



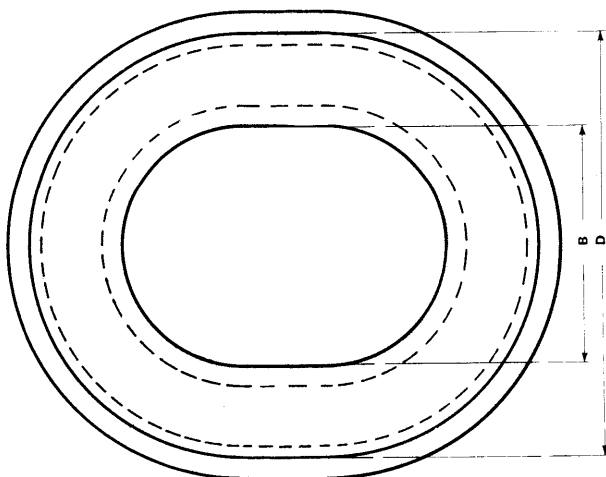
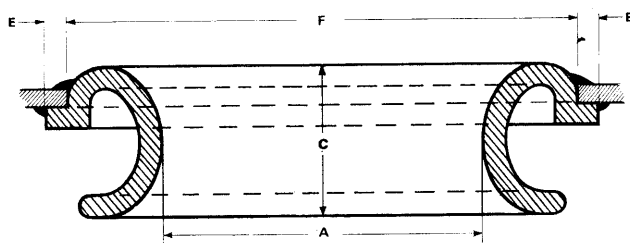
W.J. KEATING LIMITED

MOORING PIPES



K-2000

DIMENSIONS IN INCHES						
PART NO.	A	B	C	D	E	F
089-1002	4	3 ¹ / ₄	2 ¹ / ₄	6 ¹ / ₁₆	2 ¹ / ₃₂	6 ¹³ / ₁₆
089-1020	6	4 ¹ / ₂	2 ⁵ / ₁₆	7 ¹ / ₄	1 ⁹ / ₃₂	8 ¹¹ / ₁₆
089-1048	7 ¹ / ₂	5 ¹ / ₂	3 ³ / ₁₆	9 ⁷ / ₁₆	2 ⁵ / ₃₂	11 ¹ / ₂
089-1100	8 ¹ / ₂	6 ¹ / ₂	3 ⁷ / ₈	10 ⁷ / ₈	1 ¹³ / ₁₆	12 ⁷ / ₈
089-1128	10	8	4 ³ / ₁₆	12 ³ / ₄	3 ¹ / ₄	4 ³ / ₄
089-1146	12	9	5	15 ¹ / ₈	7 ¹ / ₈	18 ¹ / ₈
089-1166	14	10	6	16 ⁵ / ₈	1	20 ⁵ / ₈



EASY TO FIT

No Bolts or Studs required – burn out locating hole and weld pipe in place. Integral mounting flange on inboard side facilitates ease of positioning and welding.

NO BREAKAGES/REPLACEMENTS

All steel unit construction for long service life. Can be welded and dressed in the event of undue wear.

KIND TO ROPES

Unlike most mooring pipes a good radius is carried round outboard as well as inboard, allowing up to a full 180 bend to equalise load on bulwark plating.

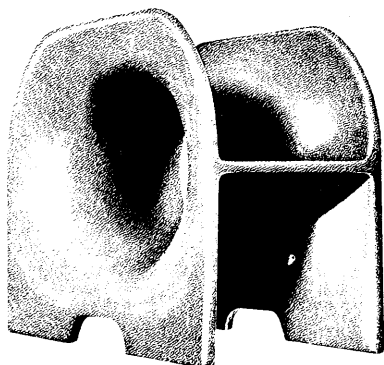
DIRECT SELECTION OF APPROPRIATE SIZE FROM STOCK

Design covers all popular sizes and loadings. Urgent demands normally met from existing stocks.

One of a **WIDE RANGE** of top quality ship's fittings designed and manufactured by:

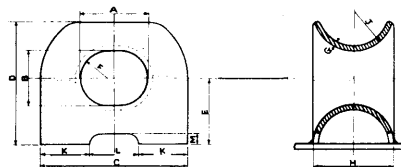


SINGLE BOWS



K-2035

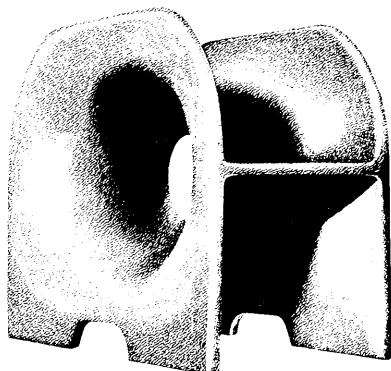
- DECK MOUNTING
- DECK MOUNTING - EXTENDED LEGS



Size	A	B	C	D	E	F	G	H	J	K	L	M
in.	12	10	26	22	12	5	$\frac{3}{8}$	14	7	$8\frac{1}{2}$	$8\frac{1}{2}$	2
mm	305	254	660	559	305	127	19	356	178	222	216	51

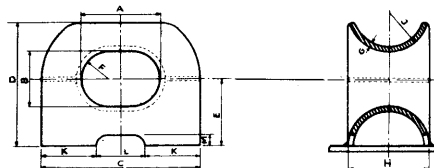
Part No. 086-0820

DOUBLE BOWS



K-2036

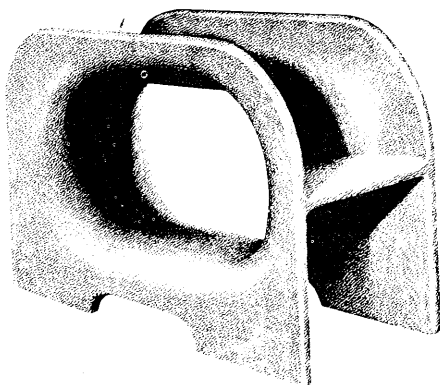
- DECK MOUNTING
- DECK MOUNTING - EXTENDED LEGS



Size	A	B	C	D	E	F	G	H	J	K	L	M
in.	14	10	28	22	12	5	$\frac{3}{8}$	14	7	$9\frac{1}{2}$	$8\frac{1}{2}$	2
mm	356	254	712	559	305	127	19	356	178	248	216	51

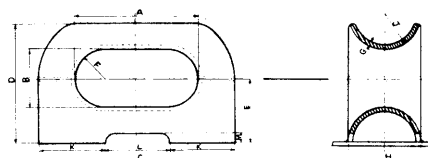
Part No. 086-0848

LARGE BOWS



K-2037

- DECK MOUNTING
- DECK MOUNTING - EXTENDED LEGS



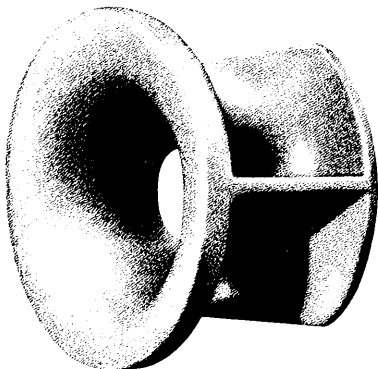
Size	A	B	C	D	E	F	G	H	J	K	L	M
in.	24	12	38	24	13	6	$\frac{3}{8}$	14	7	$12\frac{3}{4}$	$12\frac{1}{2}$	2
mm	610	305	965	610	330	152	19	356	178	324	319	51

Part No. 086-0866



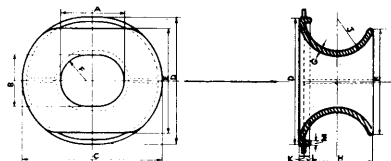
SINGLE BOWS

- BULWARK MOUNTING IN FLAT PLATE
- BULWARK MOUNTING IN CURVED PLATE



K-2039

SINGLE BOW - BULWARK MOUNTING IN FLAT PLATE

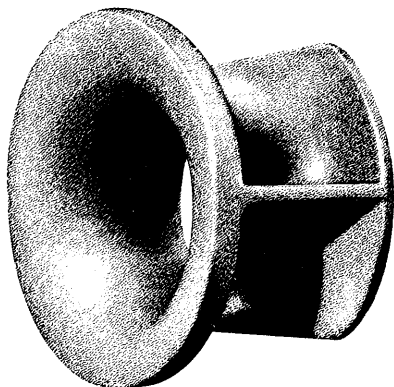


Size	A	B	C	D	E	F	G	H	J	K	L	M
in.	12	10	26	24	20	5	$\frac{3}{4}$	14	7	1	1	$\frac{3}{4}$
mm	305	254	660	610	508	127	19	356	178	26	26	19

Part No. 086-0884

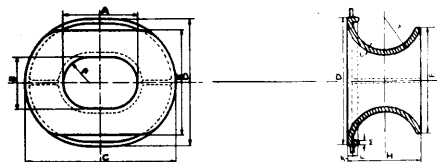
DOUBLE BOWS

- BULWARK MOUNTING IN FLAT PLATE
- BULWARK MOUNTING IN CURVED PLATE



K-2040

DOUBLE BOW - BULWARK MOUNTING IN FLAT PLATE

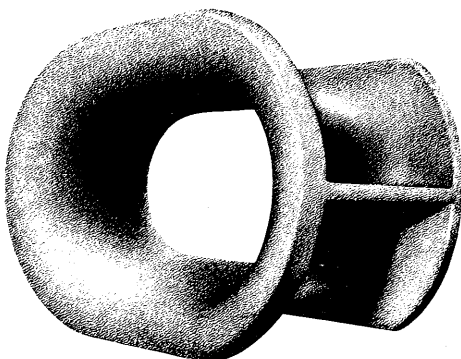


Size	A	B	C	D	E	F	G	H	J	K	L	M
in.	14	10	28	24	20	5	$\frac{3}{4}$	14	7	1	1	$\frac{3}{4}$
mm	356	254	712	610	508	127	19	356	178	26	26	19

Part No. 086-0900

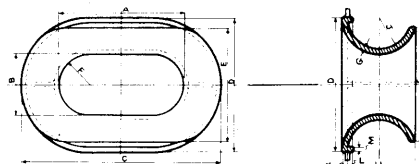
LARGE BOWS

- BULWARK MOUNTING IN FLAT PLATE
- BULWARK MOUNTING IN CURVED PLATE



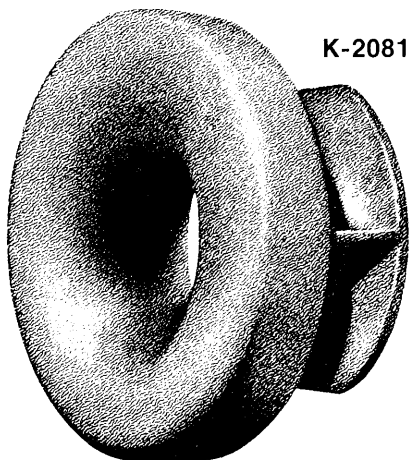
K-2041

LARGE BOW - BULWARK MOUNTING IN FLAT PLATE

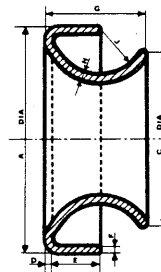
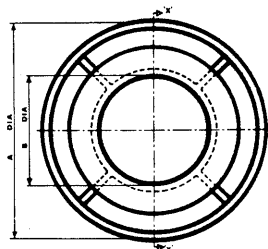


Size	A	B	C	D	E	F	G	H	J	K	L	M
in.	24	12	38	26	$22\frac{1}{2}$	6	$\frac{3}{4}$	14	7	1	1	$\frac{3}{4}$
mm	610	305	965	660	565	152	19	356	178	26	26	19

Part No. 086 -0928



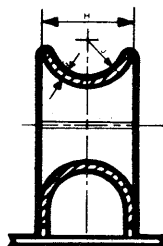
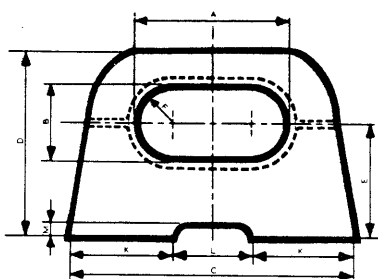
K-2081



CIRCULAR BULWARK MOUNTING

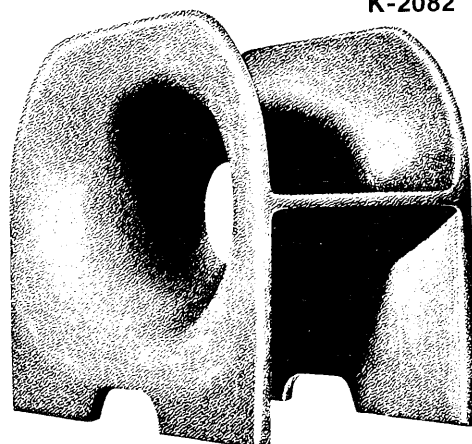
Size	A	B	C	D	E	F	G	H	J
mm	1190	610	920	30	250	30	520	30	280

Part No. 084-0807



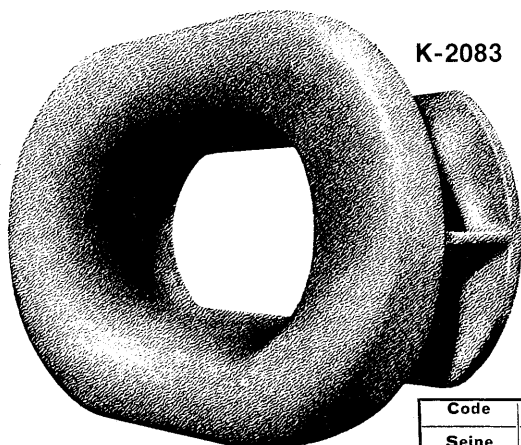
DECK MOUNTING — EXTENDED LEGS

Code	Size	A	B	C	D	E	F	G	H	J	K	L	M
Amazon	mm	315	250	815	620	365	125	22	380	190	307.5	200	50
Nile	mm	425	280	1075	785	450	140	26	500	250	412.5	250	60
Thames	mm	600	315	1360	865	507.5	157.5	30	560	280	430	300	70

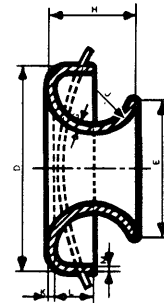
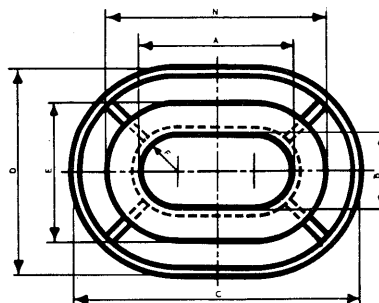


K-2082

Part No. 084-0825



K-2083



BULWARK MOUNTING IN CURVED PLATE

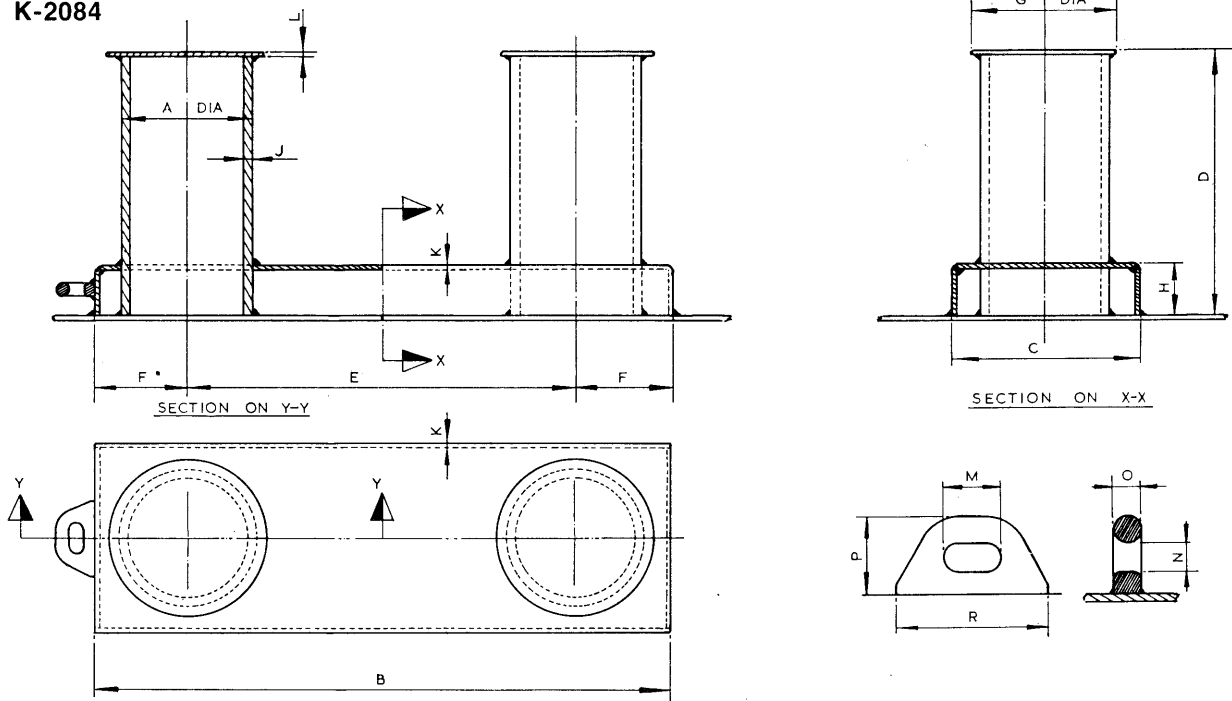
Code	Size	A	B	C	D	E	F	G	H	J	K	L	M	N
Seine	mm	315	250	695	630	432	125	22	342	190	22	168	22	497
Rhine	mm	425	280	925	780	516	140	26	450	250	26	224	26	661
Volga	mm	600	315	1160	875	571	157.5	30	504	280	30	250	30	866
Mississippi	mm	600	450	1160	1010	706	225	30	504	280	30	250	30	866

Part No. 084-0843



DOUBLE LEG BOLLARD

K-2084



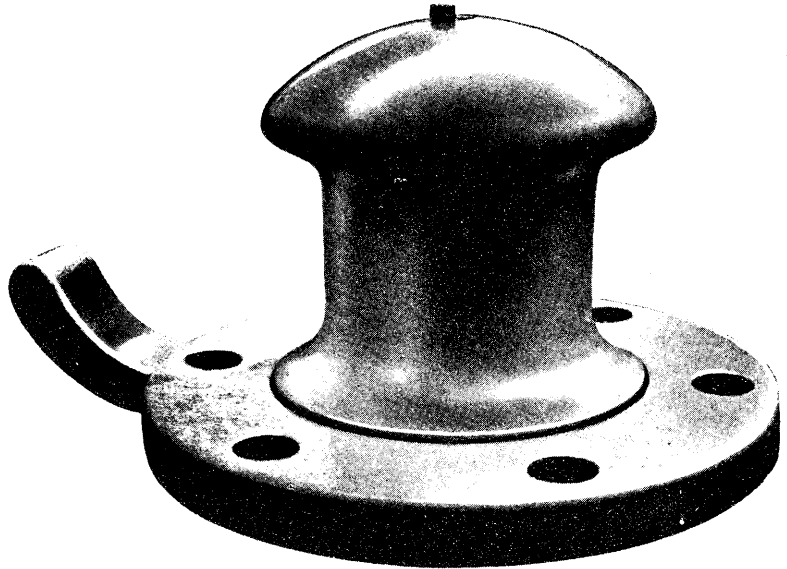
Size	Part No.	Suitable for Mooring Wire B.S.	Size	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	SWL Tons
12"	084-1600	12 Ton	in.	12"	58"	20"	27"	33"	12½"	15"	6"	¾"	½"	½"	2½"	1¾"	1¼"	3¾"	7½"	3.15
14"	084-1628	18 Ton	in.	14"	67"	22"	30"	39"	14"	17"	6½"	7⁄8"	½"	½"	3½"	1¾"	1¾"	4½"	8½"	4.77
16"	084-1646	24 Ton	in.	16"	76"	25"	33"	44"	16"	19"	7"	1"	½"	½"	3¾"	1¾"	1¾"	5½"	9½"	6
18"	084-1664	29 Ton	in.	18"	86"	27"	36"	50"	18"	21"	7½"	1"	½"	½"	4"	2"	2"	5¾"	10½"	7.6
20"	084-1682	34 Ton	in.	20"	95"	30"	40"	55"	20"	23"	8"	1"	¾"	¾"	4"	2"	2"	5¾"	10½"	7.6
22"	084-1708	42.5 Ton	in.	22"	106"	32"	43"	60"	23"	25"	8½"	1½"	7⁄8"	¾"	4½"	2½"	2"	6½"	11½"	9.5
24"	084-1806	51.5 Ton	in.	24"	116"	35"	46"	66"	25"	27"	9"	1½"	1"	¾"	5½"	2½"	2½"	7½"	13½"	12



W.J. KEATING LIMITED

PEDESTAL FAIRLEADS (SHOWN WITH HORN)

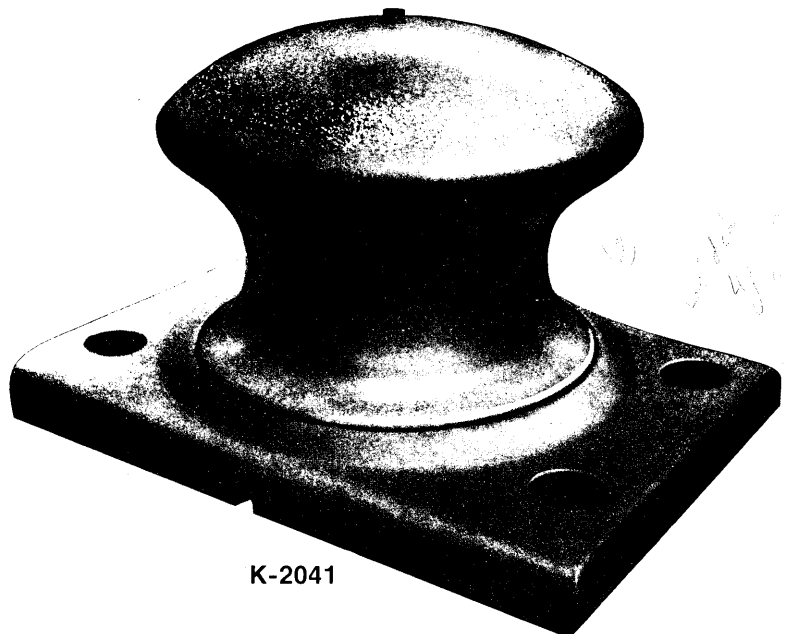
Part No.	Type	Roller at Waist
084-2805	2	4 $\frac{3}{4}$ "
084-2823	3	5 $\frac{3}{4}$ "
084-2841	4	6 $\frac{3}{4}$ "
084-2869	5	8"
084-2887	6	9"
084-2903	7	10"
084-3001	8	11"
084-3029	9	12"



K-2040

IMPROVED WARPING GUIDES

Part No.	Type	Roller at Waist
084-3047	2	4 $\frac{3}{4}$ " dia
084-3065	3	5 $\frac{3}{4}$ " "
084-3083	4	6 $\frac{3}{4}$ " "
084-3109	5	8" "
084-3608	6	9" "
084-3626	7	10" "
084-3644	8	11" "
084-3662	9	12" "

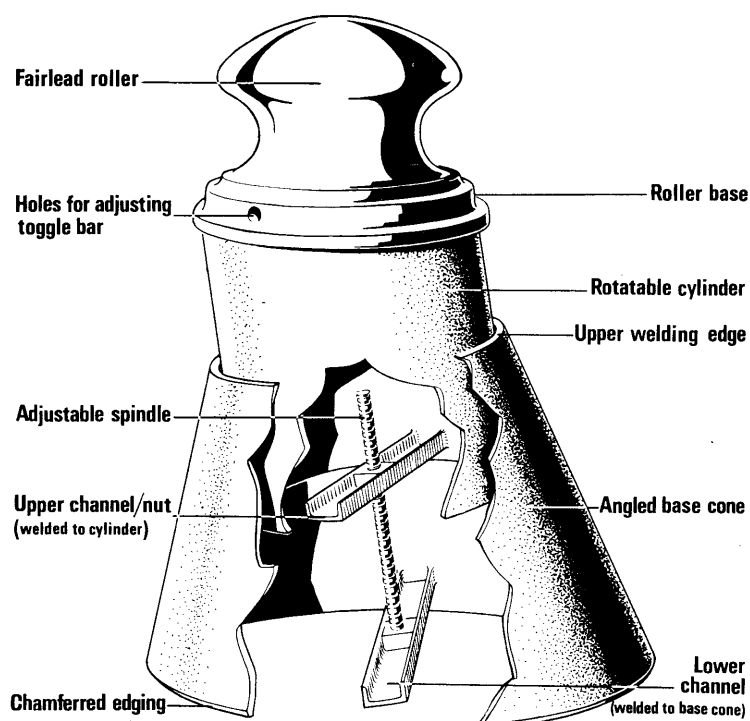


K-2041



W.J. KEATING LIMITED

ADJUSTABLE PEDESTAL FAIRLEAD



K-2042

- 1 *Infinitely variable for height and angle of fairlead roller between ample limits.*
- 2 *Eliminates complex individual manufacture to suit variations in sheer and camber of deck, and height and angle of fairlead — one pedestal does the lot.*
- 3 *All round economy in time and materials.*
- 4 *Easily fitted — position on deck, insert toggle bar and rotate cylinder to give required height and angle, then weld.*
- 5 *Supplied as a complete unit. Base cone ready cropped and chamfered at welding edges. No further treatment required.*
- 6 *Sound construction with no cut-away or access holes to weaken design and permit access of water.*
- 7 *Complementary angles of base cone and cylinder can permit close location of unit to adjacent deck structures.*
- 8 *Available in complete range of sizes to accommodate all tonnage requirements.*
- 9 *Separate rope retaining horn supplied for attaching to roller base, where required.*
- 10 *Adjustable Pedestal Units can be supplied without roller if required.*

Part No.	ROLLER DIA. AT WAIST Ins. m.m.		DIA. OF CONE BASE Ins. mm.		DIA. OF TUBE Ins. mm.	
086-2766	8	203	36	914	20	508
086-2784	10	254	36	914	20	508
086-2800	12	305	36	914	20	508
086-2828	14	356	40	1016	24	610
086-2846	16	406	40	1016	24	610

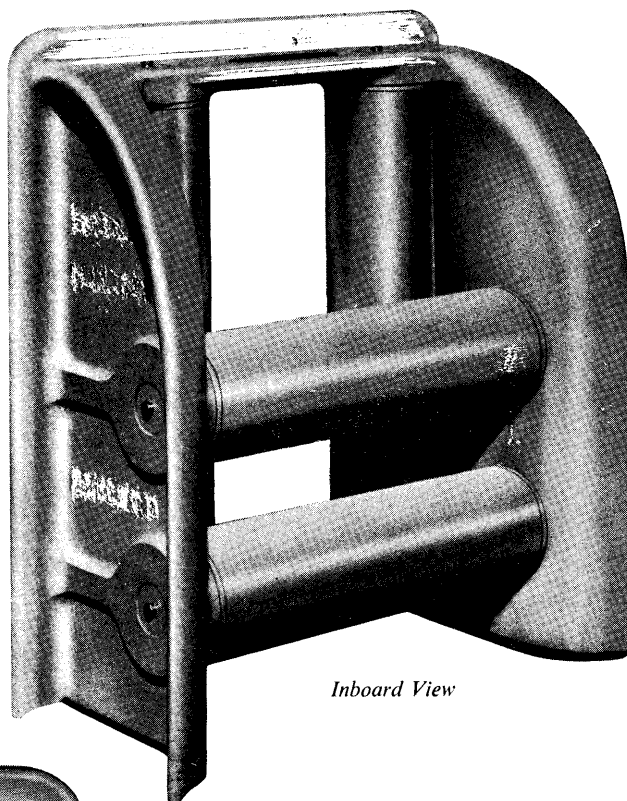


W.J. KEATING LIMITED

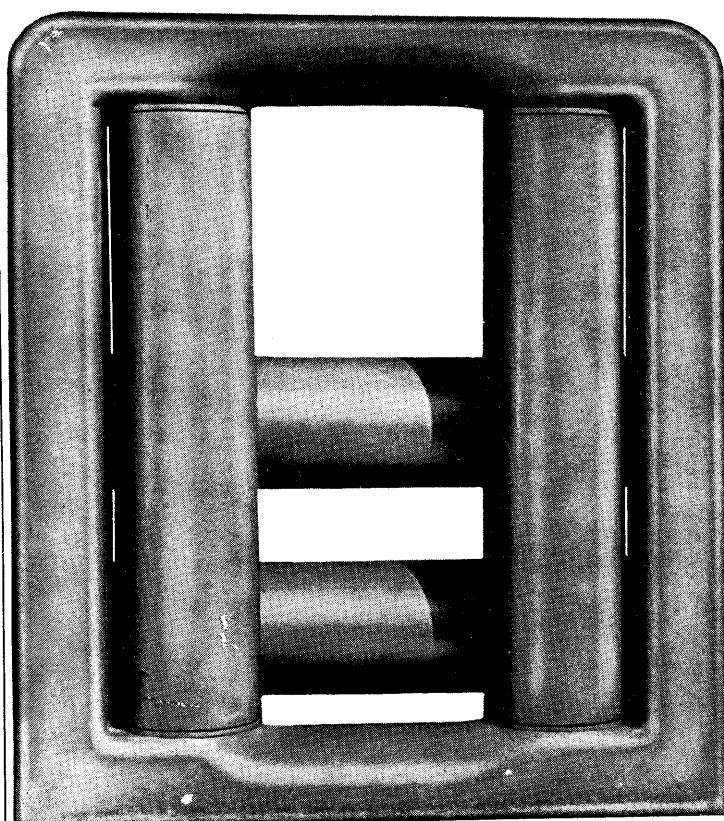
UNIVERSAL MULTI-ANGLE FAIRLEAD

For both wire and
Manilla rope may
also be used as
closed chock or bow

K-2034



Inboard View



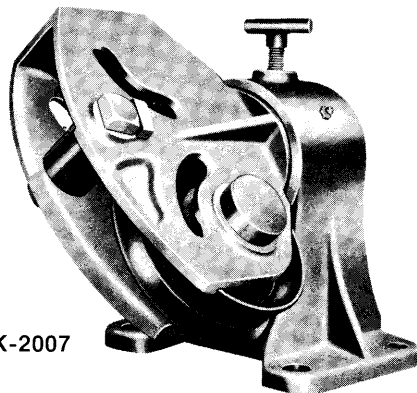
Part No.	Lower Gap	Rope Circ.
089-1208	8 ¹ / ₂ x 3	3 ¹ / ₂
089-1226	8 ¹ / ₂ x 3	3 ¹ / ₂
089-1244	12 ¹ / ₂ x 3 ³ / ₄	4
089-1262	12 ¹ / ₂ x 3 ³ / ₄	4
089-1306	15 x 4 ¹ / ₂	5
089-1324	15 x 4 ¹ / ₂	5
089-1342	4 x 16	
089-1360	4 x 13 ⁵ / ₈	

Outboard View

Data	No. 1	No. 1a	No. 2	No. 2a	No. 3	No. 3a	No. 4	No. 4a
Lower Gap	8 ¹ / ₂ "x3"	8 ¹ / ₂ "x3"	12 ¹ / ₂ "x3 ³ / ₄ "	12 ¹ / ₂ "x3 ³ / ₄ "	15"x4 ¹ / ₂ "	15"x4 ¹ / ₂ "	4"x16"	4"x13 ⁵ / ₈ "
Suggested Wire	3 ¹ / ₂ " circ.	3 ¹ / ₂ " circ.	4" circ.	4" circ.	5" circ.	5" circ.		



SELF-ALIGNING FAIRLEADS

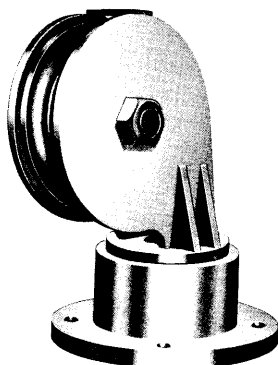


K-2007

FEATURES: Hadfield manganese-steel sheaves. Heavy-duty cast-steel base and barrel. True-balanced head revolves 360° on Timken taper-roller bearings. High-tensile-steel sheave pins.

Deck-Mounted Models, with Balanced Head

Part No.	Sheave Diameter	Line Size	Barrel Opening	Barrel Bearings	Sheave Bearings	Weight
084-2404	4 x 1-3/8	1/4	1-3/4	Timken Tapered	Roller Bearing	33 lbs.
084-2422	6 x 2-1/2	3/8	2	Timken Tapered	Ball Bearing	70 lbs.
084-2440	7 x 2-3/4	1/2	3-1/8	Timken Tapered	Timken Tapered	105 lbs.
084-2468	8 x 3	5/8	2-1/4	Timken Tapered	Timken Tapered	185 lbs.
084-2486	8 x 3	5/8	5-1/4	Timken Tapered	Timken Tapered	175 lbs.
084-2501	10 x 2-1/2	3/4 - 7/8	6	Timken Tapered	Timken Tapered	360 lbs.
084-2609	10 x 2-1/2	3/4 - 7/8	3	Timken Tapered	Timken Tapered	435 lbs.
084-2627	12 x 3	1 - 1-1/8	3	Timken Tapered	Timken Tapered	750 lbs.
084-2645	12 x 3	1 - 1-1/8	6-7/8	Timken Tapered	Timken Tapered	700 lbs.
084-2663	14 x 3	1-1/4 - 1-5/8	5-1/2	Timken Tapered	Timken Tapered	1350 lbs.
084-2681	14 x 3	1-1/4 - 1-5/8	7-3/4	Timken Tapered	Timken Tapered	1250 lbs.



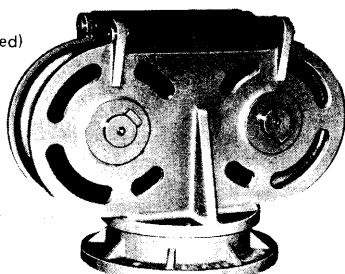
K-2008
(Non-balanced)

FEATURES: Hadfield manganese-steel sheaves. Timken-bearing equipped sheaves (Note: 4" Sheave equipped with straight roller bearings). Alloy-steel shafts. Head revolves 360° on Timken tapered-roller bearings. Cast-steel base and head.

Flange-Mount Models, Single-Sheave

Part No.	Sheave Diameter	Line Size	Barrel Opening	Barrel Bearings	Sheave Bearings	Weight
084-3207	4 x 1-3/8	1/4 - 3/8	1-5/8	Timken Tapered	Roller Bearing	35 lbs.
084-3225	6 x 2	3/8 - 1/2	2	Timken Tapered	Timken Tapered	70 lbs.
084-3243	8 x 2-1/4	1/2 - 5/8	2	Timken Tapered	Timken Tapered	85 lbs.
084-3261	10 x 2-1/4	5/8 - 3/4	2	Timken Tapered	Timken Tapered	95 lbs.
084-3289	12 x 2-1/2	3/4 - 7/8	3	Timken Tapered	Timken Tapered	240 lbs.
084-3305	14 x 2-1/2	7/8 - 1	3	Timken Tapered	Timken Tapered	265 lbs.
084-3403	16 x 4	1 - 1-1/8	3-1/2	Timken Tapered	Timken Tapered	570 lbs.
084-3421	18 x 4	1-1/8 - 1-1/4	3-1/2	Timken Tapered	Timken Tapered	600 lbs.

K-2009
(Non-balanced)

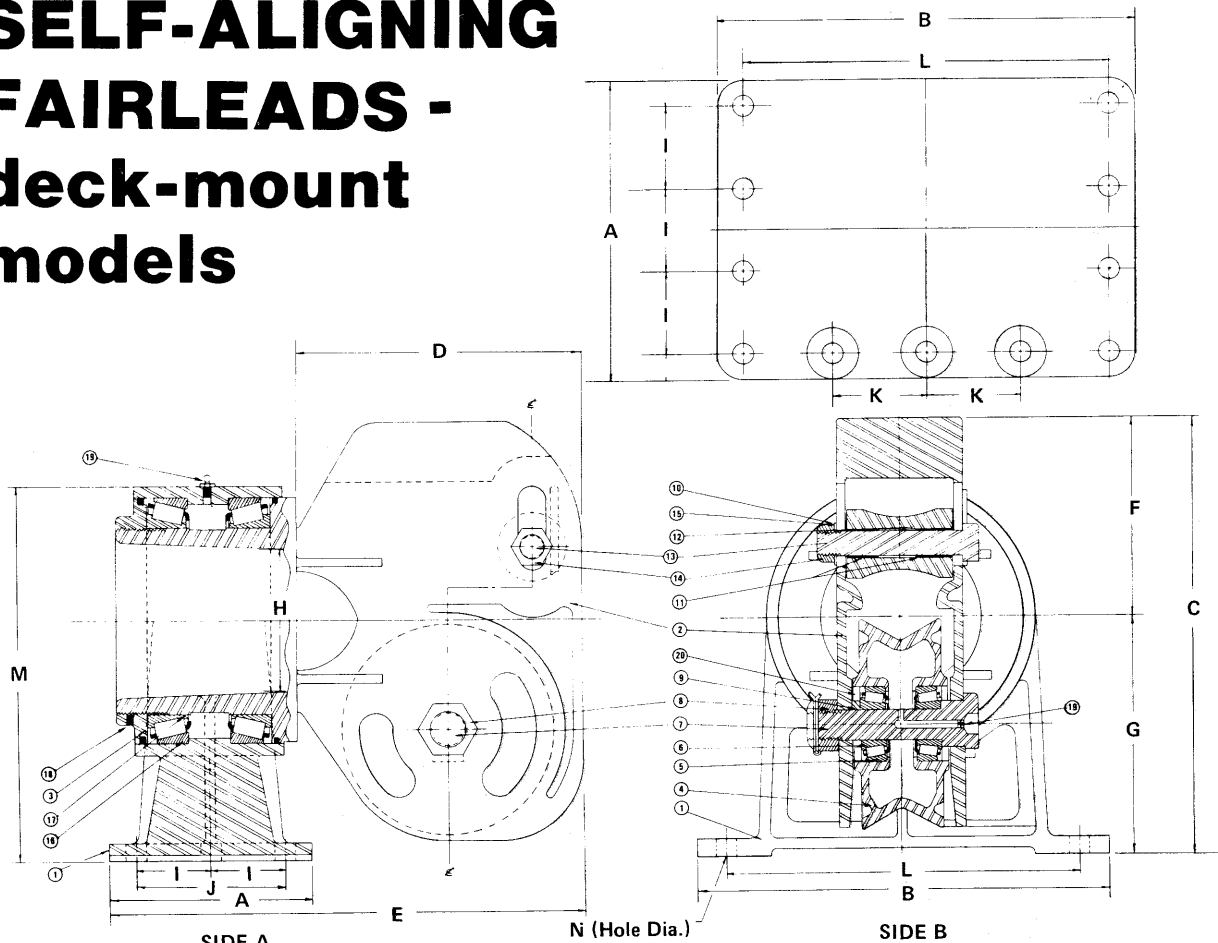


Flange-Mount Models, Double-Sheave

Part No.	Sheave Diameter	Line Size	Barrel Opening	Barrel Bearings	Sheave Bearings	Weight
084-4000	4 x 1-3/8	1/4 - 3/8	3-1/8	Timken Tapered	Roller Bearing	70 lbs.
084-4028	6 x 2	3/8 - 1/2	4	Timken Tapered	Timken Tapered	125 lbs.
084-4046	8 x 2-1/4	1/2 - 5/8	4	Timken Tapered	Timken Tapered	155 lbs.
084-4064	10 x 2-1/4	5/8 - 3/4	4	Timken Tapered	Timken Tapered	185 lbs.
084-4082	12 x 2-1/2	3/4 - 7/8	5-3/8	Timken Tapered	Timken Tapered	360 lbs.
084-4108	14 x 2-1/2	7/8 - 1	5-3/8	Timken Tapered	Timken Tapered	400 lbs.
084-4206	16 x 4	1 - 1-1/8	6-1/2	Timken Tapered	Timken Tapered	525 lbs.
084-4224	18 x 4	1-1/8 - 1-1/4	6-1/2	Timken Tapered	Timken Tapered	585 lbs.



SELF-ALIGNING FAIRLEADS - deck-mount models



O = No. of Holes Side A

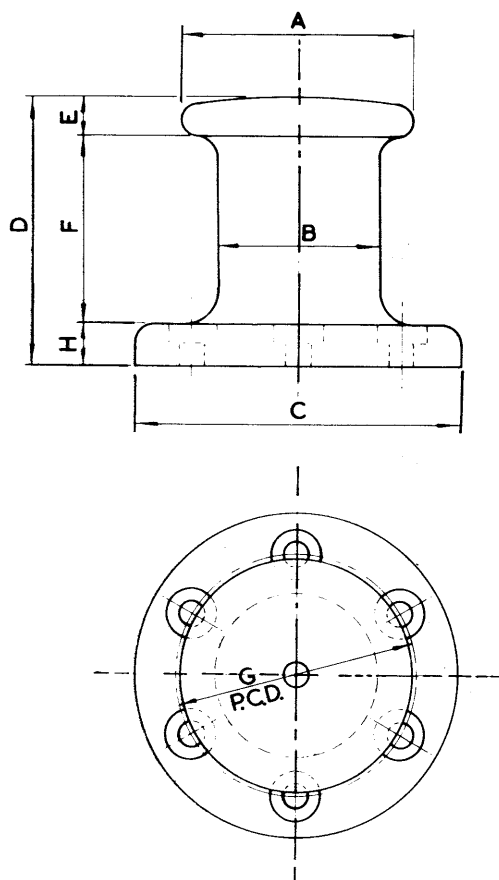
P = No. of Holes Side B

Sheave Diameter	Line Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight
4	1/4 - 5/16	5	7-5/8	8-1/4	5-3/4	9-1/2	3-5/16	5	1-3/4	3-3/4	3-3/4	-	6-3/8	7-1/8	9/16	2	-	33 lbs.
6	3/8 - 7/16	7-1/2	9-1/4	12-1/16	8-1/8	13-7/16	5-1/4	6-13/16	2	5-3/4	5-3/4	-	7-7/8	9-9/16	15/16	2	-	70 lbs.
7	1/2 - 9/16	8	11	14-1/2	9-1/4	15-1/2	6-3/8	8-1/8	3-1/8	6	6	-	9-1/2	11-5/8	13/16	2	-	105 lbs.
8	5/8	7-3/4	16	16-11/16	11-1/2	18-1/8	7-13/16	8-7/8	2-1/4	2-13/16	5-5/8	-	13-3/4	12-3/8	13/16	3	-	185 lbs.
8	5/8	7-1/2	15-1/4	16-1/8	10-1/2	17-1/2	7-1/4	8-3/4	5-1/4	2-3/4	5-1/2	-	13	13-3/4	13/16	3	-	170 lbs.
10	7/8 - 1	12	20	20-1/2	14-1/4	24-1/2	8-3/4	10-1/2	3	3	9	-	17-3/8	15	1-1/32	4	-	435 lbs.
10	7/8 - 1	20	12	20-1/4	12-1/4	21-7/8	8-3/4	11-1/2	6	3	17-1/4	-	9	17-1/8	1-1/32	4	-	400 lbs.
12	1 - 1-1/8	23	24	22-7/8	13	42	10-5/8	12-1/2	3	9-1/2	19	-	20-3/4	20	1-9/16	3	-	750 lbs.
12	1 - 1-1/8	18	24	23-1/2	14	30-7/8	10	13-1/2	6-7/8	4-11/16	14	5-1/8	20-1/2	20-1/4	1-9/16	4	3	700 lbs.
14	1-1/4 - 1-3/8	24-1/4	30-1/2	28-5/8	18-1/2	44-3/4	12-7/8	14-1/2	5-1/2	6-5/8	19-7/8	-	26-1/4	23-1/4	1-9/16	4	-	1350 lbs.
14	1-1/4 - 1-3/8	22	30-1/2	31-7/8	17-3/8	28-5/8	14-1/2	17-1/2	7-3/4	6-1/8	18-1/4	6-7/8	26-3/4	26-1/2	1-9/16	4	3	1200 lbs.

- | | | | |
|---------------|--------------------|------------------|---|
| ① Base | ⑥ Bearing Cone | ⑪ Roller Bushing | ⑮ Bearing Cup |
| ② Barrel | ⑦ Sheave Pin | ⑫ Roller | ⑰ Bearing Cone |
| ③ Barrel Nut | ⑧ Sheave-pin Nut | ⑬ Roller Pin | ⑱ Barrel Set Screw
(4" - 8" models only) |
| ④ Sheave | ⑨ Bearing Retainer | ⑭ Roller-pin Nut | ⑲ Grease Fitting |
| ⑤ Bearing Cup | ⑩ Washer | ⑮ Washer | ⑳ Sheave Bearing Seals |



STANDARD PILLAR BOLLARD WITH ROUND BASE

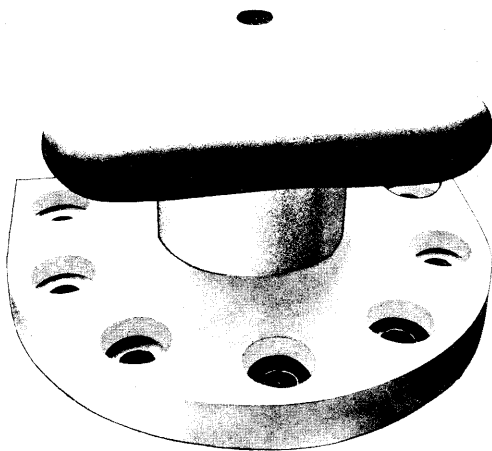


K-2003

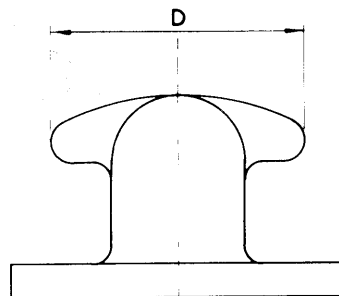
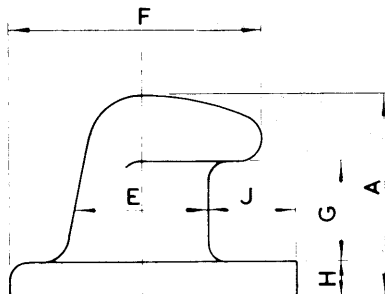
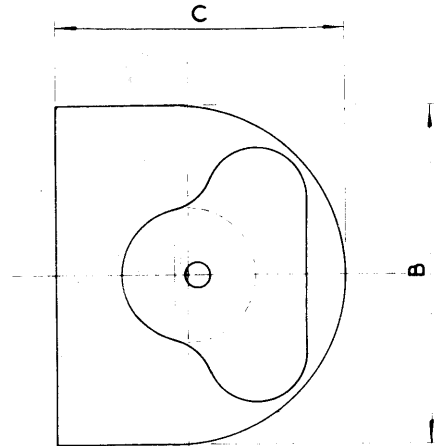
DIMENSIONS IN METRIC WITH DATA											
Part No.	A	B	C	D	E	F	G	H	No. of Bolts	Dia. Bolts	Pull in Tonnes
084-5848	150	100	200	190	25	135	140	30	5	M12	2
084-5866	195	125	270	215	30	150	200	35	4	M20	5
084-5884	240	160	320	275	40	195	230	40	5	M24	10
084-5900	330	230	460	380	50	270	340	60	6	M24	15
084-6008	330	230	460	380	50	270	340	60	6	M36	30
084-6026	490	340	690	590	80	430	510	80	8	M36	50
084-6044	630	450	900	800	100	600	680	100	8	M48	75
084-6062	800	560	1060	850	130	600	800	120	8	M56	125
084-6080	800	560	1060	850	130	600	800	120	8	M72	200



TEE HEAD BOLLARD WITH D SHAPED BASE



K-2002

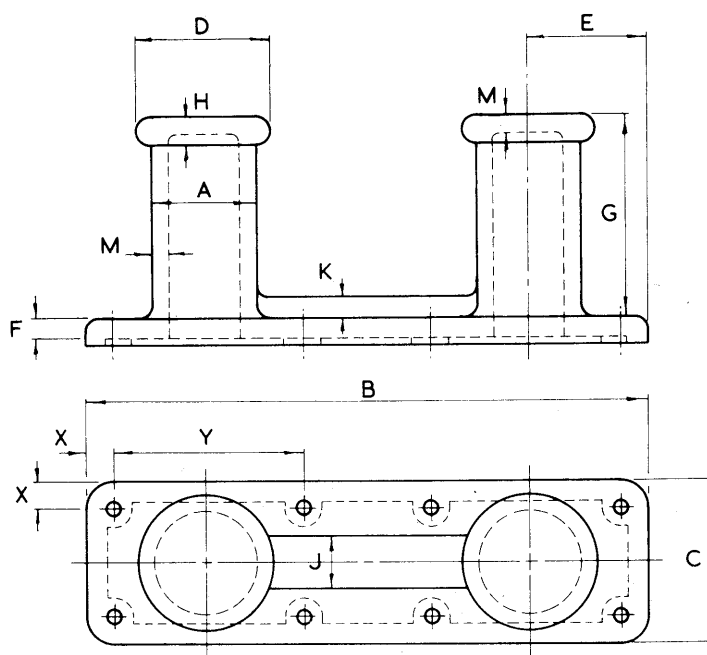


DIMENSIONS IN METRIC WITH DATA												
Part No.	A	B	C	D	E	F	G	H	J	No. of Bolts	Dia. Bolts	Pull in Tonnes
084-6106	245	350	305	280	150	280	125	45	85	5	M24	10
084-6204	290	480	410	360	190	360	145	50	125	5	M30	15
084-6222	380	600	540	460	250	475	190	60	165	5	M36	30
084-6240	480	800	650	600	300	570	245	80	205	5	M52	50
084-6268	510	800	720	650	345	620	260	90	220	6	M56	70
084-6286	600	1000	810	750	380	710	305	100	275	7	M60	100
084-6302	635	1050	850	760	405	755	330	105	275	7	M64	125
084-6400	665	1080	900	800	435	800	350	110	280	7	M68	150
084-6428	700	1220	980	820	475	880	350	140	300	8	M72	200

Also available with square or rectangular base



DOUBLE BITT STRAIGHT BOLLARD

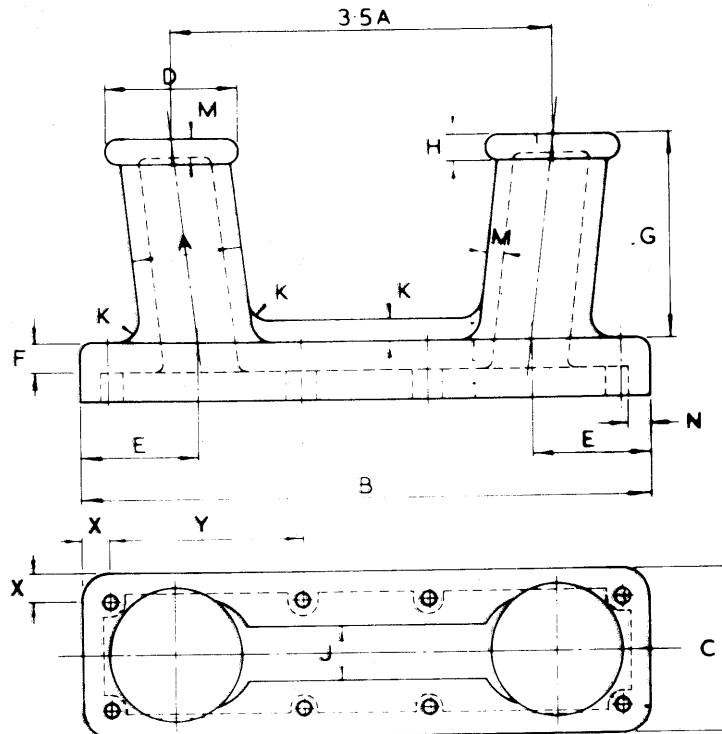


K-2004

DIMENSIONS IN METRIC WITH DATA																
Part No.	Ø CHAIN CABLE	A	B	C	D	E	F	G	H	WEB		M	BOLT SPACING			
										J	K		No.	Ø	X	Y
084-5401		80	445	130	120	90	22	140	22	30	15	13	4	M20	25	
084-5429	18-21	105	535	155	130	115	25	190	25	50	20	16	4	M20	25	
084-5447	22-25	130	665	190	160	140	32	240	32	65	25	19	4	M22	32	
084-5465	27-30	155	800	230	190	170	40	285	40	75	30	25	6	M22	40	265
084-5483	32-35	180	940	265	225	200	45	335	45	90	35	27	6	M22	45	310
084-5508	37-40	205	1065	305	255	230	50	380	50	100	40	30	6	M24	50	355
084-5606	41-45	230	1195	345	290	255	57	430	57	115	45	35	6	M24	57	400
084-5624	46-49	255	1335	380	320	285	65	475	65	125	50	38	8	M27	65	445
084-5642	50-54	280	1475	420	350	315	70	525	70	140	55	41	8	M27	70	490
084-5660	55-62	305	1650	460	380	345	75	575	75	155	60	46	8	M33	75	535
084-5688	64-70	360	1920	535	450	400	90	670	90	180	70	54	10	M36	90	625
084-5704	71-79	410	2135	610	510	455	100	765	100	205	80	60	10	M39	100	710
084-5802	80-89	460	2400	685	575	515	115	845	115	230	90	67	12	M42	115	800
084-5820		510	2440	760	640	575	150	915	130	255	100	73	12	M45	125	900



DOUBLE BITT RAKED BOLLARD



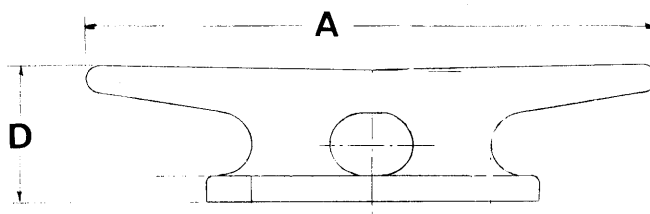
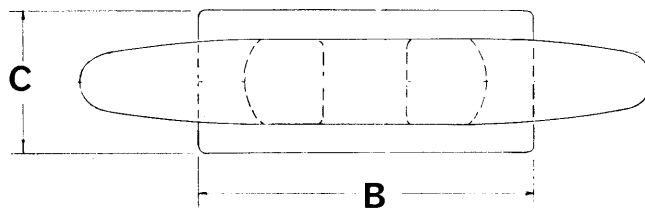
K-2005

DIMENSIONS IN METRIC WITH DATA																	
Part No.	Ø Chain Cable	A	B	C	D	E	F	G	H	J	K	M	N	BOLT SPACING			
														No.	Ø	X	Y
084-3804		80	445	130	120	90	22	140	22	30	15	13	20	4	M20	25	
084-3822	18-21	105	535	155	130	115	25	190	25	50	20	16	20	4	M20	25	
084-3840	22-25	130	665	190	160	140	32	240	32	65	25	19	25	4	M22	32	
084-3868	27-30	155	800	230	190	170	40	285	40	75	30	25	30	6	M22	40	265
084-3886	32-35	180	940	265	225	200	45	335	45	90	35	27	35	6	M22	45	310
084-3902	37-40	205	1065	305	255	230	50	380	50	100	40	30	40	6	M24	50	355
084-4402	41-45	230	1195	345	290	255	57	430	57	115	45	35	40	6	M24	57	400
084-4420	46-49	255	1335	380	320	285	65	475	65	125	50	38	45	8	M27	65	445
084-4448	50-54	280	1475	420	350	315	70	525	70	140	55	41	50	8	M27	70	490
084-4466	55-62	305	1650	460	380	345	75	575	75	155	60	46	55	8	M33	75	535
084-4484	64-70	360	1920	535	450	400	90	670	90	180	70	54	65	10	M36	90	625
084-4509	71-79	410	2135	610	510	455	100	765	100	205	80	60	75	10	M39	100	710
084-4607	80-89	460	2400	685	575	515	115	845	115	230	90	67	85	12	M42	115	800
084-4625		510	2440	760	640	575	150	915	130	255	100	73	95	12	M45	125	900

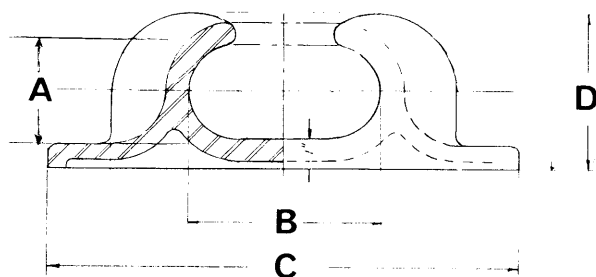
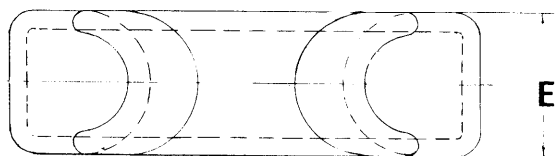


CAST STEEL DECK FITTINGS

Part No.	CLEAT			
	A	B	C	D
086-3925	16	7 ¹ / ₂	5 ¹ / ₂	5
086-4023	24	14	6 ¹ / ₈	5 ³ / ₄
086-4041	36	22	7 ³ / ₄	8 ¹ / ₂
086-4069	48	31	14	10
086-4087	60	38	13	10



K-2016



K-2017

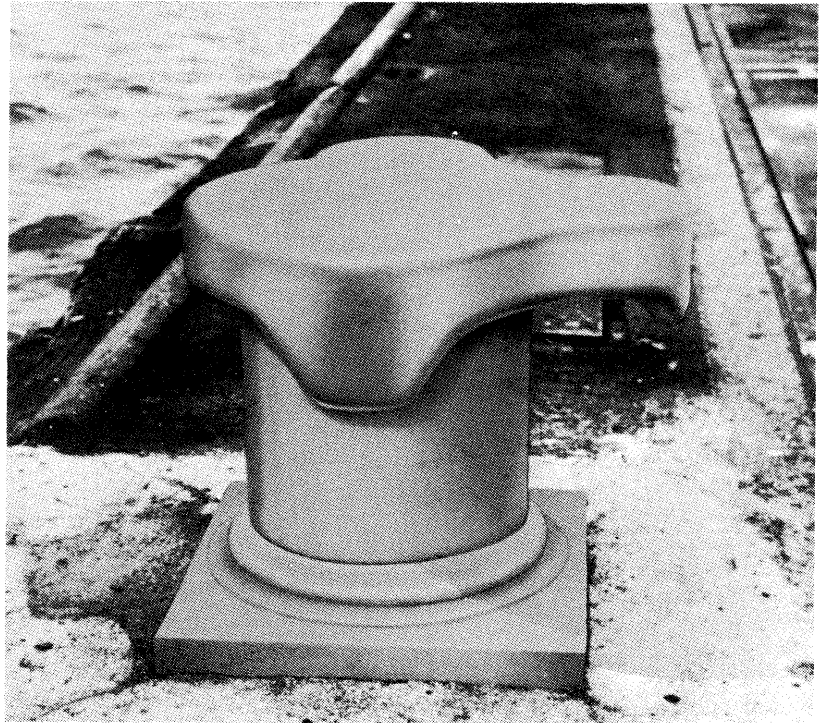
Part No.	OPEN CHOCK				
	A	B	C	D	E
086-4103	4	8	19 ³ / ₄	6 ³ / ₄	6
086-4121	5	14	32	9 ¹ / ₄	10
086-4407	8	16	36	13 ³ / ₈	12



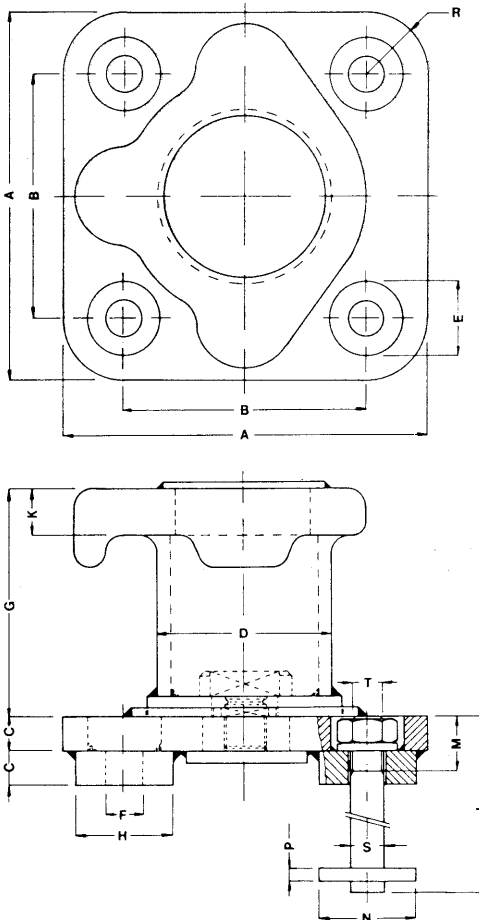
SAFETY BOLLARDS

The Safety Bollard is held to its base by a shear bolt which allows the head of the bollard to come free from its base when overloaded, thus protecting the jetty and leaving the fixed base free from any damage.

The head of the bollard is connected to its base with a precautionary retaining chain (not shown) which will keep the bollard head from going over the side. To return to service only the shear bolt need be replaced.



K-2006



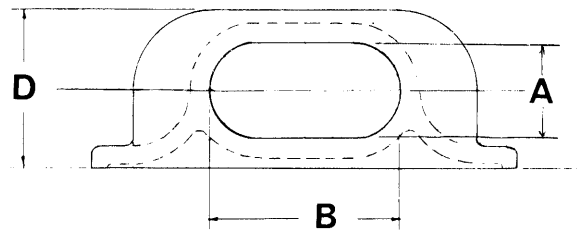
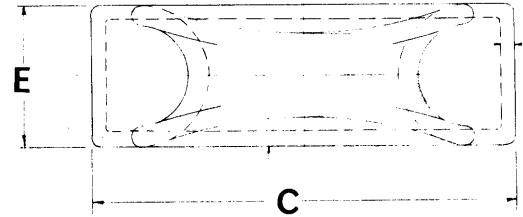
Size	150	125	100	75	50	30	25	20	15	10
Nom-load*	1500	1250	1000	750	500	300	250	200	150	100
A	900	900	750	750	650	650	600	550	500	450
B	600	600	500	500	400	400	400	350	300	250
C	90	80	70	65	60	50	45	40	35	30
D	419	406	356	324	298	273	267	245	219	194
E	190	175	160	150	140	130	120	110	100	95
F	94	85	77	68	60	52	46	40	34	28
G	500	470	435	405	380	355	330	310	290	270
H	240	225	210	200	190	180	170	160	150	145
K	120	110	100	90	80	70	65	60	55	50
L	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
M	135	120	105	95	90	75	65	60	50	45
N	180x200	180x200	180x200	180x200	180x200	180x200	180x200	180x150	180x150	180x150
P	25	25	25	25	25	25	25	20	20	20
R	150	150	125	125	125	125	100	100	100	100
S	95	85	75	65	60	50	45	40	35	25
T	M90	M80	M72	M64	M56	M48	M42	M36	M30	M24
W**	1030	930	605	485	355	290	223	185	140	105
Part No.	084-6446	084-6464	084-6482	084-6507	084-6605	084-6623	084-6641	084-6669	084-6687	084-5703

* Capacity in kN.
 ** Weight in kg.
 Dimensions in mm.

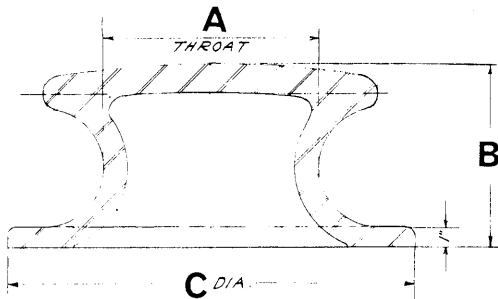


CAST STEEL DECK FITTINGS

CLOSED CHOCK					
Part No.	A	B	C	D	E
086-0946	8	16	36	13 ³ / ₈	12
086-1026	6	12	27 ³ / ₄	10 ¹ / ₈	9
086-1044	5 ³ / ₈	10 ³ / ₄	25 ¹ / ₄	9	8
086-1062					

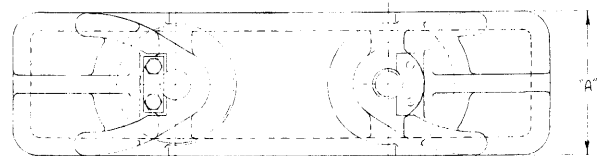


K-2010



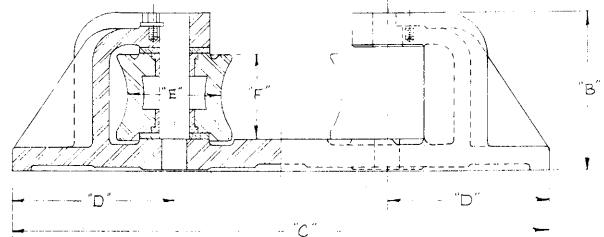
K-2014

BUTTON CHOCK			
Part No.	A	B	C
086-1080	9	8	17" dia.
086-1106	11	9 ⁷ / ₈	20 ¹ / ₄ " dia.
086-1124	12	10 ¹ / ₂	21 ¹ / ₂ " dia.
086-1142	7	6 ¹ / ₄	14" dia.
086-3827	4	5 ³ / ₄	12" dia.



NOTE:
THIS PATTERN CAN
BE ALTERED TO FORM
A CLOSED CHOCK

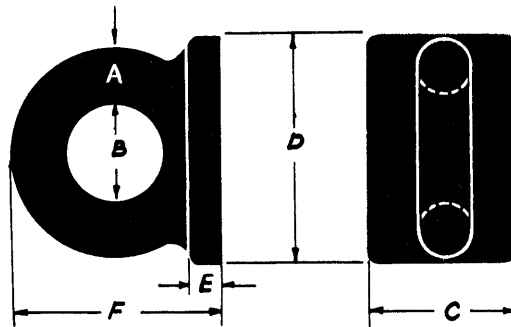
ROLLER CHOCK							
Part No.	SIZE	"A"	"B"	"C"	"D"	"E"	"F"
086-3845	6"	6	6 ³ / ₄	22 ³ / ₄	6 ⁷ / ₈	4	3 ¹¹ / ₁₆
086-3863	9"	9	10 ¹ / ₈	32 ¹ / ₄	9 ³ / ₈	6	5 ¹¹ / ₁₆
086-3881	12"	12	13 ³ / ₈	42	12	8	7 ⁷ / ₁₆
086-3907	18"	18	19 ¹¹ / ₁₆	54 ¹ / ₂	12 ³ / ₄	12	11 ¹ / ₈



K-2015



DECK OR EYE PLATES (Rectangular Base) to Admiralty Pattern



Forged Steel

K-2018

IMPERIAL DIMENSIONS IN INCHES
METRIC DIMENSIONS IN MILLIMETRES

Part No.	Pattern Number	A	B	C	D	E	F	Proof Test Tons Kg	N.A.T.O. Number
086-2481	4014	$\frac{3}{8}$ 10	$\frac{3}{4}$ 19	1 25	$1\frac{3}{4}$ 44	$\frac{1}{4}$ 6	$1\frac{1}{2}$ 38	$1\frac{3}{4}$ 1778	5140
086-2506	4015	$\frac{1}{2}$ 13	1 25	$1\frac{3}{8}$ 35	$2\frac{1}{4}$ 57	$\frac{5}{16}$ 8	2 51	$3\frac{1}{8}$ 3175	5141
086-2524	4016	$\frac{5}{8}$ 16	$1\frac{1}{4}$ 32	$1\frac{3}{4}$ 44	$2\frac{7}{8}$ 73	$\frac{3}{8}$ 10	$2\frac{1}{2}$ 63	$4\frac{7}{8}$ 4953	5142
086-2542	4017	$\frac{3}{4}$ 19	$1\frac{1}{2}$ 38	2 51	$3\frac{3}{8}$ 86	$\frac{7}{16}$ 11	3 76	7 7112	5143
086-2560	4018	$\frac{7}{8}$ 22	$1\frac{3}{4}$ 44	$2\frac{3}{8}$ 60	4 102	$\frac{1}{2}$ 13	$3\frac{1}{2}$ 89	$9\frac{9}{16}$ 9716	—
086-2588	4019	1 25	2 51	$2\frac{3}{4}$ 70	$4\frac{1}{2}$ 114	$\frac{5}{8}$ 16	4 102	$12\frac{1}{2}$ 12700	5144
086-2604	4020	$1\frac{1}{8}$ 29	$2\frac{1}{4}$ 57	3 76	$5\frac{1}{8}$ 130	$1\frac{1}{16}$ 18	$4\frac{1}{2}$ 114	$15\frac{3}{4}$ 16002	—
086-2622	4021	$1\frac{1}{4}$ 32	$2\frac{1}{2}$ 63	$3\frac{3}{8}$ 86	$5\frac{5}{8}$ 143	$\frac{3}{4}$ 19	5 127	$19\frac{1}{2}$ 19812	5145
086-2640	4022	$1\frac{3}{8}$ 35	$2\frac{3}{4}$ 70	$3\frac{3}{4}$ 95	$6\frac{1}{4}$ 159	$1\frac{3}{16}$ 21	$5\frac{1}{2}$ 140	$23\frac{5}{8}$ 24003	—
086-2668	4023	$1\frac{1}{2}$ 38	3 76	4 102	$6\frac{3}{4}$ 171	$\frac{7}{8}$ 22	6 152	$28\frac{1}{8}$ 28575	5146
086-2686	4024	$1\frac{5}{8}$ 41	$3\frac{1}{4}$ 83	$4\frac{3}{8}$ 111	$7\frac{3}{8}$ 187	1 25	$6\frac{1}{2}$ 165	33 33528	—
086-2702	4025	$1\frac{3}{4}$ 44	$3\frac{1}{2}$ 89	$4\frac{3}{4}$ 121	$7\frac{7}{8}$ 200	$1\frac{1}{16}$ 27	7 178	$38\frac{1}{4}$ 38862	5147
086-2720	4026	$1\frac{7}{8}$ 48	$3\frac{3}{4}$ 95	5 127	$8\frac{1}{2}$ 216	$1\frac{1}{8}$ 29	$7\frac{1}{2}$ 190	44 44704	—
086-2748	4027	2 51	4 102	$5\frac{5}{8}$ 137	9 229	$1\frac{3}{16}$ 30	8 203	50 50800	5148



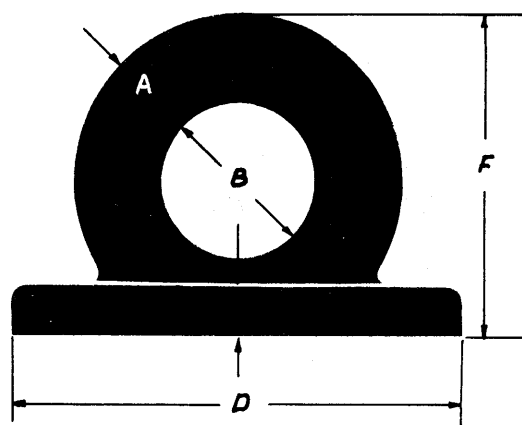
W.J. KEATING LIMITED

DECK OR EYE PLATES (Round Base) to Admiralty Pattern

Forged Steel

Eyeplates are supplied undrilled unless ordered otherwise.

Also available in Manganese Bronze for some sizes. Write for specifications.



IMPERIAL DIMENSIONS IN INCHES
METRIC DIMENSIONS IN MILLIMETRES

K-2019

Part No.	Pattern Number	A	B	D	E	F	Proof Test Tons Kg	N.A.T.O. Number
086-2203	4000	$\frac{3}{8}$ 10	$\frac{3}{4}$ 19	$2\frac{1}{2}$ 63	$\frac{1}{4}$ 6	$1\frac{1}{2}$ 38	$1\frac{3}{4}$ 1778	5130
086-2221	4001	$\frac{1}{2}$ 13	1 25	$3\frac{1}{8}$ 79	$\frac{5}{16}$ 8	2 51	$3\frac{1}{8}$ 3175	5131
086-2249	4002	$\frac{5}{8}$ 16	$1\frac{1}{4}$ 32	$3\frac{3}{4}$ 95	$\frac{3}{8}$ 10	$2\frac{1}{2}$ 63	$4\frac{7}{8}$ 4953	5132
086-2267	4003	$\frac{3}{4}$ 19	$1\frac{1}{2}$ 38	$4\frac{1}{2}$ 114	$\frac{7}{16}$ 11	3 76	7 7112	5133
086-2285	4004	$\frac{7}{8}$ 22	$1\frac{3}{4}$ 44	$5\frac{1}{4}$ 133	$\frac{1}{2}$ 13	$3\frac{1}{2}$ 89	$9\frac{3}{16}$ 9716	5134
086-2301	4005	1 25	2 51	6 152	$\frac{5}{8}$ 16	4 102	$12\frac{1}{2}$ 12700	5135
086-2329	4006	$1\frac{1}{8}$ 29	$2\frac{1}{4}$ 57	$6\frac{3}{4}$ 171	$1\frac{1}{16}$ 18	$4\frac{1}{2}$ 114	$15\frac{3}{4}$ 16002	—
086-2347	4007	$1\frac{1}{4}$ 32	$2\frac{1}{2}$ 63	$7\frac{1}{2}$ 190	$\frac{3}{4}$ 19	5 127	$19\frac{1}{2}$ 19812	5136
086-2365	4008	$1\frac{3}{8}$ 35	$2\frac{3}{4}$ 70	$8\frac{1}{4}$ 210	$1\frac{3}{16}$ 21	$5\frac{1}{2}$ 140	$23\frac{5}{8}$ 24003	—
086-2383	4009	$1\frac{1}{2}$ 38	3 76	9 229	$\frac{7}{8}$ 22	6 152	$28\frac{1}{8}$ 28575	5137
086-2409	4010	$1\frac{5}{8}$ 41	$3\frac{1}{4}$ 83	$9\frac{3}{4}$ 248	1 25	$6\frac{1}{2}$ 165	33 33528	—
086-2427	4011	$1\frac{3}{4}$ 44	$3\frac{1}{2}$ 89	$10\frac{1}{2}$ 267	$1\frac{1}{16}$ 27	7 178	$38\frac{1}{4}$ 38862	—
086-2445	4012	$1\frac{7}{8}$ 48	$3\frac{3}{4}$ 95	$11\frac{1}{4}$ 286	$1\frac{1}{8}$ 29	$7\frac{1}{2}$ 190	44 44704	—
086-2463	4013	2 51	4 102	12 305	$1\frac{3}{16}$ 30	8 203	50 50800	—