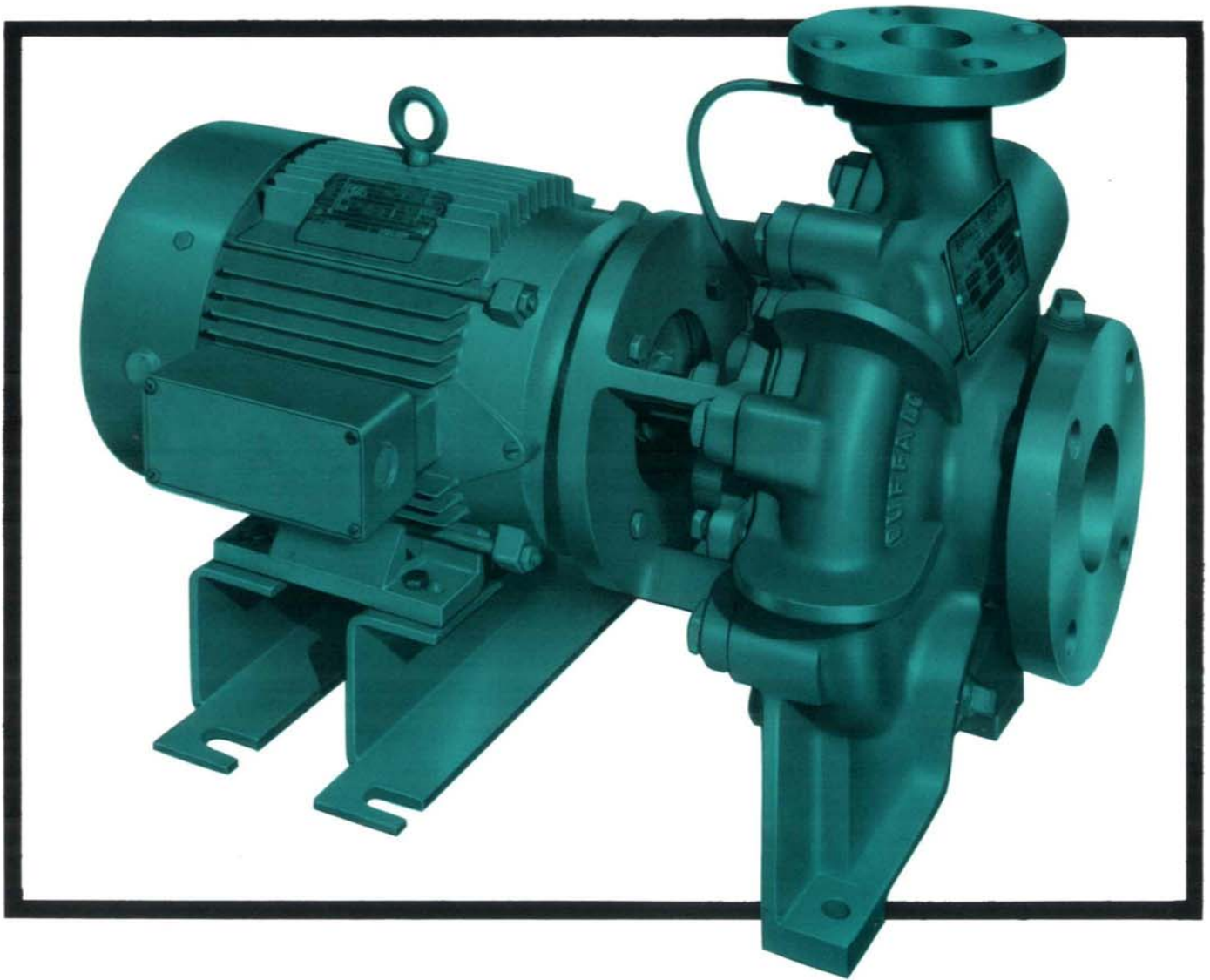


# close-coupled balanced thrust pumps



**CCRE standard dimension pumps**

WITH JP NEMA STANDARD DIMENSION MOTORS



# CCRE balanced thrust pumps

## general specifications

**CASING** — end suction • balanced axial and radial thrust volute • vertically split • center line up discharge • self venting • back pull out • foot mounted • 150 psi and 300 psi standard flanges.

**CASING COVER** — confined gasket at casing • rabbeted fit • packing or mechanical seals • sealing and/or flush connections provided • split glass filled teflon seal cage with packing • drip pan available.

**IMPELLER** — enclosed type • high efficiency • statically and hydraulically balanced • low NPSH design.

**WEARING RINGS** — renewable radial type • Carbon-graphite to maintain established radial running clearance of .006" to .008" at impeller.

**SHAFT** — JP Nema "C" face motor • sized for .002" maximum deflection at face of stuffing box • steel or 316SS to complement pump end.

**SHAFT SLEEVE** — renewable protection over motor shaft through stuffing box • bronze, 17-4 PH (310 Brinell hardness) or 316SS available.

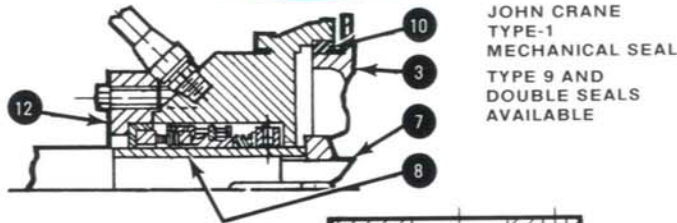
**GLAND** — solid smothering type with drain hole • stainless adjusting cap screws • split quench gland available • stainless gland collector available.

**ADAPTER** — spacer mounting bracket between motor and pump end • rabbeted fits provide positive alignment • open design permits easy access to stuffing box.

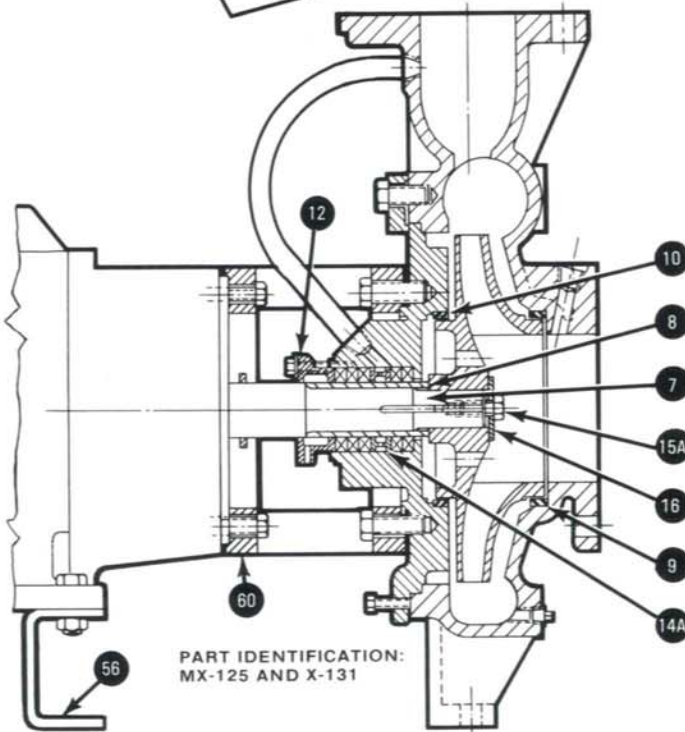
**BACK REMOVAL** — foot mounted casing combined with unique motor supports allows removal of motor and rotor **without** breaking pump casing from piping system.

### STANDARD PUMP GROUPS

GROUP	PUMP SIZES (Impeller)	MOTOR FRAME	SHAFT SLEEVE DIAM.
CCR-1	6", 8", 9", 10"	143 JP — 184 JP	1-3/8"
CCR-2	6" thru 13"	213 JP — 256 JP	1-7/8"
CCR-3	9", 10", 11", 13"	284 JP — 326 JP	1-7/8"
CCR-4	10", 11", 13"	364 JP — 365 JP	1-7/8"



JOHN CRANE  
TYPE-1  
MECHANICAL SEAL  
TYPE 9 AND  
DOUBLE SEALS  
AVAILABLE

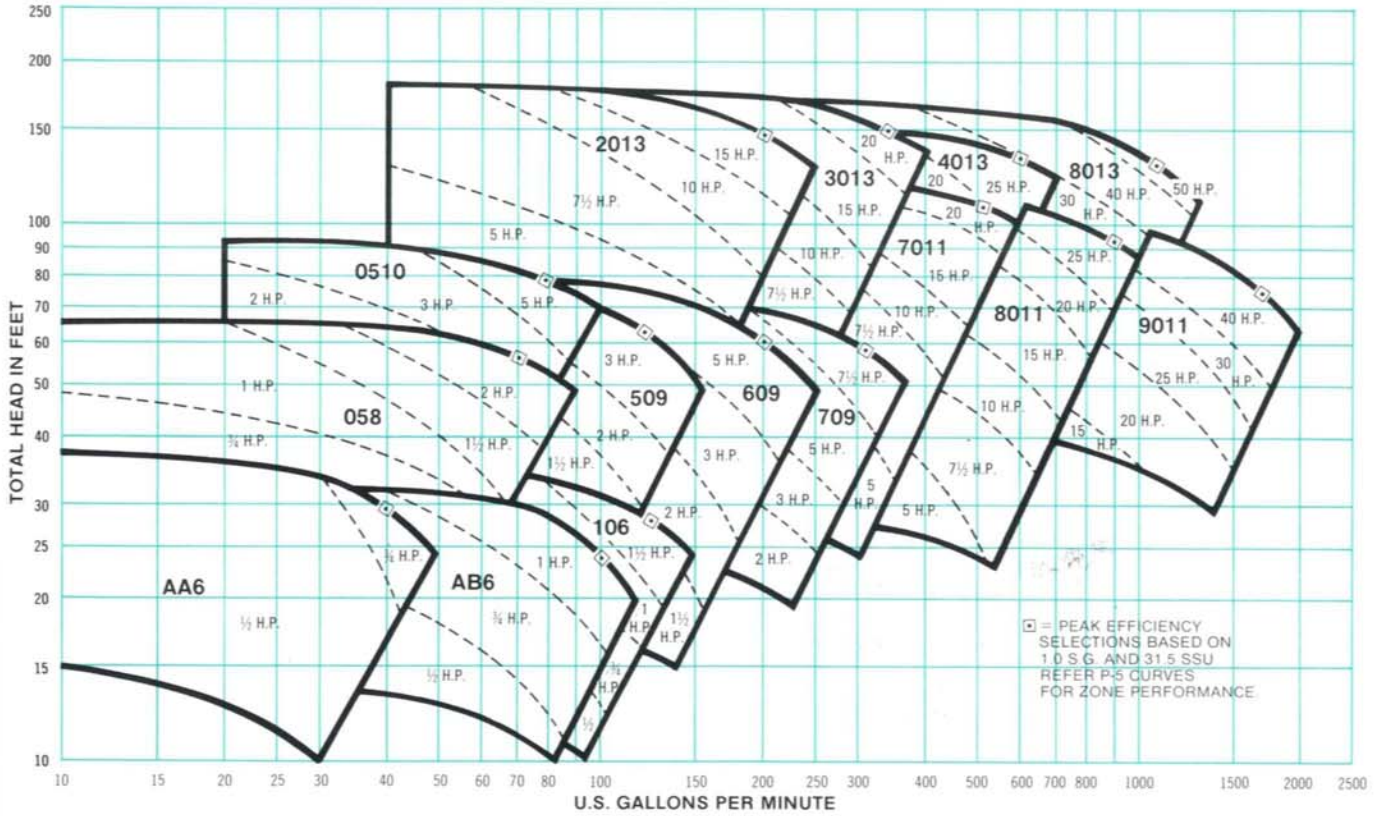


PART IDENTIFICATION:  
MX-125 AND X-131

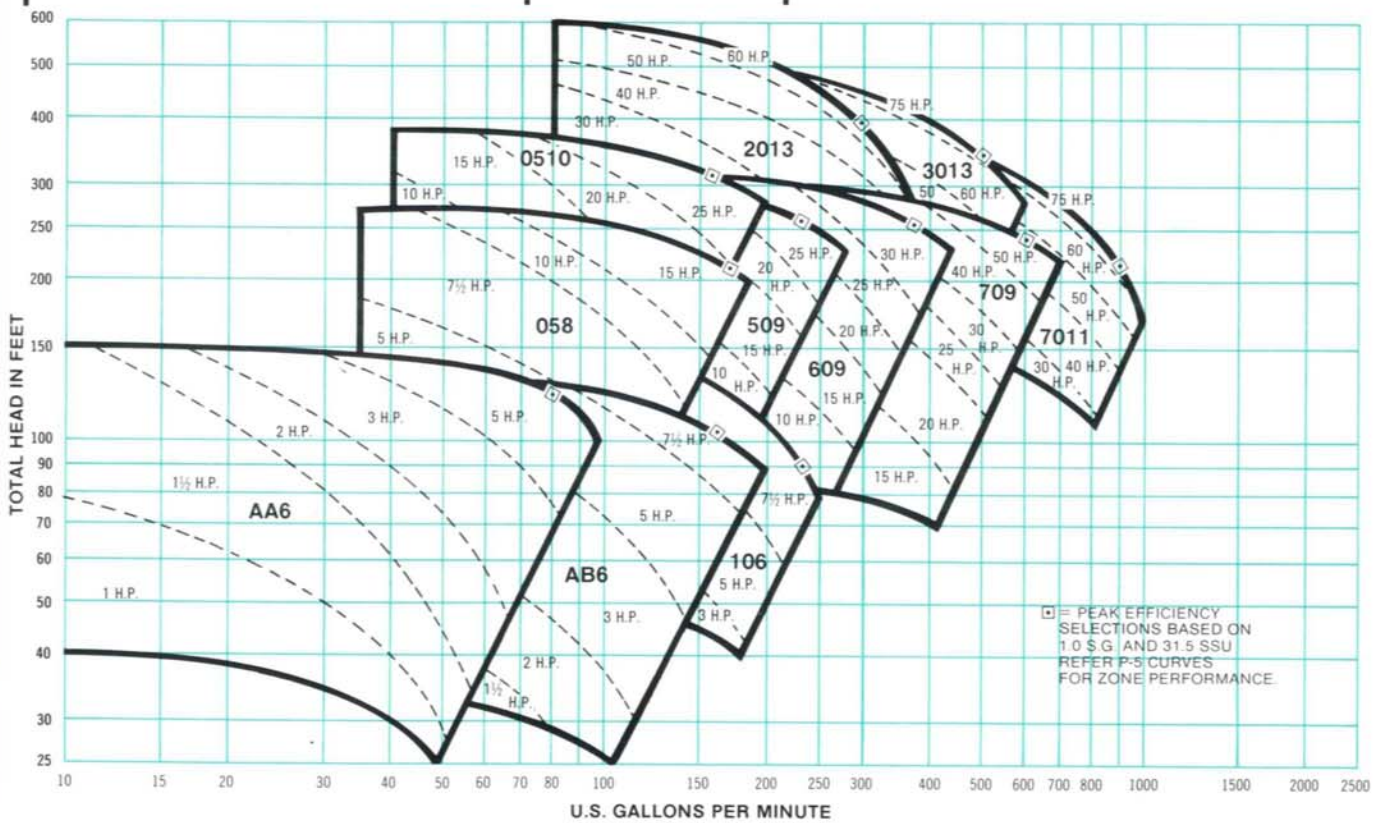
### MATERIALS OF CONSTRUCTION

PART NO.	PART NAME	BRONZE FITTED	CAST IRON	DUCTILE IRON	316 SS FITTED	ALL 316 SS
2	Casing		Cast Iron	D. Iron	Cast Iron	316 SS
3	Impeller	Bronze	Cast Iron		316 SS	
5	Casing Cover		Cast Iron	D. Iron	Cast Iron	316 SS
7	Motor Shaft		Steel		316 SS	
8	Shaft Sleeve	Bronze		17-4 PH*	316 SS	
9	Casing Ring			CARBON-GRAPHITE		
10	Casing Cover Ring			CARBON-GRAPHITE		
12	Gland		Cast Iron †		316 SS	
14A	Split Seal Cage			GLASS FILLED TEFLON		
15A	Impeller Lock Screw			316 SS		
16	Impeller Nut Washer			316 SS		
56	Back Removal Motor Blocks			STEEL		
60	Adapter			CAST IRON		
102A	Gland Screw			316 SS		
240	Bolt Lugs			Sintered Metal		

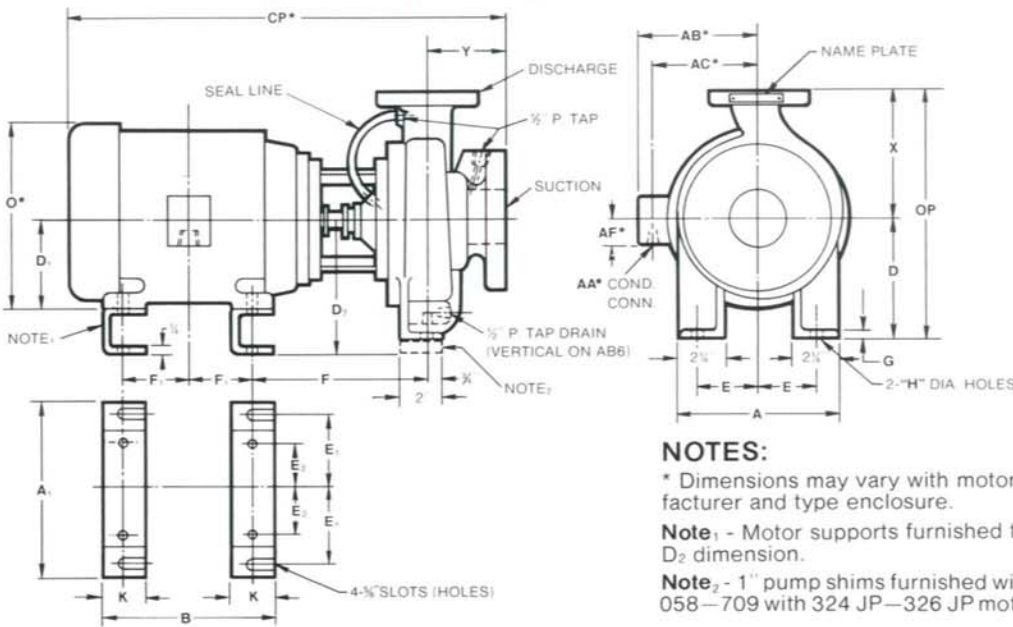
## performance / enclosed impeller 1750 rpm



## performance / enclosed impeller 3500 rpm



# close-coupled pumps / dimensions



### NOTES:

\* Dimensions may vary with motor manufacturer and type enclosure.

Note<sub>1</sub> - Motor supports furnished to maintain D<sub>2</sub> dimension.

Note<sub>2</sub> - 1" pump shims furnished with pump 058-709 with 324 JP-326 JP motors only.

### MOTOR DATA

FRAME	A <sub>1</sub>	B	D <sub>1</sub>	E <sub>1</sub>	E <sub>2</sub>	F <sub>1</sub>	K	O	AA	AB	AC	AF
143 JP	10 1/2	6	3 1/2	4 1/2	2 3/4	2	2	7 1/2	3/4	6 5/8	5 3/8	2 3/8
145 JP	10 1/2	7	3 1/2	4 1/2	2 3/4	2 1/2	2	7 1/2	3/4	6 5/8	5 3/8	2 3/8
182 JP	12	7	4 1/2	5 1/4	3 3/4	2 1/4	2 1/2	9 1/2	3/4	7 7/8	6 1/4	2 3/8
184 JP	12	8	4 1/2	5 1/4	3 3/4	2 1/4	2 1/2	9 1/2	3/4	7 7/8	6 1/4	2 3/8
213 JP	14	8 1/2	5 1/4	6 1/4	4 1/4	2 3/4	2 1/2	10 7/8	3/4	9 1/8	7 7/8	2 7/8
215 JP	14	10	5 1/4	6 1/4	4 1/4	3 1/2	2 1/2	10 7/8	3/4	9 1/8	7 7/8	2 7/8
254 JP	18 1/4	11 1/2	6 1/4	8 3/8	5	4 1/8	3 1/4	12 3/8	1 1/2	11 1/8	9	3 3/8
256 JP	18 1/4	13 1/4	6 1/4	8 3/8	5	5	3 1/4	12 3/8	1 1/2	11 1/8	9	3 3/8
284 JP	18 1/4	12 3/4	7	8 3/8	5 1/2	4 3/4	3 1/4	14 3/8	1 1/2	12 1/4	9 1/8	3 3/8
286 JP	18 1/4	14 1/4	7	8 3/8	5 1/2	5 1/2	3 1/4	14 3/8	1 1/2	12 1/4	9 1/8	3 3/8
324 JP	18 1/4	13 3/4	8	8 3/8	6 1/4	5 1/4	3 1/4	16 1/2	1 1/2	13 1/4	10 1/8	3 3/8
326 JP	18 1/4	15 1/4	8	8 3/8	6 1/4	6	3 1/4	16 1/2	1 1/2	13 1/4	10 1/8	3 3/8
364 JP	20 1/2	14 3/4	9	9 1/2	7	5 3/8	3 1/2	18 3/8	2 1/2	18 3/8	13 3/4	7
365 JP	20 1/2	15 3/4	9	9 1/2	7	6 1/8	3 1/2	18 3/8	2 1/2	18 3/8	13 3/4	7

### SUCTION & DISCHARGE

Size	FLANGE DIMENSIONS STANDARD PRESSURE						
	1	1 1/2	2	3	4	6	8
Outside Diameter	4 1/4	5	6	7 1/2	9	11	13 1/2
Thickness	3/8	1/2	3/4	1 1/8	1 1/2	1 3/4	2 1/8
No. & Size of Bolts (Straddling C)	4-1/2	4-1/2	4-5/8	4-5/8	8-5/8	8-3/4	8-3/4
Bolt Circle	3 3/8	3 3/8	4 3/4	6	7 1/2	9 1/2	11 3/4

### PUMP DATA

PUMP SIZE	SUCT. & DISCH.	A	D	E	G	H	X	Y	OP
AA6	1 1/2 x 1	8	5 1/4	3	3/8	3/8	6 1/2	4	11 3/4
AB6	3 x 1 1/2	8	5 1/4	3	3/8	3/8	6 1/2	4	11 3/4
106X	3 x 2	8	5 1/4	3	3/8	3/8	8 1/4	4	13 1/2
058	2 x 1	11 3/4	8 1/4	4 7/8	5/8	5/8	8 1/2	4	16 3/4
0510	2 x 1	11 3/4	8 1/4	4 7/8	5/8	5/8	8 1/2	4	16 3/4
509	3 x 1 1/2	11 3/4	8 1/4	4 7/8	5/8	5/8	8 1/2	4	16 3/4
609	3 x 2	11 3/4	8 1/4	4 7/8	5/8	5/8	9 1/2	4	17 1/4
709	4 x 3	11 3/4	8 1/4	4 7/8	5/8	5/8	11	4	19 1/4
5011	3 x 1 1/2	11 3/4	10	4 7/8	5/8	5/8	10 1/2	4	20 1/2
6011	3 x 2	11 3/4	10	4 7/8	5/8	5/8	11 1/2	4	21 1/2
7011	4 x 3	11 3/4	10	4 7/8	5/8	5/8	12 1/2	4	22 1/2
8011	6 x 4	11 3/4	10	4 7/8	5/8	5/8	13 1/2	4	23 1/2
9011	8 x 6	14	10	6	5/8	5/8	13 1/2	6	23 1/2
2013	3 x 1 1/2	11 3/4	10	4 7/8	5/8	5/8	10 1/2	4	20 1/2
3013	3 x 2	11 3/4	10	4 7/8	5/8	5/8	11 1/2	4	21 1/2
4013	4 x 3	11 3/4	10	4 7/8	5/8	5/8	12 1/2	4	22 1/2
8013	6 x 4	14	10	6	5/8	5/8	13 1/2	4	23 1/2

### OVERALL DIMENSIONS

FRAME	AA6-106X		058-709			5011-8011		9011		2013-8013		
	D <sub>2</sub>	F	CP	D <sub>2</sub>	F	CP	F	CP	F	CP	F	CP
143 JP	5 1/4	9 1/16	22 3/4	8 1/4	9 1/16	23 5/8						
145 JP	5 1/4	9 1/16	22 3/4	8 1/4	9 1/16	23 5/8						
182 JP	5 1/4	10 1/16	23 3/8	8 1/4	10 1/16	24 3/8						
184 JP	5 1/4	10 1/16	24 3/8	8 1/4	10 1/16	25 3/8						
213 JP	8 1/4	12 3/16	27	8 1/4	12 3/16	27	12 3/16	27	12 3/16	29	12 3/16	27
215 JP	8 1/4	12 3/16	28 1/2	8 1/4	12 3/16	28 1/2	12 3/16	28 1/2	12 3/16	30 1/2	12 3/16	28 1/2
254 JP	8 1/4	12 11/16	31 3/8	8 1/4	12 11/16	31 3/8	12 11/16	31 3/8	12 11/16	33 3/8	12 11/16	31 3/8
256 JP	8 1/4	12 11/16	33 3/8	8 1/4	12 11/16	33 3/8	12 11/16	33 3/8	12 11/16	35 3/8	12 11/16	33 3/8
284 JP				8 1/4	12 11/16	33	12 11/16	33	12 11/16	35	12 11/16	33
286 JP				8 1/4	12 11/16	34 1/2	12 11/16	34 1/2	12 11/16	36 1/2	12 11/16	34 1/2
324 JP				9 1/4	13 3/16	35 1/2	13 3/16	35 1/2	13 3/16	37 1/2	13 3/16	35 1/2
326 JP				9 1/4	13 3/16	36 7/8	13 3/16	36 7/8	13 3/16	38 7/8	13 3/16	36 7/8
364 JP							13 13/16	38 3/8	13 13/16	40 3/8	13 13/16	38 3/8
365 JP							13 13/16	39 3/8	13 13/16	41 3/8	13 13/16	39 3/8

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