



SPIRAL DUCT

<http://www.spiralduct.co.kr>

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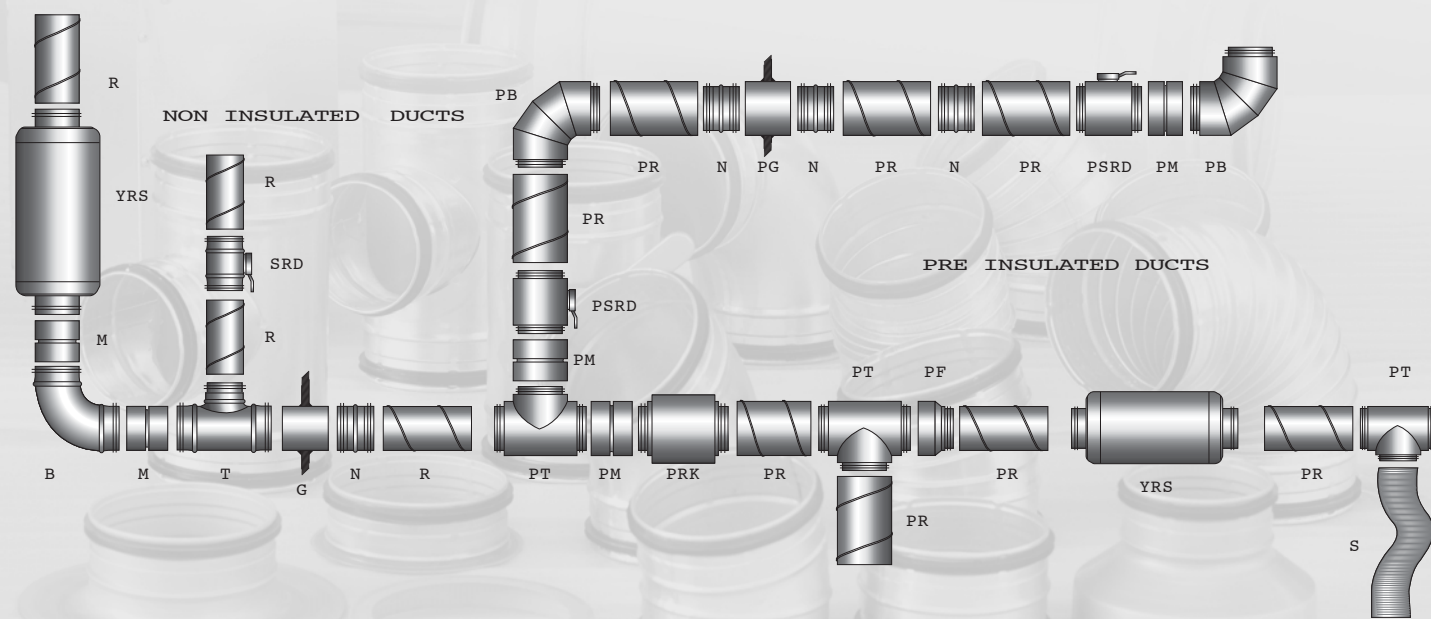
 HI DUCT Co.,Ltd.
통풍용 원형 덕트



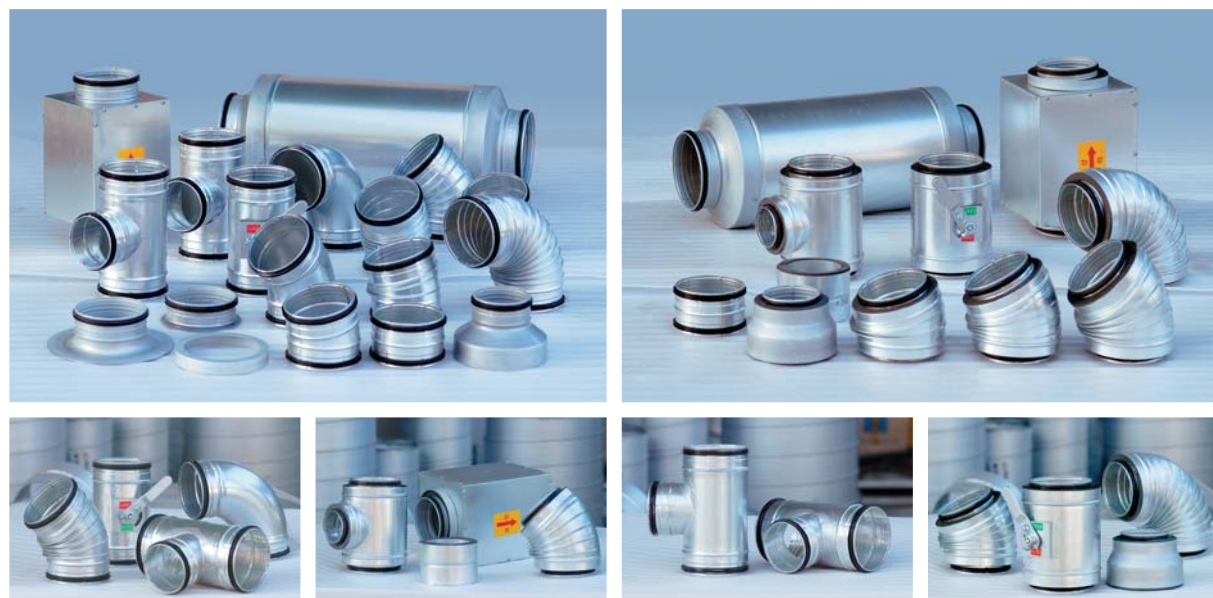
Full Assembly of Spiral Ducts

History of company

- 1988. 09 HI-PRES Korea Co., Ltd. established as a joint-venture for marine A/C & Vent.Fan business.
- 1998. 05 Moved & Expanded the factories to present area.(Gyeongnam Gimhae)
- 1998. 06 Start of Spiral duct business.
- 1999. 12 Acquired ISO 9001 Certificate from Korean Register of Shipping.
- 2003. 01 Start of Packaged Air Conditioner business.
- 2005. 10 Start of HVAC business for Power Generation Plant.
- 2006. 07 Company name changed to HI AIR KOREA Co., Ltd.
- 2007. 02 Start of Fire Damper business.
- 2009. 05 Start of MGO cooling system business.



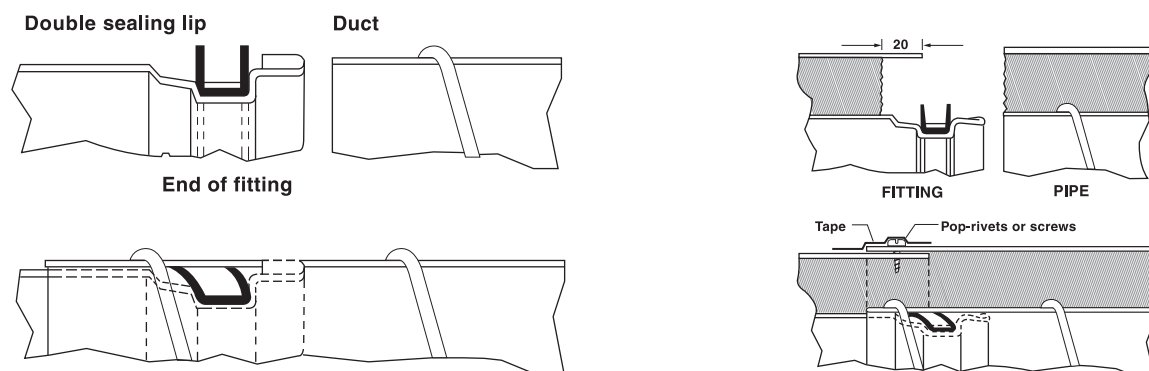
Products & Application



Benefits of the system

- Fast and easy installation
- Adjustable - twisting and fine adjustment involve no risk of leakage.
- Environmentally friendly as it is fitted without sealant which contains solvents.
- Can be installed in all kinds of weather.
- Temperature resistant from -30°C to +100°C
- Sealing minimises the risk of leakage in the event of damage.
- Withstands negative and positive pressure up to 3000 Pa
- Internal and external production control.
- Aesthetic design - an advantage for visible installation
- Unilume steel consists of aluminum(55% in weight ratio but 80% in surface volume ratio), zinc(43.4% in weight ratio), and silicone(1.6% in weight ratio) so it has both aluminum-unique corrosion-resistance and heat resistance and zinc-unique "galvanic behavior". As outdoor exposure test(for 13years), Unilume is at least 3-4 times superior to galvanized steel.

Description



The sealing system is based on a W-profile of homogeneous EPDM rubber. The rubber gasket is located in a groove at the end of the fitting and is securely attached by means of an aluminiumzinc coated steel strip. This design ensures that the rubber gasket is always held in its correct position.

When the fitting is inserted into a pipe, the W-profile results in a Double seal which significantly reduces the risk of leakage in the event of damage.

In order to achieve optimum sealing for all dimensions, we have chosen various sizes of W-profile as specified in the table below.

In order for the sealing gasket to be able to comply to our strict quality requirements, we have chosen EPDM rubber. This material is very resistant to ozone and UV rays, and at the same time unaffected by temperature fluctuations.

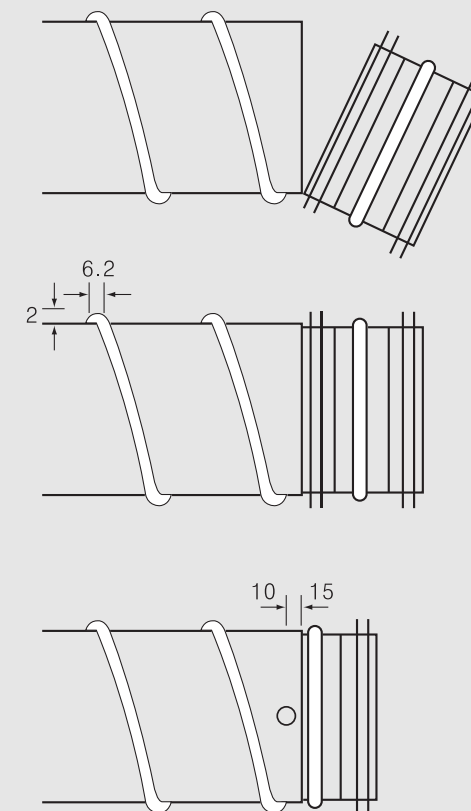
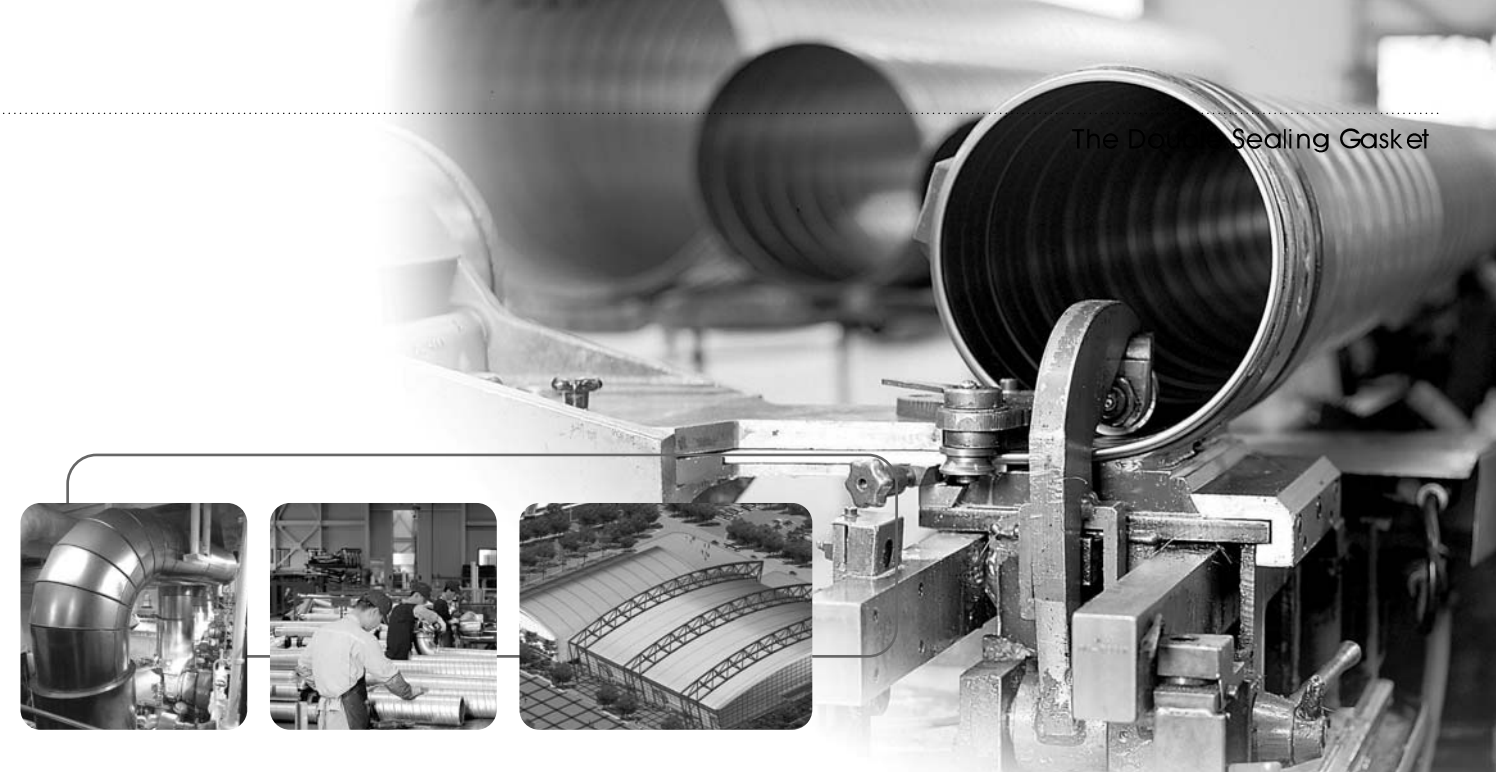
The ducts must be assembled according to these instructions

BEFORE ASSEMBLY

The ducts must be free from dirt.

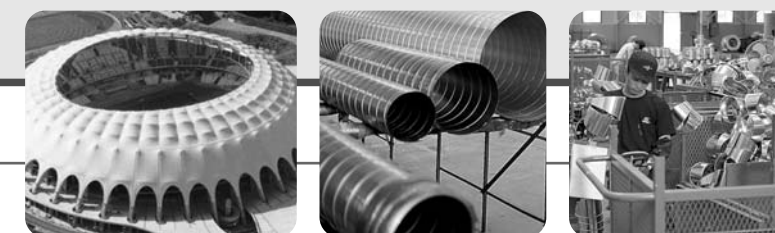
SHORTENING DUCTS

Ducts must be cut at right angles and carefully deburred.



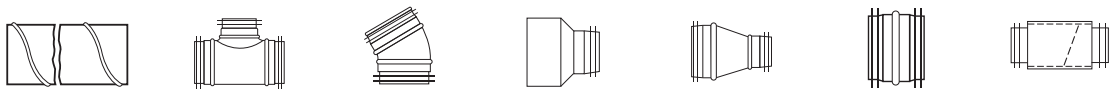
ASSEMBLY OF FITTINGS

- Check that ducts and fittings are undamaged. This is especially important with regard to the rubber gaskets.
- 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 sented pop rivets.



Contents

Pipe	R	8	Indoor ventilator	RDG	20
Tee	T	8	Non return valve	RK/PRK	20
Elbow	B90°	9	Smoke damper	SD/PSD	21
	B45°	9	Auto damper	FD	21
	B30°	10	Closing damper	CD	22
	B15°	10	Silencer	YRS	22
Reducer	F	11	Suspension clamp	U(A)	23
Volume damper	SRD	11		PU(A)	23
Nipple	N	12		U(B)	23
Sleeve	M	12		PU(B)	23
Special nipple	SN	13	End cap	EP	24
Lead-In	G	13	PVC cap	CAP	24
TC-Branch	TC	14	Flexible hose	S	25
End cover	ER	14		PS	25
			Clamp	FB	26
			Tape	TAPE	26
Pipe	PR	15			
	PRS	15			
Elbow	PB90°	16	Air Terminal Devices		27
	PB45°	16	Connecting Fittings		28
	PB30°	17	Pressure Loss In Spiral duct Fittings		29
	PB15°	17	Pressure Loss In Spiral duct pipes		29
T-piece	PT	18			
Reducer	PF	18			
Volume damper	PSRD	19			
Lead-In	PG	19			



SPIRAL DUCT SIZE

DESCRIPTION	DIA	THICKNESS	MATERIALS	REMARK
R-80	80	0.5	G/I (Galvanized Steel Sheet in Coils)	Accommodation
R-100	100			
R-125	125			
R-160	160			
R-200	200			
R-250	250			
R-315	315	1.0	G/L (Galvalume Steel Sheet)	Engine Room Cargo Hold
R-200	200			
R-250	250			
R-300	300			
R-315	315			
R-350	350			
R-400	400	1.2		
R-450	450			
R-500	500			
R-550	550			
R-560	560			
R-600	600			
R-630	630	1.6		
R-650	650			
R-700	700			
R-710	710			
R-750	750			
R-800	800			
R-850	850	1.6		
R-900	900			
R-950	950			
R-1000	1000			
R-1100	1100			
R-1200	1200			
R-1300	1300	1.6		
R-1400	1400			
R-1500	1500			
R-1600	1600			

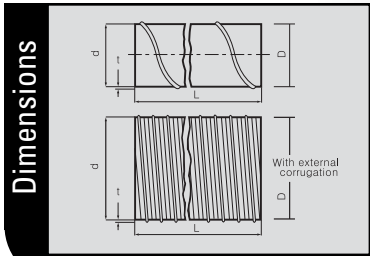
Ducts and Fittings for Circular airflow System

PIPE/TEE

R/T

ELBOW

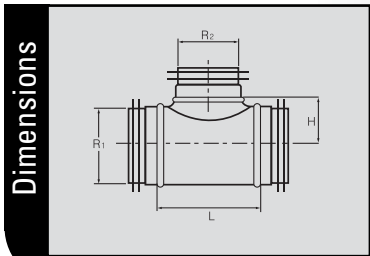
B90°/B45°



Dimensions

Type	Diameter		Thickness	weight
	Inside d	Outside D	t	Kg/m
R-80	80	84	0.5	1.16
R-100	100	104	0.5	1.62
R-125	125	129	0.5	2.00
R-160	160	164	0.5	2.40
R-200	200	204	0.5	3.00
R-250	250	254	0.5	4.00
R-315	315	320	0.5	4.80

Special size (diameter & thickness) can be produced on request.
Available production range is from 300mm to 1600mm which size is increasing by 50mm



Dimensions

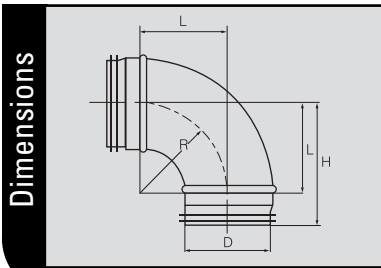
Type	L	H	R ₁	R ₂	t	Kg
T-80/80	150	70	R-80	R-80	0.5	0.30
T-100/80	150	80	R-100	R-80	0.5	0.35
T-100/100	165	80	R-100	R-100	0.5	0.39
T-125/80	150	90	R-125	R-80	0.5	0.45
T-125/100	165	90	R-125	R-100	0.5	0.50
T-125/125	200	90	R-125	R-125	0.5	0.60
T-160/80	150	109	R-160	R-80	0.5	0.51
T-160/100	165	109	R-160	R-100	0.5	0.69
T-160/125	200	109	R-160	R-125	0.5	0.70
T-160/160	250	109	R-160	R-160	0.5	0.80
T-200/80	145	140	R-200	R-80	0.5	0.70
T-200/100	170	140	R-200	R-100	0.5	0.80
T-200/125	205	140	R-200	R-125	0.5	0.90
T-200/160	250	140	R-200	R-160	0.5	1.10
T-200/200	300	140	R-200	R-200	0.5	1.30
T-250/80	145	165	R-250	R-80	0.5	0.90
T-250/100	170	165	R-250	R-100	0.5	1.00
T-250/125	205	165	R-250	R-125	0.5	1.10
T-250/160	250	165	R-250	R-160	0.5	1.25
T-250/200	300	165	R-250	R-200	0.5	1.60
T-250/250	370	150	R-250	R-250	0.5	1.80
T-315/80	145	195	R-315	R-80	0.5	1.40
T-315/100	170	195	R-315	R-100	0.5	1.50
T-315/125	205	195	R-315	R-125	0.5	1.60
T-315/160	250	195	R-315	R-160	0.5	1.70
T-315/200	300	195	R-315	R-200	0.5	1.80
T-315/250	370	195	R-315	R-250	0.5	1.94
T-315/315	450	195	R-315	R-315	0.5	2.12

Available production range is from 300mm to 1600mm which size is increasing by 50mm



Type	D	R	L	H	t	Kg
B-80/90	ø 78.8	80	99	136	0.5	0.31
B-100/90	ø 98.8	90	114	151	0.5	0.42
B-125/90	ø 123.8	104	126	163	0.5	0.59
B-160/90	ø 158.7	139	165	202	0.5	0.95
B-200/90	ø 198.6	179	201	238	0.5	1.38
B-250/90	ø 248.5	254	254	291	0.5	2.3
B-315/90	ø 313.4	319	319	356	0.5	3.1

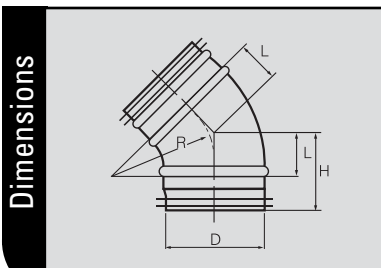
Available production range is from 300mm to 1600mm which size is increasing by 50mm



Dimensions

Type	D	R	L	H	t	Kg
B-80/45	ø 78.8	70	51	88	0.5	0.21
B-100/45	ø 98.8	90	59	96	0.5	0.29
B-125/45	ø 123.8	104	65	102	0.5	0.4
B-160/45	ø 158.7	139	80	117	0.5	0.59
B-200/45	ø 198.6	179	98	135	0.5	0.86
B-250/45	ø 248.5	254	105.2	142.2	0.5	2.0
B-315/45	ø 313.4	319	132	169	0.5	2.8

Available production range is from 300mm to 1600mm which size is increasing by 50mm



Dimensions

ELBOW

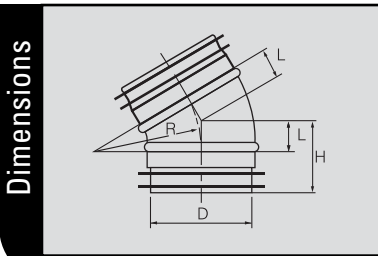
B30°/B15°



B30°

Type	D	R	L	H	t	Kg
B-80/30	ø 78.8	70	45	82	0.5	0.19
B-100/30	ø 98.8	90	47	84	0.5	0.25
B-125/30	ø 123.8	104	52	89	0.5	0.37
B-160/30	ø 158.7	139	60	97	0.5	0.48
B-200/30	ø 198.6	179	69	106	0.5	0.66
B-250/30	ø 248.5	254	67.6	104.6	0.5	1.8
B-315/30	ø 313.4	319	86	123	0.5	2.0

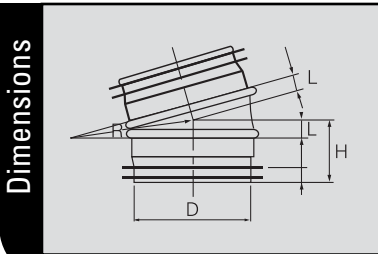
Available production range is from 300mm to 1600mm which size is increasing by 50mm



B15°

Type	D	R	L	H	t	Kg
B-80/15	ø 78.8	70	36	73	0.5	0.16
B-100/15	ø 98.8	90	35	72	0.5	0.2
B-125/15	ø 123.8	104	37	74	0.5	0.27
B-160/15	ø 158.7	139	41	78	0.5	0.37
B-200/15	ø 198.6	179	45	82	0.5	0.49
B-250/15	ø 248.5	318.5	41.3	78.3	0.5	1.6
B-315/15	ø 313.4	319.0	45.0	82.0	0.5	1.6

Available production range is from 300mm to 1600mm which size is increasing by 50mm



REDUCER/DAMPER

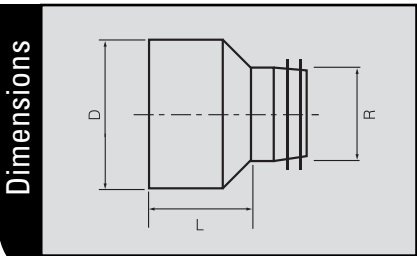
F/SRD



F

Type	L	D	R	t	Kg
F-100/80	75	100	R-80	0.8	0.22
F-125/80	75	125	R-80	0.8	0.26
F-125/100	75	125	R-100	0.8	0.27
F-160/80	75	160	R-80	0.8	0.31
F-160/100	75	160	R-100	0.8	0.35
F-160/125	75	160	R-125	0.8	0.39
F-200/100	75	200	R-100	0.8	0.38
F-200/125	75	200	R-125	0.8	0.40
F-200/160	75	200	R-160	0.8	0.46
F-250/125	75	250	R-125	0.5	0.52
F-250/160	75	250	R-160	0.5	0.60
F-250/200	75	250	R-200	0.5	0.65
F-315/80	115	315	R-80	0.5	0.74
F-315/100	115	315	R-100	0.5	0.77
F-315/125	115	315	R-125	0.5	0.8
F-315/160	115	315	R-160	0.5	0.85
F-315/200	115	315	R-200	0.5	0.9
F-315/250	115	315	R-250	0.5	0.97

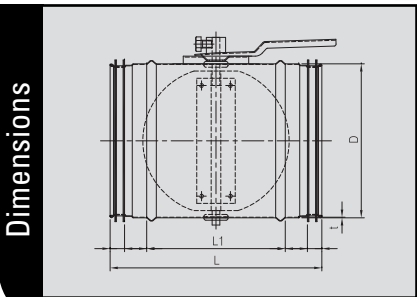
Available production range is from 300mm to 1600mm which size is increasing by 50mm



SRD

Type	D	L1	L	t	Kg
SRD-80	ø 78.8	140	214	0.5	0.5
SRD-100	ø 98.8	140	214	0.5	0.66
SRD-125	ø 123.8	140	214	0.5	0.76
SRD-160	ø 158.7	140	214	0.5	0.98
SRD-200	ø 198.6	140	214	0.5	1.24
SRD-250	ø 248.5	140	214	0.5	1.46
SRD-315	ø 313.4	140	214	0.5	1.78

Available production range is from 300mm to 1600mm which size is increasing by 50mm



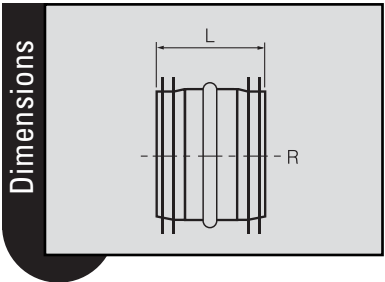
NIPPLE/SLEEVE

N/M



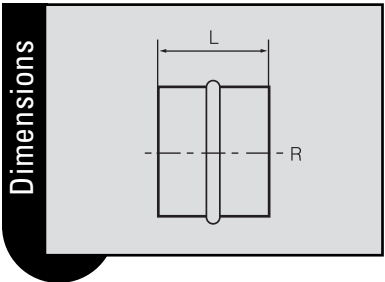
N				
Type	L	R	t	Kg
N-80	80	R-80	0.5	0.1
N-100	80	R-100	0.5	0.1
N-125	80	R-125	0.5	0.2
N-160	80	R-160	0.5	0.3
N-200	80	R-200	0.5	0.3
N-250	80	R-250	0.5	0.4
N-315	80	R-315	0.5	0.5

Available production range is from 300mm to 1600mm which size is increasing by 50mm



M				
Type	L	R	t	Kg
M-80	100	R-80	0.5	0.1
M-100	100	R-100	0.5	0.1
M-125	100	R-125	0.5	0.2
M-160	100	R-160	0.5	0.2
M-200	100	R-200	0.5	0.3
M-250	100	R-250	0.5	0.4
M-315	100	R-315	0.5	0.5

Available production range is from 300mm to 1600mm which size is increasing by 50mm

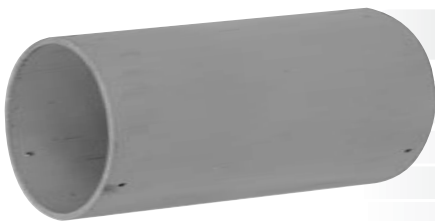
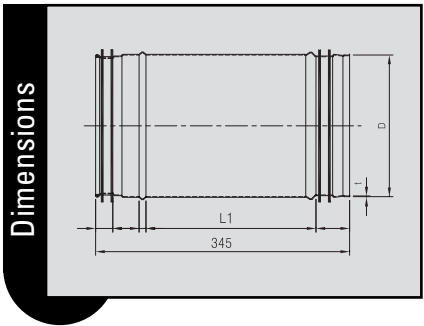


SPECIAL NIPPLE/LEAD-IN

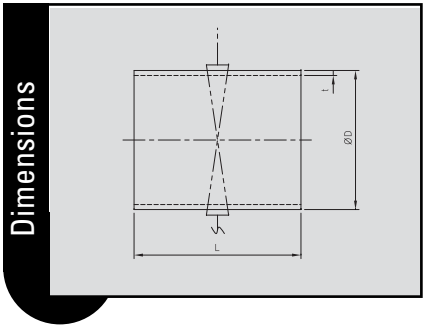
SN/G



SN				
Type	D	L1	t	Kg
SN-80	78.8	272	0.5	0.3
SN-100	98.8	272	0.5	0.4
SN-125	123.8	272	0.5	0.5
SN-160	158.7	272	0.5	0.7
SN-200	198.6	272	0.5	0.8
SN-250	248.5	272	0.5	1.2
SN-315	313.4	272	0.5	1.4



G					
Type	D	L	R	t	Kg
G-80/200	ø 88.9	200	R-80	4.05	1.9
G-100/200	ø 114.3	200	R-100	6.0	3.8
G-125/200	ø 139.7	200	R-125	6.6	4.7
G-160/200	ø 171.0	200	R-160	5.2	3.3
G-200/GL-200	ø 219.1	200/900	R-200	8.2	9.1/41.0
G-250/GL-250	ø 267.0	200/900	R-250	9.3	11.5/48.8
G-315/GL-315	ø 331.0	200/900	R-250	6.0	9.9/42.5

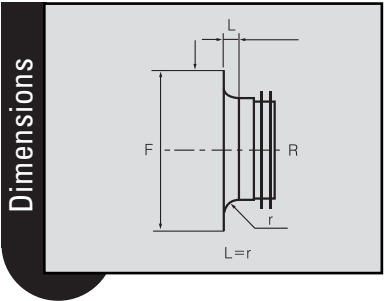


TC-BRANCH/END COVER

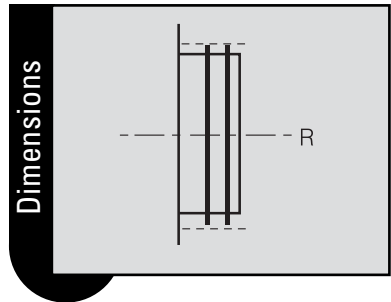
TC/ER



TC					
Type	F	R	L	t	Kg
TC-80	130	R-80	12	0.8	0.1
TC-100	155	R-100	15	0.8	0.1
TC-125	220	R-125	20	0.8	0.1
TC-160	220	R-160	25	0.8	0.1
TC-200	275	R-200	25	0.8	0.2
TC-250	325	R-250	25	0.8	0.3
TC-315	390	R-315	25	0.8	0.4



ER			
Type	R	t	Kg
ER-80	R-80	0.8	0.10
ER-100	R-100	0.8	0.12
ER-125	R-125	0.8	0.16
ER-160	R-160	0.8	0.20
ER-200	R-200	0.8	0.24
ER-250	R-250	0.8	0.30
ER-315	R-315	0.8	0.36

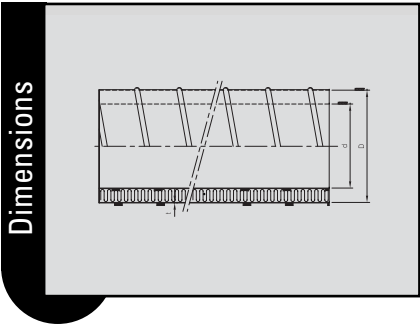


PIPE

PR/PRS



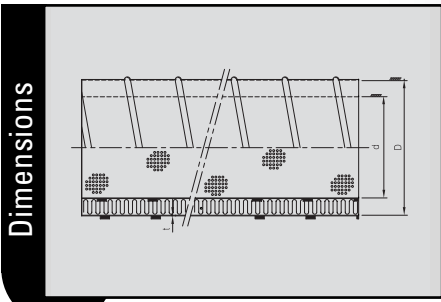
PR					
Type	Diameter		Thickness	Weight	Air volume
	inside d	outside D	t	Kg/m	m³/h
PR-80	ø 80	ø 112	0.5	3.3	18.0
PR-100	ø 100	ø 132	0.5	4.2	28.3
PR-125	ø 125	ø 157	0.5	4.7	44.2
PR-160	ø 160	ø 192	0.5	6.0	72.4
PR-200	ø 200	ø 232	0.5	7.3	113.0
PR-250	ø 250	ø 282	0.5	12.6	117.0
PR-315	ø 315	ø 350	0.5	13.1	281.0



- 1) Air volume at V=1m/s
2) Special size (diameter & thickness) can be produced on request.



PRS					
Type	Diameter		Thickness	L	Weight
	inside d	outside D	t		Kg/m
PRS-80	ø 80	ø 112	0.5	4000	2.8
PRS-100	ø 100	ø 132	0.5	4000	3.6
PRS-125	ø 125	ø 157	0.5	4000	4.1
PRS-160	ø 160	ø 192	0.5	4000	5.4
PRS-200	ø 200	ø 232	0.5	4000	6.7
PRS-250	ø 250	ø 282	0.5	4000	8.0
PRS-315	ø 315	ø 350	0.5	4000	11.2



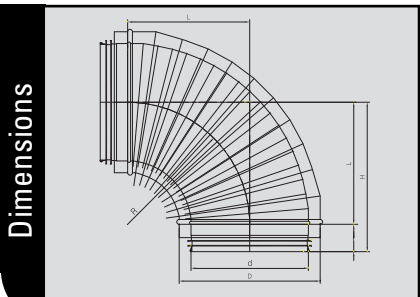
ELBOW

PB90°/PB45°



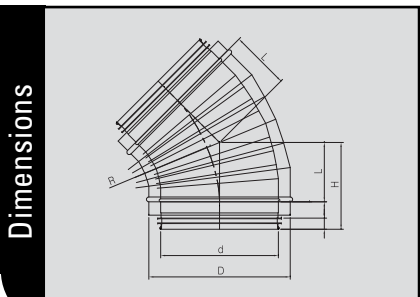
PB90°

Type	d	D	R	L	H	t	Kg
PB-80/90	ø 78.8	ø 110.8	80	99	136	0.5	0.88
PB-100/90	ø 98.8	ø 130.8	90	114	151	0.5	1.12
PB-125/90	ø 123.8	ø 155.7	104	126	163	0.5	1.55
PB-160/90	ø 158.7	ø 190.6	139	165	202	0.5	2.37
PB-200/90	ø 198.0	ø 230.6	179	201	238	0.5	3.44
PB-250/90	ø 248.5	ø 280.5	254	254	291	0.5	3.68
PB-315/90	ø 313.4	ø 348.4	319	319	356	0.5	4.20



PB45°

Type	d	D	R	L	H	t	Kg
PB-80/45	ø 78.8	ø 110.8	70	51	88	0.5	0.55
PB-100/45	ø 98.8	ø 130.8	90	59	96	0.5	0.74
PB-125/45	ø 123.8	ø 155.7	104	65	102	0.5	0.99
PB-160/45	ø 158.7	ø 190.6	139	80	117	0.5	1.44
PB-200/45	ø 198.6	ø 230.6	179	98	135	0.5	2.05
PB-250/45	ø 248.5	ø 280.5	254	105.2	142.2	0.5	2.40
PB-315/45	ø 313.4	ø 348.4	319	132	169	0.5	2.50



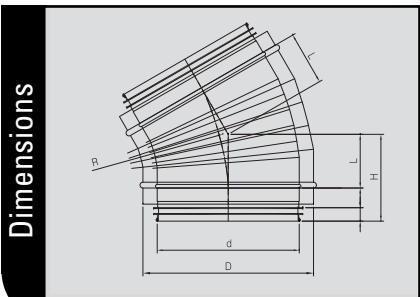
ELBOW

PB30°/PB15°



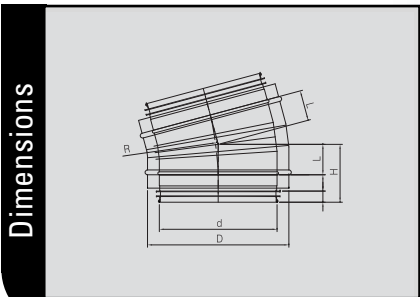
PB30°

Type	d	D	R	L	H	t	Kg
PB-80/30	ø 78.8	ø 110.8	70	45	82	0.5	0.5
PB-100/30	ø 98.8	ø 130.8	90	47	84	0.5	0.63
PB-125/30	ø 123.8	ø 155.7	104	52	89	0.5	0.82
PB-160/30	ø 158.7	ø 190.6	139	60	97	0.5	1.15
PB-200/30	ø 198.6	ø 230.6	179	69	106	0.5	1.58
PB-250/30	ø 248.5	ø 280.5	254	67.6	104.6	0.5	1.90
PB-315/30	ø 313.4	ø 348.4	319	86.0	123	0.5	2.10



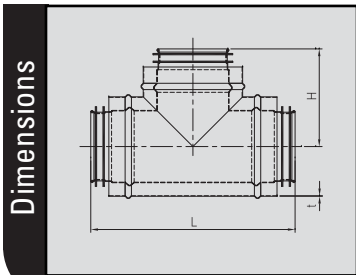
PB15°

Type	d	D	R	L	H	t	Kg
PB-80/15	ø 78.8	ø 110.8	70	35	73	0.5	0.41
PB-100/15	ø 98.8	ø 130.8	90	35	72	0.5	0.5
PB-125/15	ø 123.8	ø 155.7	104	37	74	0.5	0.64
PB-160/15	ø 158.7	ø 190.6	139	41	78	0.5	0.87
PB-200/15	ø 198.6	ø 230.6	179	45	82	0.5	1.14
PB-250/15	ø 248.5	ø 280.5	320	41.3	78.3	0.5	1.2
PB-315/15	ø 313.4	ø 348.4	345	45	82	0.5	2.0



T-PIECE/REDUCER

PT/PF

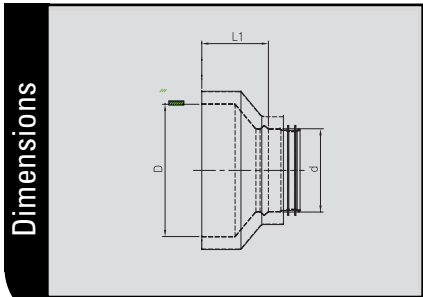


PT

Type	R1	R2	L	H	t	Kg
PT-80/80	PR-80	PR-80	224	107	0.5	0.60
PT-100/80	PR-100	PR-80	224	117	0.5	0.75
PT-100/100	PR-100	PR-100	239	117	0.5	0.80
PT-125/80	PR-125	PR-80	224	127	0.5	0.83
PT-125/100	PR-125	PR-100	239	127	0.5	0.91
PT-125/125	PR-125	PR-125	274	127	0.5	1.10
PT-160/80	PR-160	PR-80	224	146	0.5	1.10
PT-160/100	PR-160	PR-100	239	146	0.5	1.20
PT-160/125	PR-160	PR-125	274	146	0.5	1.29
PT-160/160	PR-160	PR-160	324	146	0.5	1.60
PT-200/80	PR-200	PR-80	219	177	0.5	1.30
PT-200/100	PR-200	PR-100	244	177	0.5	1.50
PT-200/125	PR-200	PR-125	279	177	0.5	1.70
PT-200/160	PR-200	PR-160	324	177	0.5	2.00
PT-200/200	PR-200	PR-200	374	177	0.5	2.30
PT-250/80	PR-250	PR-80	219	202	0.5	2.00
PT-250/100	PR-250	PR-100	244	202	0.5	2.25
PT-250/125	PR-250	PR-125	279	202	0.5	2.40
PT-250/160	PR-250	PR-160	324	202	0.5	2.80
PT-250/200	PR-250	PR-200	374	202	0.5	3.15
PT-250/250	PR-250	PR-250	444	202	0.5	3.60
PT-315/80	PR-315	PR-80	224	232	0.5	3.10
PT-315/100	PR-315	PR-100	239	232	0.5	3.40
PT-315/125	PR-315	PR-125	274	232	0.5	3.80
PT-315/160	PR-315	PR-160	324	232	0.5	4.00
PT-315/200	PR-315	PR-200	374	232	0.5	4.30
PT-315/250	PR-315	PR-250	444	232	0.5	4.70
PT-315/315	PR-315	PR-315	494	232	0.5	5.00

PF

Type	L1	D	d	t	Kg
PF-100/80	75	100	PR-80	0.8	0.25
PF-125/80	75	125	PR-80	0.8	0.30
PF-125/100	75	125	PR-100	0.8	0.40
PF-160/80	75	160	PR-80	0.8	0.40
PF-160/100	75	160	PR-100	0.8	0.40
PF-160/125	75	160	PR-125	0.8	0.45
PF-200/100	75	200	PR-100	0.8	0.65
PF-200/125	75	200	PR-125	0.8	0.70
PF-200/160	75	200	PR-160	0.8	0.70
PF-250/125	75	250	PR-125	0.5	1.05
PF-250/160	75	250	PR-160	0.5	1.05
PF-250/200	75	250	PR-200	0.5	1.05
PF-315/160	75	315	PR-160	0.5	1.20
PF-315/200	75	315	PR-200	0.5	1.20
PF-315/250	75	315	PR-250	0.5	1.30



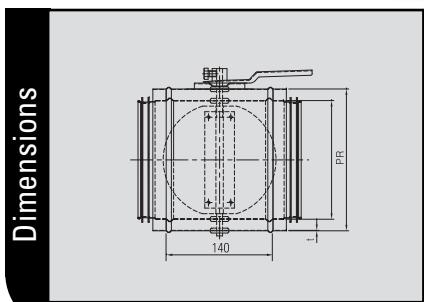
VOLUME DAMPER/LEAD-IN

PSRD/PG



PSRD

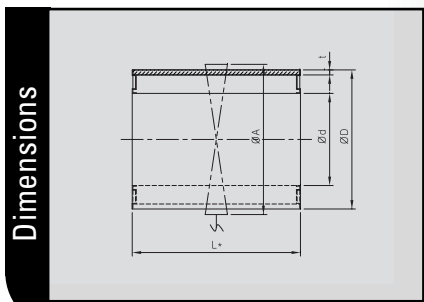
Type	PR	t	Kg
PSRD-80	PR-80	0.5	0.81
PSRD-100	PR-100	0.5	0.93
PSRD-125	PR-125	0.5	1.01
PSRD-160	PR-160	0.5	1.22
PSRD-200	PR-200	0.5	1.46
PSRD-250	PR-250	0.5	2.10
PSRD-315	PR-315	0.5	2.30



PG

Type	d	D	L*	A	t	Kg
PG-80/200	80	114.3	200	117	4.5	2.4
PG-100/200	100	139.7	200	142	4.85	3.8
PG-125/200	125	159.0	200	161	4.85	4.0
PG-160/200	160	193.7	200	197	5.85	5.5
PG-200/200	200	245.0	200	248	9.3	11.4
PG-200/900	200	245.0	900	248	9.3	51.3
PG-250/200	250	318.5	200	322	7.0	13.0
PG-250/900	250	318.5	900	322	7.0	58.5
PG-315/200	315	381.0	200	385	6.0	12.1
PG-315/900	315	381.0	900	385	6.0	54.2

*)The Length of PG type will be adjusted according to yard request

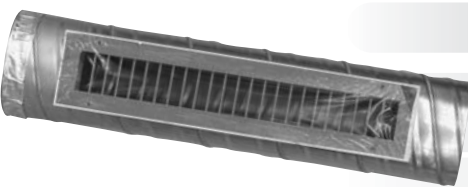


INDOOR VENTILATOR/NON RETURN VALVE

RDG/RK/PRK

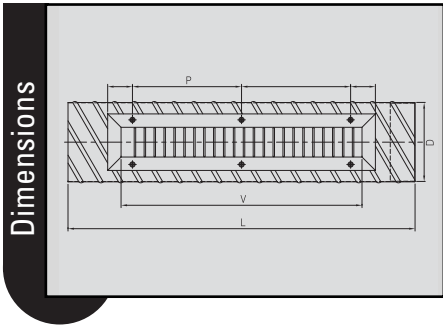
SMOKE DAMPER/AUTO DAMPER

SD/PSD/FD



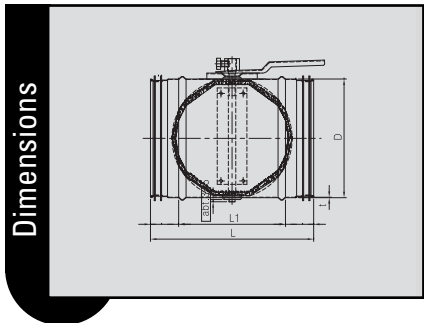
RDG

Type	D	Grill size	L	P	N	Free area	Kg
		(VxH)				(M²)	
RDG-1	ø 160	500 x 75	700	220	6	0.032	2.40
RDG-2	ø 160	800 x 75	1000	370	8	0.051	3.34



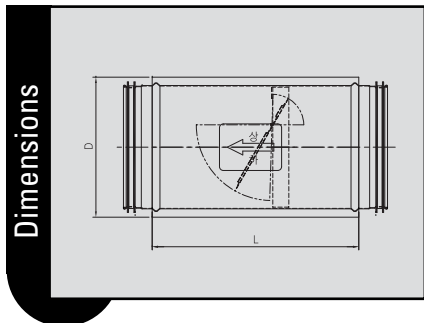
SD/PSD

Type	D	L1	L	t	Kg
SD/PSD-80	Ø78.5	140	214	0.5	0.50/0.80
SD/PSD-100	Ø98.5	140	214	0.5	0.58/0.94
SD/PSD-125	Ø123.5	140	214	0.5	0.68/1.14
SD/PSD-160	Ø158	140	214	0.5	0.86/1.42
SD/PSD-200	Ø198	140	214	0.5	1.08/1.74
SD/PSD-250	Ø248	140	214	0.5	1.40/2.18
SD/PSD-315	Ø313	140	214	0.5	1.78/3.68



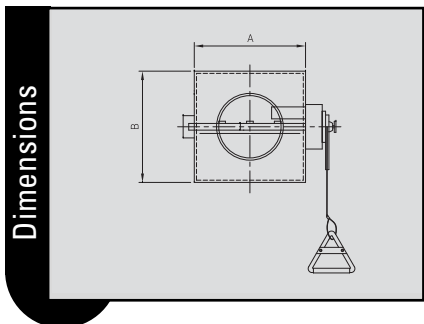
RK/PRK

Type	D	L	Kg
RK/PRK-80	Ø78.8	175/205	0.20/0.56
RK/PRK-100	Ø98.8	175/205	0.25/0.68
RK/PRK-125	Ø123.8	250/280	0.44/1.09
RK/PRK-160	Ø158.7	250/280	0.57/1.44
RK/PRK-200	Ø198.6	350/380	0.99/2.46
RK/PRK-250	Ø248.5	415/435	1.47/4.96
RK/PRK-315	Ø313	470/500	3.59/6.74



FD

Type	D	A	B	L	t	Kg
FD-80	ø 89.1	135	135	200	4.5	7.0
FD-100	ø 114.3	135	135	200	4.5	8.0
FD-125	ø 139.8	170	170	200	4.5	12.0
FD-160	ø 172	210	210	225	4.5	14.0
FD-200	ø 216.3	250	250	275	4.5	21.0
FD-250	ø 267.4	300	300	325	4.5	27.0

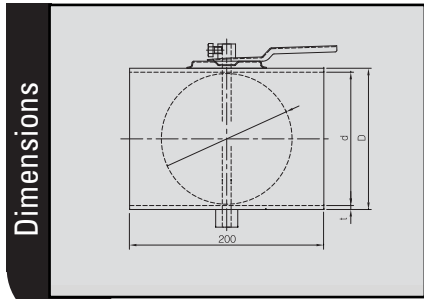


CLOSING DAMPER/SILENCER

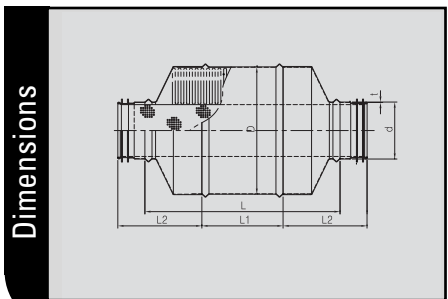
CD/YRS



CD			
Type	d	D	t
CD-80	80	ø 89.1	4.5
CD-100	100	ø 109.4	4.0
CD-125	125	ø 134.8	4.9
CD-160	160	ø 172.0	6.0
CD-200	200	ø 211.6	5.9
CD-250	250	ø 262.8	6.4
CD-315	315	ø 331	8



YRS							
Type	d	D	L1	L2	L	t	Kg
YRS-100/05	Ø98.8	200	385	105	520	0.5	2.95
YRS-100/10	Ø98.8	200	885	105	1020	0.5	5.35
YRS-125/05	Ø123.8	250	365	115	520	0.5	3.85
YRS-125/10	Ø123.8	250	865	115	1020	0.5	6.98
YRS-160/05	Ø158.7	250	365	115	520	0.5	3.98
YRS-160/10	Ø158.7	250	865	115	1020	0.5	7.40
YRS-200/05	Ø198.6	300	365	115	520	0.5	5.10
YRS-200/10	Ø198.6	300	865	115	1020	0.5	8.92
YRS-250/05	Ø248.5	350	345	125	520	0.5	5.95
YRS-250/10	Ø248.5	350	845	125	1020	0.5	10.53
YRS-315/05	Ø313.5	415	345	125	520	0.5	7.48
YRS-315/10	Ø313.5	415	845	125	1020	0.5	13.34

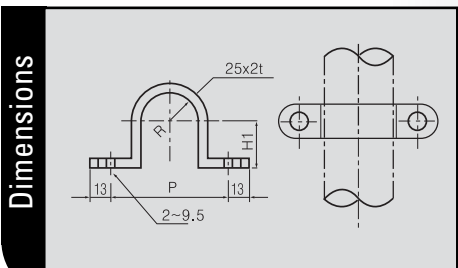
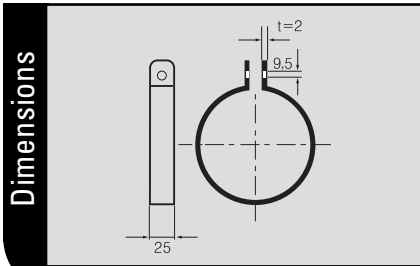


SUSPENSION CLAMP

U&PU



U(A)		PU(A)	
Type	Kg	Type	Kg
U-80	0.27	PU-80	0.34
U-100	0.32	PU-100	0.39
U-125	0.38	PU-125	0.45
U-160	0.47	PU-160	0.54
U-200	0.57	PU-200	0.64
U-250	0.69	PU-250	0.82
U-315	0.80	PU-315	0.90



U(B)				
Pipes	P	H ₁	R	Kg
U-80	128	40	42	0.13
U-100	148	50	52	0.15
U-125	172	62	64	0.18
U-160	208	80	82	0.21
U-200	248	100	102	0.25
U-250	298	125	127	0.30
U-315	364	158	160	0.37

PU(B)				
Pipes	P	H ₁	R	Kg
PU-80	160	56	58	0.16
PU-100	180	66	68	0.19
PU-125	205	79	81	0.21
PU-160	240	96	98	0.25
PU-200	280	116	118	0.29
PU-250	330	141	143	0.33
PU-315	395	174	176	0.41

END CAP/PVC CAP

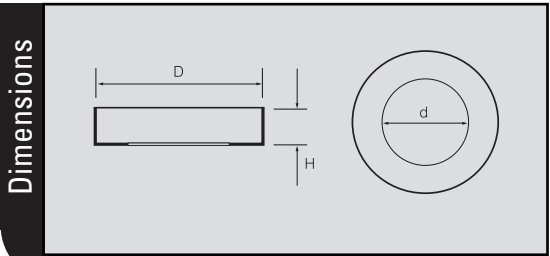
EP/CAP

FLEXIBLE HOSE

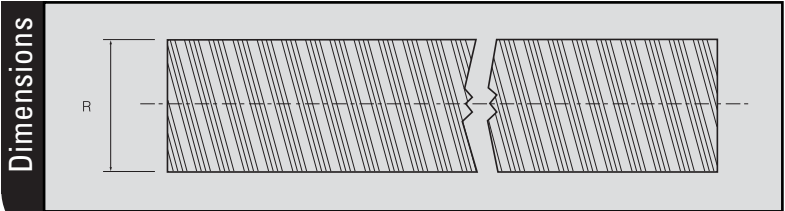
S/PS



EP				
Type	d	D	H	Kg
EP-80	85	115	25	0.1
EP-100	105	135	25	0.1
EP-125	130	160	25	0.1
EP-160	165	195	25	0.2
EP-200	205	235	25	0.3
EP-250	255	285	25	0.4
EP-315	320	350	25	0.5



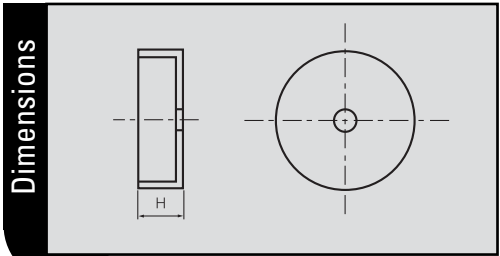
S		
Type	R	Kg/m
S-80	R-80	0.5
S-100	R-100	0.6
S-125	R-125	0.7
S-160	R-160	0.9
S-200	R-200	1.0
S-250	R-250	1.2
S-315	R-315	1.6



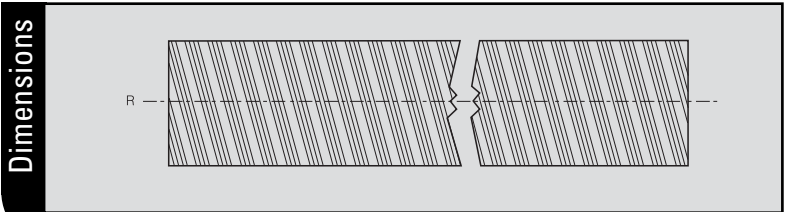
Flexible hoses are of nonflammable or self-extinguished, joining the diffuser and hose by a hose clamp(FB).
Suitable temperature : - 25°C ~125°C
Material : AL



CAP		
Type	D	H
CAP-80	80	40
CAP-100	100	40
CAP-112	112	40
CAP-125	125	40
CAP-132	132	40
CAP-157	157	40
CAP-192	192	40
CAP-200	200	40
CAP-232	232	40




PS			
Type	PR	Thickness of insulation	Kg/m
PS-80	PR-80	15	0.5
PS-100	PR-100	15	0.6
PS-125	PR-125	15	0.7
PS-160	PR-160	15	0.8
PS-200	PR-200	15	0.9
PS-250	PR-250	15	1.0
PS-315	PR-315	15	1.2



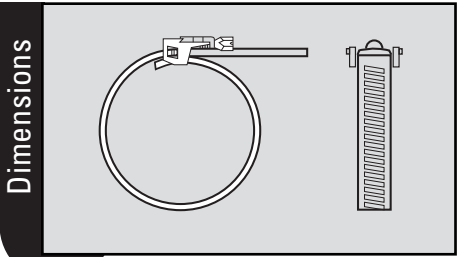
Note: Flexible hoses are of nonflammable or self-extinguished, joining the diffuser and hose by a hose clamp(FB).
Suitable temperature : - 25°C ~125°C
Material : AL


CLAMP/TAPE

FB/TAPE

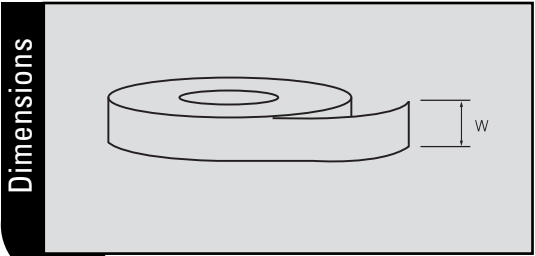


FB		
Type	Fits	
FB-80	S- 80/PS-80	
FB-100	S-100/PS -100	
FB-125	S-125/PS -125	
FB-160	S-160/PS -160	
FB-200	S-200/PS -200	
FB-250	S-250/PS -250	
FB-315	S-315/PS -315	





TAPE			
	W	Length	
TAPE	50mm	25m	
TAPE	75mm	25m	



Air Terminal Devices



Cabin Units



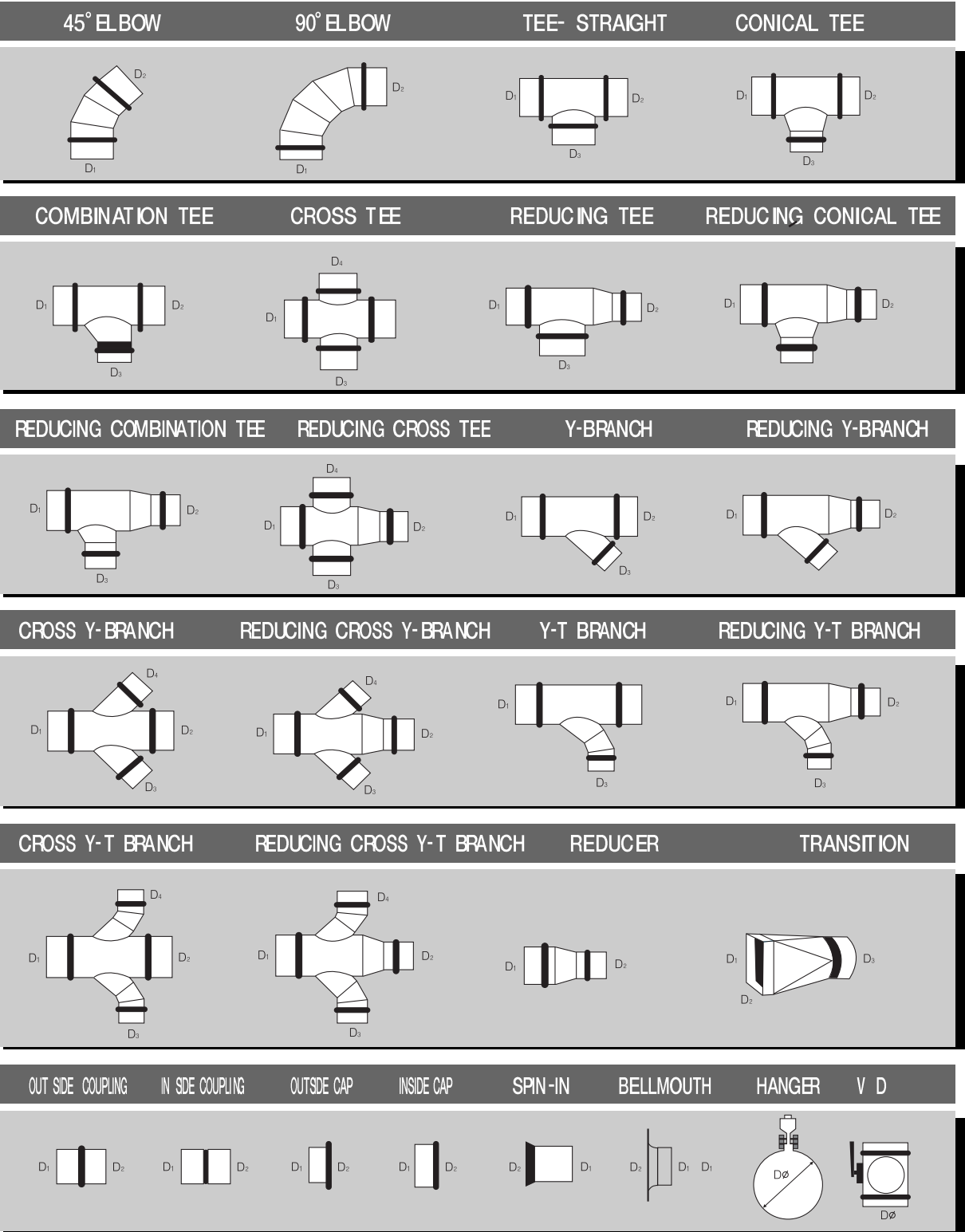
HI AIR KOREA cabin units are specially designed for the supply of conditioned air to ship's accommodation via the spiral duct air pipe system. For each type of HI AIR KOREA system (Single-pipe, Twin-pipe, Re-heat), there is a comprehensive range of cabin units comprising units for bulkhead mounting or ceiling suspension, units supplying the conditioned air through a grill, a ceiling diffuser or a punkah louver.

HI AIR KOREA cabin units are made in sizes to suit the ventilation requirements as well as the heating and cooling loads. All units have an air volume control device by means of which the air flow delivered can be varied from nil to a predetermined maximum. Besides, units intended for Twin-pipe and Re-heat installation provide individual temperature control, independent of the air flow control.

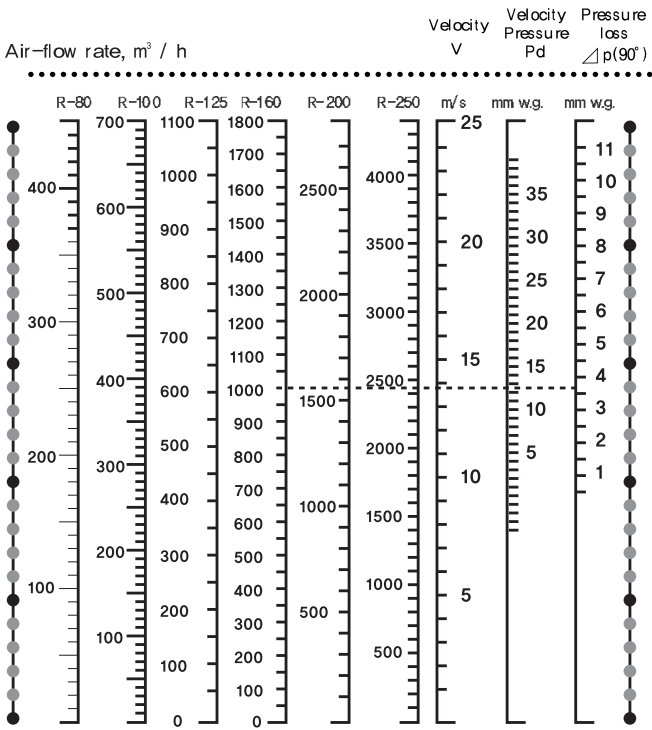
In the design of the units, special attention has been devoted to sound attenuation, and in relation to the ambient sound levels occurring in ship's accommodation, very satisfactory sound levels have been achieved.





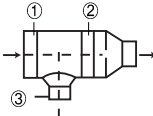
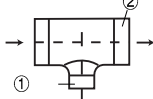
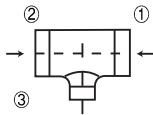
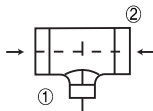
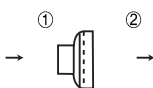
Heating Medium	Cabin Unit			HI AIR KOREA system	Cabin unit designation	Location of cabin units	Air supply device
	Type						
	RE- HEAT	TWIN- PIPE	SINGLE- PIPE	SINGLE-PIPE Manual control	MS types	Ceiling	Diffuser Grill Push-pull louver
				TWIN-PIPE Manual control	MT types	Ceiling	Diffuser Grill
Steam				TWIN-PIPE Auto. control	AKV type	Ceiling	Diffuser
Electric	X			RE-HEAT	RS types & NAV types	Ceiling	Diffuser Grill
Water	X						

CONNECTING FITTINGS



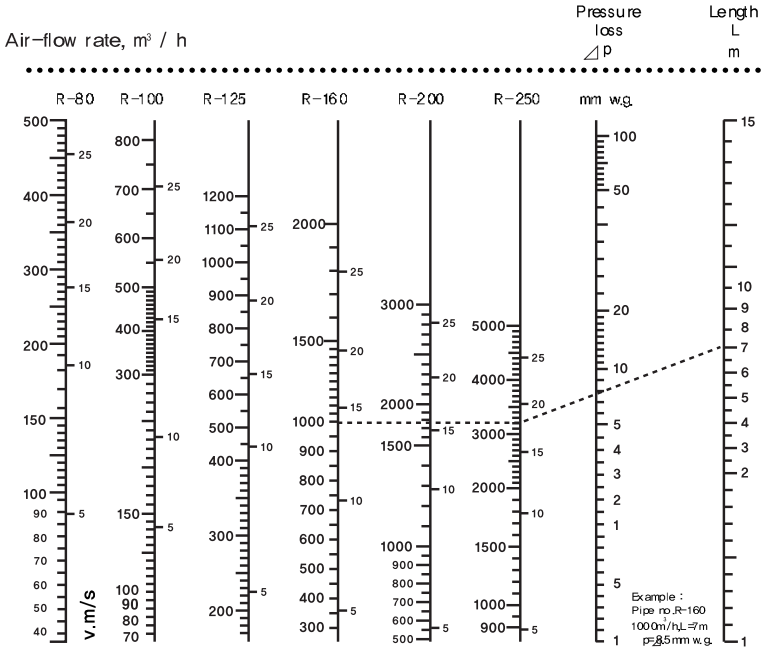
PRESSURE LOSS IN SPIRAL DUCT FITTINGS



		Pressure loss
	90°	$\triangle P(90^\circ)$
	45°	$0.5 \times \triangle P(90^\circ)$
	30°	$0.4 \times \triangle P(90^\circ)$
	15°	$0.2 \times \triangle P(90^\circ)$
Supply		$\textcircled{1} \rightarrow \textcircled{2}$ $0.5 \times \text{pd}(v-v^2)$
		$\textcircled{1} \rightarrow \textcircled{3}$ $2 \times \triangle p(90^\circ)$
		$\textcircled{1} \rightarrow \textcircled{2}$ $3 \times \triangle p(90^\circ)$
Exhaust		$\textcircled{2} \rightarrow \textcircled{1}$ $1.5 \times \triangle p(90^\circ)$
		$\textcircled{3} \rightarrow \textcircled{1}$ $2 \times \triangle p(90^\circ)$
		$\textcircled{2} \rightarrow \textcircled{1}$ $4 \times \triangle p(90^\circ)$
		$\textcircled{1} \rightarrow \textcircled{2}$ $\text{pd}(v - v^2)$

Tpiece : calculation to be based on pipe diameter and air flow rate at ①

PRESSURE LOSS IN SPIRAL DUCT PIPES





Main Factory



Main Factory (A/C & Prov. Ref. plant, Ventilation Fan, Air Handling Units, Fire Damper)
Land (120,000m²), Factory & Office etc. (49,000m²)

Main Business List

Central Air Handling Units : HKA-04SO, 05SO, 06SO, 07SO, 08SO, 09SO, 010SO
HKA-06SN, 07SN, 08SN

Refrigerating Plant - Air conditioning : Types MCU 24~116
- Provision Store : Types MCU 3~5
- Chiller Units

Axial Flow Fans : AWA 300~2000, AKA 500~2000, ACA 500~2000
MNA 500~1800, MXA 500~1800, HCA 300~1800

Fire Damper : CDR 300~2000 (Manual & Pneumatic types)
CDSQ (Manual & Pneumatic types)



2nd Factory



2nd Factory (Packaged A/C & HVAC Accessory)
Land (16,000m²), Factory & Office etc.(8,000m²)

Main Business List

Cabin Units : HKR-S, T, A, R, W, E

Centrifugal Fans : CLC 250~1000, CHC 400~1000

Packaged A/C : HIP-03W, 05W, 08W, 10W, 15W, 20W (Water Cooled type)
HIP-03A, 05A, 08A, 10A, 15A, 20A (Air Cooled type)

Fan Coil Unit : HIP-03, 05, 08, 10, 15, 20

Deck Unit type A/C, Spot Cooler



3rd Factory



4th Factory



3rd / 4th Factory (Spiral Duct)

Land (12,000m²), Factory (5,600m²), Office etc.(200m²)

Land (16,000m²), Factory & Office etc.(11,000m²)

-3rd Factory

-4th Factory

Main Business List

Spiral Ducts - Products Range : Diameter (Thickness)
R80 ~ R315 (0.5 ~ 1.0 t)
R200 ~ R1600 (1.0 ~ 1.6 t)

-3rd Factory

-4th Factory