.1	100	150	3000	12.5	250	300	3000
12.2	125	160	3000	12.6	300	355	3000
12.3	160	200	3000	12.7	315	355	3000
12.4	200	250	3000				

13. DOUBLE SKIN 90° ELBOW-DBFU 90°



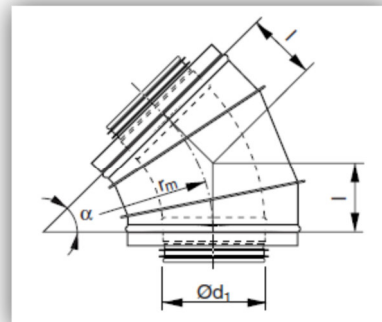
No	Ød1	l	No	Ød1	l
	(mm)			(mm)	
13.1	100	160	13.5	224	224
13.2	125	190	13.6	250	352
13.3	160	240	13.7	315	315
13.4	200	200			

14. DOUBLE SKIN 60° ELBOW-DBFU 60°



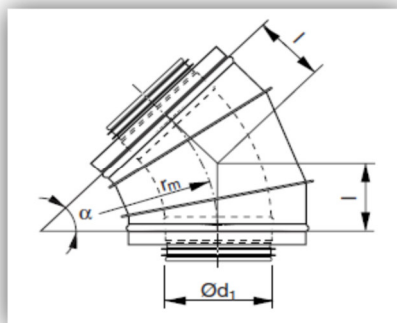
No	Ød1	No	Ød1
	(mm)		(mm)
14.1	100	14.5	224
14.2	125	14.6	250
14.3	160	14.7	315
14.4	200		

15. DOUBLE SKIN 45° ELBOW-DBFU 45°



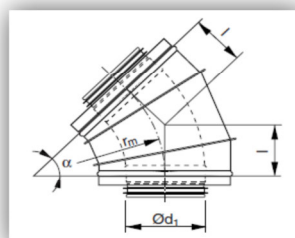
No	Ød1	l	No	Ød1	l
	(mm)	(mm)		(mm)	(mm)
15.1	100	66	15.5	224	124
15.2	125	79	15.6	250	136
15.3	160	100	15.7	315	145
15.4	200	83			

16. DOUBLE SKIN 30° ELBOW-DBFU 30°



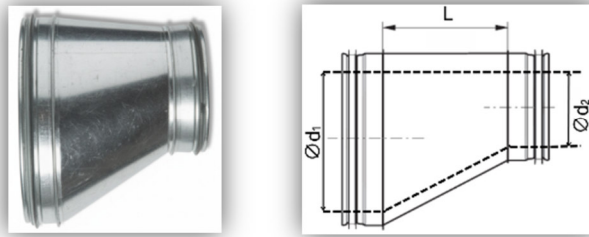
No	Ød1	l	No	Ød1	l
	(mm)	(mm)		(mm)	(mm)
16.1	100	43	16.5	224	59
16.2	125	47	16.6	250	69
16.3	160	60	16.7	315	83
16.4	200	54			

17. DOUBLE SKIN 15° ELBOW-DBFU 15°

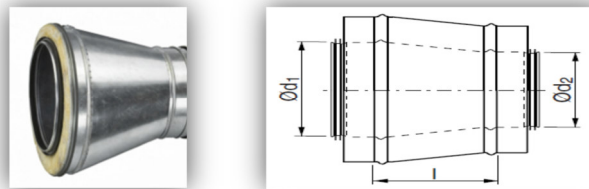


No	Ød1	No	Ød1
	(mm)		(mm)
17.1	100	17.5	224
17.2	125	17.6	250
17.3	160	17.7	315
17.4	200		

18. RCLU&RLU DOUBLE SKIN REDUCER



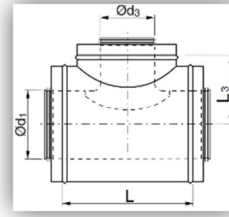
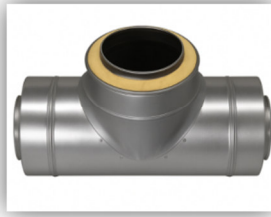
RLU



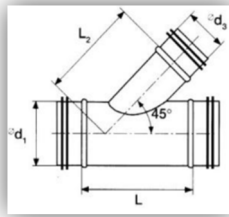
RCLU

No	Ød1	Ød2	l	No	Ød1	Ød2	l
	(mm)	(mm)	(mm)		(mm)	(mm)	(mm)
18.1	125	100	64	18.11	250	100	222
18.2	160	100	112	18.12	250	125	202
18.3	160	125	75	18.13	250	160	154
18.4	200	100	167	18.14	250	200	99
18.5	200	125	133	18.15	250	224	85
18.6	200	160	85	18.16	315	100	222
18.7	224	100	167	18.17	315	125	202
18.8	224	125	133	18.18	315	160	154
18.9	224	160	85	18.19	315	200	99
18.10	224	200	74	18.20	315	224	85
				18.21	315	250	74

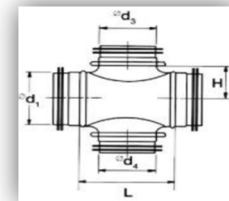
19. TCPU&TVU 45&XCPL DOUBLE SKIN T-JOINT



TCPU



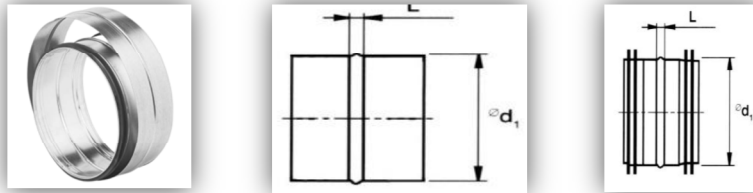
TVU 45



XCPL

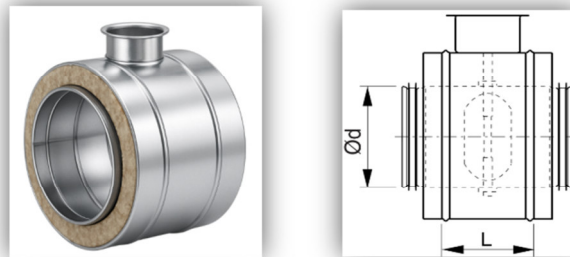
No	Ød1	Ød3	l	L3	No	Ød1	Ød3	l	L3
	(mm)	(mm)				(mm)	(mm)		
19.1	100	100	200	92	19.20	224	224	320	170
19.2	125	100	200	102	19.21	250	100	200	180
19.3	125	125	230	112	19.22	250	125	230	180
19.5	160	125	230	134	19.23	250	150	245	130
19.6	160	150	245	130	19.24	250	160	260	180
19.7	160	160	260	128	19.25	250	180	280	145
19.8	200	100	200	142	19.26	250	200	300	170
19.9	200	125	230	152	19.27	250	224	324	176
19.10	200	150	245	130	19.28	250	250	350	187
19.11	200	160	260	145	19.29	315	100	200	192
19.12	200	180	280	155	19.30	315	125	230	205
19.13	200	200	300	162	19.31	315	150	245	130
19.14	224	100	200	124	19.32	315	160	260	210
19.15	224	125	230	152	19.33	315	180	280	145
19.16	224	150	245	130	19.34	315	200	300	200
19.17	224	160	260	145	19.35	315	224	324	208
19.18	224	180	280	155	19.36	315	250	350	217
19.19	224	200	300	162	19.37	315	315	415	210

20. NPU DOUBLE WALLED COUPLING(2 PARTS GASKET INCLUDED)



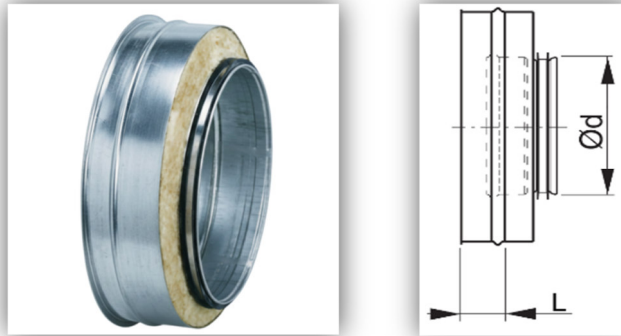
No	Ød1 (mm)	No	Ød1 (mm)
20.1	100	20.5	224
20.2	125	20.6	250
20.3	160	20.7	315
20.4	200		

21. NPU DOUBLE WALLED REGULATING DAMPER



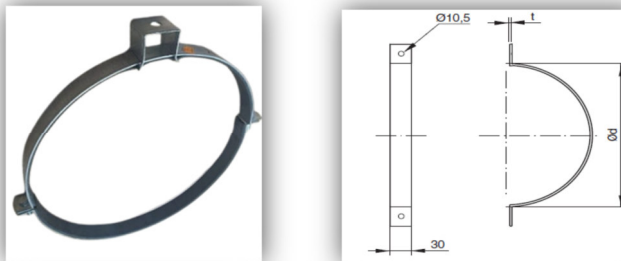
No	Ød (mm)	l (mm)	No	Ød (mm)	l (mm)
21.1	100	100	21.5	224	100
21.2	125	100	21.6	250	100
21.3	160	100	21.7	315	100
21.4	200	100			

22. ESL DOUBLE WALLED END CAP(GASKET INCLUDED)



No	Ød	l	No	Ød	l
	(mm)	(mm)		(mm)	(mm)
22.1	100	100	22.5	224	100
22.2	125	100	22.6	250	100
22.3	160	100	22.7	315	100
22.4	200	100			

23. CLAMP



No	Ød	t	No	Ød	t
	(mm)	(mm)		(mm)	(mm)
23.1	100	1.5	23.9	280	2
23.2	125	1.5	23.10	300	2
23.3	150	1.5	23.11	315	2
23.4	160	1.5	23.12	355	2
23.5	180	1.5	23.13	400	2
23.6	200	1.5	23.14	450	2.5
23.7	224	1.5	23.15	500	2.5
23.8	250	2			