YKM-SUPPLY SELECTION TABLE:

Flow Rate m3/h	W X H	425 X 75	525 X 75	625 X 75	425 X 125	525 X 125	625 X 125	425 X 225	525 X 225	625 X 225	825 X 225	1025 X 225
					825x75	1025x75	1225x75	525x175	625x175	825x175	1025x175	1225x75
	A (m2)	0,015	0,019	0,023	0,030	0,037	0,045	0,060	0,075	0,090	0,120	0,150
100	Lt (m)	2,4										
	NR											
	Pt (Pa)	8										
	Vk (m/s)	1,9										
150	Lt (m)	3,6	3,2									
	NR	20	15									
	Pt (Pa)	19	12									
	Vk (m/s)	2,8	2,2									
200	Lt (m)	4,7	4,2	3,8								
	NR	28	23	18								
	Pt (Pa)	33	21	14								
	Vk (m/s)	3,7	2,9	2,4								
300	Lt (m)	7,1	6,3	5,7	5,0	4,5						
	NR	38	33	29	23	19						
	Pt (Pa)	75	47	32	19	15						
	Vk (m/s)	5,5	4,4	3,6	2,8	2,2						
400	Lt (m)	9,5	8,4	7,6	6,7	6,0	5,5					
	NR	46	41	37	31	26	22					
	Pt (Pa)	134	83	47	33	22	15					
	Vk (m/s)	7,4	5,8	4,8	3,7	3,0	2,5					
600	Lt (m)		15,0	11,0	10,0	9,0	8,2	7,1	6,4			
	NR		55	47	41	37	32	26	21			
	Pt (Pa)		200	128	75	49	33	19	12			
	Vk (m/s)		9,0	7,2	5,1	4,5	3,7	2,8	2,2			
800	Lt (m)					12,0	11,0	9,5	8,5	8,6		
	NR					44	40	34	29	26		
	Pt (Pa)					88	59	33	22	15		
	Vk (m/s)					6,0	4,9	3,7	3,0	2,5		
1200	Lt (m)						14,0	13,0	13,0	11,0	10,0	
	NR						44	39	36	29	25	
	Pt (Pa)						75	47	35	20	13	
	Vk (m/s)						5,5	4,4	3,7	2,8	2,3	
1800	Lt (m)								21,0	20,0	17,0	15,0
	NR								50	46	40	35
	Pt (Pa)								118,0	80,0	42,0	28,0
	Vk (m/s)								7,0	5,8	4,2	3,3
2500	Lt (m)										27,0	21,0
	NR										55	43
	Pt (Pa)										155,0	50,0
	Vk (m/s)										7,8	4,5
3500	Lt (m)											10,0
	NR											52
	Pt (Pa)											105,0
	Vk (m/s)											6,5

SELECTION CRITERIA

Ceiling Height
H = 3+- 0,5 mm
Vt = 0,25 m/s
Damper %100 open

YKM-RETURN SELECTION TABLE :

Flow Rate (m3/h)	W X H	425 X 75	525 X 75	625 X 75	425 X 125	525 X 125	625 X 125	425 X 225	525 X 225	625 X 225	825 X 225	1025 X 225
					825x75	1025x75	1225x75	525x175	625x175	825x175	1025x175	1225x75
	A (m2)	0,019	0,023	0,028	0,037	0,046	0,055	0,074	0,092	0,110	0,138	0,166
150	NR	-										
	Pt (Pa)	21										
	Vk (m/s)	2,3										
200	NR	-	-									
	Pt (Pa)	18	12									
	Vk (m/s)	3,0	2,5									
300	NR	28	25	20	-	-						
	Pt (Pa)	40	30	18	12	6						
	Vk (m/s)	4,8	3,8	3,0	2,3	1,8						
400	NR		31	32	22	-	-					
	Pt (Pa)		49	27	18	12	8					
	Vk (m/s)		5,0	4,0	3,0	2,5	2,0					
600	NR				32	26	23	-	-			
	Pt (Pa)				45	25	18	10	5			
	Vk (m/s)				4,9	3,6	3,0	2,3	1,8			
800	NR					34	30	24	20	-		
	Pt (Pa)					49	32	18	12	8		
	Vk (m/s)					5,0	4,0	3,0	2,5	2,0		
1200	NR							34	29	23	22	
	Pt (Pa)							42	24	18	10	
	Vk (m/s)							4,6	3,5	3,0	2,4	
1800	NR									36	32	27
	Pt (Pa)									37	27	18
	Vk (m/s)									4,2	3,7	3,0
2500	NR										40	35
	Pt (Pa)										49	31
	Vk (m/s)										5,0	4,0

SELECTION CRITERIA

Ceiling Height
H = 3+- 0,5 mm
Vt = 0,25 m/s
Damper %100 open

MAXIMUM HEIGHT MEASUREMENTS ACCORDING TO THE DIRECTIONS:

	Round Duct Diameter (mm)										
Ø (mm)	200	250	300	350	400	450	500	550	600	900	1200
Hmax.(mm)	75	75	100	100	125	125	150	150	150	200	250

ROUND DUCT DIAMETER YKM SELECTION TABLE:

W x H	DIAMETER
225 x 75	150
325	
425	
525	
625	
825	
1025	
1225	400
225 x 125	300
325	
425	
525	
625	
825	
1025	
1225	900
325 x 225	600
425	
525	
625	
825	
1025	
1225	2400

ROUND DUCT GRILLES SELECTION:

YKM-D EFFECTIVE AREA Ak (m2) :

H (mm)	Ak (m^2) W (mm)						
	325	425	525	625	825	1025	1225
75	0,011	0,015	0,019	0,023	0,030	0,037	0,045
125	0,023	0,030	0,037	0,045	0,060	0,075	0,090
175	0,034	0,045	0,056	0,068	0,090	0,113	0,135
225	0,045	0,060	0,075	0,090	0,120	0,150	0,180

Table-1

YKM-T EFFECTIVE AREA Ak (m2) :

H (mm)	Ak (m2) W (mm)								
	200	250	300	400	500	600	800	1000	1200
100	0,017	0,021	0,025	0,034	0,042	0,049	0,066	0,082	0,098
150	0,025	0,031	0,037	0,049	0,061	0,074	0,099	0,123	0,147
200	0,034	0,042	0,049	0,066	0,082	0,098	0,132	0,164	0,196
300			0,073	0,098	0,123	0,147	0,198	0,246	0,294
400				0,131	0,164	0,196	0,264	0,328	0,392
500					0,205	0,245	0,330	0,410	0,490

Table-2

SUPPLY ROUND DUCT GRILLE:

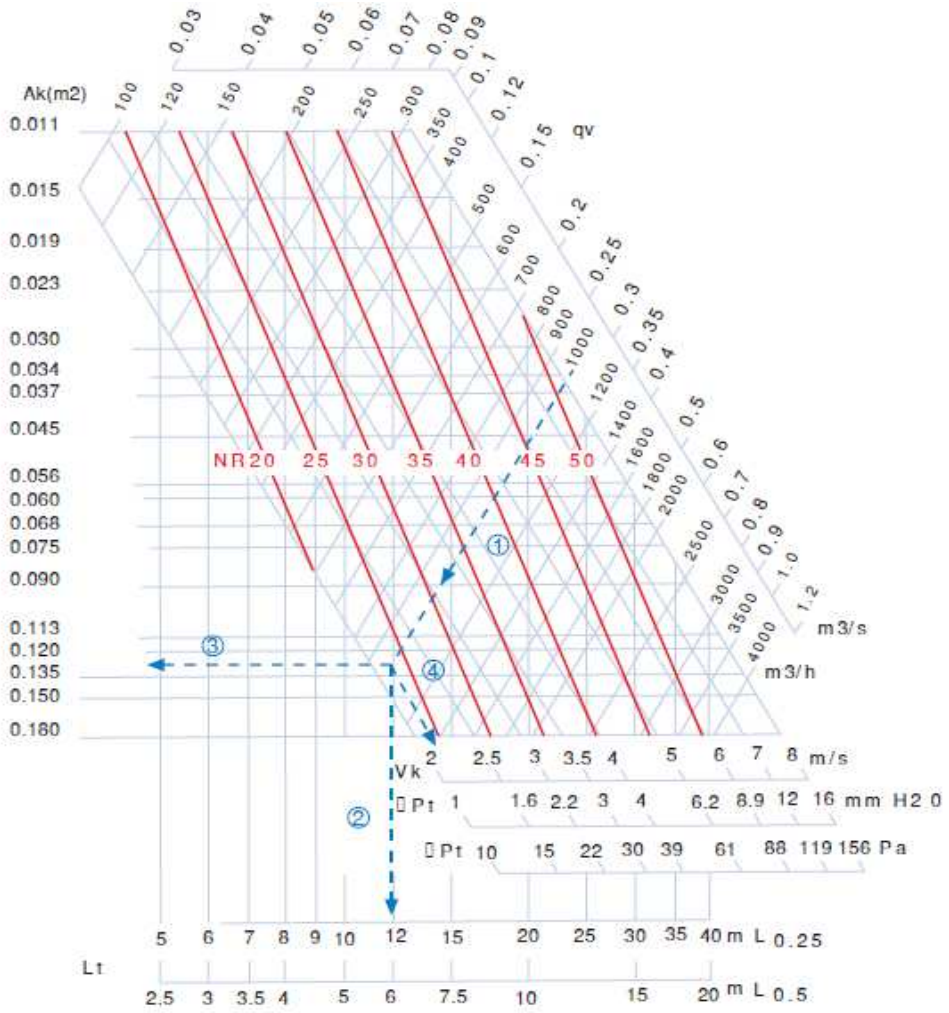


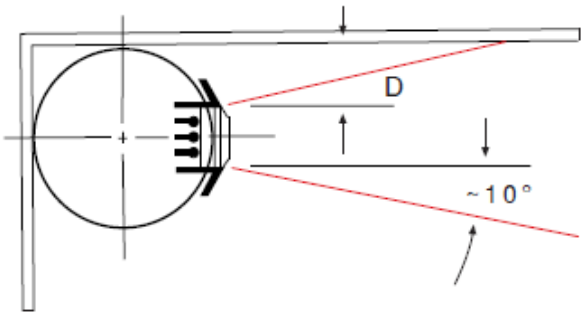
Diagram-1

Damper Position	Without Damper	%100 OPEN	%50 OPEN	%25 OPEN
Pt	Pt x 0,50	Pt x 1,00	Pt x 2,25	Pt x 5,90
Lw	Lw -4	Lw + 0	Lw +10	Lw +20

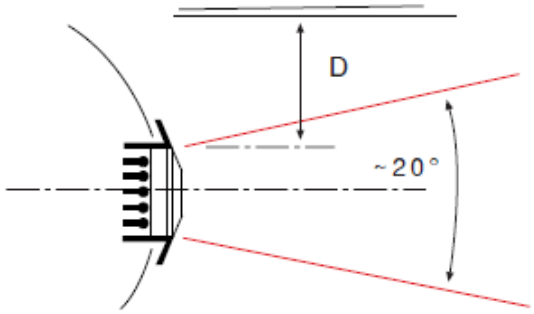
Table-3

SELECTION CRITERIA

Ceiling Height
H = 3+- 0,5 mm
Vt = 0,25 m/s
Damper %100 open



A) **With Ceiling Effect**
D= max.0,30m
(Selection Table)



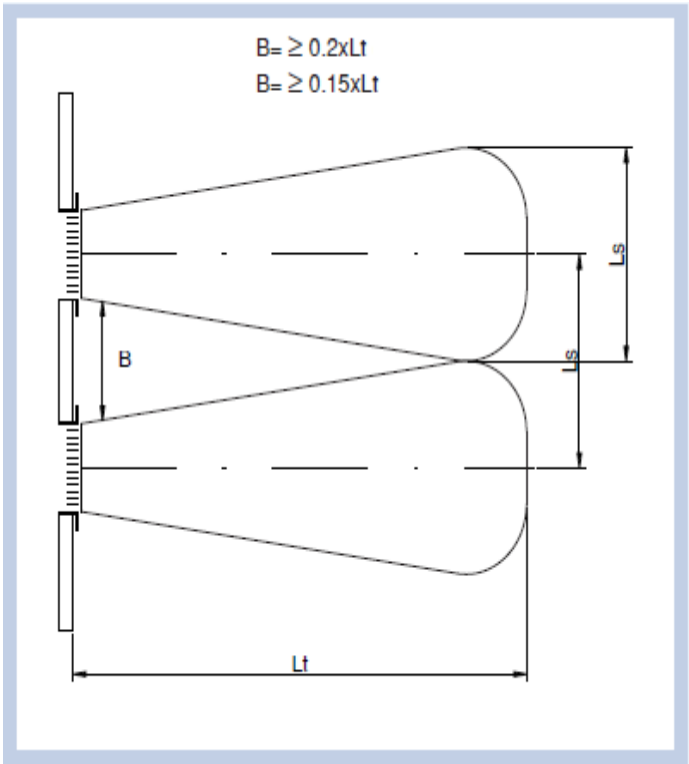
B) **Without Ceiling Effect**
D=max.0,90m
(Correction Chart)

	Lt	Vk	Pt	Lw
22°	x 0,77	x 1,15	x 1,30	+ 3
45°	x 0,55	x 1,25	x 1,60	+ 6

Table-4 Different Wing Angles for Correction Table

V_t (m/s)		0.25	0.375	0.5	0.625
L_t	A	x 1	x 0.67	x 0.5	x 0.4
	B	x 0.7	x 0.47	x 0.35	x 0.28

Table-5 V_t for Correction Table



AIR FALL DIAGRAM:

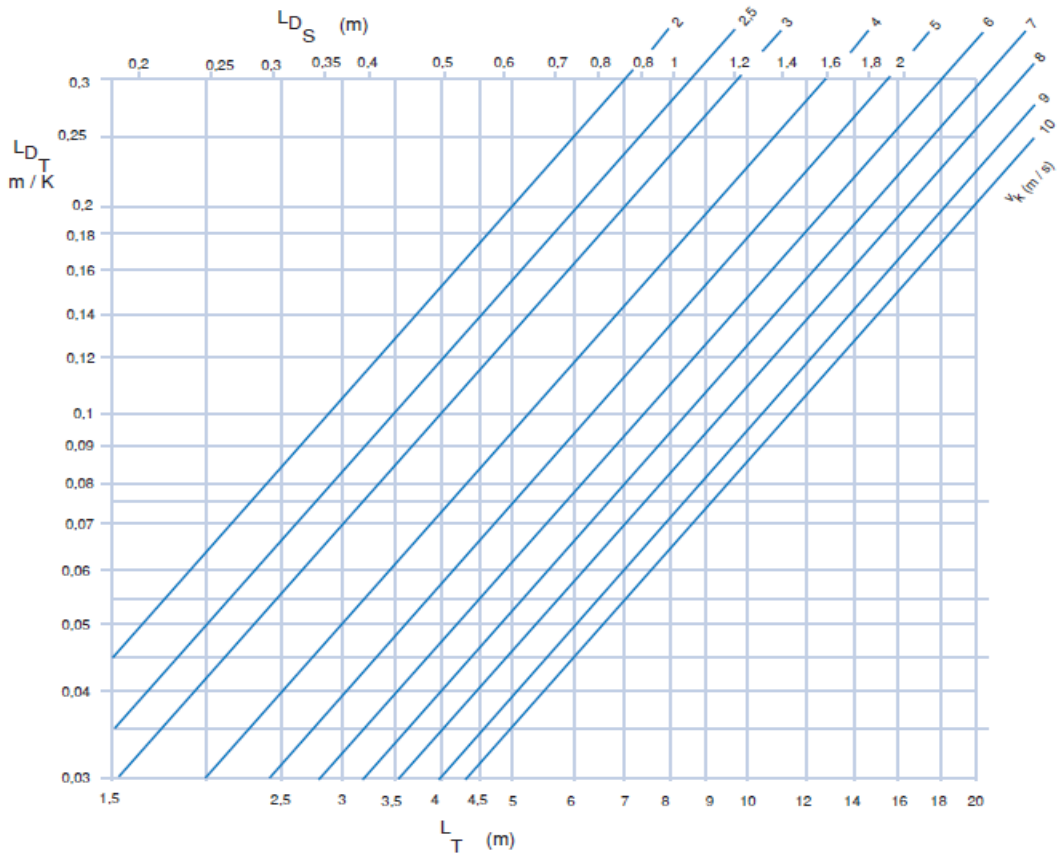
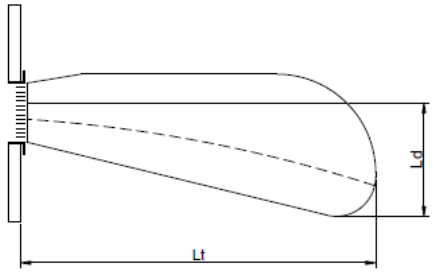


Diagram-2

AIR FALL



Description :

The total air drop is the vertical distance between the air drop center and the lowest point to the air drop Vt (m / s). Total air loss consists of two components.

Ld = Lds + Ldt

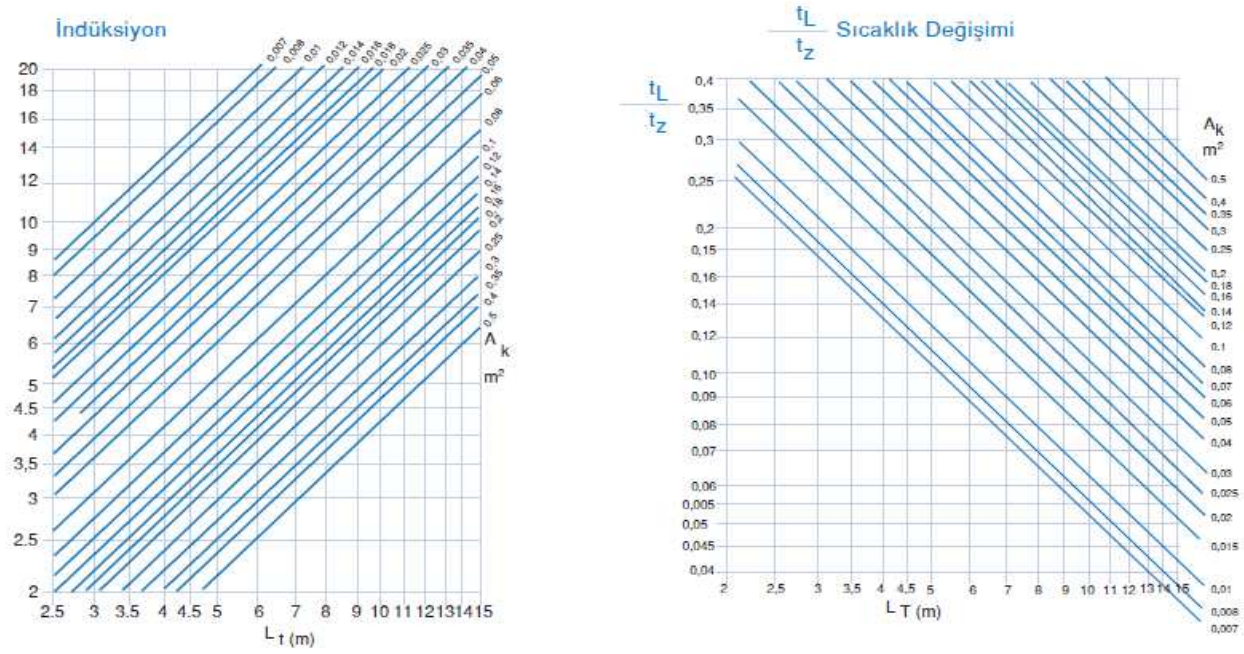


Diagram-3

T_L / T_Z : Temperature Change

T_L (K) : Maximum temperature difference between room temperature and air temperature
Tz (K) : Maximum temperature difference between room temperature and distributor air temperature

I : induction

SAMPLE SELECTION

Data
Qv= 1.000m³/h (1)
Room Lenght =12m (2)
Vt=0.25m/s

Result
Ak=0.125m/s (3)
Vk=2.2m/s (4)
WxH=825x225mm
pt=13 Pa
Lt=12m

RETURN ROUND DUCT GRILLE:

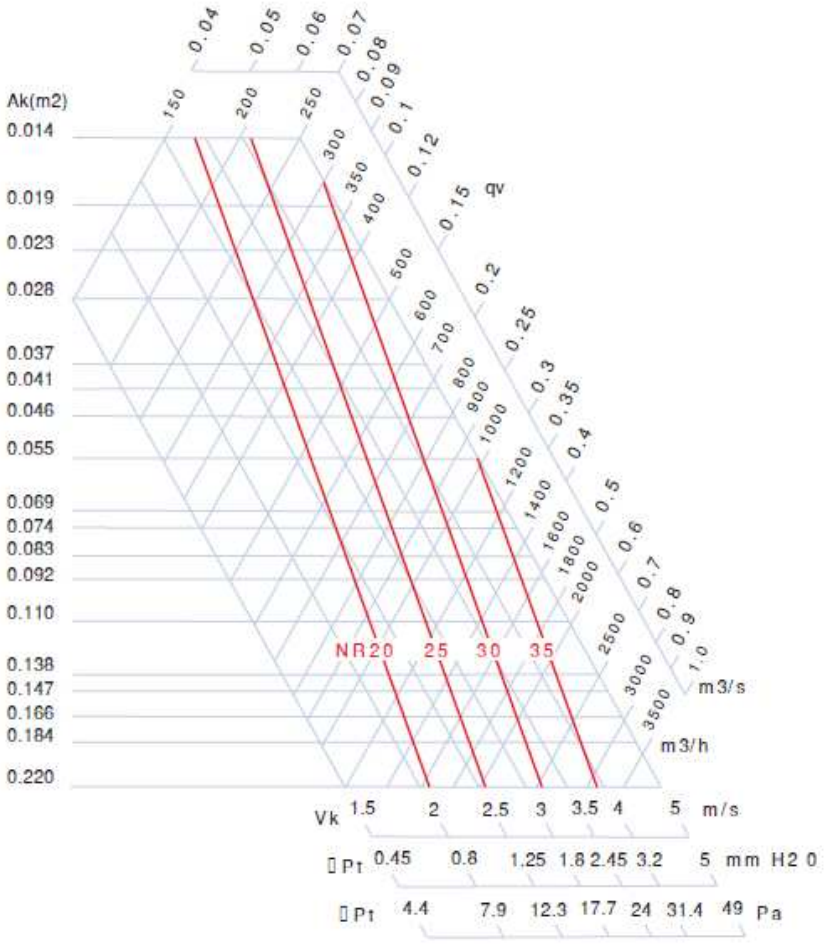


Diagram – 4

Damper Position	Without Damper	%100 OPEN	%50 OPEN	%25 OPEN
Pt	Pt x 0,50	Pt x 1,00	Pt x 2,25	Pt x 5,90
Lw	Lw -4	Lw + 0	Lw +10	Lw +20

Table-6

SELECTION CRITERIA

Ceiling Height
H = 3+- 0,5 mm
Vt = 0,25 m/s
Damper %100 open