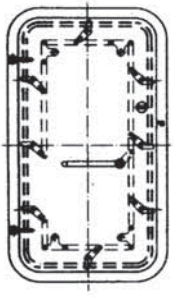
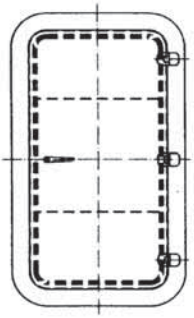
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Quick–opening weather tight steel doors Hx080



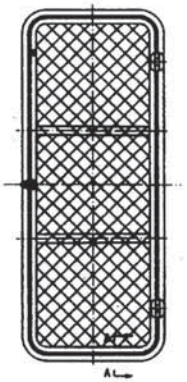
Instruction
1.Quick–opening weather tight single leaf steel doors matched with single handle linkage may be equipped sealing plate. The others are produced according to GBT3477– 96.
2.Specifications are determined according to customer requirements.

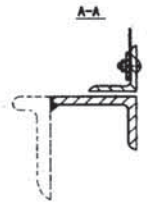
Fire protection watertight airtight doors Hx081



Instruction
Fire protection watertight airtight door grades and specifications require users to determine.

Steel wire mesh doors CB*52—81

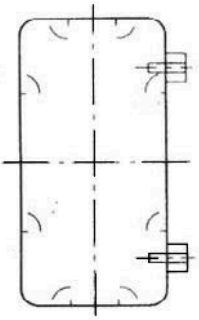




Instruction
1.Steel wire mesh doors are produced according to CB*452–81.
2.Specifications are determined according to customer requirements.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Marine weather tight single–leaf steel doors GB/T3477–1996



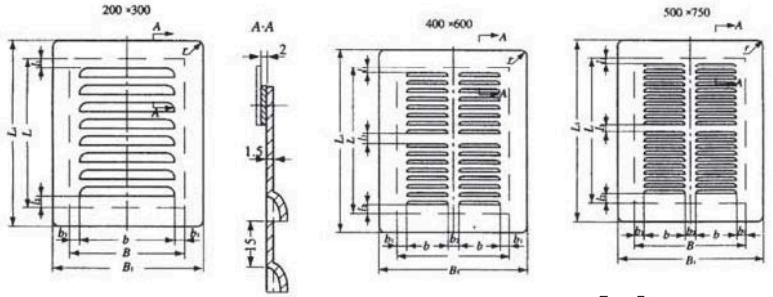
mm

Type	Specification	Opening dim.	Surrounding wall opening dim.	
			AF/BF/CF/DF	AY/BY/CY/DY
AF	1050	1000x500	1100x600 R 80	1100x600 R 150
BF	1260	1200x600	1300x700 R 80	1300x700 R 150
CF	1460	1400x600	1500x700 R 80	1500x700 R 150
DF	1475	1400x750	1500x850 R 80	1500x850 R 150
AY	1490	1400x900	1500x1000 R 80	1500x1000 R 150
BY	1660	1600x600	1700x700 R 80	1700x700 R 150
CY	1675	1600x750	1700x850 R 80	1700x850 R 150
DY	1690	1600x900	1700x1000 R 80	1700x1000 R 150
DF	1860	1800x600	1900x700 R 80	1900x700 R 150
DY	1875	1800x750	1900x850 R 80	1900x850 R 150
	1890	1800x900	1900x1000 R 80	1900x1000 R 150

Fixed steel louvers CB/T749–1997

F

Type F



Type F

F

mm

Nom. dim. B x L	Outline dim. B1 x L1	r	l_1	l_2	l_3	b	b_1	b_2	Kg Weight kg
200 x 300	260 x 360	5	20	15		160	20	--	1.1
400 x 600	460 x 660			15	35	160		40	3.56
500 x 600	560 x 660			20	40	200		60	5.34

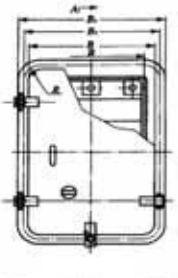
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

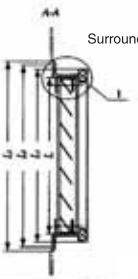
GB/T749–1997

Watertight louvers GB/T749–1997

M

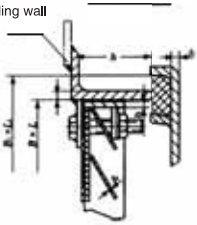
Type M



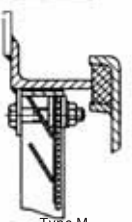


Surrounding wall

Net installed after blade



Net installed in front blade



Type M

M

mm

B x L Nom. dim. B × L	B1 x L1 Cover plate outline B1 × L1	B2 x L2 Surrounding wall opening B2 × L2	B3 x L3 Window frame outline B3 × L3	Window frame thickness t2	Louver frame thickness t3	Blade thickness t4	Window frame height h	Bolt dia. D	Pin dia. d	Fastener No. n	Weight kg Cover plate thickness t1 4	 6	 8
150x200	192x242	200x250	250x300	8	3	3	70	M12	10	2	14	15.5	17.5
200x150	242x192	250x200	300x250								14	15.5	17.5
150x250	192x292	200x300	250x350								15.5	17.5	19.5
250x150	292x192	300x200	350x250								15.5	17.5	19.5
150x300	192x342	200x350	250x400								17.5	19.5	21.5
300x150	342x192	350x200	400x250								17.5	19.5	21.5
200x200	242x242	250x250	300x300								15.5	17.5	19.5
200x250	242x292	250x300	300x350							3	17.5	19.5	19.5
250x200	292x242	300x250	350x300								17.5	19.5	19.5
200x300	242x342	250x350	300x400								19.5	22	24.5
300x200	342x242	350x250	400x300								19.5	22	24.5
200x400	242x442	250x450	300x500								23.5	27	30
400x200	442x242	450x250	500x300								23.5	27	30
200x500	242x542	250x550	300x600								26.5	31	35.5
500x200	542x242	550x250	600x300								26.5	31	35.5
250x250	292x292	300x300	350x350								20.5	23	25.5
250x300	292x342	300x350	350x400								21.5	24.5	27.5
300x250	342x292	350x300	400x350								21.5	24.5	27.5
250x350	292x392	300x400	350x450								23.5	26.5	30
350x250	392x292	400x300	450x350								23.5	26.5	30
250x400	292x442	300x450	350x500							4	27	30	34
400x250	442x292	450x300	500x350								27	30	34
250x500	292x542	300x550	350x600								30.5	34.5	38
500x250	542x292	550x300	600x350								30.5	34.5	38
300x300	342x342	350x350	400x400								23.5	26.5	30

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Type M

mm

B × L Nom. dim. B × L	$B_1 \times L_1$ Cover plate outline $B_1 \times L_1$	$B_2 \times L_2$ Surrounding wall opening $B_2 \times L_2$	$B_3 \times L_3$ Window frame outline $B_3 \times L_3$	Window frame thickness t_2	Louver frame thickness t_3	Blade thickness t_4	Window frame height h	Bolt dia. D	Pin dia. d	Fastener No. n	Kg Weight kg Cover plate thickness t_1 4	6	8
300x350	342x392	350x400	400x450	8	3	3	70	M12	10	4	27	30.5	34.5
350x300	392x342	400x350	450x400								27	30.5	34.5
300x400	342x442	350x450	400x500								29	33	37.5
400x300	442x342	450x350	500x400								29	33	37.5
300x500	342x542	350x550	400x600								33.5	38.5	43
500x300	542x342	550x350	600x400								33.5	38.5	43
300x600	342x642	350x650	400x700								40	46	51.5
600x300	642x342	650x350	700x400								40	46	51.5
350x350	392x392	400x400	450x450								29	33.5	37.5
350x400	392x442	400x450	450x500								31.5	36	40.5
400x350	442x392	450x400	500x450								31.5	36	40.5
350x450	392x492	400x500	450x550								34	39	44
450x350	492x392	500x400	550x450								34	39	44
400x400	442x442	450x450	500x500								34.5	39.5	44.5
400x450	442x492	450x500	500x550								39	44.5	49.5
450x400	492x442	500x450	550x500								39	44.5	49.5
400x500	442x542	450x550	500x600								43.5	49.5	55
500x400	542x442	550x450	600x500								43.5	49.5	55
400x600	442x642	450x650	512x712		4	4	85	M14	12	5	--	60	66.5
600x400	642x442	650x450	712x512								--	60	66.5
400x700	442x742	450x750	512x812								--	66.5	74.5
700x400	742x442	750x450	812x512								--	66.5	74.5
450x450	492x492	500x500	562x562								--	52	58
450x500	492x542	500x550	562x612							6	--	57	63.5
500x450	542x442	550x500	612x562								--	57	63.5
450x550	492x592	500x600	562x662								--	60.5	67.5
550x450	592x492	600x500	662x562								--	60.5	67.5
500x500	542x542	550x550	612x612								--	62	68
500x550	542x592	550x600	612x662								--	64.5	72.5
550x500	592x542	600x550	662x612								--	64.5	72.5
500x600	542x642	550x650	612x712								--	68.5	76.5
600x500	642x542	650x550	712x612								--	68.5	76.5
500x700	542x742	550x750	612x812								--	77.5	86.5
700x500	742x542	750x550	812x612								--	77.5	86.5
500x800	542x842	550x850	612x912								--	84.5	95
800x500	842x542	850x550	912x612								--	84.5	95

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

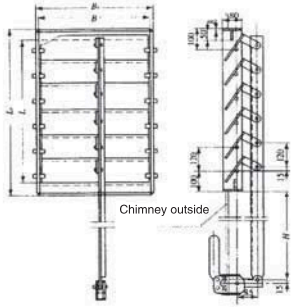
Type M

M mm

B x L Nom. dim. B x L	B_1 x L_1 Cover plate outline B_1 x L_1	B_2 x L_2 Surrounding wall opening B_2 x L_2	B_3 x L_3 Window frame outline B_3 x L_3	Window frame thickness t_2	Louver frame thickness t_3	Blade thickness t_4	Window frame height h	Bolt dia. D	Pin dia. d	Fastener No. n	Kg Weight kg Cover plate thickness t_1		
				t_2	t_3	t_4	h	D	d	n	4	6	8
550x550	592x592	600x600	662x662	8	5	5	85	M14	12	6	--	69.5	77.5
550x600	592x642	600x650	662x712								--	73.5	82.5
600x550	642x592	650x600	712x662								--	73.5	82.5
550x650	592x692	600x700	662x762								--	91	100
650x550	692x592	700x600	762x662								--	91	100
550x750	592x792	600x800	662x862								--	102.5	114.5
750x550	792x592	800x600	862x662								--	102.5	114.5
600x600	642x642	650x650	712x712							8	--	92.5	102
600x700	642x742	650x750	712x812								--	101.5	112
700x600	742x642	750x650	812x712								--	101.5	112
600x800	642x842	650x850	712x912								--	119	131
800x600	842x642	850x650	912x712								--	119	131
600x900	644x944	660x960	726x1026	10	6	6	95	M16	14		--	139.5	153
900x600	944x644	960x660	1026x726								--	139.5	153
600x1000	644x1044	660x1060	726x1126								--	144.5	158
600x1200	644x1244	660x1260	726x1326							10	--	172.5	189
600x1500	644x1544	660x1560	726x1626								--	194	214.5
650x650	694x694	710x710	776x776							8	--	123.5	136
650x1050	694x1094	710x1110	776x1176							10	--	146.5	161.5
650x1250	694x1294	710x1310	776x1376								--	181.5	206
650x1550	694x1594	710x1610	776x1676								--	203	224
700x700	744x744	760x760	826x826							8	--	130.5	142.5
700x800	744x844	760x860	826x926								--	141.5	155
800x700	844x744	860x760	926x826								--	141.5	155
700x900	744x944	760x960	826x1026								--	153	168
700x1000	744x1044	760x1060	826x1126								--	161	177
700x1100	744x1144	760x1160	826x1226							10	--	177.5	129.5
700x1200	744x1244	760x1260	826x1326								--	188.5	208
700x1500	744x1544	760x1560	826x1626								--	223	246.5
800x1000	844x1044	860x1060	926x1126								--	181	199
800x1100	844x1144	860x1160	926x1226								--	138	213
800x1200	844x1244	860x1260	926x1326								--	205.5	226.5
800x1500	844x1544	860x1560	926x1626								--	242.5	269

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Chimney closed louvers CB*3132–1983

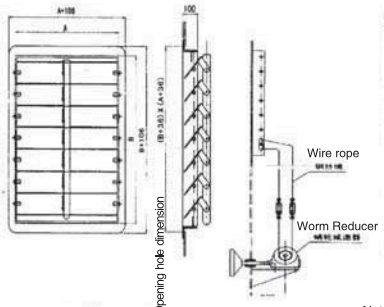


S Type S (by hand) mm

B x L Through–hole size B x L	B_1xL1 Surrounding wall opening size B1 x L1	Louver plate		Kg Weight kg
		Length x width x thickness	No.	
400x580	416x680	396x160x4	5	31.5
500x460	516x560	496x160x4	4	31.5
500x700	516x800		6	41
500x940	516x1040		8	50.5
500x1180	516x1280		10	60
500x1420	516x1520		12	69.5

2.81xH(Kg)

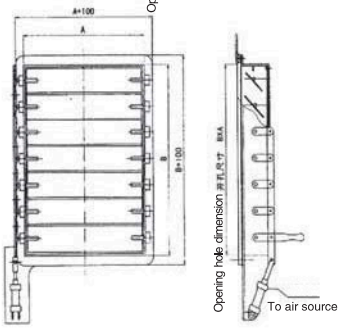
Note: Pulling lever weight 2.81xH(Kg) should be also added to the whole weight according to installation dimension H (m).



Z Type Z (self–locking) mm

A x (B–100) Through–hole size A x (B–100)	Louver plate		Kg Weight kg
	Length x width x thickness	No.	
400x580	396x160x4	5	60
500x460	496x160x4	4	60
500x700		6	78
500x940		8	92
500x1180		10	112
500x1420		12	134

Note: Louver plates can be locally self–locked at any option angles. This form applies to operating position with distance greater than 2 meters from the louver.



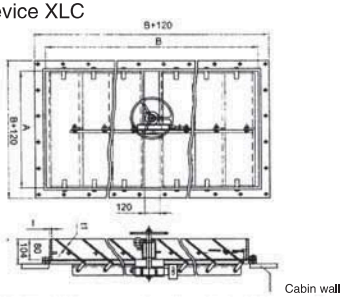
Q Type Q (pneumatic) mm

A x (B–100) Through–hole size A x (B–100)	Louver plate		Kg Weight kg
	Length x width x thickness	No.	
400x580	396x160x4	5	58
500x460	496x160x4	4	58
500x700		6	80
500x940		8	102
500x1180		10	124
500x1420		12	145

Note: The louvers can be opened normally when no compressed air induced, and closed when compressed air induced, or conversely, opened when compressed air induced, and closed when no compressed air induced. The dampers can be opened and closed by hand. Screw threads for cylinder connection is G1/4" fitted ϕ8 copper tube. 0.7MPa air source should be supplied.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

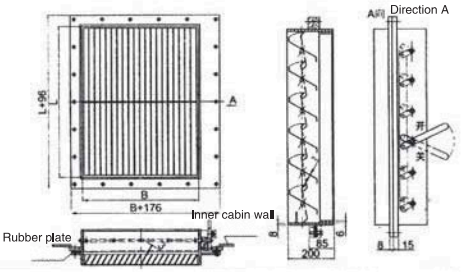
Louver ventilator with closing device XLC



Type	A	B	t	t1	Cabin wall opening dim.
SKC-500 × 800	500	920	8	3	530 × 950
SKC-600 × 1000	600	1120	8	3	630 × 1150
SKC-800 × 1500	800	1620	8	3	830 × 1650
SKC-1000 × 1800	1000	1920	10	4.5	1030 × 1950
SKC-1200 × 2000	1200	2120	10	4.5	1230 × 2150
SKC-1500 × 2500	1500	2620	10	4.5	1230 × 2650

Note: 1. Middle or down position hand wheel with same structure may be selected by customer.
2. Blades in opening status 0 ~ 90 degree may be designed according to customer requirements.
3.Order specification: XLC–A x B (horizontal x vertical)

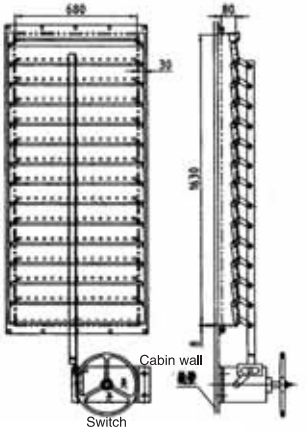
Anti–wave type louver ventilator with closing device FLC

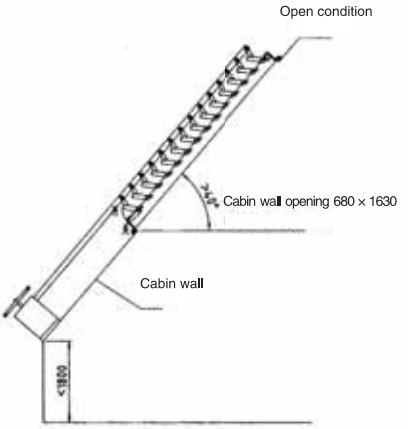


Type	B	L	Cabin wall opening dim
FLC-600 × 800	600	800	650 × 930
FLC-900 × 950	900	950	950 × 1080
FLC-700 × 1100	700	1100	750 × 1230
FLC-800 × 1400	800	1400	850 × 1530
FLC-1100 × 1400	1100	1400	1150 × 1530

Note: 1. Hand lever operated in door or out door should be specified by customer.
2. Louver inserted from in door or out door should be specified by customer.
3. Lever installation may be driven by hand, electricity and pneumatic according to customer requirements.
4.Order specification: FLC–B x L (horizontal x vertical).

Incline adjustable louver ventilator

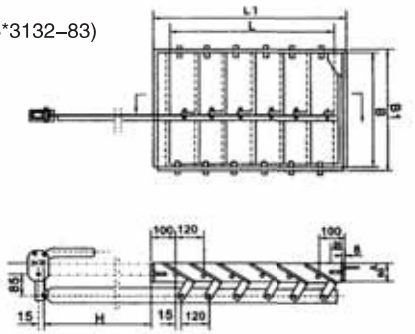




Note: Specifications are determined according to customer requirements.

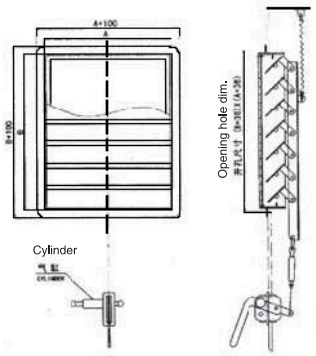
(CB*3132–83)

Chimney louvers with closing device (CB*3132–83)



B×L Through-hole size B×L	B1×L1 Opening hole dim. B1×L1	Louver plate Size	Louver plate No.	kg/R Weight kg/piece	H
400×580	416×680	396×160×4	5	28.6	Specified by customer
500×460	516×560	496×160×4	4	28.3	Specified by customer
500×700	516×800	496×160×4	6	37.0	Specified by customer
500×940	516×1040	496×160×4	8	46.6	Specified by customer
500×1180	516×1280	496×160×4	10	54.2	Specified by customer
500×1420	516×1520	496×160×4	12	62.9	Specified by customer

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com



Type SQ (spring, pneumatic)

SQ

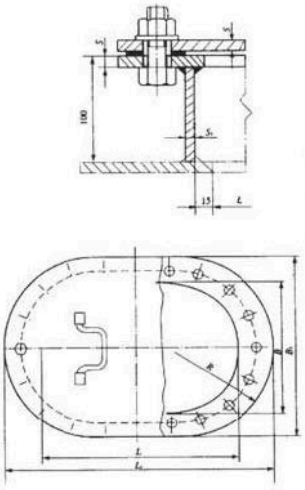
mm

A x (B−100) Through−hole size A x (B−100)	Louver plate		Kg Weight kg
	Length x width x thickness	No.	
400x580	396x160x4	5	58
500x460	496x160x4	4	58
500x700		6	80
500x940		8	102
500x1180		10	124
500x1420		12	145

Note: This louver may be opened and closed pneumatically and by hand.

GB11628−1989

Marine manhole cover GB11628−1989



A Type A

mm

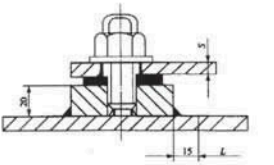
L x B Through−hole size L x B	L_1	B_1	R	S	S_1	Bolt		Kg
						Dia.	No.	Weight kg
450x350	620	520	260	4	4	M20	20	24.5
				6	4			32
				8	6			39.5
				10	8			48
500x400	670	570	285	6	4		20	34.5
				8	6			44.5
				10	8			54.5
				12	10			64
600x400	770	570	285	8	6		24	51.5
				10	8			63
				12	10			74
				14	12			85
600x450	770	620	310	8	6		24	54
				10	8			66
				12	10			78
				14	12			89.5
				16	14			101.5

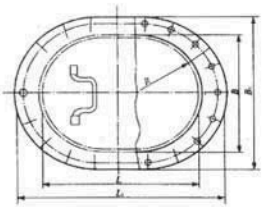
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Type B

B

mm



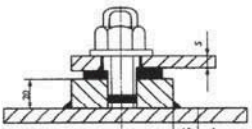


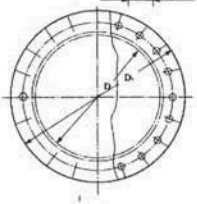
L x B Through–hole size L x B	L_1	B_1	R	S	Bolt Dia.	Bolt No.	Kg Weight Kg
450x350	620	520	260	4	M20	20	31.5
				6			37
				8			40.5
				10			45
500x400	670	570	285	6		20	41.5
				8			46.5
				10			52
				12			57
600x400	770	570	285	8		24	53.5
				10			60
				12			66
				14			72
600x450	770	620	310	8		24	56.5
				10			63.5
				12			70
				14			76.5
				16			83

Type C

C

mm



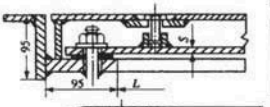


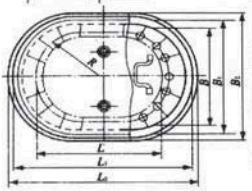
D Through–hole size D	D_1	S	Bolt Dia.	Bolt No.	Kg Weight Kg
450	620	4	M20	20	35.5
		6			40.5
		8			45.5
		10			50.5
		12			55.5
600	770	6		26	55.5
		8			63.5
		10			71.5
		12			79.5
		14			87

Type D

D

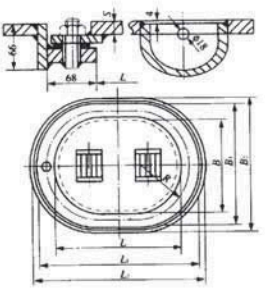
mm





L x B Through–hole size L x B	L_1	B_1	L_2	B_2	R	S	Bolt Dia.	Bolt No.	Fitting bolt Dia.	Fitting bolt No.	Kg Weight Kg
530x430	710	610	752	652	250	10	M20	20	M16	2	128.5
						12					133.5
630x430	810	610	852	652	250	10		24			150
						12					155
630x480	810	660	852	702	275	10		24			151
						12					158

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com



Type E

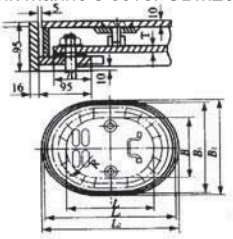
E

mm

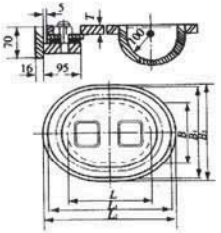
LxB Through-hole size L x B	L_1	B_1	L_2	B_2	R	S	Bolt Dia.	Bolt No.	Kg Weight Kg
530x430	656	556	698	598	250	14	M20	20	80.5
						18			89.5
630x430	756	556	798	598	250	14		24	91.5
						18			103
630x480	756	606	798	648	275	14		24	98.5
						18			108

CBM2053–1983

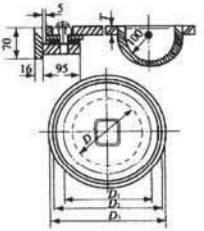
Sunk manhole cover CBM2053–1983



A Type A



B Type B



C Type C

A、B Type A, B

mm

Type	L x B Through-hole size L x B	L_1	B_1	L_2	B_2	R	T	Bolt Dia.	Bolt No.	Kg Weight Kg
A	530x430	710	610	752	652	250	12	M20	20	130
	630x430	810	610	852	652	250			24	148.5
	630x480	810	660	852	702	275			24	155
B	530x430	656	556	698	598	250	18		20	90
	630x430	756	556	798	598	250			24	103
	630x480	756	606	798	648	275			24	108

Type C

C

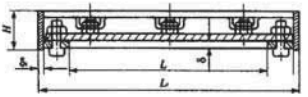
mm

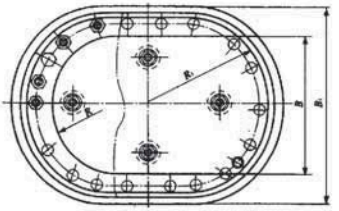
D Through-hole size D	D_1	D_2	D_3	T	Bolt Dia.	Bolt No.	Kg Weight Kg
480	550	660	702	18	M20	20	110
630	700	810	852			26	150

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

CB959–1980

Sunk manhole cover CB959–1980



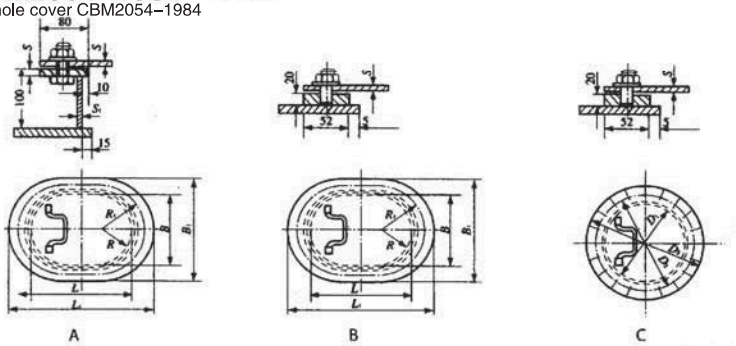


mm

Through–hole size		Fence panel dim.					Bolt			Kg
L	B	L_1	B_1	H		t	Dia.	Length	No.	Weight Kg
450	320	590	460	80	16	12	M20	55	18	58.5
500	400	640	540	85	20	12	M20	60	20	107.5

CBM2054–1984

Manhole cover CBM2054–1984



A

mm

Type	L x B Through–hole size L x B	L_1	B_1	R	R_1	S	S_1	Bolt Dia.	Bolt No.	Kg Weight Kg
A	500x400	670	570	200	250	8	6	M20	20	43.5
						10	8			53.5
						12	10			63.5
	600x400	770	570	200	250	8	6		24	50.5
						10	8			62
						12	10			73.5
	600x450	770	620	225	275	8	6		24	53
						10	8			65
						12	10			77

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

B

mm

Type	L x B Through-hole size L x B	L_1	B_1	R	R_1	S	S_1	Bolt Dia.	Bolt No.	Kg Weight Kg
B	450x350	620	520	175	225	6	20	M20	20	35.5
						8				40
						10				44.5
	500x400	670	570	200	250	8			20	45.5
						10				50.5
						12				56
	600x400	770	570	200	250	8			24	52
						10				58.5
						12				64.5
	600x450	770	620	225	275	8			24	54.5
						10				61
						12				68

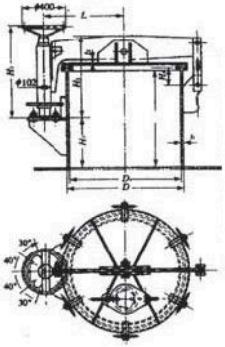
C

mm

D Through-hole size D	D_1	D_2	D_3	S	Bolt Dia.	Bolt No.	Kg Weight Kg
450	480	550	620	8	M20	20	44
				10			49.5
				12			54.5
600	630	700	770	8		26	61.5
				10			69.5
				12			77.5

CB/T282–1994

Rotating type oil hatch cover CB/T282–1994

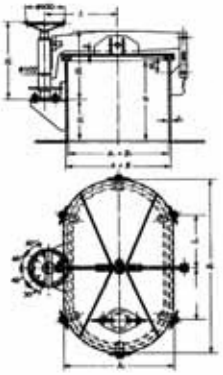


Type A

A

mm

D Through-hole size D	D_1 Deck opening hole dim D_1	H	H_1	H_2	H_3	H_4	L	t_1	t_2	Fastener No.	Kg Weight Kg
600	570	600	290	538	585 ~ 700	100	480	10	12	4	324
700	670						530			6	357
800	440						580				458
1000	970						682	12	14		592
1200	1170						782				693



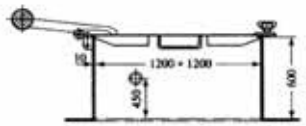
B

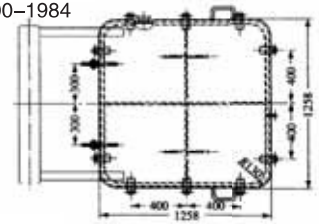
mm

D Through-hole size D	D1 Deck opening hole dim. D1	A2	B2	H	H1	H2	H3	H4	L	L1	t	t1	Fastener No.	Weight Kg
750x1200	720x1170	885	1285	600	260	538	585	100	506	480	12	14	6	594
750x1500	720x1470	885	1585				–		506	480				651
850x1500	820x1470	985	1585				700		606	480				675

CB*3200–1984

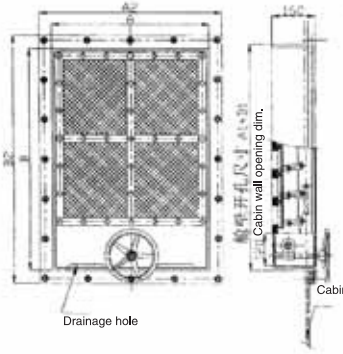
Souez Canal light hatch cover CB*3200–1984





HT/WM HT0607–01

Watertight cover without door HT/WM HT0607–01



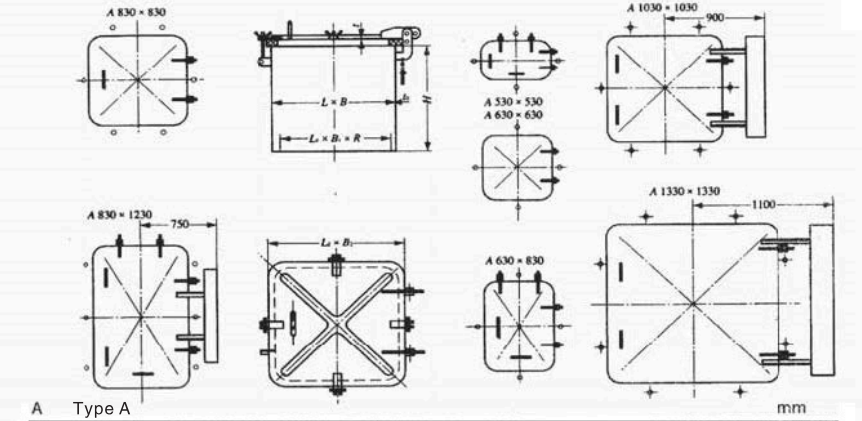
Nom. dim. A × B	Cabin wall opening dim. A1 × B1	Outline dim. A2 × B2
400x600	445x645	516x716
500x800	545x845	616x916
500x1000	545x1045	616x1116
600x800	645x845	716x916
600x1200	645x1245	716x1316
800x1000	845x1045	916x1116
800x1500	845x1545	916x1616
1000x1800	1049x1849	1120x1920
1200x1800	1249x1849	1320x1920

Note: 1. Opening hole and nominal dimensions should be specified when placing order.
2. Upper, middle, down or other position hand wheel may be selected by customer.
3. Opening and closing mechanism may be selected either electricity or pneumatic driven according to customer requirements.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

CB/T3728–1995

Small type steel hatch cover CB/T3728–1995



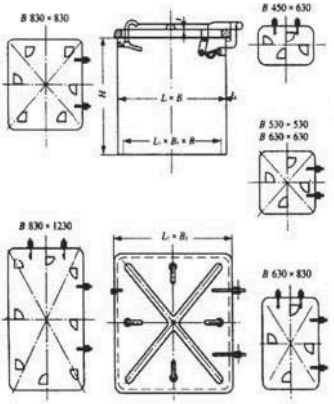
A Type A

mm

L × B Nom. dim. L × B	$L_1 \times B_1 \times R$ Through–hole size $L_1 \times B_1 \times R$	$L_2 \times B_2$ Cover plate dim. $L_2 \times B_2$	t Cover plate thickness t	Surrounding plate		Fastener		Kg Weight Kg
				Thickness t_1	H Height H	Dia.	No.	
450x630	420x600x100	508x688	4	4;6	100 150 200 250 450 600	M16	4	27
		512x692	6	6;8				34.5
		516x696	8	8;11				41.5
530x530	500x500x100	588x588	4	4;6				27
		592x592	6	6;8				34
		596x596	8	8;11				41.5
630x630	600x600x100	688x688	4	4;6		M20		34
		692x692	6	6;8				44
		696x696	8	8;11				53.5
630x830	600x800x100	688x888	4	4;6				41.5
		692x892	6	6;8				53.5
		696x896	8	8;11				66
830x830	800x800x100	888x888	4	4;6			6	52
		892x892	6	6;8				67.5
		896x896	8	8;11				83
830x1230	800x1200x100	888x1288	4	4;6			8	72
		892x1292	6	6;8				94
		893x1296	8	8;11	800			193*
1030x1330	1000x1000x100	1092x1092	6	6;8			6	162*
		1096x1096	8	8;11				210*
1330x1330	1300x1300x100	1396x1396	8	8;11			8	364*

Note: 1. Surrounding plate weight is not included in weight in this table.
2. Height and thickness of surrounding plate are selected according to customer.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

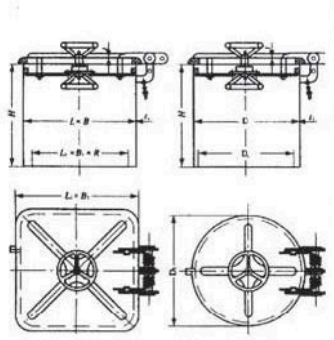


B Type B

mm

L×B Nom. dim. L×B	L×B×R Through-hole size L1 × B1 × R	L2×B2 Cover plate dim. L2 × B2	Cover plate thickness t	Surrounding plate Thickness t1	Surrounding plate H Height	Fastener No.	Kg Weight Kg
450x630	420x600x100	508x688	4	4;6	100 150 200 250 450 600	4	31.5
		512x692	6	6;8			39
		516x696	8	8;11			46.5
530x530	500x500x100	588x588	4	4;6			31.5
		592x592	6	6;8			38.5
		596x596	8	8;11			46
630x630	600x600x100	688x688	4	4;6			37
		692x692	6	6;8			46.5
		696x696	8	8;11			56.5
630x830	600x800x100	688x888	4	4;6			43.5
		692x892	6	6;8			56.5
		696x896	8	8;11			68.5
830x830	800x800x100	888x888	4	4;6		6	56.5
		892x892	6	6;8			72
		896x896	8	8;11			87.5
830x1230	800x1200x100	888x1288	4	4;6		8	78.5
		892x1292	6	6;8			101

Note: 1. Surrounding plate weight is not included in weight in this table.
2. Height and thickness of surrounding plate are selected according to customer.



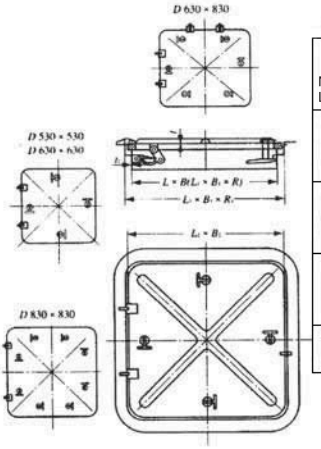
C Type C

mm

L×B ,D Nom. dim. L×B	L×B×R ,D Through-hole size L1 × B1 × R	L2×B2, D2 Cover plate dim. L2 × B2	Cover plate thickness t	Surrounding plate Thickness t1	Surrounding plate H Height	Fastener No.	Kg Weight Kg
530x530	500x500x100	588x588	4	4;6	150 200 250 450 600	4	49
		592x592	6	6;8			56.5
		596x596	8	8;11			64
630x630	600x600x100	688x688	4	4;6			55
		692x692	6	6;8			64.5
		696x696	8	8;11			74.5
530	500	588	4	4;6			47
		592	6	6;8			53
		596	8	8;11			58.5
630	600	688	4	4;6			51
		692	6	6:8			64
		696	8	8;11			67

Note: 1. Surrounding plate weight is not included in weight in this table.
2. Height and thickness of surrounding plate are selected according to customer.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com



D Type D

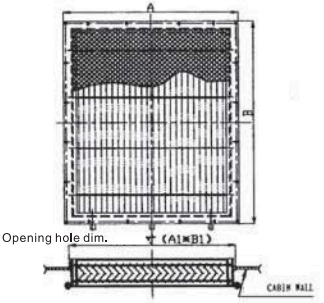
mm

L×B Nom. dim. L×B	$L_1 \times B_1 \times R$ Through–hole size $L_1 \times B_1 \times R$	$L_2 \times B_2$ Cover plate dim. $L_2 \times B_2$	$L_3 \times B_3 \times R_1$ Deck opening size $L_3 \times B_3 \times R_1$	Cover plate thickness t	Surrounding plate Thickness t_1	Fastener No.	Kg Weight Kg
530x530	530x530x115	588x588	622x622x161	4	6	4	51.5
		592x592	622x622x161	6	6		59
		596x596	626x626x163	8	8		70
630x630	630x630x115	688x688	722x722x161	4	6		63.5
		692x692	722x722x161	6	6		73
		696x696	726x726x163	8	8		88.5
630x830	630x830x115	688x888	722x922x161	4	6	6	81.5
		692x892	726x926x163	6	8		100.5
		696x896	726x926x163	8	8		117
830x830	830x830x115	892x892	926x926x163	6	8	8	126.5
		896x896	926x926x163	8	8		142

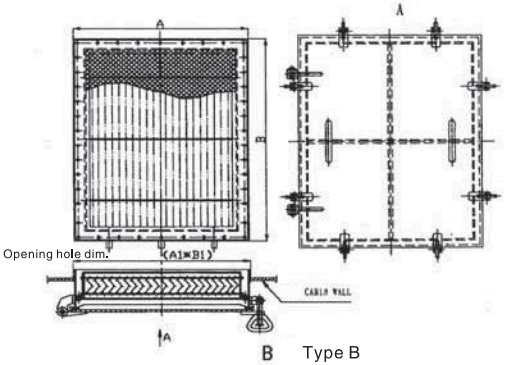
Note: 1. Surrounding plate weight is not included in weight in this table.
2. Height and thickness of surrounding plate are selected according to customer.

FL HT0607–02

Water–air–separating louver FL HT0607–02



A Type A



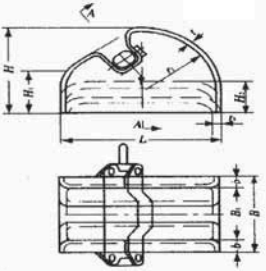
B Type B

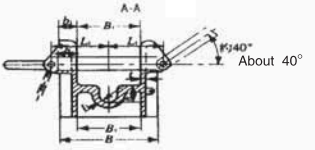
Note: 1. Type A (without cover) or type B (with cover) should be specified when placing order.
2. Materials(stainless steel S, aluminum alloy L, galvanized steel sheet, glass fiber reinforced plastics) for water baffle plate should be selected by customer.
3. Opening hole dimension A*B or A1*B1 should be specified when placing order.
4. Other particular structures may also be designed and produced according to customer requirements.

Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

CB*286–1984

Cast steel cable stopper with knife switch CB*286–1984





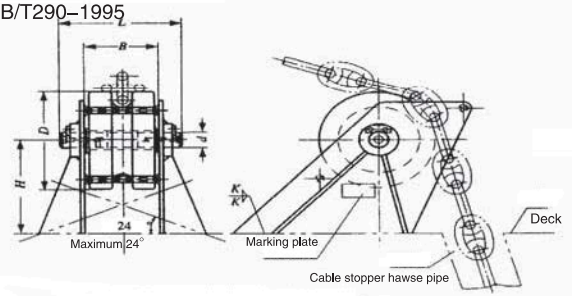
Note: Right cable stopper shown in figure, left cable stopper conversely.

mm

Anchor chain dia.	B	B_1	H	H_1	H_2	L	b	b_1	d	h	l	L_1	r	r_1	t	t_1	B_2	Kg Weight Kg
12.5~14	142	92	162	85	77	235	25	40	14	27	40	90	70	118	8	11	24	22
16~17.5	170	112	190	98	80	270	29	38	14	32	53	100	80	135	9	12	30	28
19~20.5	193	129	216	107	84	310	32	42	20	37	63	113	92	155	10	13	34	33
22~24	219	147	241	120	92	345	36	47	20	43	73	128	102	172	11	14	39	41
26~28	241	163	270	134	92	385	39	48	20	48	85	140	115	192	12	16	46	50
30~32	274	186	305	150	104	435	44	53	24	54	100	160	130	217	13	19	53	62
34~36	304	208	342	164	118	490	48	59	26	61	113	177	145	245	14	22	59	76
38~40	336	230	378	178	130	540	53	66	30	68	125	195	160	270	15	25	65	94
42~44	366	252	412	192	142	590	57	72	30	75	140	212	180	295	16	27	72	119
46~48	397	273	450	213	155	640	62	79	30	82	151	230	190	320	17	30	78	153
50~52	428	294	491	232	170	695	67	86	30	88	167	247	200	345	18	32	85	190
54~56	457	315	528	250	182	745	71	93	30	95	180	265	210	370	19	34	92	231
58~60	488	336	564	270	195	795	76	98	32	102	194	282	230	395	20	36	98	281
62~64	517	357	600	280	208	850	80	104	34	109	208	300	250	425	21	38	104	335
66~68	547	377	635	296	220	900	85	111	36	116	222	318	270	450	22	41	110	399

CB/T290–1995

Fairlead roller CB/T290–1995



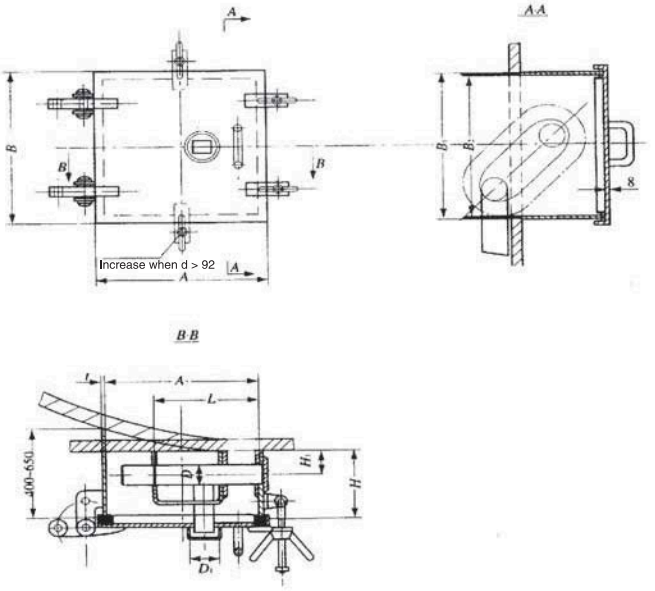
Note: Right cable stopper shown in figure, left cable stopper conversely.

mm

Type	Anchor chain dia.	D	d	L	B	H	K	Kg Weight Kg
14	12.5~14	154	26	164	94	150	4	14
17.5	16~17.5	192	32	186	108	170	5	23.5
20.5	19~20.5	226	38	208	122	210		36
24	22~24	264	42	236	142	240	6	55
28	26~28	308	48	262	160	280		81.5
32	30~32	352	54	292	178	310	7	115.5
36	34~36	396	58	319	201	360		159
40	38~40	440	64	349	219	390	8	209
44	42~44	484	70	377	239	430		264
48	46~48	528	74	405	259	470	9	336
52	50~52	572	78	430	280	510		407.5
56	54~56	616	82	466	302	540	10	499
60	58~60	660	88	492	320	580	11	629
64	62~64	704	94	526	342	620	12	756.5
68	66~68	748	98	552	360	660	13	915.5

CB/T3143–1999

Plug pin cable releaser CB/T3143–1999

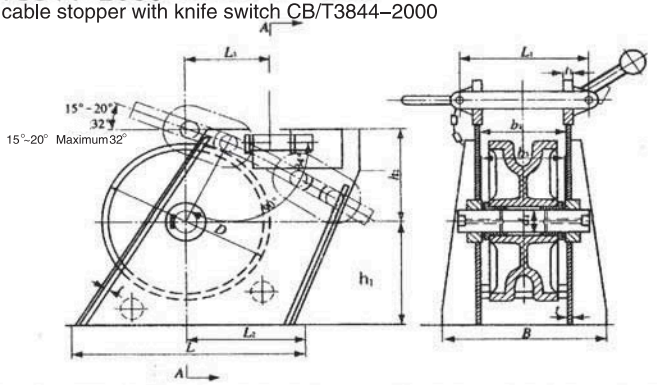


mm

Nom. dim.	Anchor chain dia.	A	A_1	B	B_1	B_2	H	H_1	D	t	Kg Weight Kg
52	50~52	466	400	398	346	332	175	63	54	14	93.5
56	54~56	501	435	486	434	420	180	70	58		125.5
60	58~60	541	475	516	464	450	185	75	62		140
64	62~64	546	480	546	498	480	220	82	66		157.5
68	66~68	568	500	572	516	504	230	86	70	16	195
73	70~73	604	536	608	558	540	246	90	75		243
78	76~78	638	570	644	596	570	248	94	80		247.5
84	81~84	698	630	688	636	620	250	102	85		259.5
90	87~90	730	668	740	686	670	280	110	90	18	332
95	92~95	770	700	780	730	710	288	110	95		368.5
102	97~102	824	750	784			315	130	100	22	434.5
111	105~111	886	810	786			370	150	110	24	664.5
120	114~120	906	830	786			380	170	112		682

CB/T3844–2000

Roller cable stopper with knife switch CB/T3844–2000



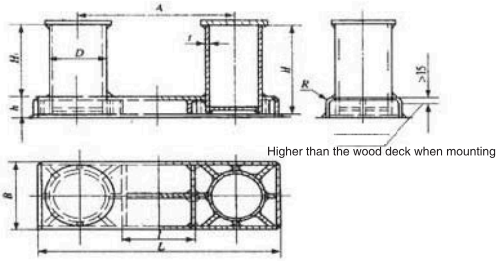
mm

Nom. dim.	Anchor chain dia.	L	L_1	L_2	L_3	B	D	h_1	h_2	t_1	t	Kg Weight Kg
44	42~44	1000	370	400	270	380	484	392	281	32	12	301
48	46~48	1050	420	450	300	446	528	414	306	34	13	386
52	50~52	1100	440	500	320	510	572	440	338	36	14	496
56	54~56	1150	450	550	340	556	600	460	354	38	15	589
60	58~60	1200	470	570	360	610	620	490	378	40	16	716
64	62~64	1250	500	600	370	666	640	520	400	42	17	828
68	66~68	1300	550	640	394	732	680	540	420	45	18	1032
73	70~73	1350	570	670	414	800	730	580	460	48	20	1295
78	76~78	1400	610	700	442	865	780	630	490	50	22	1564
84	81~84	1460	650	740	475	940	840	670	530	55	24	1933
90	87~90	1540	710	780	507	1030	900	720	570	60	26	2388
95	92~95	1600	740	820	535	1080	950	760	610	65	28	2823
102	97~102	1680	790	870	572	1150	1020	800	650	70	30	3030
107	105~107	1750	840	900	600	1210	1070	860	690	75	32	4004
114	111~114	1820	880	940	637	1270	1140	910	740	80	34	4732
122	117~122	1880	930	1010	679	1340	1220	980	790	85	36	5857
132	124~132	1960	1000	1080	730	1440	1320	1060	860	90	38	6868

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

GB/T554–1996

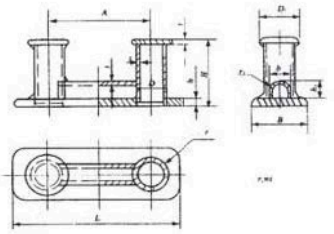
Mooring bitt GB/T554–1996



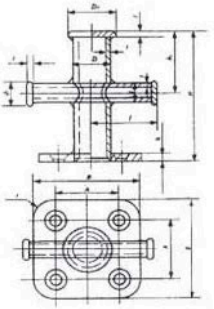
Type A

A A mm

Nom. dia.	Cable maximum breaking load KN	Cable maximum dia. (or perimeter)					Pile					Base					Kg
		Steel cable			Hempen rope (perimeter)	Synthetic fibre cable	D	H	H_1	t_{min}	A	B	L	h_{min}	I	R	Weight Kg
		6x24	6x30	6x37													
100	29	7.4	8.7	--	63	14	114	196	150	10	250	165	445	50	70	15	21
125	39	9.3	8.7	8.7	75	18	140	246	190	10	315	195	540	60	100	15	32
160	49	9.3	11	8.7	90	20	168	316	250	10	400	225	670	70	145	20	50
200	78	13	13	13	110	26	219	378	300	10	500	290	860	85	160	25	88
250	118	15	17.5	15	130	30	273	470	380	11	630	360	1065	100	215	30	155
315	196	20.5	21.5	19.5	170	39	325	597	480	15	800	430	1300	125	325	35	290
355	255	24	24	21.5	200	45	351	663	530	17	890	480	1475	145	360	40	394
400	314	26	28	24	235	53	402	749	600	18	1000	550	1680	160	400	45	549
450	382	30	30	28	250	56	450	841	680	19	1130	620	1840	170	450	50	748
500	451	32	32.5	30	280	64	508	928	750	20	1250	690	2040	190	500	55	1002
560	549	33.5	36.5	32.5	315	70	560	1025	830	22	1380	750	2240	210	560	60	1328
630	686	37.5	39	36.5	345	77	610	1152	940	24	1570	820	2510	225	680	70	1761
710	804	41	43	39	375	84	712	1294	1050	25	1750	960	2840	260	710	80	2477
800	981	44.5	47.5	43	--	--	813	1480	1200	26	2000	1100	3240	295	810	80	3378



Type C C



Type D D

Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

C

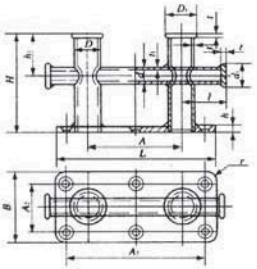
mm

Nom. dia.	Steel cable maximum dia.	Hempen rope maximum perimeter	Synthetic fibre cable dia.	D	D_1	L	A	B	H	h	h_1	t	b	r	Kg Weight Kg
50	8.7	75	16	50	65	310	180	100	115	9	26	6	32	20	5
75	11.5	90	20	75	95	430	275	125	170	12	43	7	50	20	12
100	13.5	100	24	100	120	540	350	160	220	14	51	7	65	25	21
125	15.5	125	28	125	145	676	430	200	275	15	60	9	80	28	38
150	17.5	150	30	150	170	800	500	230	330	16	70	9	100	35	54

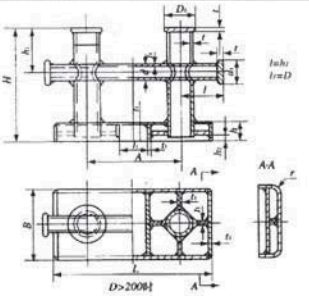
D

mm

Nom. dia.	Steel cable maximum dia.	Hempen rope maximum perimeter	Synthetic fibre cable dia.	D	D_1	B	H	h	h_1	t	d	d_1	r	A	Screw		Kg Weight Kg
															Dia.	No.	
50	8.7	75	16	50	65	135	190	8	85	6	25	35	25	85	M16	4	4
75	11.5	90	20	75	95	185	290	12	135	7	42	52	35	115	M22	4	11
100	13.5	100	24	100	120	235	350	18	160	7	50	65	40	155	M27	4	18



Type E



E

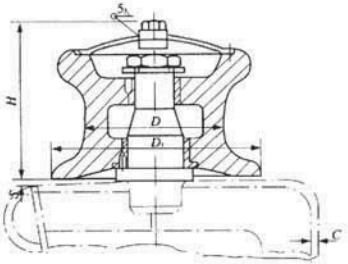
mm

Nom. dia.	Steel cable maximum dia.	Hempen rope maximum perimeter	Synthetic fibre cable dia.	D	D_1	L	B	H	h	h_1	h_2	t	t_1	d	d_1	r	A	A_1	A_2	Screw		Kg
																				Dia.	No.	Weight Kg
50	8.7	75	16	50	65	310	130	190	8	85	–	6	4	32	40	20	180	270	90	12	6	8
75	11.5	90	20	75	95	450	170	290	10	130	–	7	5	48	56	25	275	400	125	16	6	18
100	13.5	100	24	100	120	550	200	350	12	160	–	7	5	65	75	28	350	494	144	18	6	30
125	15.5	125	28	125	145	660	240	425	14	195	–	9	7	80	95	35	425	590	170	22	6	78
150	17.5	150	30	150	170	770	270	500	16	210	–	9	7	90	110	35	500	700	200	22	6	103
175	19.5	175	36	180	200	850	320	550	18	240	–	10	8	110	125	38	530	774	244	24	6	113
200	22.5	200	40	203	225	960	360	795	145	275	60	12	9	130	145	20	600	–	–	–	–	199
250	26	225	48	245	280	1200	450	855	155	350	60	14	12	159	180	25	750	–	–	–	–	341
300	30.5	250	56	299	330	1440	540	1160	180	420	73	16	14	194	215	30	900	–	–	–	–	633

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

GB*58–1983

Fairlead roller GB*58–1983



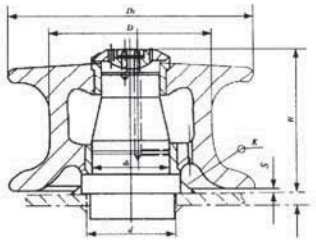
mm

D Roller dia.D	Steel cable maximum dia. (GB1102–74) 155kgf/mm² Steel cable(GB1102–74) tensile strength 155kgf/mm² 6x24	6x30	6x37	Hempen rope	Outer dim. D_1	H	S	Kg Weight Kg Cast iron	Cast steel
100	11	11	11	40	160	128	3	21	22
150	17	17.5	15	45	240	211	3	35.5	37
200	22.5	21.5	19.5	55	310	251	3	71	75
250	24	26	24	65	380	298	4	119	125
300	30	32.5	28	70	440	321	4	175	185
350	37.5	39	34.5	75	500	346	4	259	273
400	41	39	39	85	560	371	5	370	391
450	44.5	47.5	43	--	620	394	5	454	508

Note: Base weight is not included in weight in this table.

GB/T10105–1988

Marine fairlead roller GB/T10105–1988



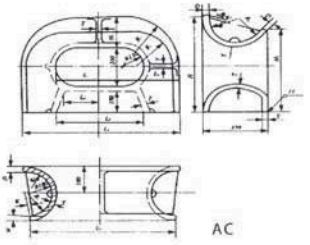
mm

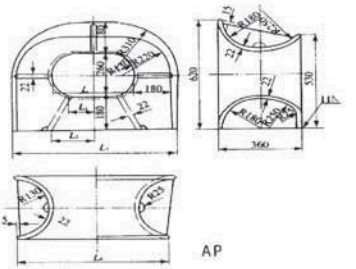
D Roller dia. D	Steel cable maximum dia. (GB1102–74) 155kgf/mm² Steel cable(GB1102–74) tensile strength 155kgf/mm² 6x24	6x37	Synthetic fiber rope	Hempen rope	Outer dim. D_1	d	d_1	H	s	k	Kg Weight Kg
150	17	15	32	45	240	90	79	154	5	9	27.5
200	22.5	19.5	40	55	310	115	99	186	5	10	54.5
250	24	24	45	65	380	135	119	230	6	10	101
300	30	28	50	70	440	155	129	255	7	12	140
350	37.5	34.5	55	75	500	175	149	271	7	13	185
400	41	39	65	85	560	185	159	307	7	14	278
450	44.5	43	80	--	630	210	179	316	7	14	341

Note: Base weight is not included in weight in this table.

GB11586–1989

Panama chocks GB11586–1989





Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

AC

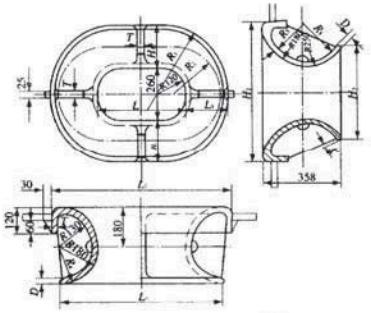
mm

Nom. dim. L	L_1	L_2	L_3	L_4	L_5	D	H_1	H_2	H_3	R_1	R_2	R_3	R_4	R_5	K	T	Kg Weight Kg
310	199	105	310	708	652	38	639	541	199	329	231	140	142	195	15	32	278
360	200	130	360	760	701	40	640	542	200	330	232	135	140	195	15	34	318
400	202	150	400	804	750	44	642	545	202	332	235	134	136	185	20	36	355
450	203	175	450	856	802	46	643	547	203	333	237	132	134	182	20	38	386
500	204	200	500	908	854	48	644	549	204	334	239	130	132	180	20	40	434

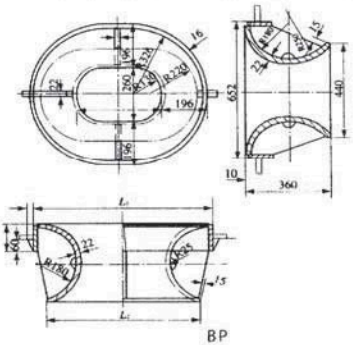
AP

mm

L Nom. dim. L	L_1	L_2	L_3	L_4	Kg Weight Kg
310	85	155	670	620	209
360	110	180	720	670	228



BC



BP

BC

mm

L Nom. dim L	L_1	L_2	L_3	D	H_1	H_2	H_3	R_1	R_2	R_3	R_4	R_5	K	T	Kg Weight Kg
310	212	734	652	38	212	684	462	342	231	148	140	195	15	32	304
360	214	788	704	40	214	688	464	344	232	146	138	192	15	34	336
400	216	832	750	44	216	692	470	346	235	144	134	185	20	36	378
450	218	886	802	46	218	696	474	348	237	142	132	182	20	38	424
500	220	940	854	48	220	700	478	350	239	140	130	180	20	40	464

BP

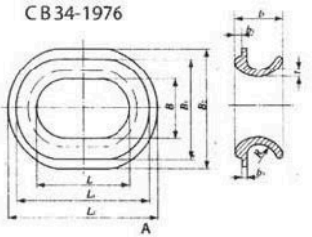
mm

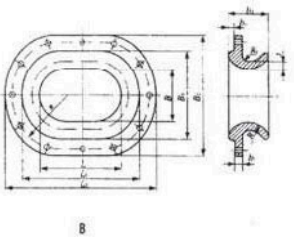
L Nom. dim. L	L_1	L_2	Kg Weight Kg
310	702	620	203
360	752	670	213

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

CB34–1976

Mooring pipe CB34–1976





A

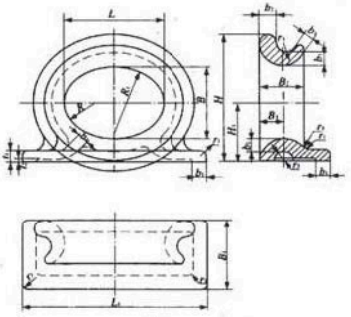
mm

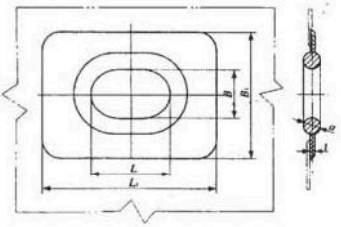
Steel cable maximum dia.	Hempen rope maximum perimeter	Nylon rope maximum dia.	L	L_1	L_2	B	B_1	B_2	t	b_1	b_2	b_3	R	R_1	Cabin wall opening hole dim. B_3	Cabin wall opening hole dim. L_3	Kg Weight Kg
18.5	160	35	200	300	340	130	230	270	18	18	110	9	58	20	310	240	18
22.5	200	45	260	400	450	170	310	360	22	25	160	10	84	30	415	325	45
28	230	55	320	465	515	200	345	395	25	28	175	12	95	30	480	360	63
33.5	270	70	400	572	632	260	430	490	30	32	200	15	108	35	592	450	106
43.5	325	90	480	685	755	310	525	595	35	35	240	18	126	45	705	545	189

B

mm

Steel cable maximum dia.	Hempen rope maximum perimeter	Nylon rope maximum dia.	L	L_1	L_2	B	B_1	B_2	t	b_1	b_2	b_3	R	R_2	Cabin wall opening hole dim. L_3	Cabin wall opening hole dim. B_3	Rivel or bolt Dia.	Rivel or bolt No.	Kg Weight Kg
18.5	160	35	200	300	400	130	230	330	18	18	110	22	58	145	310	240	12	12	25
22.5	200	45	260	400	520	170	310	430	22	25	160	25	84	190	415	325	16	12	55
28	230	55	320	465	590	200	345	470	25	28	175	30	95	210	480	360	16	16	79
33.5	270	70	400	572	720	260	430	580	30	32	200	35	108	260	592	450	20	16	130
43.5	325	90	480	685	870	310	525	700	35	35	240	40	126	320	705	545	24	16	226





C

mm

Steel cable maximum dia.	Hempen rope maximum perimeter	Nylon rope maximum dia.	L	L_1	B	B_1	B_2	B_3	H	H_1	R	R_1	b_1	b_2	b_3	r	r_1	r_2	r_3	t_1	t_2	Kg Weight Kg
15	125	30	150	400	110	170	118	60	250	115	48	102	32	40	26	50	27	20	10	25	5	42
18.5	160	35	200	500	150	190	139	71	317	146	65	133	40	50	32	70	30	30	10	30	5	69
22.5	200	45	250	600	180	220	161	82	382	177	85	165	45	55	36	75	37	30	15	35	10	107
28	230	55	300	660	220	250	172	88	436	198	95	203	50	60	42	90	37	40	15	40	10	140
33.5	270	70	400	750	290	290	185	95	513	240	125	273	55	65	47	95	39	40	20	45	10	231
43.5	325	90	500	880	350	350	199	102	589	277	147	350	60	70	51	110	42	50	20	50	10	325

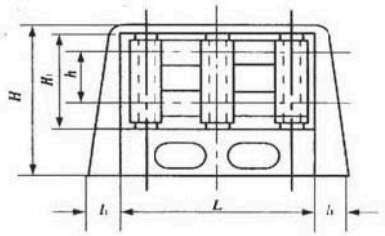
D

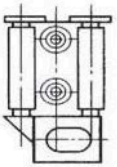
mm

Steel cable maximum dia.	Hempen rope maximum perimeter	Nylon rope maximum dia.	L	L_1	B	B_1	d	t	Cabin wall opening hole dim.		Kg Weight Kg
									L_3	B_3	
--	90	22	120	270	80	220	30	5	220	180	4.5
15	125	30	160	360	110	300	40	5	280	230	9.5
18.5	160	35	200	450	130	350	50	8	360	290	19
22.5	200	45	260	570	170	440	60	8	440	350	33
28	230	55	320	700	200	500	70	10	520	400	54

CB*3139–1983

Saint Lawrence fairlead CB*3139–1983



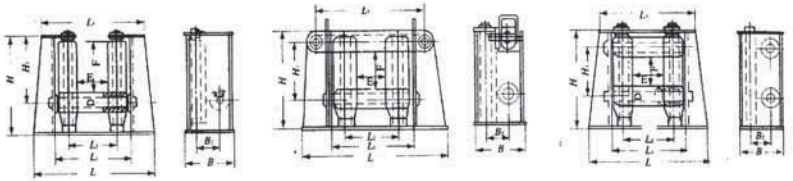


Roller Nom. dia.	L	L_1	H	H_1	h	B	B_1	D	D_1	Kg Weight Kg	Steel cable	Nylon rope
140	826	140	810	508	290	275	145	90	140	533	19.5	36
160	920	155	937	578	318	340	200	110	160	827	22.5	40
190	1002	185	1040	624	344	380	230	135	180	1188	26	45
200	1077	200	1119	669	369	435	255	160	200	1568	32.5	70

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

CB*3062–1979

Fairlead with horizontal roller CB*3062–1979



A
Type A

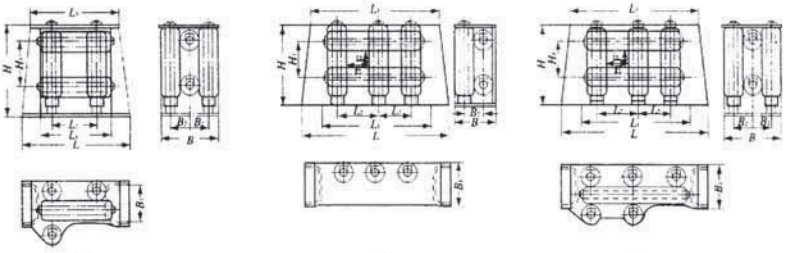
BA
Type BA

BB
Type BB

mm

Type	Dia. Steel cable	Dia. Nylon rope	E	F	D	L	L_1	L_2	L_3	B	B_1	B_2	H	H_1	Kg Weight Kg
A	19.5	36	200	257	100	644	416	300	544	238	194	108	508	330	152
	22.5	40	200	275	120	728	456	320	608	280	232	128	552	360	233
	26	45	200	311	130	776	480	330	646	304	250	138	606	405	300
	32	70	220	328	150	880	540	370	730	346	288	158	670	435	441
	34.5	80	240	358	160	940	580	400	780	370	308	168	710	470	516
	37.5	85	240	383	180	1030	620	420	850	417	345	190	770	510	746
	43	95	260	411	200	1136	686	460	936	459	385	210	820	550	952
	52	100	260	450	230	1256	746	490	1026	521	445	240	910	605	1316
	60.5	–	300	493	260	1430	850	560	1170	590	500	270	1000	670	1915
	68	–	320	563	320	1690	990	640	1370	714	620	330	1130	770	3092
BA	19.5	36	200	194	100	744	416	300	544	238	194	108	508	294	190
	22.5	40	200	196	120	848	456	320	608	280	232	128	552	316	290
	26	45	200	228	130	906	480	330	646	304	250	138	606	358	370
	32	70	220	230	150	1030	540	370	730	346	288	158	670	380	533
	34.5	80	240	250	160	1100	580	400	780	370	308	168	710	410	641
	37.5	85	240	265	180	1210	620	420	850	417	345	190	770	445	905
	43	95	260	275	200	1336	686	460	936	459	385	210	820	475	1170
BB	19.5	36	200	150	100	644	416	300	544	238	194	108	508	250	170
	22.5	40	200	150	120	728	456	320	608	280	232	128	552	270	263
	26	45	200	180	130	776	480	330	646	304	250	138	606	310	336
	32	70	220	180	150	880	540	370	730	346	288	158	670	330	495
	34.5	80	240	200	160	940	580	400	780	370	308	168	710	360	633
	37.5	85	240	200	180	1030	620	420	850	417	345	190	770	380	831
	43	95	260	210	200	1136	686	460	936	459	385	210	820	410	1085
	52	100	260	220	230	1256	746	490	1026	521	445	240	910	450	1507
	60.5	–	300	240	260	1430	850	560	1170	590	500	270	1000	500	2208
	68	–	320	250	320	1690	990	640	1370	714	620	330	1130	570	3687

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com



C
Type C

D
Type D

E
Type E

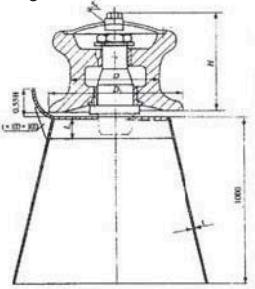
mm

Type	Dia.		E	F	D	L	L_1	L_2	L_3	B	B_1	B_2	H	H_1	Kg
	Steel cable	Nylon rope													Weight Kg
C	19.5	36	200	150	100	644	416	300	544	324	194	108	508	250	200
	22.5	40	200	150	120	728	456	320	608	384	232	128	552	270	310
	26	45	200	180	130	776	480	330	646	415	250	138	606	310	396
	32	70	220	180	150	880	540	370	730	475	288	158	670	330	585
	34.5	80	240	200	160	940	580	400	780	507	308	168	710	360	742
	37.5	85	240	200	180	1030	620	420	850	571	345	190	770	380	984
	43	95	260	210	200	1136	686	460	936	632	385	210	820	410	1285
	52	100	260	220	230	1256	746	490	1026	723	445	240	910	450	1799
	60.5	--	300	240	260	1430	850	560	1170	815	500	270	1000	500	2622
	68	--	320	250	320	1690	990	640	1370	997	620	330	1130	570	4423
D	19.5	36	200	150	100	644	716	300	844	238	194	108	508	250	271
	22.5	40	200	150	120	728	776	320	928	280	232	128	552	270	414
	26	45	200	180	130	776	810	330	976	304	250	138	606	310	533
	32	70	220	180	150	880	910	370	1100	346	288	158	670	330	787
	34.5	80	240	200	160	940	980	400	1180	370	308	168	710	360	934
	37.5	85	240	200	180	1030	1040	420	1270	417	345	190	770	380	1046
	43	95	260	210	200	1136	1146	460	1396	459	385	210	820	410	1700
	52	100	260	220	230	1256	1236	490	1516	521	445	240	910	450	2357
	60.5	--	300	240	260	1430	1410	560	1730	590	500	270	1000	500	3447
	68	--	320	250	320	1690	1630	640	2010	714	620	330	1130	570	5610
E	19.5	36	200	150	100	644	716	300	844	324	194	108	508	250	332
	22.5	40	200	150	120	728	776	320	928	384	232	128	552	270	510
	26	45	200	180	130	776	810	330	976	415	250	138	606	310	655
	32	70	220	180	150	880	910	370	1100	475	288	158	670	330	971
	34.5	80	240	200	160	940	980	400	1180	507	308	168	710	360	1153
	37.5	85	240	200	180	1030	1040	420	1270	571	345	190	770	380	1352
	43	95	260	210	200	1136	1146	460	1396	632	385	210	820	410	2102
	52	100	260	220	230	1256	1236	490	1516	723	445	240	910	450	2942
	60.5	--	300	240	260	1430	1410	560	1730	815	500	270	1000	500	4275
	68	--	320	250	320	1690	1630	640	2010	997	620	330	1130	570	7075

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

CB/T436–2000

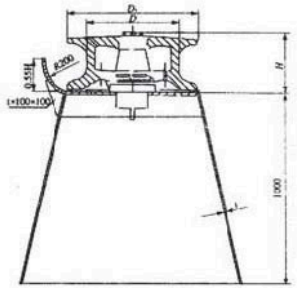
Claw single roller fairleader CB/T436–2000



A

mm

D Roller dia. D	Steel cable maximum dia. (GB1102–74) 155kgf/mm² Steel cable(GB1102–74) tensile strength 155kgf/mm² 6x24	6x37	Synthetic fiber rope	Hempen rope	Outer dim. H	L	t	Kg Weight Kg Roller	Base
100	11	11	28	40	128	60	8	22	71
150	17	15	32	45	211	75	12	37	142
200	22.5	19.5	40	55	251	85	14	75	196
250	24	24	45	65	298	100		125	228
300	30	28	50	70	321		16	185	292
350	37.5	34.5	55	75	346		18	275	365
400	41	39	65	85	371		20	391	441
450	44.5	43	80	--	394	120		508	490



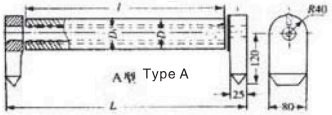
B

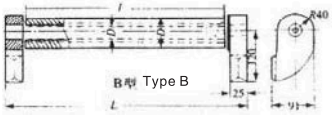
mm

D Roller dia. D	Steel cable maximum dia. (GB1102–74) Steel cable(GB1102–74) tensile strength 155kgf/mm² 6x24	6x37	Synthetic fiber rope	Hempen rope	Outer dim. H	L	t	Kg Weight Kg Roller	Base
150	17	15	32	45	154	75	12	27.5	142
200	22.5	19.5	40	55	186	85	14	54.5	196
250	24	24	45	65	230	100		101	228
300	30	28	50	70	255		16	140	292
350	37.5	34.5	55	75	271		18	185	365
400	41	39	65	85	307		20	278	441
450	44.5	43	80	--	316	120		341	490

CB435–1965

Horizontal roller fairleader CB435–1965

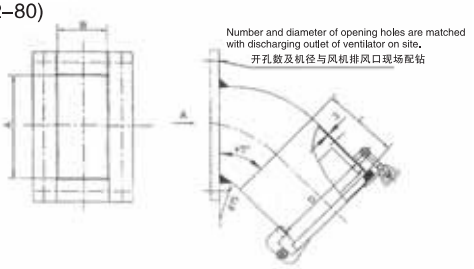




L	l	D	D_1	Kg Weight Kg	
464	400	68	32	17	17.5
646	580	83	42	31	32

(CB*752–80)

Ventilator watertight cover CQ (CB*752–80)



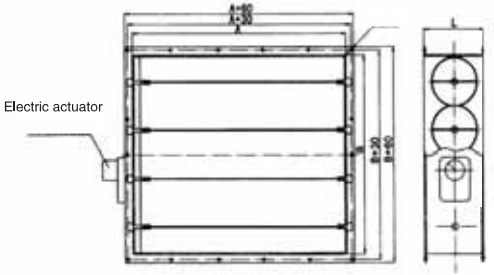
Type B

B

Ventilator type	A	B	L	Hinge No.	No. of spiral fastener	kg Weight kg
CQ2、CQ3	230	90	80	1	3	6.0
CQ4	185	125	80	1	3	8.6
CQ5	230	160	80	1	3	10.4
CQ6	260	180	80	1	3	12.9
CQ7	325	215	90	2	5	18.7
CQ8	380	255	90	2	5	23.1
CQ9	420	270	90	2	5	24.2
CQ10	165	78	80	1	3	6.0
CQ11、CQ12	165	115	80	1	3	8.6
CQ13	190	135	80	1	3	10.4
CQ14	320	230	90	2	5	18.7

DY HT0607–03

Electric volume damper DY HT0607–03



Note.
1.This damper is matched with electric actuator, and may also with electricity control box .The damper can be operated remotely.
2.The power source for electric actuators determined by customers.
3.Self–locked at any angles of 0~90° with indication plate.
4.The detail specifications determined by customers.

(CB/T3726–1995)

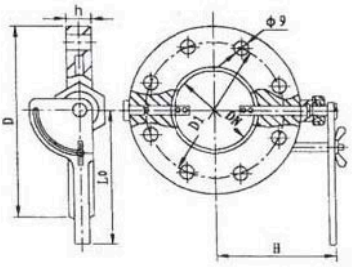
Volume damper (CB/T3726–1995)

Volume damper types

Types	Name	DN(mm) Nom. dia. DN(mm)	Installation position
A	Round common volume damper	80~400	Middle part of round duct
B	Round tightness volume damper		Middle part of round duct with seal requirements
C	Round simple volume damper		Middle part of round duct
D	Rectangular simple volume damper	80~700	Middle part of rectangular duct
E	Rectangular lever type volume damper		Middle part of rectangular duct, and outlet end (Middle part of duct without flange net)
F	Rectangular ring pull type volume damper		
G	Rectangular hinge type volume damper		Outlet end of rectangular duct

A

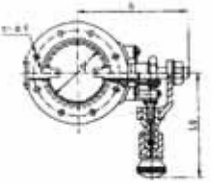
Structural form and main dimension of volume damper A



Dn Nom. dia.Dn	Main dimensions					n(个) No. of bolt holes	kg Weight kg
	D	D1	L0	h	H		
80	135	116	100	14	135	4	1.4
100	155	136			145		1.6
125	180	161			160		1.9
150	205	186			170		2.2
175	230	211			185	6	3.2
200	255	236	150	19	195		4.3
250	305	286			230	12	5.3
300	355	336			255		6.3
350	405	386	170		280		7.1
400	455	436			310	16	7.8

B

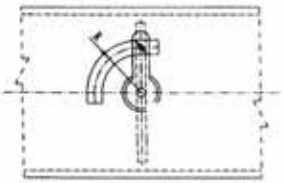
Structural form and main dimension of volume damper B

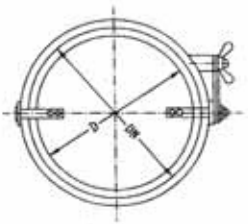


Dn Nom. dia.Dn	Main Dim.					No. of bolt holes	kg Weight kg
	D	D1	L0≈	h	H≈		
80	135	116	140	25	117	4	2.5
100	155	136			130	6	2.8
125	180	161	148		160		3.6
150	205	186			172		4.3
175	230	211			184	8	4.7
200	255	236			196		5.4
250	305	286			222	12	6.5
300	355	336	152	30	250		9.3
350	405	386			275		10.8
400	455	436	172		300	16	12.8

C

Structural form and main dimension of volume damper C



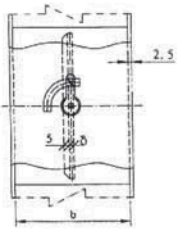


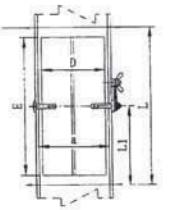
Dn Nom. dia.Dn	Main dimensions		kg Weight kg
	D	H≈	
80	78	30	0.28
100	98		0.37
125	123	40	0.47
150	148		0.56
175	173	60	0.75
200	198		1.08
250	248	100	1.42
300	298		1.77
350	348		2.33
400	398		2.85

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

D

Structural form and main dimension of volume damper D





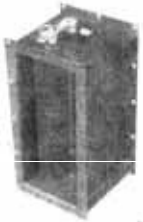
Duct			Main Dim.						kg ≈ Weight kg
Dn Nom. dia.Dn	Nom. dim. a	b	E	D	L	L1	R≈	δ	
80	60	90	88	58	100	50	30	2	0.3
100	60	140	138	58	150	75	40		0.4
	80	120	118	78	130	65			
125	60	220	218	58	230	115			0.5
	80	160	158	78	170	85			
	100	130	128	98	140	70			
150	80	250	248	78	260	130	60		0.6
	100	200	198	98	210	105			
	120	150	148	118	160	80			
175	80	350	348	78	360	100			0.9
	100	250	248	98	220	130			
	120	210	208	118	360	110			
200	100	350	348	98	290	180			1.3
	120	280	278	118	230	145			
	150	220	218	118	480	115			
250	120	470	468	118	360	240	100		1.7
	150	350	348	148	260	180			
	190	280	278	188	290	145			
300	150	530	528	238	540	270		2.5	2.3
	190	390	388	188	400	200			
	240	300	298	238	310	155			
350	190	550	548	188	560	280			2.6
	240	420	418	238	430	215			
	290	360	358	288	370	185			
400	190	760	758	188	770	385			3.2
	240	550	548	238	560	280			
	250	460	458	288	470	235			

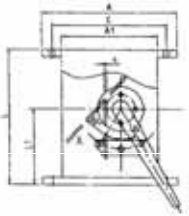
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

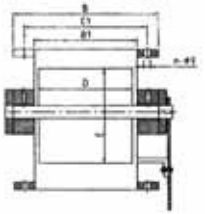
Duct			Main Dim.						kg
Dn Nom. dia.Dn	Nom. dim. a	Nom. dim. b	E	D	L	L1	R	δ	Weight kg
450	240	730	728	238	740	370	180		4.3
	290	580	578	288	590	295			
	250	480	478	348	490	245			
500	240	930	928	238	940	470			5.1
	290	730	728	288	740	370			
	350	600	598	348	610	305			
600	290	1100	1098	288	1110	565			7.2
	350	880	878	348	890	445			
	420	710	708	418	720	360			
700	350	1240	1238	348	1250	625	200		9.8
	420	990	998	418	1000	500			
	500	810	808	498	820	410			

E

Structural form and main dimension of volume damper E





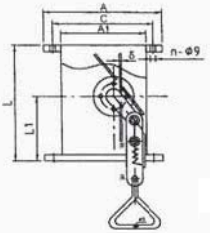


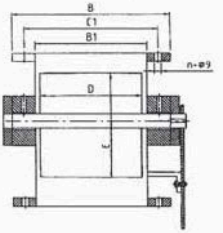
Duct			Flange dim.		Main Dim.					Bolt holes pitch.		No. of bolt holes			Weight kg
Dn Nom. dia. Dn	Nom. dim. a	Nom. dim. b	Inner A×B	Outer A1×B1	E	D	L	L1	δ	C	C1	Short side	Long side	Total	
80	60	90	115×145	65×95	68	85	98	44		95	126	0	3	6	3.1
100	60	140	115×195	65×145	68	135	98	144		95	176				4.1
	80	120	135×175	85×125	90	115	120	55		115	156				
125	60	220	115×275	65×225	68	215	98	44		95	255		4	8	4.6
	80	160	135×215	85×165	90	155	120	55		115	196		3	6	
	100	130	55×185	105×135	113	125	143	67		135	166	1		8	
150	80	250	135×305	85×255	90	245	120	55		115	285	0	4		5.2
	100	200	155×255	105×205	113	195	143	67		135	236	1	3		
	120	150	175×255	125×155	135	145	165	78		155	186				
175	80	350	135×405	85×355	90	345	120	55		115	388	0	5	10	6.5
	100	250	155×305	105×255	113	245	143	67		135	285	1	4		
	120	210	175×265	125×215	135	205	165	78		155	246				

Duct			Flange dim.		Main Dim.					Bolt holes pitch.		n(个) No. of bolt holes			≈kg Weight kg
Dn Nom. dia. Dn	Nom. dim. a	Nom. dim. b	Inner A×B	Outer A1×B1	E	D	L	L1	δ	C	C1	Short side	Long side	Total	
250	60	90	175×525	125×475	135	465	160	78	2	156	505	1	6	14	9.9
	60	140	206×406	156×356	170	345	200	95		186	388		5	12	
	80	120	246×336	196×286	215	275	245	118		226	318		4	10	
300	60	220	206×586	156×536	170	525	200	95	2.5	186	570	1	6	14	12.5
	80	160	246×446	196×396	215	385	245	118		226	428		5	12	
	100	130	297×357	247×307	170	295	301	146		279	339	2	4		
350	80	250	246×606	196×556	215	545	245	118		228	588	1	7	16	16.10
	100	200	297×477	247×427	171	415	301	146		279	460	2	5	14	
	120	150	350×420	300×370	331	355	361	176		330	400				
400	80	350	246×816	196×766	215	755	245	188		226	798	1	6	18	20.3
	100	250	297×607	247×557	271	545	301	146		279	588	2	7		
	120	210	350×520	300×470	331	455	361	176		330	500		6	16	
450	100	350	297×787	247×737	271	725	301	146		279	768		9	22	25.9
	120	280	354×640	300×590	331	575	361	176		330	624		7	18	
	150	220	410×540	360×490	398	455	428	209		392	520	3	6		
500	120	470	297×987	247×937	271	925	301	146		279	970	2	11	26	29.9
	150	350	350×790	300×740	331	725	361	176		330	770		8	20	
	190	280	410×660	360×610	398	595	428	209		392	542	3	7		
600	150	530	350×1160	300×1100	331	1095	361	176		330	1140	2		26	39.9
	190	390	410×940	360×890	390	875	428	209		392	920	3		28	
	240	300	480×770	430×720	476	705	506	248		460	752		9	24	
700	190	550	410×1300	360×1250	398	1235	428	209		392	1284		13	32	52.1
	240	40	480×1050	430×1000	476	985	506	248		460	1030		11	28	
	290	360	560×870	510×820	566	805	596	293		540	848	4	9	26	

F

Structural form and main dimension of volume damper F



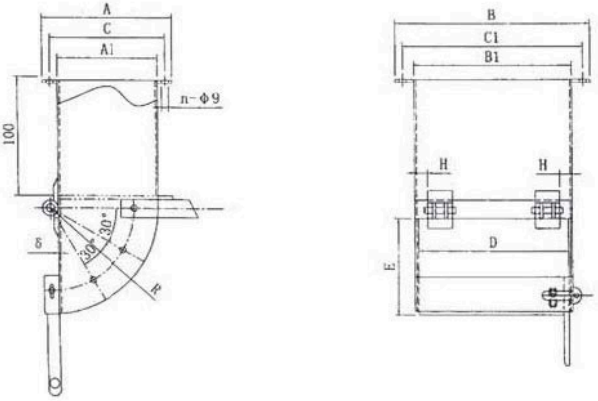


Duct			Flange dim.		Main Dim.					Bolt holes pitch.		n(个) No. of bolt holes			≈kg Weight kg
Dn Nom. dia. Dn	Nom. dim. a	b	Inner A×B	Outer A1×B1	E	D	L	L1	δ	C	C1	Short side	Long side	Total	
80	60	90	115×145	65×95	68	85	98	44	2	95	126	0	3	6	3.1
100	60	140	115×195	65×145	68	135	98	44		95	176				4.1
	80	120	135×175	85×125	90	115	120	55		115	156				
125	60	220	115×275	65×225	68	215	98	44		95	255		4	8	4.6
	80	160	135×215	85×165	90	155	120	55		115	196		3	6	
	100	130	55×185	105×135	113	125	143	67		136	166	1		8	
150	80	250	135×305	85×255	90	245	120	55		115	285	0	4		5.2
	100	200	155×255	105×205	113	195	143	67		136	236	1	3		
	120	150	175×255	125×155	135	145	165	78		156	186				
175	80	350	135×405	85×355	90	345	120	55		115	388	0	5	10	6.5
	100	250	155×305	105×255	113	245	143	67		136	285	1	4		
	120	210	175×265	125×215	135	205	165	78		156	246				
200	100	350	155×405	105×355	113	345	143	67		136	388		5	12	7.9
	120	280	175×355	125×285	135	275	165	78		156	315		4	10	
	150	220	206×276	156×226	170	215	200	95		186	258				
250	120	470	175×525	125×475	135	465	160	78		156	505		6	14	9.8
	150	350	206×406	156×356	170	345	200	95		186	388		5	12	
	190	280	246×336	196×286	217	275	245	118		226	318		4	10	
300	150	530	206×586	156×536	170	525	200	95	2.5	186	570		6	14	12.9
	190	390	246×446	196×396	215	385	245	118		226	428		5	12	
	240	300	297×307	247×307	170	295	301	146		279	339	2	4		
350	190	550	246×606	156×556	215	545	245	118		228	588	1	7	16	15.7
	240	40	297×477	247×427	271	415	301	146		279	460	2	5	14	
	290	360	350×420	300×370	331	355	361	176		330	400				

Duct			Flange dim.		Main Dim.					Bolt holes pitch.		n(个) No. of bolt holes			kg ≈ Weight kg
Nom. dia. Dn	Nom. dim. a	Nom. dim. b	Inner A×B	Outer A1×B1	E	D	L	L1	δ	C	C1	Short side	Long side	Total	
400	190	760	246×816	196×766	215	755	245	188	2.5	226	188	1	6	18	19.4
	240	550	297×607	247×557	271	545	301	146		279	146	2	7		
	290	480	350×520	300×470	331	455	361	176		330	176		6	16	
450	240	730	297×787	247×737	271	725	301	146		279	146		9	22	24.9
	290	580	354×640	300×590	331	575	361	176		330	176		7	18	
	350	480	410×540	360×490	398	455	428	209		292	209	3	6		
500	240	930	297×987	247×937	271	925	301	146		279	146	2	11	26	28.8
	290	730	350×790	300×740	331	725	361	176		330	176		8	20	
	350	600	410×660	360×610	398	595	428	209		392	209	3	7		
600	290	1100	350×1160	300×110	331	1095	361	176		330	176	2	11	26	38.2
	350	880	410×940	360×890	390	875	428	209		392	209	3		28	
	420	710	480×770	430×720	476	705	506	248		460	248		9	24	
700	350	1240	410×1300	360×1250	398	1235	428	209		392	209		13	32	51.1
	420	990	480×1050	430×1000	476	985	506	248		460	248		11	28	
	500	810	560×870	510×820	566	805	596	293		540	293	4	9	26	

G

Structural form and main dimension of volume damper G



Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

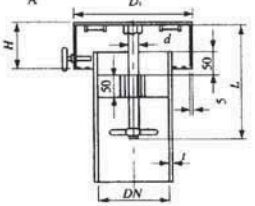
Duct			Flange dim.		Main Dim.						Bolt holes pitch.		n(个) No. of bolt holes.			≈kg Weight kg
Dn	Nom. dim.		Inner	Outer												
Nom. dia Dn	a	b	A×B	A×B	E	D	H	R	δ	Hinge dim.	C	C1	Short side	Long side	Total	
80	60	90	115×145	65×95	68	85			2	40×35	95	68	0	3	6	1.9
100	60	140	115×195	65×145	68	135					95	68				2.6
	80	120	135×175	85×125	90	115					115	90				
125	60	220	115×275	65×225	68	215					95	68		4	8	3.1
	80	160	135×215	85×165	90	155					115	90		3	6	
	100	130	155×185	105×135	113	125					136	113	1		8	
150	80	250	135×305	85×255	90	245					115	90	0	4		3.3
	100	200	155×255	105×205	113	195					136	113	1	3		
	120	150	175×255	125×155	135	145					156	135				
175	80	350	135×405	85×355	90	345					115	90	0	5	10	4.1
	100	250	155×305	105×255	113	245					136	113	1	4		
	120	210	175×265	125×215	135	205					156	135				

Duct			Flange dim.		Main Dim.						Bolt holes pitch.		n(个) No. of bolt holes.			≈kg Weight kg
Dn	Nom. dim.		Inner	Outer												
Nom. dia Dn	a	b	A×B	A1×B1	E	D	L	L1	δ	Hinge dim.	C	C1	Short side	Long side	Total	
200	100	350	155×405	105×355	113	345	143	67	2	40×35	136	388	1	5	12	5.2
	120	280	175×355	125×285	135	275	165	78			156	315		4	10	
	150	220	206×276	156×226	170	215	200	95			186	258				
250	120	470	175×525	125×475	135	465	160	78			156	505		6	14	6.5
	150	350	206×406	156×356	170	345	200	95			186	388		5	12	
	190	280	246×336	196×186	215	275	245	118			226	318		4	10	
300	150	530	206×586	156×536	170	525	200	95	2.5		186	570		6	14	7.8
	190	390	246×446	196×396	215	285	245	118			226	428		5	12	
	240	300	297×357	247×307	170	295	301	146			279	339	2	4		
350	190	550	246×606	196×556	215	545	245	118		75×50	228	588	1	7	16	9.9
	240	410	297×477	247×427	271	415	301	146			279	460	2	5	14	
	290	360	350×420	300×370	331	355	361	176			330	400				
400	190	760	240×816	196×766	215	755	245	188			226	798	1	6	18	11.4
	240	550	297×607	247×557	271	545	301	146			279	588	2	7		
	290	480	350×520	300×470	331	455	361	176			330	500		6	16	
450	240	730	297×787	247×737	271	725	301	146			279	768		9	22	15.8
	290	580	354×640	300×590	331	575	361	176			330	624		7	18	
	350	480	410×540	360×490	398	455	428	209			392	520	3	6		
500	240	930	297×987	247×937	271	925	301	146			279	970	2	11	26	18.3
	290	730	350×790	300×740	331	725	361	176			330	770		8	20	
	350	600	410×660	360×610	398	595	428	209			392	542	3	7		
600	290	1100	350×1160	300×1100	331	1095	361	176			330	1140	2	11	26	24.1
	350	880	410×940	360×890	390	875	428	209			392	920	3		28	
	420	710	480×770	430×720	476	705	506	248			460	752		9	24	
700	350	1240	410×3100	360×1250	398	1235	428	209			392	1284		13	32	31.9
	420	990	480×1050	430×1000	476	985	506	248			460	1030		11	28	
	500	810	560×870	510×820	566	805	596	293			540	848	4	9	26	

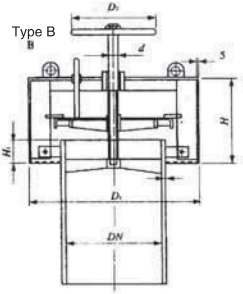
CB/T295–2000

Marine mushroom ventilator CB/T295–2000

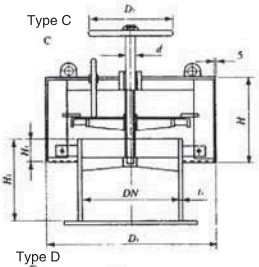
Type A



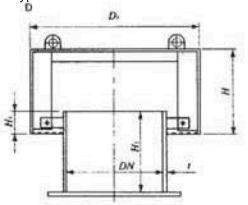
Type B



Type C



Type D



A Type A

mm

Nom. dia.	D_1	H	d	L	t	Kg Weight kg
150	250	100	M22	250	8	12
200	320	110	M24	250	9	13
250	390	125		300		18
300	470	135				22
350	540	150	M30	350		30

Note. Ventilated barrel weights are not included in tables.

B、C Type B, C

mm

DN Nom. dia.DN	D_1	D_2	H	H_1	H_2	d	t	t_1	Kg Weight kg B Type B	Kg Weight kg C Type C
250	440	200	220	90	210	Tr24x5-LH	8	6	57	68
300	530		265						72	85
350	620		310						89	105
400	710	280	345	105	230	Tr30x6-LH	9	8	108	130
450	800		375						136	162
500	890	320	405			Tr40x7-LH			163	197
550	980		435						183	227
600	1050		470	120	270				188	245
650	1160		500						231	274
700	1240		520						247	301
750	1320		540						285	340
800	1410	360	560	140	320				320	395
850	1500		580						354	449
900	1580		600			Tr46x8-LH			392	477
950	1670		620						425	500
1000	1760		640						462	583
1100	1930		680						566	661
1200	2100		720						643	758
1300	2270		760						725	837
1400	2440	400	800		350				741	1032

B

Note. Ventilated barrel weights are not included in tables for Type B.

D Type D

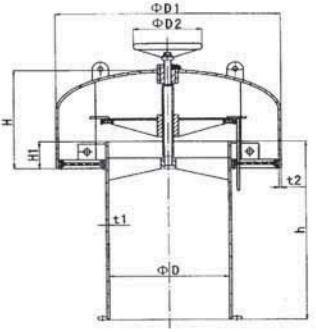
mm

DN Nom. dia DN	D_1	H	H_1	H_2	t	Kg Weight kg
250	440	220	90	195	6	46
300	530	265				57
350	620	310				71
400	710	345	105	205	8	89
450	800	375				109
500	890	405				134
550	980	435				162
600	1050	470	120	220		186
650	1160	500				213
700	1240	520				240
750	1320	540				256
800	1410	560	140	240		329
850	1500	580				335
900	1580	600				367
950	1670	620				394
1000	1760	640				442
1100	1930	680				545
1200	2100	720				651
1300	2270	760				709
1400	2440	800				771

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

E

Type E (parabolic cover open from top)



E

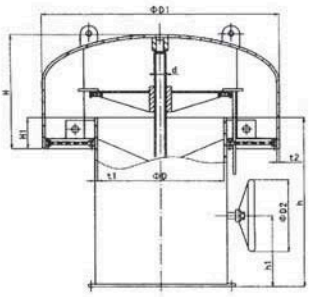
Type E (parabolic cover open from top)

mm

D Nom. dia.D	D_1	D_2	H	H_1	h	Dia. of screw	t_1	t_2	Kg Weight kg
250	512		310						97
300	512	200	330	90		Tr24x5-LH			107
350	612		370						135
400	712	280	390	105		Tr30x6-LH		6	169
450	812		405						195
500	916		435			Tr40x7-LH			265
550	1016		465						303
600	1116		500						352
650	1166	320	530	120					386
700	1216		550		500		10		429
750	1316		570						472
800	1416		590						529
850	1516		620						586
900	1620		650					8	761
950	1670		700						829
1000	1770	360	760	140					949
1100	1920		800			Tr46x8-LH			1060
1200	2020		850						1199
1300	2220		870						1364
1400	2420	400	890						1540

F

Type F (parabolic cover open from side)



F

Type F(parabolic cover open from side)

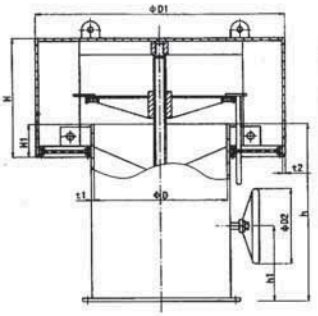
mm

D Nom. dia.D	D_1	D_2	H	H_1	h	Dia. of screw	t_1	t_2	Kg Weight kg
400	712	280	390	105		Tr30x6-LH		6	187
450	812		405						210
500	916		435			Tr40x7-LH			277
550	1016		465						318
600	1116		500						368
650	1166	320	530	120					404
700	1216		550						460
750	1316		570						495
800	1416		590		500		10		552
850	1516		620						615
900	1620		650					8	793
950	1670		700						869
1000	1770	360	760	140					989
1100	1920		800			Tr46x8-LH			1104
1200	2020		850						1230
1300	2220		870						1408
1400	2420	400	890						1598

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

G

Type G (flat cover open from side)



G

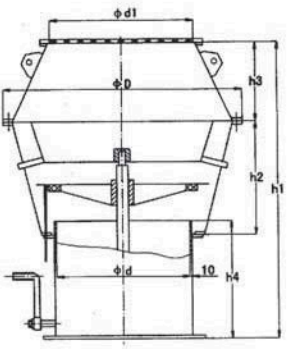
Type G (flat cover open from side)

mm

D Nom. dia.D	D_1	D_2	H	H_1	h	Dia. of screw	t_1	t_2	Kg Weight Kg
400	710	280	345	105	500	Tr30x6-LH	10	5	187
450	800		375						209
500	890	320	405			Tr40x7-LH			238
550	980		435						270
600	1050		470	120					363
650	1160		500						407
700	1240		520						456
750	1320		540						497
800	1410		560	140					535
850	1500		580						602
900	1580	360	600			Tr46x8-LH			644
950	1670		620						704
1000	1760		640						781
1100	1930		680						902
1200	2100		720						985
1300	2270		760						1155
1400	2440	400	800						1309

H

Type H (olive–shaped cover open from side)



H

Type H (olive–shaped cover open from side)

mm

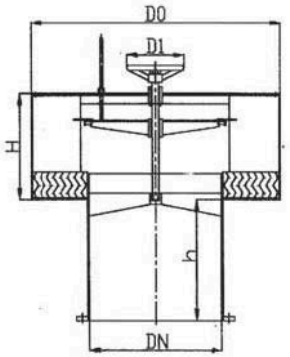
d Nom.dia.D	d_1	D	h_1	h_2	h_3	h_4	Kg Weight Kg
250	279	499	697	220	152	355	77
280	312	549	738	243	170	355	84
315	351	606	785	274	191	355	91
355	396	674	841	310	216	355	108
400	444	747	900	348	242	355	141
450	500	837	1064	391	273	450	176
500	555	913	1132	434	303	450	202
560	623	1014	1214	484	340	450	248
630	700	1129	1319	547	382	450	308
710	789	1263	1468	618	430	500	385
800	889	1413	1591	696	485	500	440
900	1000	1580	1727	782	545	500	561
1000	1111	1746	1923	867	606	560	682
1120	1244	1946	2157	973	679	630	891
1250	1388	2162	2414	1086	758	710	1155
1400	1554	2411	2668	1215	848	710	1375
1600	1775	2743	2978	1390	968	800	1782
1800	1997	3075	3370	1581	1089	900	2079

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

FL–1 HT0607–04

Anti–wave mushroom ventilator FL–1 HT0607–04

mm



DN Nom. dia.DN	D0	D1	H	Kg h=450 Weight Kg
300	585	200	380	187
400	780	280	390	210
450	880		440	277
500	980	320	500	318
550	1080		520	368
600	1160		550	404
650	1280		580	460
700	1360		640	495
750	1460		660	552
800	1560		680	615
850	1660		700	793
900	1760	360	720	869
1000	1960		760	989
1100	2140		800	1104
1200	2340		840	1230
1300	2500		860	1408
1400	2690	400	920	1598

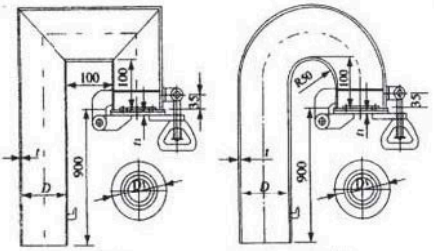
CB/T296–1999

Gooseneck ventilator CB/T296–1999

Type AA, AB

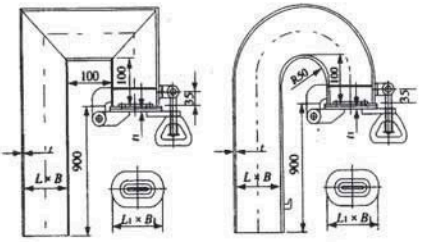
AA 、AB

mm



D Nom. dia.D	t	D_1	t_1	Kg Weight Kg AA Type AA	AB Type AB
100	4	118	6	23	19.5
	6	124	8	35	30
	8			41.5	35
150	4.5	170	6	43	35.5
	6	178	8	54	44
	8			64	53.5
200	6	213	6	65	52.5
	6	229	8	68	64
	8			85.5	76
350	6.5	255	6	83	74.5
	6.5	283	8	100	85.5
	8			114	93
300	7.5	309	6	115	95.5
	7.5	335	8	125	99
	9			146	103

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com



BA型
Type BA

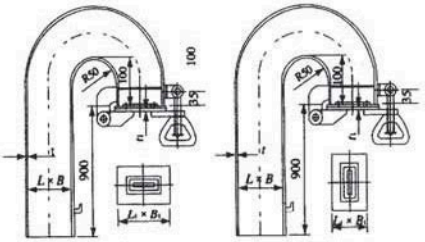
BB型
Type BB

Type BA, BB

BA 、BB

mm

D(LxB) Nom. dia D (L × B)	t	$L_1 \times B_1$	t_1	Kg Weight kg BA Type BA	BB Type BB
100 (120x80)	4	138X98	6	23	20
	6	146x106	8	34	28.5
	8			43	36.5
150 (150x120)	4	168x136	6	33	24
	6	176x146	8	47	37.5
	8			59	47.5
200 (220x150)	4	240x170	6	54.5	41.5
	6	246x176	8	59	55.5
	8			84	76.5
250 (280x190)	5	300x210	6	72	60.5
	6	306x216	8	76	61.5
	8			111	93
300 (300x240)	6	328x268	9	104	82
	9			150	109



CA型
Type CA

CB型
Type CB

CA 、CB

Type CA,CB

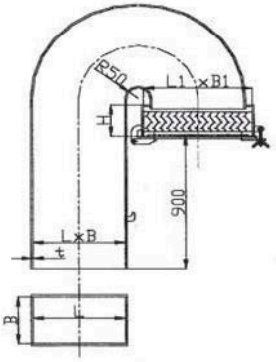
mm

D(LxB) Nom. dia D(L × B)	t	$L_1 \times B_1$	t_1	Kg Weight kg
100 (120x80)	4	138X98	6	24
	6	146x106	8	32
	8			45
150 (150x120)	4	168x136	6	33
	6	176x146	8	49
	8			61
200 (220x150)	4	240x170	6	56.5
	6	246x176	8	61
	8			86.5
250 (280x190)	5	300x210	6	74
	6	306x216	8	78.5
	8			115
300 (300x240)	6	328x268	9	108
	9			155
350 (360x290)	6	390x320	10	139
	10			212
400 (460x290)	6	490x320	10	170
	10			269

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

FL–2 HT0607–05

Anti–wave gooseneck ventilator FL–2 HT0607–05

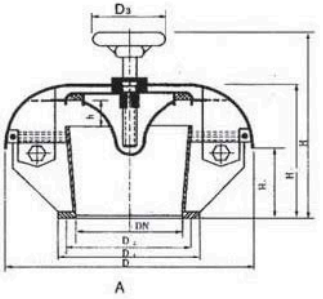


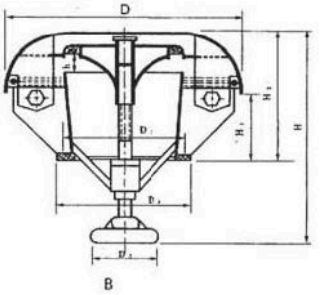
mm

D(L×B) Nom. dia D(L × B)	t	H	$L_1 \times B_1$	Kg Weight kg
100 (120x80)	8	210	200x160	62
150 (150x120)	8		230x200	84
200 (220x150)	8		300x230	117
250 (280x190)	10		360x270	156
300 (300x240)	10		380x320	210
350 (360x290)	10		440x370	288
400 (460x290)	10		540x370	366

CB445–65

Mushroom ventilator with streamlined dome CB445–65



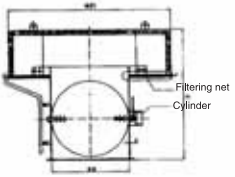


mm

Type	DN	D	D_1	D_2	D_3	H		H_1	H_2	h		Kg
						A Type A	B Type B			A Type A	B Type B	Weight kg
A Type A	100	200	156	136	100	180	225	50	132	42	40	18
	150	300	206	186	140	235	288	66	176	62	60	32
	200	400	256	236	140	285	333	90	220	82	80	48
	250	500	306	286	160	333	374	100	261	104	100	62
	300	600	356	336	160	375	420	121	301	122	120	77
B Type B	350	700	386	406	200	415	490	130	336	142	140	96
	400	780	436	456	200	445	526	130	363	162	160	118
	450	880	492	510	225	481	570	140	388	177	175	147
	500	980	542	560	250	540	656	170	443	202	200	179
	600	1060	642	660	250	600	745	180	503	242	240	223

XH016

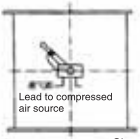
Dust removal and noise reduction ventilation cowls(with damper closed pneumatically) XH016
Instruction

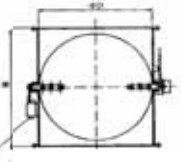


1. The ventilation cowls provide the functions of noise reduction and dust removal with dampers closed pneumatically. The damper can be opened normally when no compressed air induced, and closed when compressed air induced, or conversely, opened when compressed air induced, and closed when no compressed air induced. The dampers can be opened and closed by hand.
2. Electric control box and solenoid valve box are matched according to customer requirements, which can be operated remotely.
3. 0.7MPa air source should be supplied.
4. Screw threads for cylinder connection is G1/4" fitted ϕ8 copper tube.
5. Flange dimensions and sizes are determined according to customer requirements.

HX026B

Pneumatic damper HX026B
Instruction





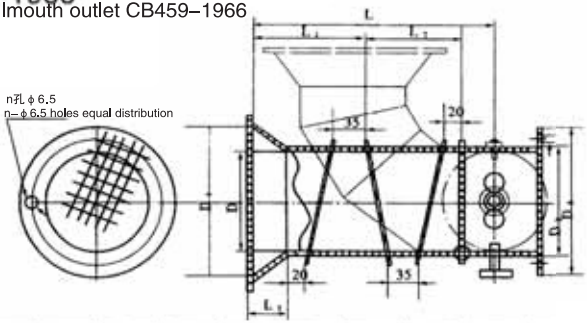
Signal switch

1. The damper can be opened normally when no compressed air induced, and closed when compressed air induced, or conversely, opened when compressed air induced, and closed when no compressed air induced. The dampers can be opened and closed by hand.
2. Control systems (HX–QF) are matched according to customer requirements, which can be operated remotely.
3. 0.7MPa air source should be supplied.
4. Screw threads for cylinder connection is G1/4" fitted ϕ8 copper tube.
5. Flange dimensions are determined according to customer requirements.
6. Rectangular or multi–blade dumpers may be manufactured if any special requirements.
7. This kind of dumpers may be used as fire dumpers, and the thickness should be satisfied with related fire prevention standards.

μX026B-900μ
Example Diameter ϕ900
pneumatic dumper HX026B–900

CB459–1966

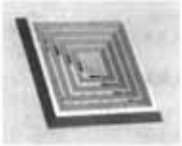
Rotary bellmouth outlet CB459–1966



DN Nom. dia. DN	D	D_1	D_2	D_3	L	L_1	L_2	L_3	n	Kg Weight kg	
										LZ Aluminum sheet LZ	GZ Steel sheet GZ
150	150	192	153	203	423	273	50	41	12	1.8	3.5
200	200	254	203	253	477	327	50	53	12	3.3	6.8
250	250	316	253	303	526	376	50	63	12	4.4	9
300	300	378	303	353	638	428	67	76	16	5.5	11.5
350	350	440	354	404	681	481	67	88	16	8.5	19
400	400	503	404	454	733	533	67	100	16	10	22
450	450	566	455	505	838	588	100	113	20	12.2	25
500	500	630	505	555	891	641	100	127	20	14.5	30

DB

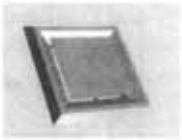
Antifouling squire air diffuser DB



Product code:DB–A–axb–D1
Material: Aluminum extrusions (A), Stainless steels (SS)
Size specifications: a x b according to design sizes.
Features: Out box of Type DB protrudes ceilings, so ceilings around are not easy to pollution when air flows out. There are 4 kinds of wind blowing methods from 1 to 4 sides for venting openings. Inner cone blades and out box are removable so as to install and adjust easily.

DPB

Antifouling squire plate air diffuser DPB



Product code:DPB–A–axb–D1
Material: Aluminum extrusions (A)
Size specifications: a x b according to design sizes.
Addition accessories: Flow adjusting switches D1, Squire circular cover D2,
Features: Out box of Type DPB protrudes ceilings so ceilings around are not easy to pollution when air flows out. Diffusion blades are circular plate type, and connected with removable out boxes.

CB

Antifouling circular air diffuser CB

Product code:CB–A– ϕ 200–C1
Material: Aluminum sheet (A)
Size specifications: (Size C) ϕ 150, ϕ 200, ϕ 250, ϕ 300, ϕ 350, ϕ 375
Addition accessories: Circular rectifier switch C1, Circular rectifier C2, Baffle rectifier C3, Circular duct C4
Features: Out box of Type CB protrudes ceilings so Ceilings around are not easy to pollution when air flows out. Out and inner boxes are constructed removable with two different heights so two blow angles may be adjusted variously.

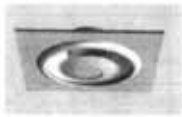
CPB

Antifouling circular plate air diffuser CPB

Product code:CPB–A– ϕ 250–C1
Material: Aluminum sheet (A)
Size specifications: (Size C) ϕ 150, ϕ 200, ϕ 250, ϕ 300, ϕ 350, ϕ 375
Addition accessories: Circular rectifier switch C1, Circular rectifier C2, Baffle rectifier C3, Circular duct C4
Features: Out box of Type CPB protrudes ceilings so ceilings around are not easy to pollution when air flows out. Out and inner boxes are constructed removable with two different heights so two blow angles may be adjusted variously.

CPC

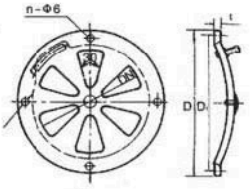
Air diffuser CPC



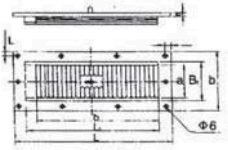
Product code:CPC–A– ϕ 200–C1
Material: Aluminum sheet (A)
Size specifications: (Size C) ϕ 200, ϕ 250, ϕ 300
Facial dimensions: (Size D)603 × 603,595 × 595
The size and dimensions is decided according to light steel metal frame ceiling dimensions
Addition accessories: Flow adjusting switches D1
Features: On the basis of Type CP, Type CPC diffuser add square extension box with circular rectifier attached on the neck so the flow rate may equally distribute.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

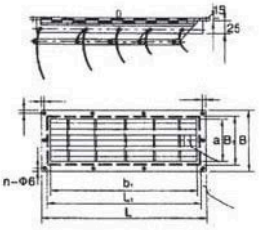
CB/T462–1996
Ventilation grille CB/T 462–1996



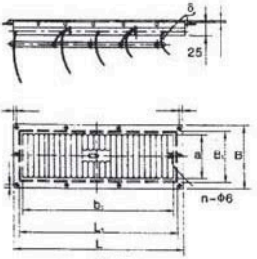
A Type A



B Type B



C Type C



D Type D

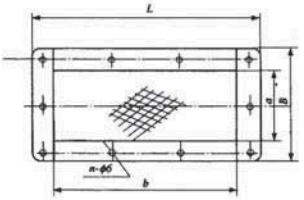
A Type A

Main dimensions				n
DN Nom. dia.DN	D	D_1	δ	No. of bolt holes
100	160	144	1.5	4
125	185	169		
150	210	194		
175	235	219		6
200	260	244	2	
250	310	294		
300	360	314		8
350	410	394		
400	460	444		

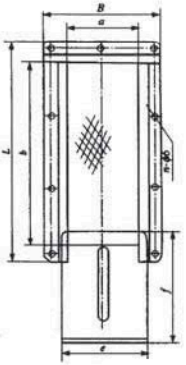
B、C、D Type B, C, D

Main dimensions					n
DN Nom. dia.DN	axb Nom. size a × b	$B_1 \times L_1$	B x L	δ	No. of bolt holes
100	60×150	66×165	100×210	2	6
	80×130	86×145	120×190		
125	60×230	66×245	100×290		
	80×170	86×185	120×230		
	100×130	106×145	140×190		
150	80×250	86×265	120×310		
	100×210	106×225	140×270		
	120×150	126×165	160×210		
175	80×350	86×365	120×410		8
	100×250	106×265	140×310		
	120×210	126×225	160×27		
200	100×350	106×365	140×410	2.5	
	120×290	126×305	160×350		
	150×230	156×245	190×290		
250	120×470	126×485	160×530		10
	150×350	156×365	190×410		
	190×290	196×305	230×350		
300	150×530	156×545	190×590		12
	190×390	196×405	230×450		
	240×310	246×325	280×370		
350	190×550	196×565	230×610		
	240×430	246×445	280×490		
	290×370	296×375	330×430		
400	190×770	196×785	330×830		14
	240×550	246×565	280×610		
	290×470	296×485	330×530		

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com



E Type E



F Type F

E、F Type E, F

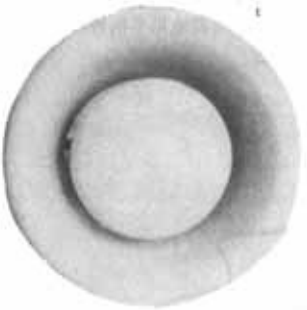
mm

Main dimensions					n
DN Nom. dia.DN	a x b Nom. size a x b	B x L	e	f	No. of bolt holes
100	60x140	100x180	66	100	6
	80x120	120x160	86	90	
125	60x220	100x260	66	140	
	80x160	120x200	86	110	
	100x130	140x170	106	95	
150	80x250	120x290	86	155	
	100x200	140x240	106	130	
	120x150	160x190	126	105	
175	80x350	120x390	86	205	8
	100x250	140x290	106	155	
	120x210	160x250	126	135	
200	100x350	140x390	106	205	
	120x280	160x320	126	170	
	150x220	190x260	156	140	
250	120x470	160x510	126	265	10
	150x350	190x390	156	205	
	190x280	230x320	196	170	
300	150x530	190x570	156	295	12
	190x390	230x430	196	225	
	240x300	280x340	246	180	
350	190x550	230x590	196	305	
	240x420	280x460	246	240	
	290x360	330x400	296	210	
400	190x760	230x800	196	410	14
	240x550	280x590	246	305	
	290x460	330x500	296	260	

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

TRE HT0607-06

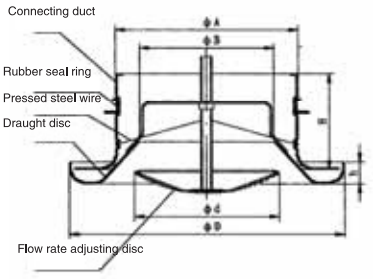
Circular outlet TRE HT0607-06



Applications and features

Circular adjustable outlet TRE is steel sheet molded with plastic sprayed outer surface. It possesses features of nice shape, smooth linear, low-pressure drop, and easy installation. It is more convenient to distribute flow rate with adjustable mechanism, and applicable for draught systems such as toilet, washroom, dressing room and etc in marine ships.

Outline drawing



Construction and function

The outlet is composed of three main parts.

Connecting duct —— It is molded with galvanized carbon steel sheet with one end fitted in duct (sealed with rubber seal ring), and another end fixed on ceilings with tapping screws.

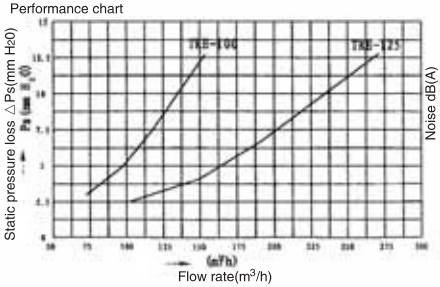
Draught disc —— It is press shaped once with carbon steel sheet and plastic sprayed outer surface. There is a pair of steel wire springs attached to the disc, so it can be fixed in connecting duct conveniently and quickly.

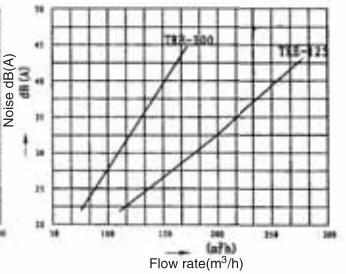
Flow rate adjusting disc —— It is composed of circular flow rate disc and adjusting screw. Flow rate adjusting disc can rotate to adjust flow rate.

Outline dimensions

Type	Φd	Φd	Φd	Φd	Φd	Φd	m^3/h Flow rate m^3/h
TRE-100	148	148	148	148	148	148	0~100
TRE-125	180	180	180	180	180	180	0~250
TRE-160	220	220	220	220	220	220	0~380

Performance chart

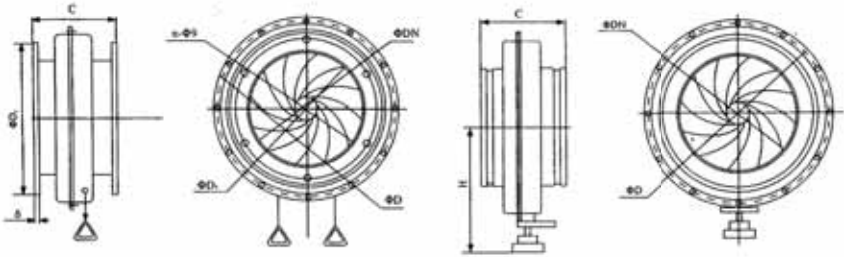


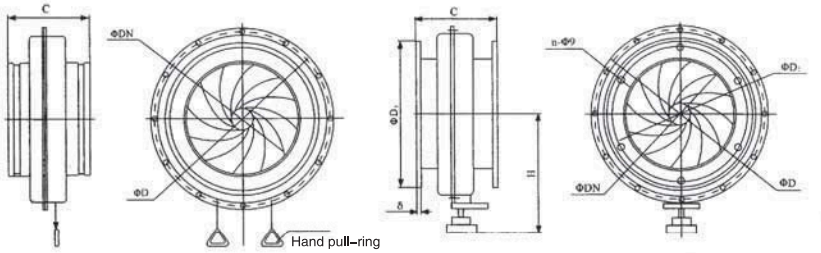


CGDM SB198–96

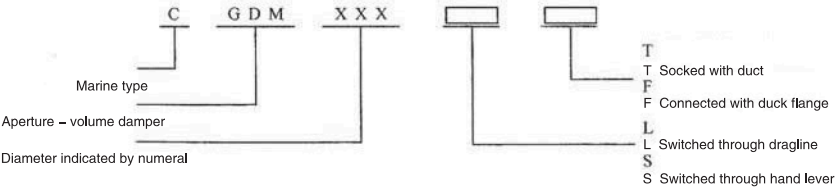
Aperture – volume damper CGDM SB198–96

Aperture – volume dampers are applied to various circular ducts for ventilation and air condition in marine ships, oil platforms and on land. Damper can step–less control every flow rate with two ends connected to ducts by flange or socked to circular screw duct. It can be adjusted by rotating switch through hand lever locally, or by pulling switch through dragline remotely. The features are compact, easy installation, flexible operation and etc.





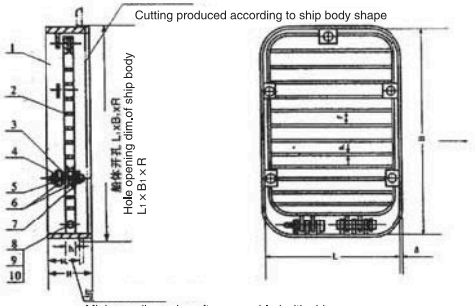
Type \ mm Dimension	ΦDN	D	D_1	D_2	C	δ	n	H
CGDM100LT	100	182						
CGDM150LT	150	246						
CGDM200LT	200	306						
CGDM250LT	250	363						
CGDM100LF	100	182	155	136		4	6	
CGDM150LF	150	246	205	186	135	4	6	
CGDM200LF	200	306	255	236		5	8	
CGDM250LF	250	363	305	286		5	12	
CGDM150ST	150	246						163
CGDM200ST	200	306						193
CGDM250ST	250	363			145			225
CGDM150SF	150	246	205	186		4	6	163
CGDM200SF	200	306	265	236		5	8	193
CGDM250SF	250	363	306	286		5	12	225



Bottom suction grill

1. A

1、Structure and basic dimension of bottom suction grill A

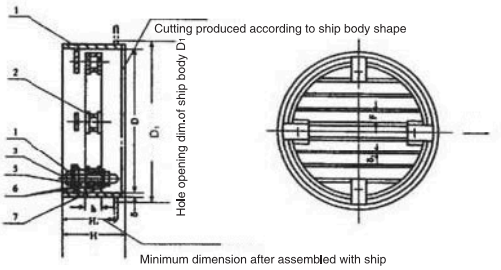


1.Grid block 2.Grill 3.Stub bolt
4. Hexagon nut 5.Small hexagon flat nut
6.Double eared stopping washer
7.Cap nut 8.Pin shaft 9.Spilt pin
10.Washer

Nom. dia. of sea suction valve	Grid block					grill			screw		Pin shaft screw		L_1xB_1xR Hole opening dim. of ship body $L_1 \times B_1 \times R$	Circulation area ratio	kg weight kg
	L	B	H	H_1	δ	h	F	δ_1	No.	Dia.	No.	Dia.			
100	160	244	100	65	7	20	20	5	6	M10	2	M12	178x262x50	3.25	6.9
125	202	292								M12			220x310x50	3.24	8.2
150	210	390	105	70	8	25							230x410x60	3.26	11.2
200	290	442	110	75									310x462x60	3.60	17.7
250	360	550	115	80	10	30	25	6	5	M16		M16	384x574x80	3.05	32.3
300	480	616	130	95					7				504x764x80	3.08	42.6
350	526	740											550x764x80	3.00	50.0
400	592	868	145	105	12	35							620x896x100	3.00	76.7
450	652	992											680x1020x100	3.10	91.0
500	662	1176	150	110		40							690x1204x100	3.03	112.7

2. B

2、Structure and basic dimension of bottom suction grill B



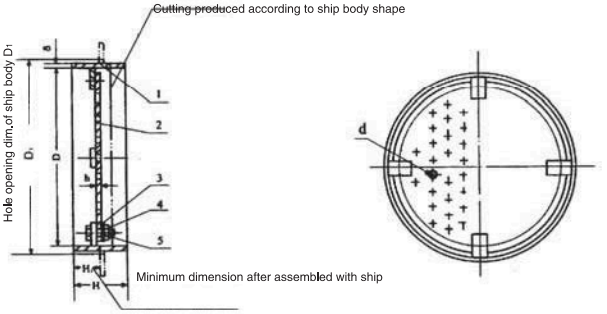
1.Grid block 2.Grill 3.Stub bolt
4. Hexagon nut 5.Small hexagon flat nut
6.Double eared stopping washer
7.Cap nut

mm

DN Nom. dia.of sea suction valve DN	Grid block				grill			screw		D_1 Hole opening dia. of ship body D_1	Circulation area ratio	kg weight kg
	D	H	δ	H_1	h	F	δ_1	No.	Dia.			
50	118	80	6	65	20	15	M8			135	3.3	2.1
65	158									175	3.7	2.8
80	191									208		3.6
100	231	90	7	70		20	M10			250		5.6
125	286									305	3.5	6.9
150	336	95	8	75	25		M12			355	3.4	10.4
200	414	100		80						435	3.1	14.1

3. C

3、Structure and basic dimension of bottom suction grill C



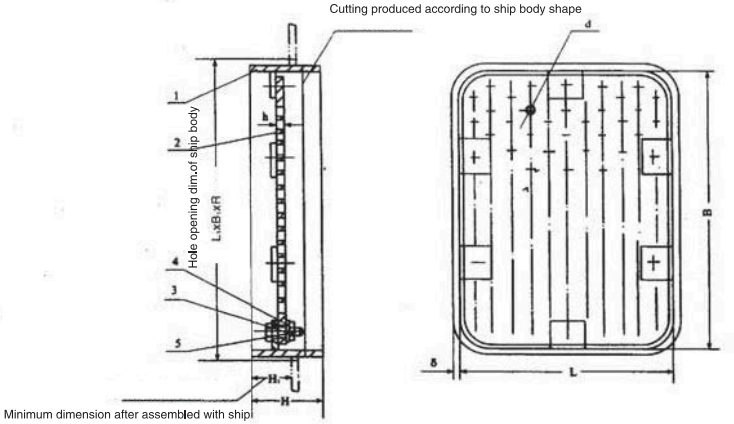
1.Grid block 2.Grill 3.Stub bolt 4. Hexagon nut 5.Small hexagon flat nut

mm

DN Nom. dia.of sea suction valve DN	Grid block				grill			screw		D_1 Hole opening dia. of ship body D_1	Circulation area ratio	kg weight kg
	D	H	δ	H_1	h	d	Hole No.	No.	Dia.			
50	240	70	6	35	6	13	61	6	13	260	4.12	4.5
65	290						91			310	3.64	5.8
80	330						127			350	3.35	7.0

4. D

4、Structure and basic dimension of bottom suction grill D



1.Grid block 2.Grill 3.Stub bolt 4. Double eared stopping washer
5.Small hexagon flat nut

mm

DN Nom. dia.of sea suction valve DN	Grid block					grill			screw		D_1 Hole opening dia. of ship body D_1	Circulation area ratio	kg weight kg
	D	B	H	H_1	δ	h	d	Hole No.	No.	Dia.			
100	250	330	80	45	7	7	15	142	6	M12	270x350x40	3.20	6.4
125	330	450						272			350x470x40	3.92	9.5
150	330	650			8	8		402			350x670x40	4.02	13.6
200	410	930						762	8		430x950x40	4.29	21.0

5、A100 CB/T615—1995:
200mm、100mm
B200-H100 CB/T615—1995
C65 CB/T615—1995

Note.
1.Grills for Type B and Type C may be separately produced according to order requirements.
2. Description may be required in selection if dimension H needs heightened.

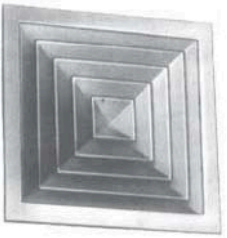
5. Description
Rectangular strip suction grill for sea suction valve with 100mm nominal diameter
Suction grill A100 CB/T615-1995
Circular strip suction grill for sea suction valve with 200mm nominal diameter and 100mm grid block height
Suction grill B200-H100 CB/T615-1995
Circular drilling suction grill for sea suction valve with 65mm nominal diameter
Suction grill C65 CB/T615-1995

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

FK-3、FK-10 HT0607-07

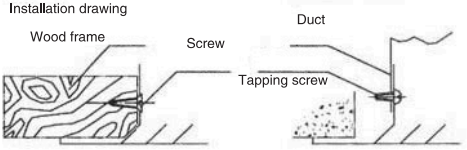
Square diffuser FK–3, FK–10 HT0607–07

Application and feature



Type FK3 and FK–10 are square diffuser with attached airflow, which applied to studio, hospital, theater, classroom, concert hall, library, amusement hall, foyer, general office, shops, hotels, sports center and etc.
Straight lined and smooth surface are the features of square diffuser. With fixed angle, blade is press connected with angle sheet. All the blades are split constructed with edge frame (It means blades may be taken down from inner of edge frame, and fixed again after edge frame installation completed.), so as to be easy installed and adjusted. There are two normal methods for outlet installation, as shown in the figure on the left.
Square diffuser FK–3, FK–10 are often used with adjusting valve FK–11 (as shown in the figure on the left) to control speed and rate of air flow, therefore to allow the system air distribution to achieve the best status.
Furthermore, installation height and site should be also considered besides the neck air speed determined according to performance chart in order to prevent environmental noise to disturb people and avoid discomfort.

Installation drawing



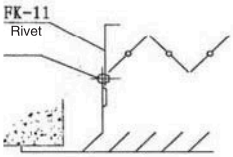
Maximum neck air allowance speed at various installation height

Outlet installation height	Outlet neck air speed
2.1～2.7 (m)	5.5 below 5.5m/s
3.0～4.25 (m)	7.5 below 7.5m/s

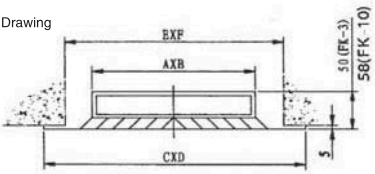
Maximum neck air allowance speed at various site

Site	Neck air speed	Site	Neck air speed
Studio	3-3.5	Theater	5-6 5–6m/s
Hospital outpatient department	4-5	Foyer	
Ward		Classroom	
Hotel guest room		Concert hall	
Reception room		Dining hall	
Living room		Library	
Computer room		Amusement hall	
		General office	
		Shops	6-7.5 6–7.5m/s
		Hotels	
		Lyric theater	
		Restaurant	

Fitting drawing



Outline Drawing



Outline dimension

AXB Size A×B	CXD		EXF	
	FK-3	FK-10	FK-3	FK-10
240X240	343X343	363X363	290X290	290X290
300X300	403X403	423X423	350X350	350X350
360X360	463X463	483X483	410X410	410X410
420X420	523X523	543X543	470X470	470X470
480X480	583X583	603X603	530X530	530X530

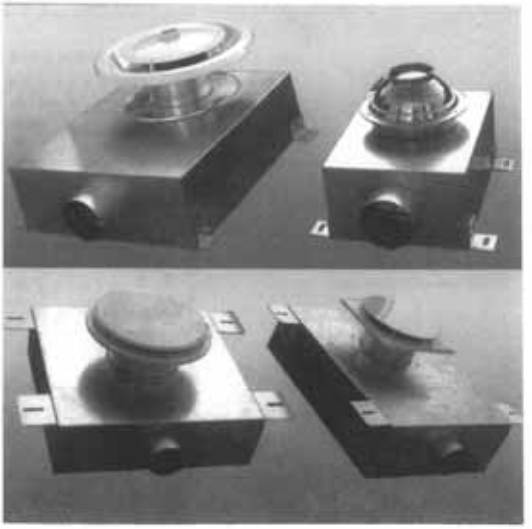
Air diffuser

Introduction

Air diffuser is the terminal device for air condition and ventilation system with compact structure, nice outlook, easy installation, low noise, convenient control and etc. It is an important component for air conditioning system.
Air diffuser is suitable for air conditioning system of various marine ship office, meeting room, living room, dining room, and also suitable for terminal device for air condition system of hotel, hospital, public hall and etc.
There are two installation methods for air diffuser including ceiling fixed type and side–wall fixed type.
There are disc outlet and ball outlet for air diffuser.
Assistant electric device may be added to above–mentioned air diffuser.

Structure

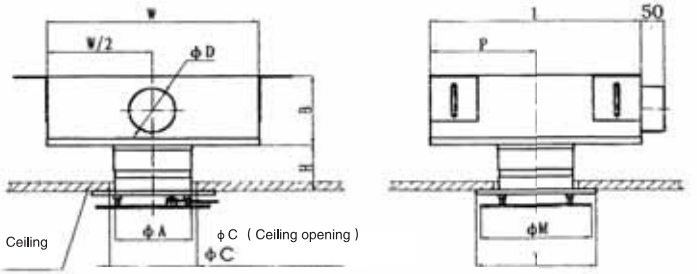
Air diffuser is composed of three main parts.
1.Static pressure connecting box : It is fabricated with galvanized carbon steel sheet covered with inner fireproofing, damp proofing, acoustic insulation material.
2.Flow rate adjusting device : It possess two functions including primary airflow limit and secondary airflow control. The primary airflow limit may balance each air diffuser flow rate, and the secondary airflow control bottom may be used for adjusting airflow rate by hand.
3.Air outlet :Disc type air outlet is press shaped with aluminum alloy or carbon steel sheet and plastic sprayed outer surface. The inner part is covered with acoustic insulation material in order to reduce airflow noise. Ball type air outlet is press shaped with stainless steel sheet and polished on outer surface. Adjusting damper is designed to control airflow amount and air discharging direction at will.



Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

TNH

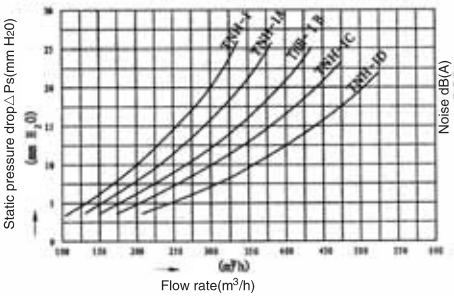
Ceiling air diffuser TNH

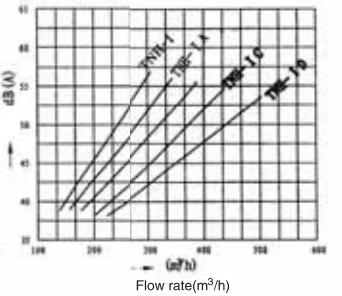


mm

Type Specification	A	D	Y	C	L	W	B	P	M	H	m³/h Flow rate m³/h
TNH-I	160	78	260x260	185	450	450	150	225	140	50~75 75~95 100~120	0~200
TNH-I A		98									0~250
TNH-I B		98									0~300
TNH-I C		123									0~400
TNH-I D	200	123	320x320	230	600	500	200	200	184		0~500

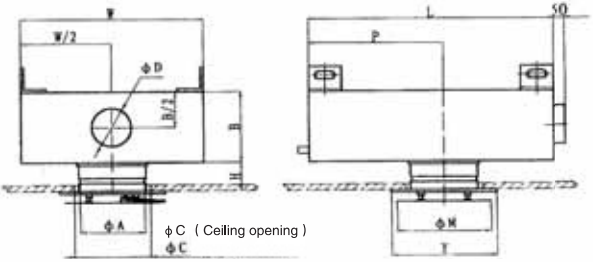
Performance chart





TNHR

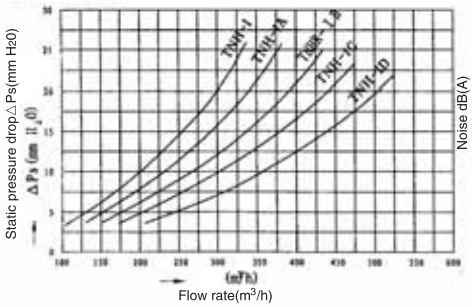
Ceiling air diffuser with electric heated TNHR

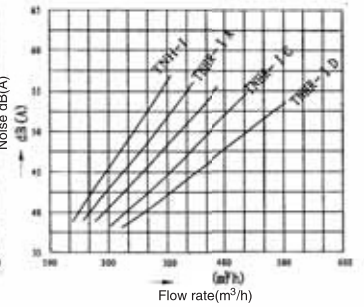


mm

Type	A	D	Y	C	L	W	B	M	P	H	Flow rate m^3/h	Electric heater power
TNHR-I	160	78	260x260	185	600	450	150	240	330	50~75 75~95 100~120	0~200	100~300W
TNHR-IA		98									0~250	100~500W
TNHR-IB		98									0~300	100~600W
TNHR-IC		123									0~400	100~800W
TNHR-ID	200	123	320x320	230	600	500	200	284			0~500	100~1200W

Performance chart

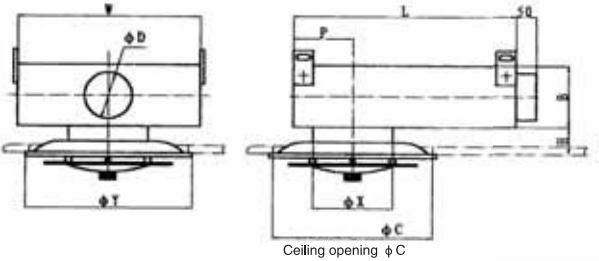




Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

TPB

Ceiling air diffuser TPB

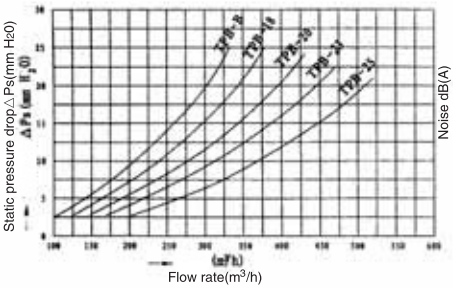


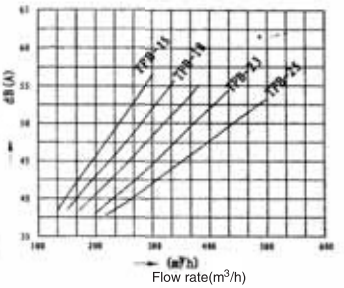
Ceiling opening ϕC

mm

Type	X	D	Y	C	L	W	B	P	H	m³/h Flow rate m³/h
TPB-15A	150	98	380	320	550	450	160	150	60~105	0~200
TPB-18A	175	98	380	320	550	450	160	150		0~250
TPB-20A	200	123	380	320	550	450	160	150		0~350
TPB-22A	225	123	380	320	550	450	160	150		0~425
TPB-23A	225	123	440	440	550	500	200	200		0~450
TPB-25A	250	148	440	440	600	500	200	200		0~600

: Performance chart

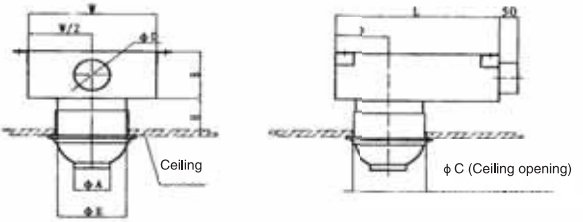




Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

TPBQ

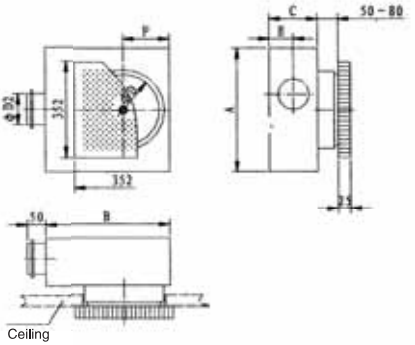
Ceiling ball air diffuser TPBQ



Type	A	D	C	E	L	W	B	P	H	m³/h Flow rate m³/h
TPBQ-16	80	98	173	160	450	350	150	150	65~105	0~180
TPBQ-20	100	98	215	200	450	350	150	150	75~115	0~200
TPBQ-25	125	123	270	250	450	350	170	150	85~125	0~250

TPF

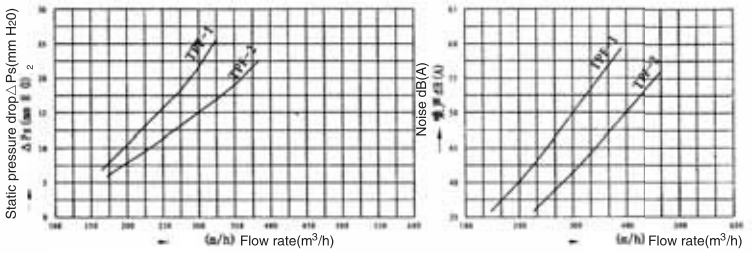
Ceiling air diffuse TPF



Air diffuse is compose of square disc and circular duct which are both press shaped with carbon steel sheet and plastic sprayed outer surface. There are 2.5~5mm small holes equally distributed on square disc front face. The diffuser color normally is milky white but the other colors also can be supplied according to order requirements.

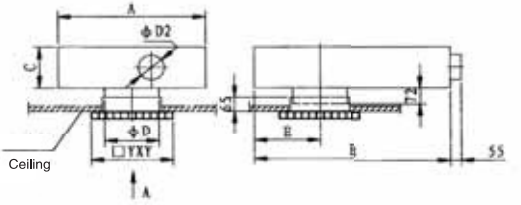
Type	A	B	C	D	D_2	E	F	m^3/h Flow rate m^3/h
TPF-1	425	425	165	250	100	80	213	0-300
TPF-2	495	495	180	250	125	90	248	0-400

Performance chart



TAD

Ceiling air diffuser TAD

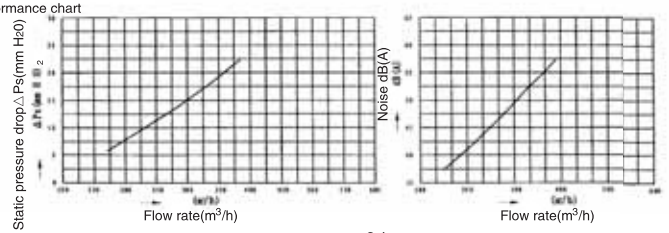


Direction A

Type	A	B	C	D	D_2	B	Y	m^3/h Flow rate m^3/h
TAD	400	600	150	200	100	131	275	0-350

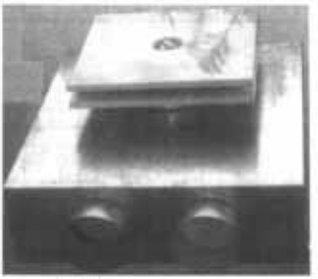
Air diffuse is compose of square disc and circular duct which are both press shaped with carbon steel sheet and plastic sprayed outer surface. There are 6 x 6mm small square holes equally distributed on square disc front face. The diffuser color normally is milky white but the other colors also can be supplied according to order requirements.

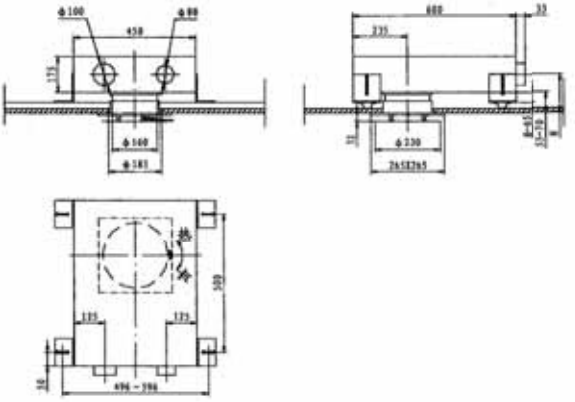
Performance chart



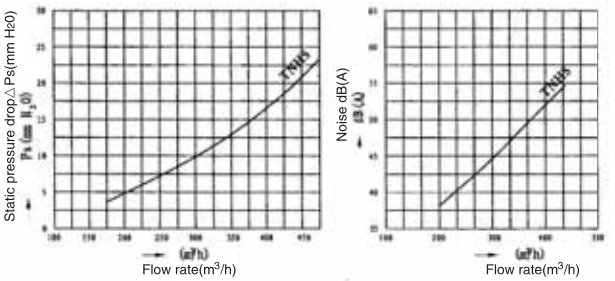
TNHS

Ceiling air diffuser with double duct TNHS





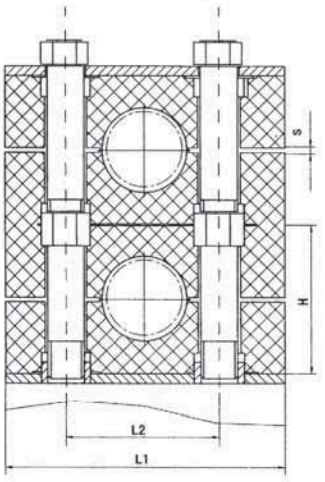
Performance chart



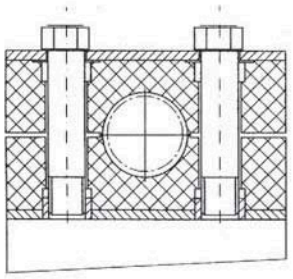
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

KDGJ–I

Composite pipe hanger KDGJ–I



Serial number	DW	L1	L2	H	S	Width	Screw
1	6-12	37	20	27	0.4	30	M6
2	14-18	42	26	33	0.6	30	M6
3	19-25	50	33	36	0.6	30	M6
4	28-30	59	40	42	0.6	30	M6
5	32-42	71	52	58	0.8	30	M6
6	45-48	86	66	66	0.8	30	M6
7	57-76	121	94	93	0.8	30	M6
8	89-114	147	129	134	2	30	M6
9	133-140	177	158	158	2	40	M8
10	180	220	196	213	3	45	M8
11	219	270	245	249	3	50	M10



Reinforced

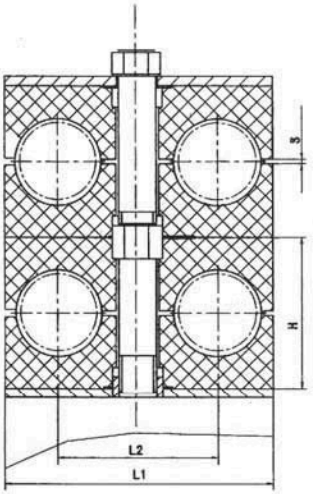
Serial number	DW	L1	L2	H	S	Width	Screw
1	45-65	115	90	89	2	45	M12
2	70-89	152	122	120	2	60	M16
3	108-133	206	168	167	2	80	M20
4	140-168	255	210	200	3	91	M24

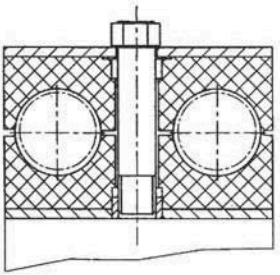
According to customer request, different materials can be selected, and different type base also can be selected. Please specified when placing order.

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

KDGJ– II

Composite pipe hanger KDGJ–II



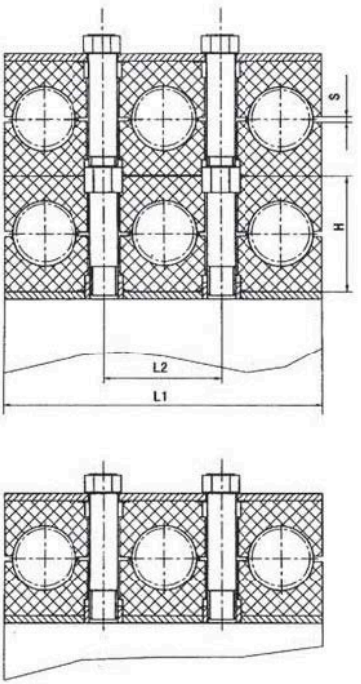


Serial number	DW	L1	L2	H	S	Width	Screw
1	6	36	20	27	0.6	30	M6
	6.4						
	8						
	9.5						
	10						
	12						
2	12.7	53	29	27	0.7	30	M8
	13.5						
	14						
	15						
	16						
	17.2						
	18						
3	19	67	36	37	0.7	30	M8
	20						
	21.3						
	22						
	25						
4	26.9	80	45	40	0.7	30	M8
	28						
	30						
5	32	106	56	53	0.7	30	M8
	33.7						
	35						
	38						
	40						
	42						

According to customer request, different materials can be selected, and different type base also can be selected. Please specified when placing order.

KDGJ– Ⅲ

Composite pipe hanger KDGJ–Ⅲ

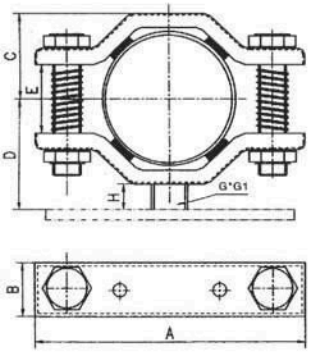


Serial number	DW	L1	L2	H	S	Width	Screw
1	6	56	20	27	0.6	30	M6
	6.4						
	8						
	9.5						
	10						
	12						
2	12.7	82	29	27	0.7	30	M8
	13.5						
	14						
	15						
	16						
	17.2						
	18						
3	19	103	36	37	0.7	30	M8
	20						
	21.3						
	22						
	25						
4	26.9	125	45	40	0.7	30	M8
	28						
	30						
5	32	162	56	53	0.7	30	M8
	33.7						
	35						
	38						
	40						
	42						

According to customer request, different materials can be selected, and different type base also can be selected. Please specified when placing order.

THGJ

Spring clip THGJ

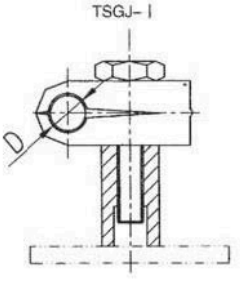


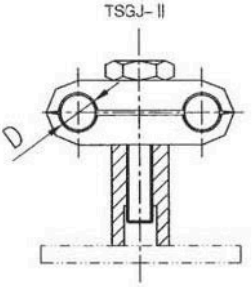
Serial number	A	B	C	D	E	G	G1	H	Bolt (Nut)
25, 26	90	40	23	38	6	12	30	15	M8X30
27, 28, 30	90	40	26	41	12	12	30	15	M8X40
34	90	40	30	45	20	12	30	15	M8X45
38	117	50	34	49	11	20	40	15	M8X40
42	117	50	37	52	18	20	40	15	M8X50
45	117	50	39	54	22	20	40	15	M8X55
48	117	50	41	56	26	20	40	15	M8X55
54	117	50	45	60	34	20	40	15	M8X65
60	154	50	50	65	30	30	40	15	M10X70
65	154	50	54	69	38	30	40	15	M10X75
73, 76	154	50	62	75	54	30	40	15	M10X90
80	174	50	61	78	42	40	40	18	M12X80
89, 90	174	50	67	84	54	40	40	18	M12X95
100, 102	174	50	74	91	68	40	40	18	M12X110
114	214	60	81	96	58	50	50	15	M16X105
120	214	60	85	100	66	50	50	15	M16X115
130	214	60	93	107	82	50	50	15	M16X130
140	254	90	101	113	68	60	80	15	M16X125
165	254	90	119	133	104	60	80	15	M16X165
168	254	90	121	135	108	60	80	15	M16X165

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

TSGJ-Ⅰ、Ⅱ

Clip TSGJ-Ⅰ、Ⅱ



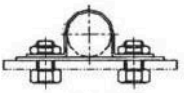


Type	D
TSGJ-Ⅰ6/TSGJ-Ⅱ6	ϕ6
TSGJ-Ⅰ8/TSGJ-Ⅱ8	ϕ8
TSGJ-Ⅰ10/TSGJ-Ⅱ10	ϕ10
TSGJ-Ⅰ14/TSGJ-Ⅱ14	ϕ14
TSGJ-Ⅰ18	ϕ18

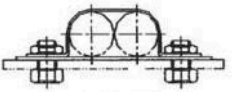
According to customer request, different materials can be selected, and different type base also can be selected. Please specified when placing order.

HTGJ

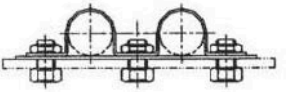
Aluminum brass clip HTGJ



HTGJ-H



HTGJ-P



HTGJ-H

HTGJ-H

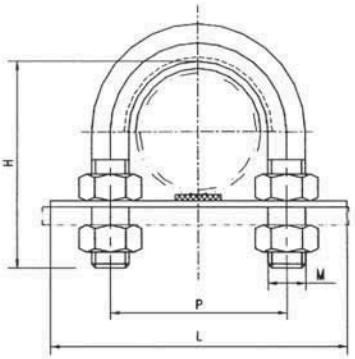
Type	Diameter	Outer diameter
HTGJ-H-1016	10	16.0
HTGJ-H-1518	15	18.0
HTGJ-H-1520	15	20.0
HTGJ-H-1820	18	20.0
HTGJ-H-2024	20	24
HTGJ-H-2530	25	30
HTGJ-H-3238	32	38
HTGJ-H-4042	40	42
HTGJ-H-4045	40	45
HTGJ-H-5055	50	55
HTGJ-H-5557	55	57

HTGJ-P

Type	Diameter	Outer diameter
HTGJ-P-1016	10	16.0
HTGJ-P-1518	15	18.0
HTGJ-P-1520	15	20.0
HTGJ-P-1820	18	20.0
HTGJ-P-2024	20	24
HTGJ-P-2530	25	30
HTGJ-P-3238	32	38
HTGJ-P-4042	40	42
HTGJ-P-4045	40	45
HTGJ-P-5055	50	55
HTGJ-P-5557	55	57

FBU

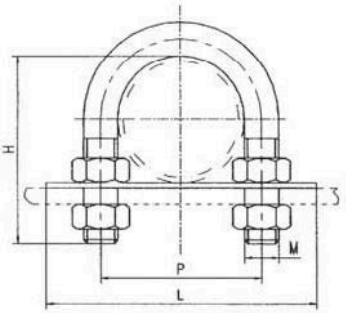
Clip FBU



Type	DN	DW	M	P	H	L
FBUA（B、D）-15	15	22	8	36	45	58
FBUA（B、D）-20	20	27	8	41	50	63
FBUA（B、D）-25	25	34	8	48	57	70
FBUA（B、D）-32	32	42	10	58	67	85
FBUA（B、D）-40	40	48	10	64	73	90
FBUA（B、D）-50	50	60	10	76	85	103
FBUA（B、D）-65	65	76	12	94	105	125
FBUA（B、D）-80	80	89	12	107	118	139
FBUA（B、D）-100	100	108	16	132	146	170
FBUA（B、D）-100	100	114	16	137	152	175
FBUA（B、D）-125	125	133	16	156	171	194
FBUA（B、D）-125	125	140	16	163	178	200
FBUA（B、D）-150	150	159	16	182	197	220
FBUA（B、D）-150	150	168	16	191	206	228
FBUA（B、D）-200	200	219	20	247	263	293
FBUA（B、D）-250	250	273	20	300	317	346
FBUA（B、D）-300	300	325	24	356	375	410
FBUA（B、D）-350	350	377	24	408	427	462
FBUA（B、D）-400	400	426	24	457	476	511
FBUA（B、D）-450	450	480	30	518	540	583
FBUA（B、D）-500	500	530	30	568	590	633

DJG– I

Hanger DJG–1

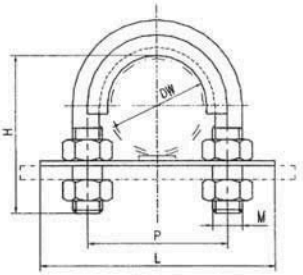


DW	DN	M	P	H	L
ϕ22	15	8	31	40	51
ϕ25	20	8	33	42	54
ϕ27	20	8	36	44	58
ϕ30	25	8	39	47	61
ϕ32	25	8	41	49	63
ϕ34	25	8	43	51	65
ϕ38	32	8	47	55	77
ϕ42	32	10	53	61	80
ϕ45	40	10	56	64	83
ϕ48	40	10	59	67	85
ϕ50	40	10	61	69	87
ϕ55	50	10	66	74	93
ϕ57	50	10	68	76	95
ϕ60	50	10	71	79	100
ϕ63	50	10	74	82	102
ϕ70	65	12	83	92	113
ϕ76	65	12	89	98	118
ϕ85	80	12	98	107	128
ϕ89	80	12	102	111	132
ϕ108	100	16	125	134	165
ϕ114	100	16	131	139	170
ϕ133	125	16	150	156	187
ϕ135	125	16	152	158	189
ϕ159	150	16	176	185	215
ϕ168	150	16	185	193	224
ϕ219	200	20	240	248	290
ϕ267	250	20	288	298	338
ϕ273	250	20	294	304	354
ϕ325	300	24	350	372	436

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

DJ–H

Hanger DJ–H



DW	DN	M	P	H	L
ϕ22	15	8	36	43	58
ϕ25	20	8	39	46	60
ϕ27	20	8	41	47	63
ϕ30	25	8	44	51	66
ϕ32	25	8	46	53	68
ϕ34	25	8	48	54	70
ϕ38	32	8	52	58	82
ϕ42	32	10	58	62	85
ϕ45	40	10	61	65	88
ϕ48	40	10	64	68	90
ϕ50	40	10	66	70	92
ϕ55	50	10	70	74	97
ϕ57	50	10	72	76	99
ϕ60	50	10	75	83	103
ϕ63	50	10	78	85	106
ϕ70	65	12	90	94	120
ϕ76	65	12	96	101	125
ϕ85	80	12	106	109	136
ϕ89	80	12	110	114	140
ϕ108	100	16	130	137	170
ϕ114	100	16	136	144	175
ϕ133	125	16	156	161	193
ϕ135	125	16	158	163	195
ϕ140	125	16	163	175	200
ϕ159	150	16	182	188	221
ϕ168	150	16	191	197	230
ϕ194	170	20	223	231	270
ϕ219	200	20	248	253	295
ϕ267	250	20	296	301	340
ϕ273	250	20	302	307	347
ϕ325	300	24	358	364	410
ϕ356	350	24	389	401	440

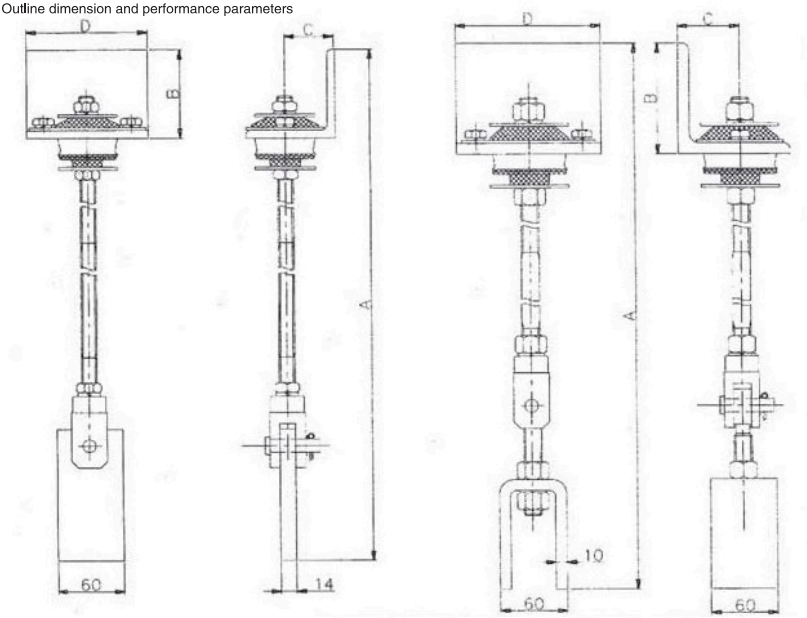
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

P1
Mobile and elastic hanger P1

Introduction

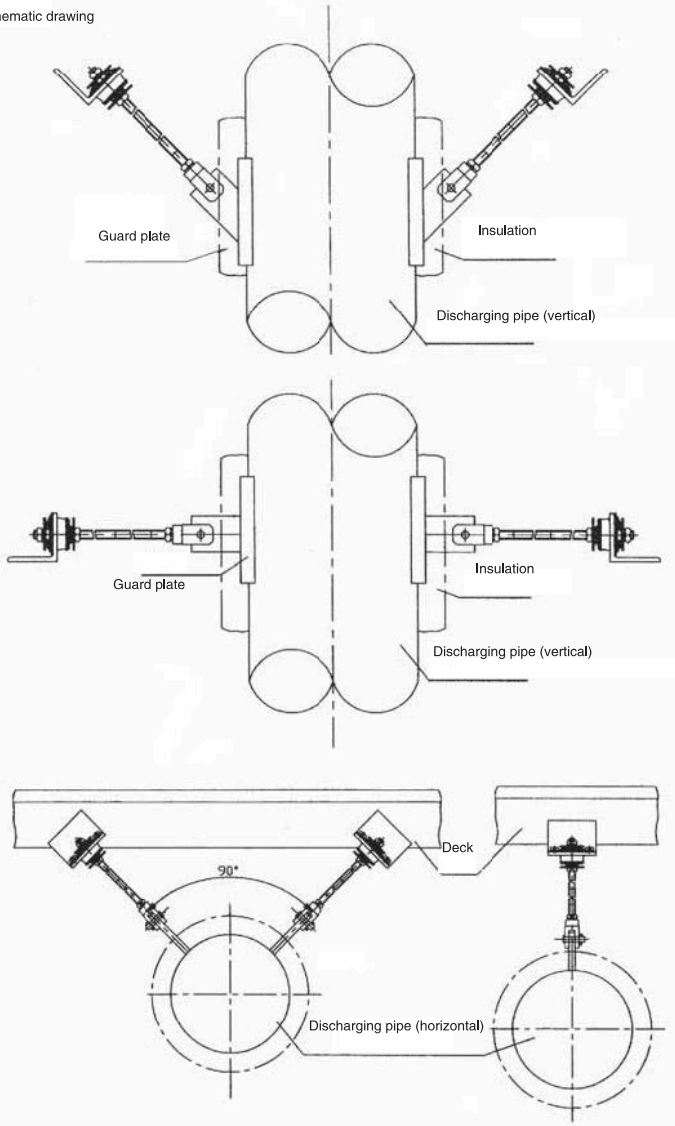
This series of product is developed on the basis of foreign technology imported abroad.
The elastic elements are made of silicon rubber with good performance, which are shock proofing, impact proofing, both high temperature and low temperature resistance, oil resistance and anti–aging.
Removable joint is applied to adjust the length, and also can be freely moved within the range of heat deformation of the discharging pipe.
Application: The hangers are suitable to apply to installations of horizontal and vertical discharging pipes.

Outline dimension and performance parameters



Type	Dimension				kgf Static load kgf	kgf Working load kgf
	A mm	B mm	C mm	D mm		
P1-021	450-550	80	45	110	100	35
P1-025	450-550	100	60	120	200	70
P1-026	530-680	100	55	130	400	130
P1-027	530-680	125	75	130	600	200

Installation schematic drawing



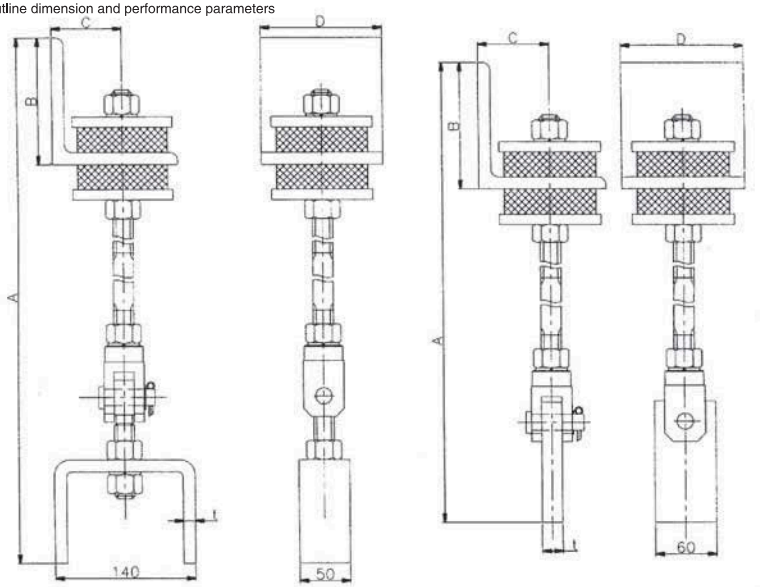
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

PS
Mobile and elastic hanger PS

Introduction

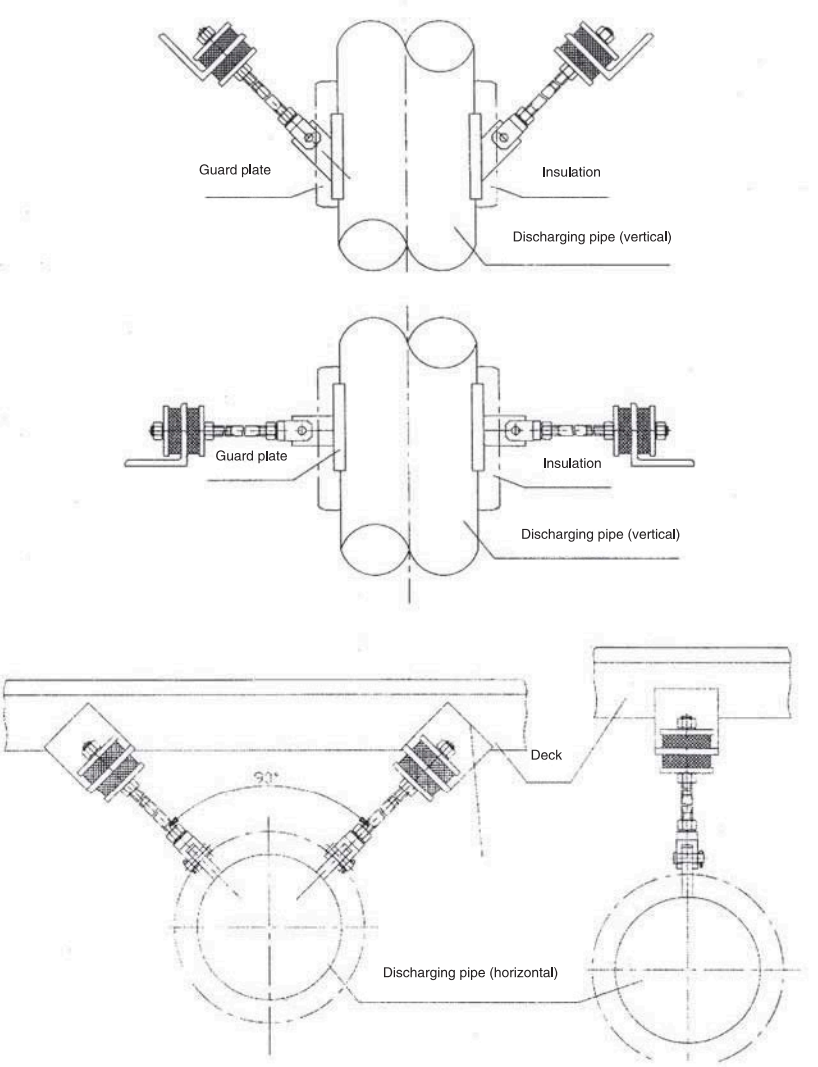
This series of product is developed on the basis of foreign technology imported abroad.
The elastic elements are made of silicon rubber with good performance, which are shock proofing, impact proofing, both high temperature and low temperature resistance, oil resistance and anti–aging.
Removable joint is applied to adjust the length, and also can be freely moved within the range of heat deformation of the discharging pipe.
Application: The hangers are suitable to apply to installations of horizontal and vertical discharging pipes.

Outline dimension and performance parameters



Type	Dimension					kgf	kgf
	A mm	B mm	C mm	D mm	T mm	Static load kgf	Working load kgf
TS-444-1	530-650	125	45	120	12	800	270
TS-472-1	670-830	160	60	160	12	1500	500
TS-444-2	470-590	125	55	120	20	1000	350
TS-472-2	550-710	160	75	160	24	2000	700

Installation schematic drawing



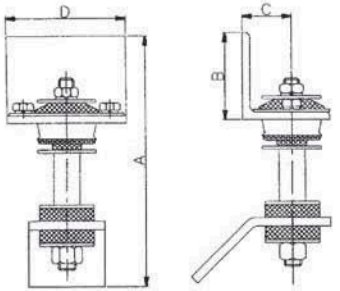
Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Fixed suspending hanger

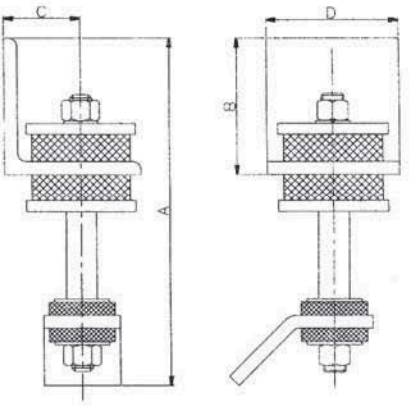
Introduction

This series of product is developed on the basis of foreign technology imported abroad.
The elastic elements are made of silicon rubber with good performance, which are shock proofing, impact proofing, both high temperature and low temperature resistance, oil resistance and anti–aging.
Removable joint is applied to adjust the length, and also can be freely moved within the range of heat deformation of the discharging pipe.
Application: The hangers are suitable to apply to installations of horizontal and vertical discharging pipes.

Outline dimension and performance parameters



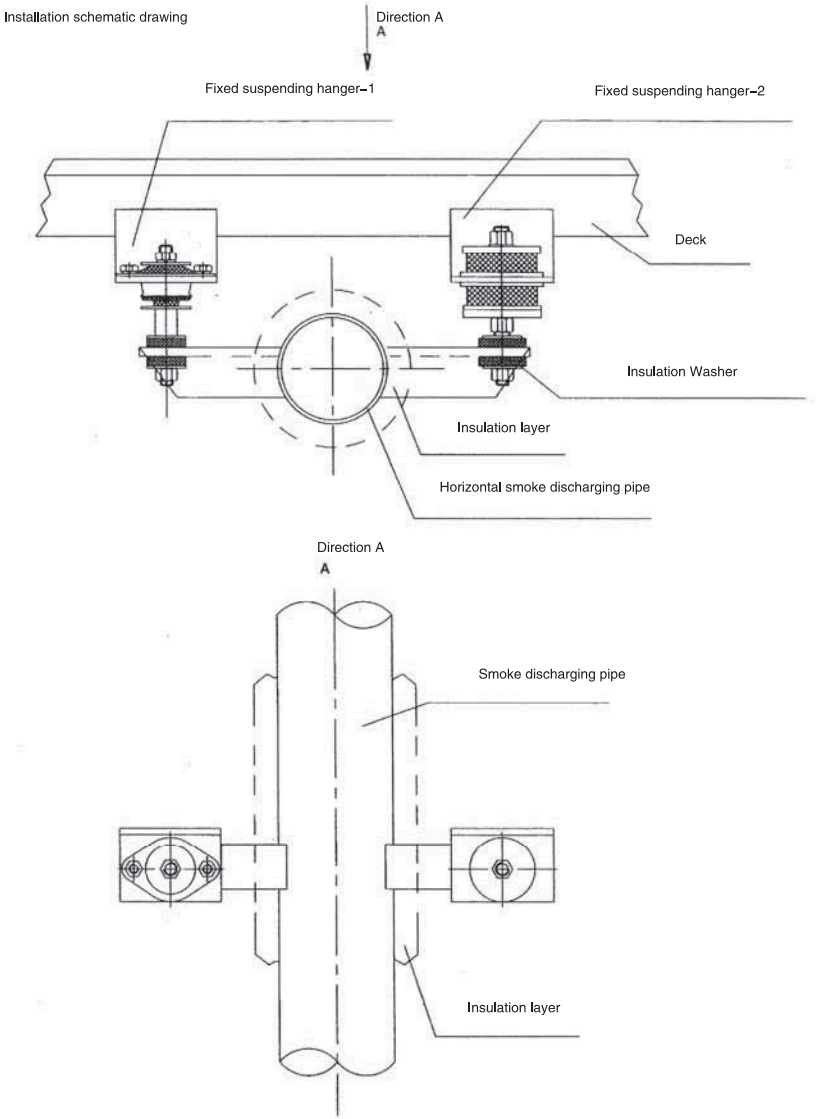
VOP–021, VOP–025
VOP–026, VOP–027



TS–444–3, TS–472–3

Type	Dimension				kgf Static load kgf	kgf Working load kgf
	A mm	B mm	C mm	D mm		
VOP-021	230	80	445	110	600	200
VOP-025	255	100	60	120	700	230
VOP-026	280	100	55	130	800	270
VOP-027	310	125	75	130	1000	350
TS-444-3	320	125	70	120	1000	350
TS-472-3	360	160	90	160	2000	700

Installation schematic drawing



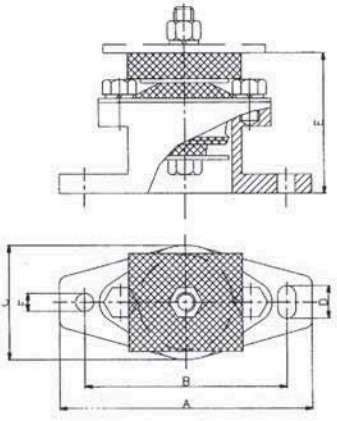
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Elastic rubber support

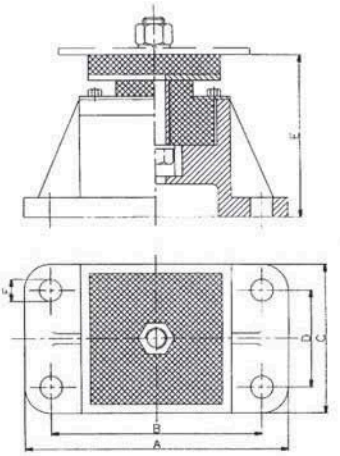
Introduction

This series of product is developed on the basis of foreign technology imported abroad.
The elastic elements are made of silicon rubber with good performance, which are shock proofing, impact proofing, both high temperature and low temperature resistance, oil resistance and anti–aging.
The insulation washers are applied to be able to withstand high loads and high temperatures.
Application: The supports are mainly suitable to apply to fasten vertical discharging pipes.

Outline dimension and performance parameters



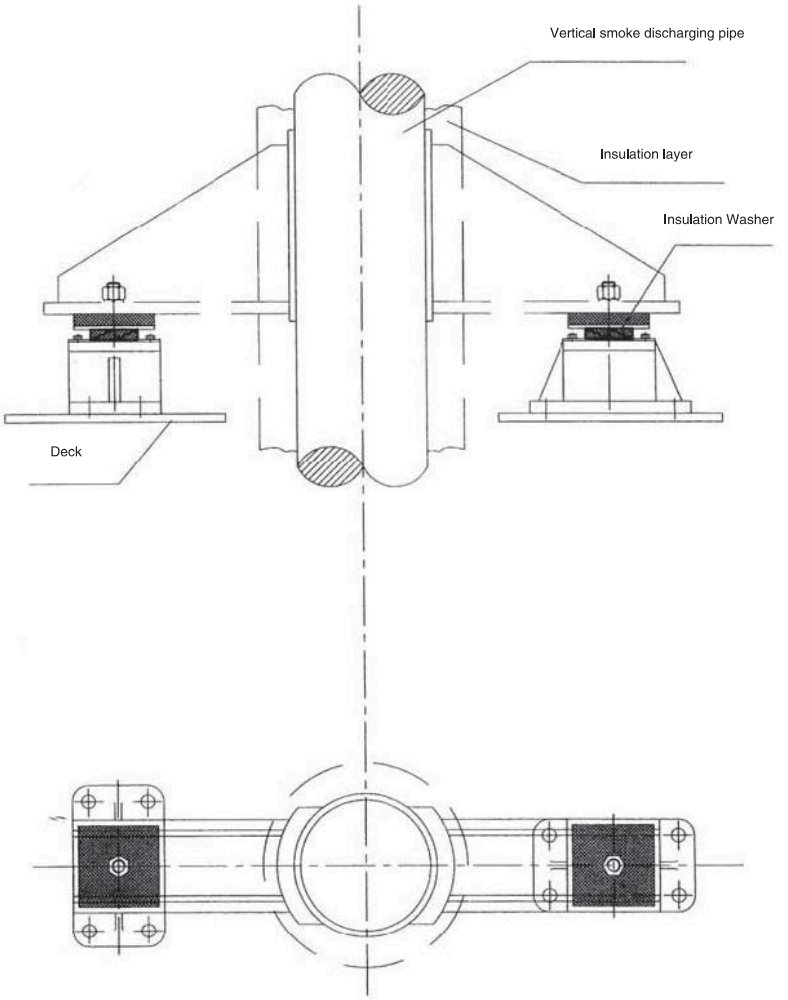
VP–025, VP–026



VP–027, VP–030

Type	Dimension						kgf Static load kgf	kgf Working load kgf
	A mm	B mm	C mm	D mm	E mm	F mm		
VP-025	155	124	70	20	87	Φ11	500	160
VP-026	160	130	92	25	100	Φ14	1000	350
VP-027	200	160	114	74	126	Φ17	1500	500
VP-030	235	195	132	75	144	Φ17	2000	700

Installation schematic drawing



Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Metal spring hanger

Application

Metal spring hanger is a new type shock reducer which is widely used to reduce vibration installation in marine ship ducts, diesel engine exhaust pipes, various industrial pipes, and to isolate vibration for mechanical equipment mounting, ceiling suspended mounting, ceiling fan hoisting and etc.
The product is divided into Type A (used to stabilize and reduce vibration for vertical pipes) and Type B (used to stabilize and reduce vibration for horizontal pipes).

Character and selection

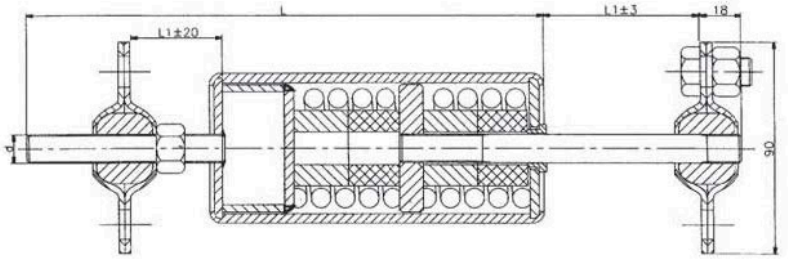
Type	N(kgf) Working load N(kgf)	fn(Hz) Natural frequency under rated P fh(Hz)	Maximum resonance amplification	N(kgf) Endurance capacity N(kgf)	Y_0 Optimum pre-compression Y_0		(3M) Pipe diameter applied (Maximum distance not great than 3m generally)	
							Pipe direction	Pipe diameter
A	A_1	600-1200 (60-120)	3.5-5.0	3-6	300 (30)		Vertical	150-300
	A_2	1000-2000 (100-200)			500 (50)			350-500
	A_3	1600-3200 (160-320)			800 (80)			600-800
	A_4	2000-4000 (200-400)			1000 (100)			900-1100
	A_5	3000-6000 (300-600)			1500 (150)			1200-1500
B	B_1	600-1200 (60-120)	3.5-5.0	3-6	600 (60)	15	Horizontal	150-300
	B_2	1000-2000 (100-200)			1000 (100)			350-500
	B_3	1600-3200 (160-320)			1600 (160)			600-800
	B_4	2000-4000 (200-400)			2000 (200)			900-1100
	B_5	3000-6000 (300-600)			3000 (300)			1200-1500

A_2、A_4、B_2、B_4

ϕ350-ϕ500mm A_2 CB×3262-86
ϕ900-ϕ1100mm B_4 CB×3262-86

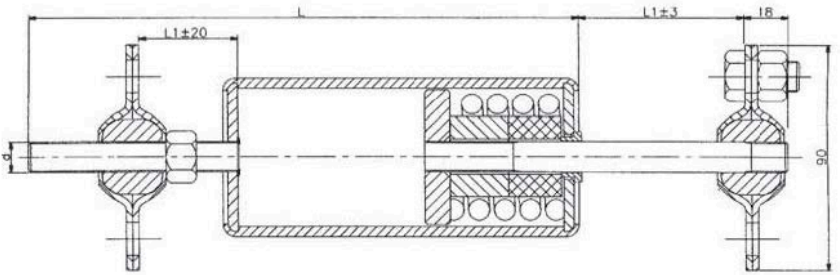
Note. First select Type A_2,A_4,B_2,B_4.
Identify examples
The metal spring hanger Type A2 CBx3262–86 is used to reduce vibration for vertical pipe diameter ϕ350–ϕ500mm.
The metal spring hanger Type B4 CBx3262–86 is used to reduce vibration for vertical pipe diameter ϕ900–ϕ1100mm.

Outline dimension



1:A

Fig.1. Metal spring hanger Type A (Outside color: Light green)



1:B

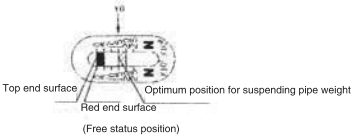
Fig.1. Metal spring hanger Type B (Outside color: Light yellow)

Type		(mm) Outline dimension (mm)			(kg) Mass (kg)	
A Type A	B Type B	L	L1	d	A Type A	B Type B
A1	B1	220	40	M12	2.0	1.8
A2	B2	230			2.1	1.9
A3	B3	240			2.2	2.0
A4	B4	245	45	M16	4.6	4.3
A5	B5	295			5.4	5.1

Metal spring hanger

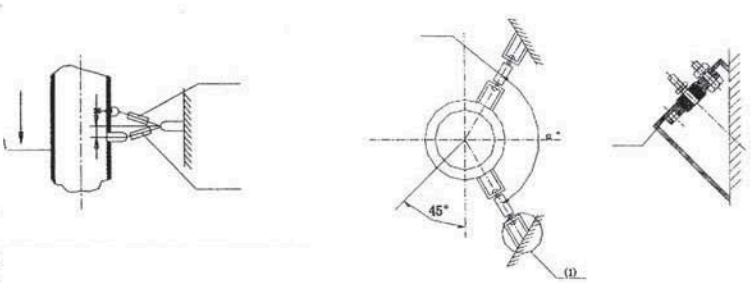
Installation instruction

1.The hanger should be installed without any outside force applied. The distance between the hanger and the suspending pipe is adjusted by turning hanger sleeve with ±20mm distance, after the distance finally fixed, tightening the flat screw nut.
2.The pre–compression (optimum pre–compression Y0=15) for hanger Type B is realized through assembly. The red top surface (for indication purpose) inside the sleeve should be adjusted to the compression 15(Y0) best on the nameplate.



3.

3.Pre–made fastening piece should be welded to the wall plate for mount position, and the bolt M12 should be fastened through through–hole 13 on two end clamp plates when installing the hanger. As shown in Figure 4 (I).

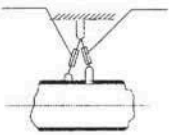


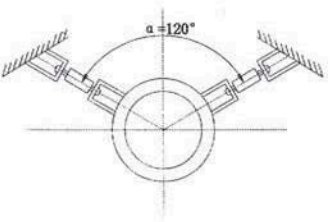
3. 1
3. 2

3.1The fastening piece should be installed at a certain angle to pipe.
3.2The opening of the fastening piece should be paralleled with the axial direction of the pipe when installed.

4. 5

4.The horizontal pipe is installed with the hanger as shown in Figure 5.





Metal elastic support

Application

(CB3321—88)

Metal elastic support (CB3321–88) is a new series of vibration isolator with stainless steel wires applied as elastic body, which is mainly suitable for pipeline system installation for marine ship diesel engine, deck installation for marine auxiliary machine base, and at the same time also can be widely applied to all kinds of industrial pipeline installation, vibration and shock prevention for power machinery, civil–military vehicle equipment, nuclear plant, carrier–based and vehicle–mounted launcher, instrument, especially suitable for variable load and the broadband random vibration isolation. Usually used with spring hanger for pipeline system.

Features

1.The rigidity of product is hard with great friction damp(C/Cc up to 0.2), so, the range for vibration isolation is large with good effect and with fine resonance resistance.
2.The product with wide utility range and good frequency performance under rated loading range, it is especially suitable for variable load condition with fine vibration and shock prevention performance.
3.The product is totally made of metal materials with fatigue resistance, corrosion resistance, resistance to radiation, anti–high and low temperature changes and long life and other characteristics.
4.With bi–direction vibration proof and impact characteristics, it can work under tension or compression state.
5.Vibration isolation system is made up of the product can pass the United States military standard MIL–STD–167–1 (Mechanical vibration of ship equipment) assessment.

Character and selection

Type	N(kgf) Rated vertical load N(kgf)	(mm) Deformation under rated vertical load (mm)	(HZ) Nature frequency (HZ)	C/Cc Damping ratio C/Cc	Standard for vibration test
A10	300-7000 (30-700)	1.0-5.0	15-20 ϕ0.3mm Input amplitude	0.15~0.20	MIL-STD-167-1 MIL–STD–167–1 (Mechanical vibration of ship equipment)
B12	500-9000 (50-900)	0.8-4.0	18-25 ϕ0.3mm Input amplitude	0.15~0.20	
B14	2500-70000 (250-7000)	2.5-5.8		0.15~0.20	
C12	500-9000 (50-900)	1.5-6.5	3-18 ϕ0.3mm Input amplitude	0.15~0.20	
C14	2500-7000 (250-700)	3.0-6.5		0.15~0.20	
D12	500-5000 (50-500)	1.8-6.0	15-23 ϕ0.4mm Input amplitude	0.15~0.20	
D14	2500-30000 (250-3000)	3.5-6.0		0.15~0.20	

1. 1:3
2. A10、B12

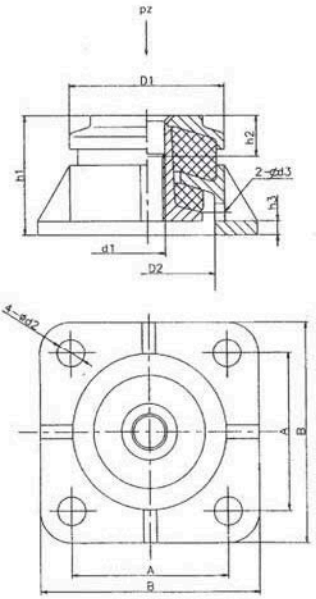
300-7000(30-700kgf) A
A10 CB3321-87

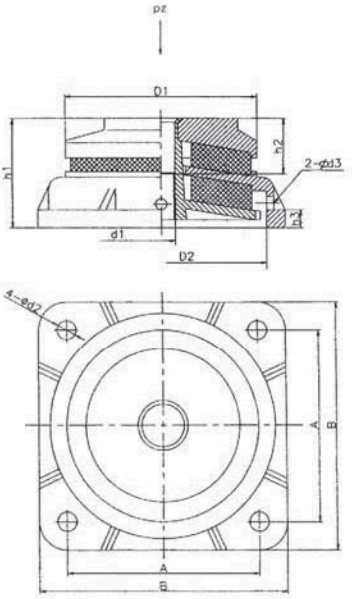
1.Ratio of axial dynamic rigidity and radial dynamic rigidity for product is about 1:3
2.First select Type A10 and Type B12
Identify examples
Metal spring support Type A with rated load 300–7000(30–7000kgf)
Elastic support A10 CB3321–87

Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

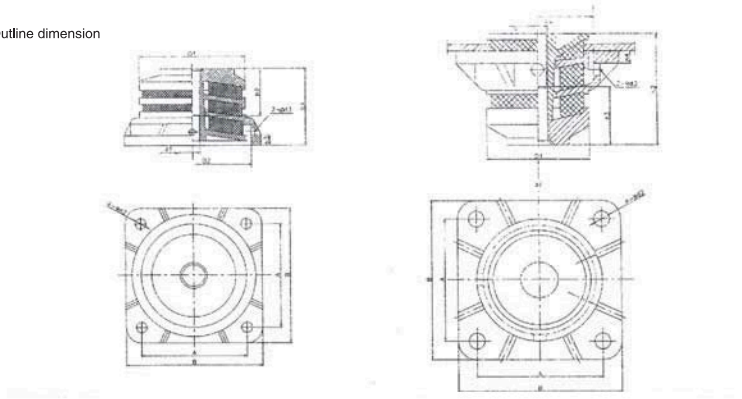
Outline dimension

Type	A	B	D1	D2	d1	d2	d3	h1	h2	h3	h4	Mass kg
A10	70	98	69	60	M16	12.5	8	~53	17	10		~0.8
B12	100	130	82	90	M16	12.5	10	~71	31	13		~1.9
B14	170	220	170	188	M27	17	12	~97	55	16		~10
C12	100	130	82	90	M16	12.5	10	~100	54	13		~2.2
C14	170	220	170	188	M27	17	12	~125	80	16		~13
D12	100	130	82	90	M16	12.5	10	~73	90	46	13	~2.2
D14	170	220	170	188	M27	17	12	~97	112	80	13	~13





Outline dimension



Installation instruction

1.According to isolation weight, elastic support is selected usually in accordance with the medium rated load on elastic support.
2.The product may be used in series in order to meet with project requirements or to get better results for vibration and shock prevention so the rigidity may be reduced.
3.Arrangement of all supporting points should be settled at object gravity center of isolated object (equipment, ducts and pipes, or boilers and others) so as to get uniform forces for all elastic supports when elastic support installing.
4.If the elastic support is installed on the foundation of the vibration isolation object, the foundation surface should be flat or concave. Two small holes(– d3) on elastic support may be easily inserted into with screwdriver to fasten screw nut when the foundation of vibration isolation object mounted with the elastic support.

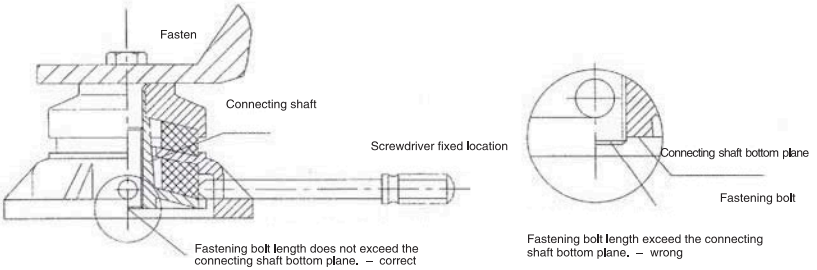


Figure 7. Metal elastic installation schematic drawing

5.After installation finished, and after a period of time (usually in two weeks), the levelness adjustment should be carried out if the vibration isolation object installed requiring high levels.
6.Applications for vibration isolation of marine ship duct systems please refer to attached figures, typical elastic suspension schematic drawing. All kinds of layout forms and slide installations for piping system erection equipment elastic supporting are shown in figures.

Installation instruction

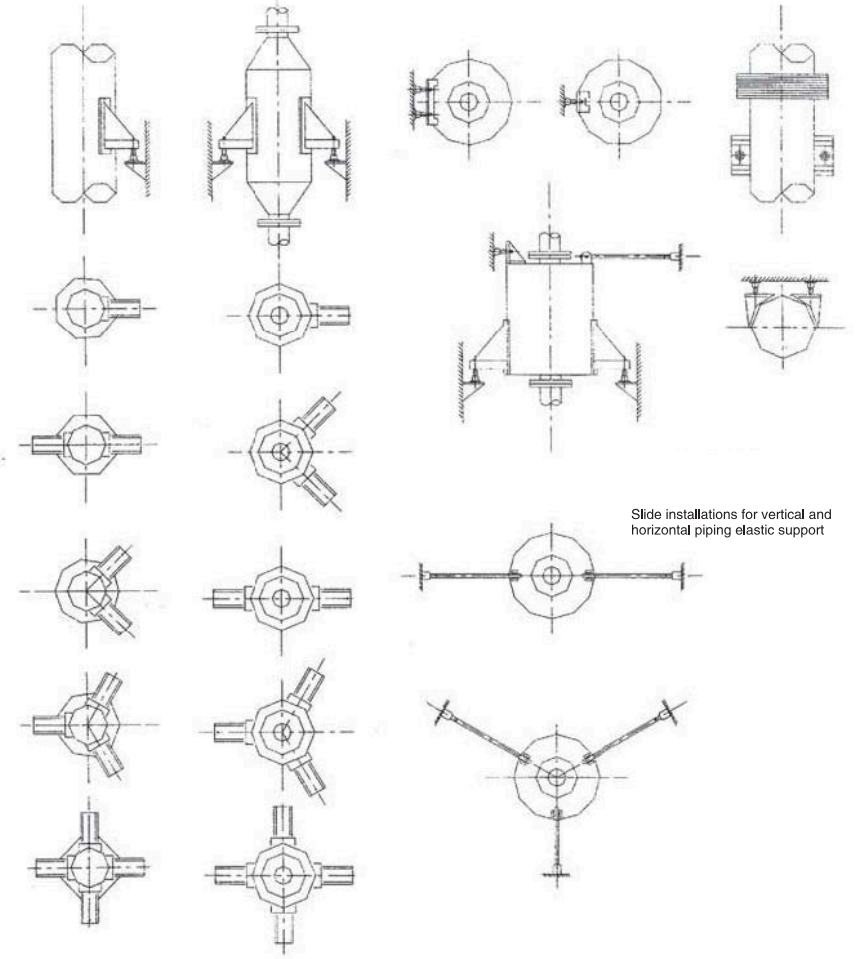


Figure 8. All kinds of layout forms for piping system erection equipment elastic supporting

Installation instruction

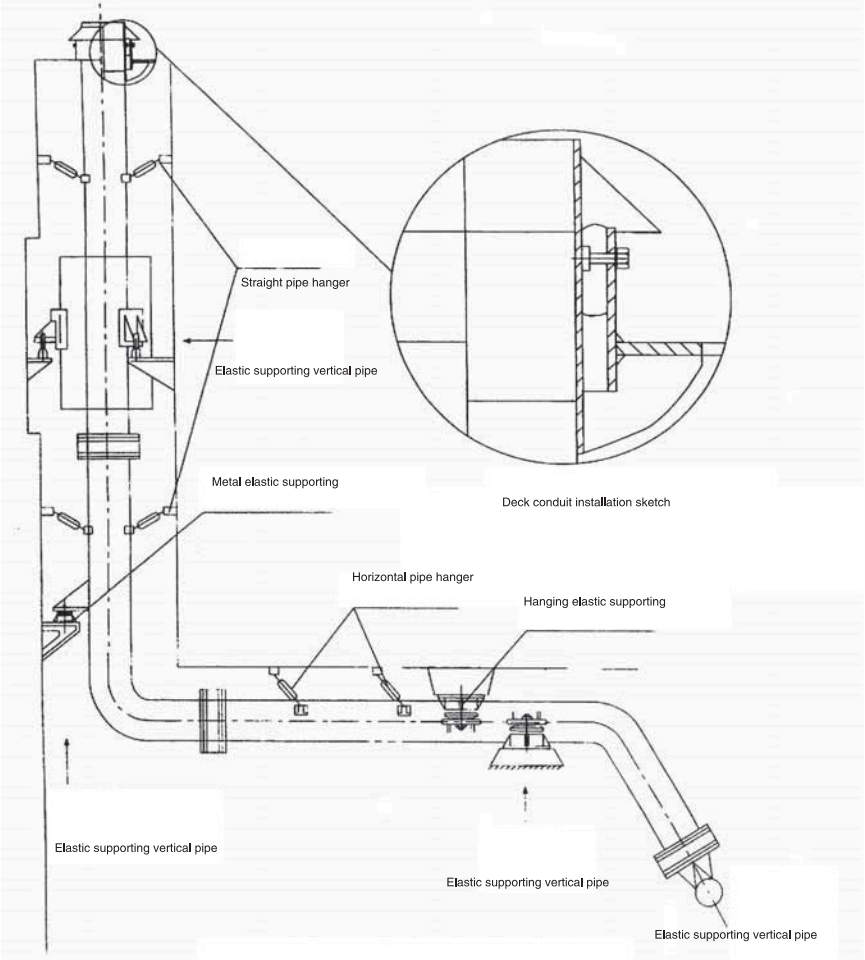


Figure 9. Spring hanger and metal elastic supporting schematic drawing

CB/T3780–1997

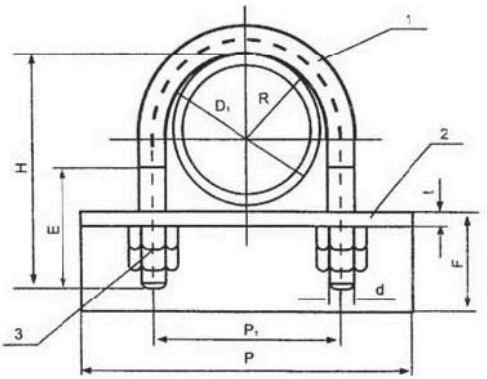
Pipe hanger CB/T3780–1997

Scope

This standard specifies product classifications, technical requirements, test specifications, marking and package for pipe hangers.
This standard applies to ship pipeline system pipe fixed.

Types and primary parameters for pipe hangers

Type		D mm Pipe outer diameter	Application scope
Light	Qa	6~60	Single pipe hangers for thin–walled steel pipe, or various copper pipe, plastic tube, low pressure welded steel pipe
	Qb		Single pipe hangers for thin–walled steel pipe, or various copper pipe, plastic tube, low pressure welded steel pipe
	Qc	6~18	Multiple side – by – side supporting hangers for thin–walled steel pipe, or various copper pipe, plastic tube, low pressure welded steel pipe
Common	Pa	10~630	Clips for vibration resistance and preventing axial movement of the pipe
	Pb	76~630	Clips for allowing pipe axial expansion caused by medium large temperature difference
Special	Ta	22~630	Clips for chemical tankers or ships hazardous area pipe
	Tb	24~1048	Clips for copper, copper alloy, galvanized pipe or special coating pipe allowed axial movement
	Tc	8~38	Clips for small multi side–by–side or single row copper tube, copper alloy, galvanized pipe or special coating pipe
	Td	6~12	Clips for hydraulic pneumatic pipe



Kornerstone
Office No: 412E, Ibn Battuta Gate Office Building, Dubai
Tel No: +971-4-553-0601, Email: info@korner-stone.com

Pa

Primary dimension for pipe hanger Pa

mm

U type bolt		Dw Outer diameter Dw	Structural dimension						kg Weight kg
R	d		H	E	P	P1	F	t	
6	M6	10.0	30	26	60	18	40	5	0.02
7		(12.0)	32		62	20			0.03
8		14.0	34		68	22			0.04
9		17.0	37		70	24			0.05
12	M8	22.0	46	33	80	32			0.06
13		(25.0)	49		82	34			0.09
15		27.0	51		88	38			0.10
17		(32.0)	56		92	42			0.11
18		34.0	60		96	44			0.12
20	M10	(38.0)	62		100	50			0.13
22		42.0	67		104	54			0.15
25		48.0	73		110	60			0.21
31		60.0	85		120	72			0.29
39	M12	76.0	110	45	154	90	50	6	0.35
46		89.0	120		167	104			0.52
58	M16	114.0	154	55	204	132	63	8	0.88
72		140.0	184		230	160			1.25
86		168.0	210		258	188			1.69
99	M20	(194.0)	240	60	300	218	80		2.23
111		219.0	266		324	242			2.49
124		(245.0)	290		348	268			2.74
138		273.0	320		378	296			3.04
164	M24	325.0	385	70	454	352	90	10	5.22
180		355.6	415		484	384			6.63
190		377.0	435		504	404			8.39
205		406.4	465		534	434	100		9.30
215		426.0	480		554	454			10.83
231	M30	457.0	525	80	592	492			11.30
242		480.0	550		610	514			11.83
256		508.0 660	580	85	642	542	125	12	12.14
267		530.0 680	600		650	564			12.99
280		558.8	630		700	590			13.63
282		560.0				594			13.68
307		610.0	680		744	644			14.83
317		630.0	700		770	664			15.29