

1. All dimensions are in inches and may vary ±3/8".

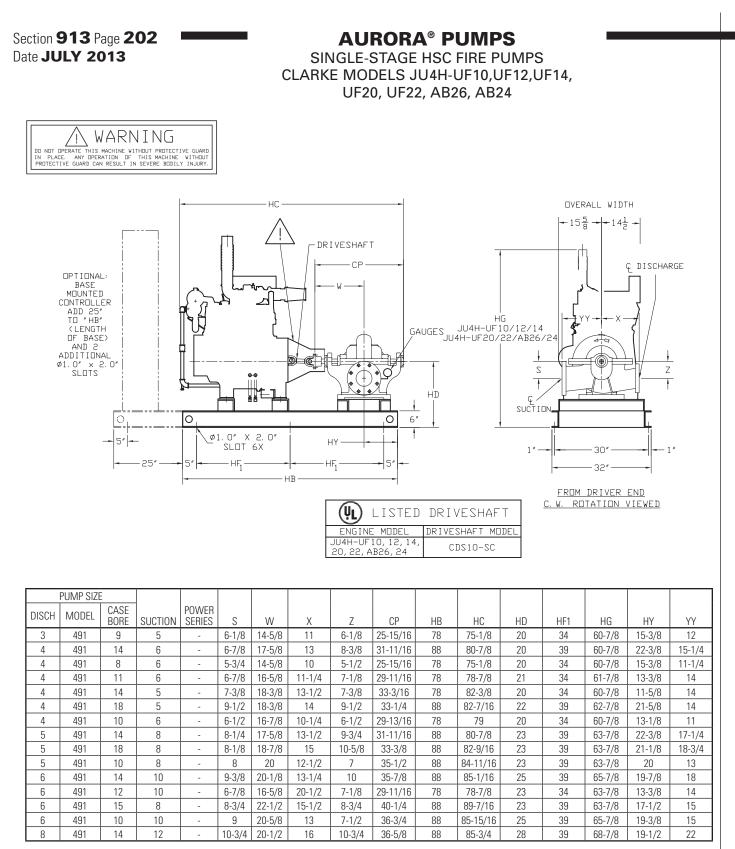
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.25" ± 0.08 inches vertically above the pump shaft and 0.00" ± 0.08 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Refer to individual engine dimension print for reference point used to determine engine overall length.





1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

 Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

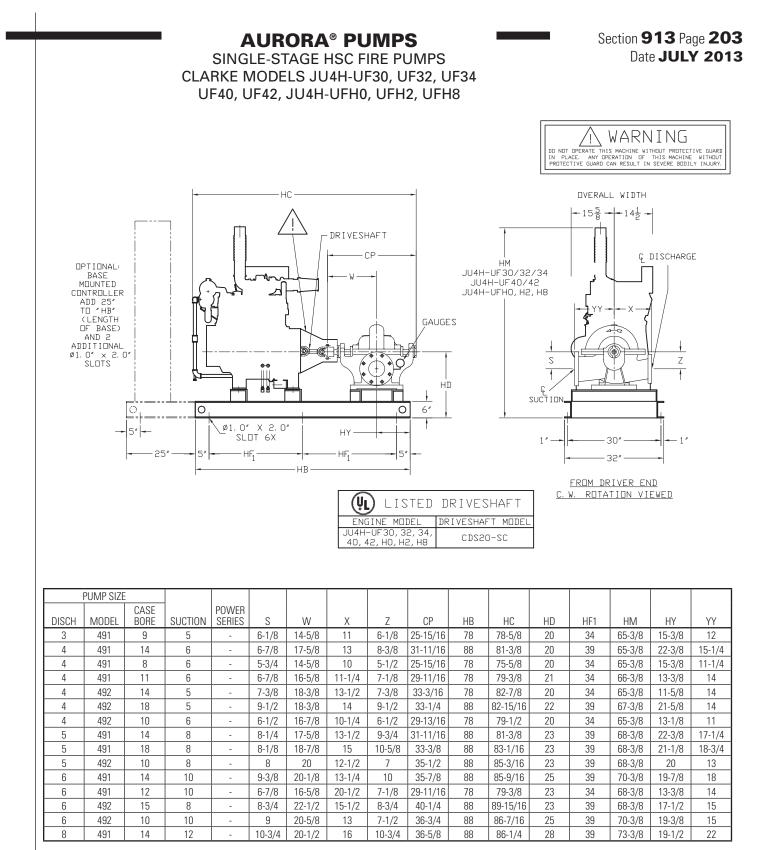
3. All bases are required to be completely filled with grout.

 Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.25"±0.09 inches vertically above the pump shaft and 0.00"±0.09 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.





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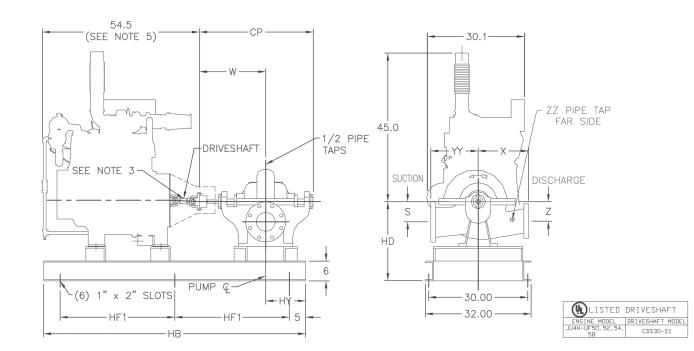
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AURORA® 481 PUMPS SINGLE-STAGE FIRE PUMPS CLARKE MODELS JU4H-UF50, UF52, UF54, UF58





DISCH	PUMP SIZE	CASE BORE	SUCTION	POWER SERIES	S	W	Х	Z	СР	YY	ZZ	HB	HD	HF1	НҮ
2-1/2	481	10B	3	2	4	13-1/2	9-3/4	4	24	10	1-1/4	78	20	34	16-1/2
3	481	10	4	2	4-1/2	13-1/2	10	4-1/2	24	11	1-1/4	78	20	34	16-1/2
4	481	11/A/C	5	3	5	14-1/2	11-1/4	5	26	12-3/4	1-1/4	78	20	34	15-1/2
4	481	11D	5	3	5	14-1/2	12	5	26	12-3/4	1-1/4	78	20	34	15-1/2
4	481	15	5	3	5-1/2	14-1/2	13	5-1/2	26	14	1-1/4	78	20	34	15-1/2
5	481	11	6	4	5-1/2	16	11-1/4	5-1/2	28-1/2	13-1/4	1-1/4	78	20	34	14
5	481	15/A	6	4	6-1/4	16	13-1/4	6-1/4	28-1/2	15	1-1/4	78	20	34	14
5	481	17	6	4	6-1/4	16	14	6-1/4	28-1/2	15	1-1/4	78	20	34	14
6	481	11	8	4	6-1/4	16	11-3/4	6-1/4	28-1/2	14-1/2	1-1/4	78	21	34	14
6	481	11HH	8	-	8-5/8	18-1/8	10	8-5/8	32-7/8	15	1-1/4	78	23	34	11-7/8
6	481	14HH	8	-	7-1/2	20-7/16	15	7-1/2	36-3/4	17	1-1/4	88	23	39	19-9/16
6	481	15	8	5	6-3/4	18	14-1/4	6-3/4	32	16-3/4	1-1/4	78	21	34	12
6	481	18	8	5	8	18	16	8	32	18	1-1/4	78	22	34	12
6	481	20	8	5	8	18	15-3/4	8	32	18	1-1/4	78	22	34	12
8	481	12	10	5	8	18	17	9	32	17-3/4	1-1/4	78	24	34	12
8	481	17	10	5	8	18	17	8	32	17-3/4	2	78	24	34	12

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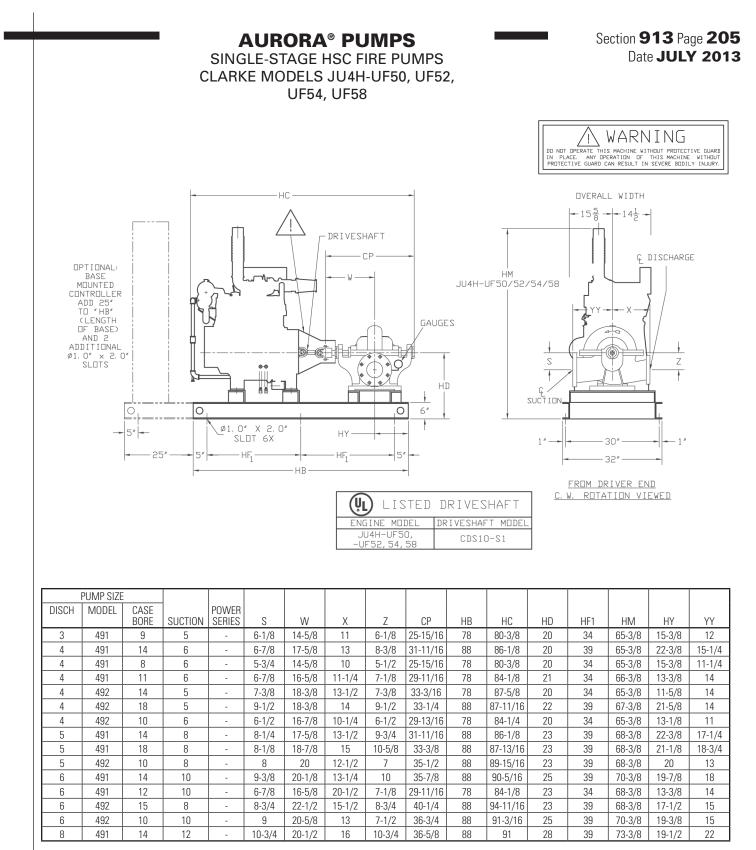
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.35" ± 0.10 inches vertically above the pump shaft and 0.00" ± 0.10 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Refer to individual engine dimension print for reference point used to determine engine overall length.



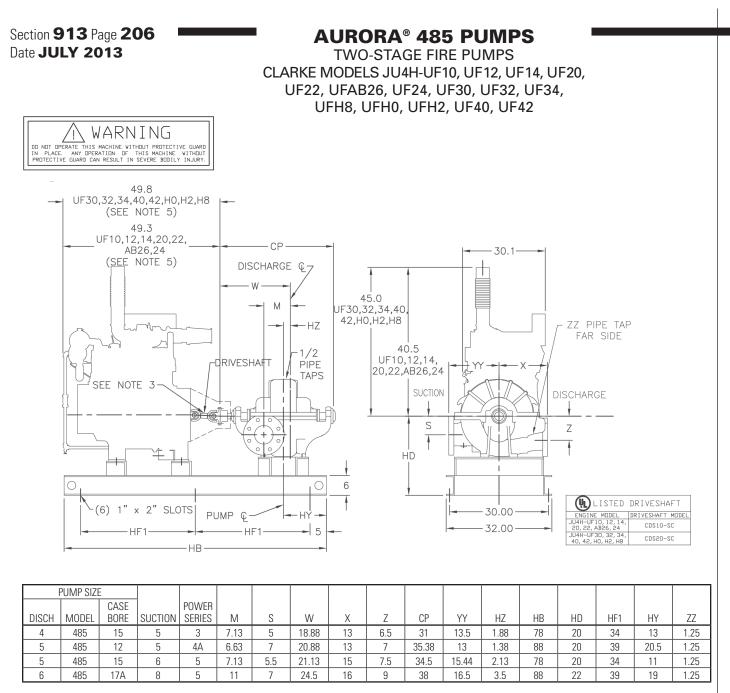


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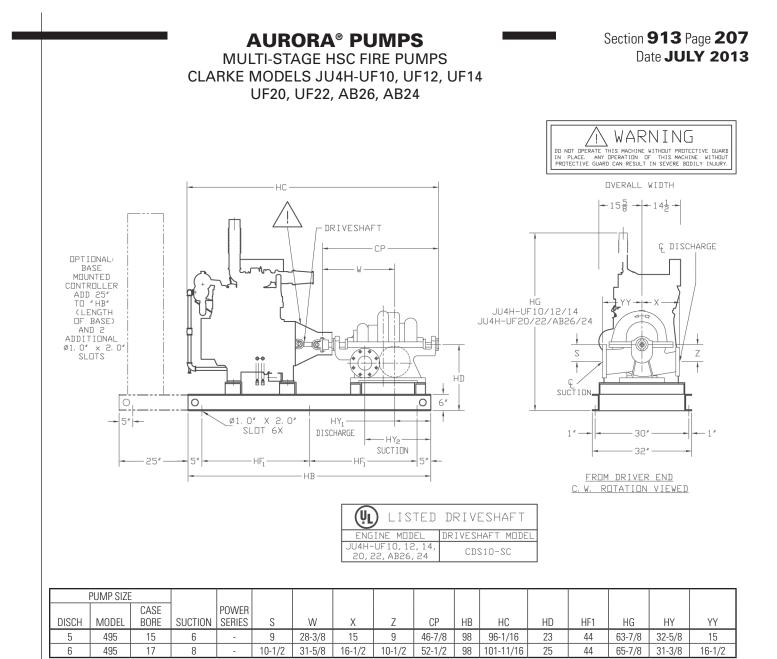
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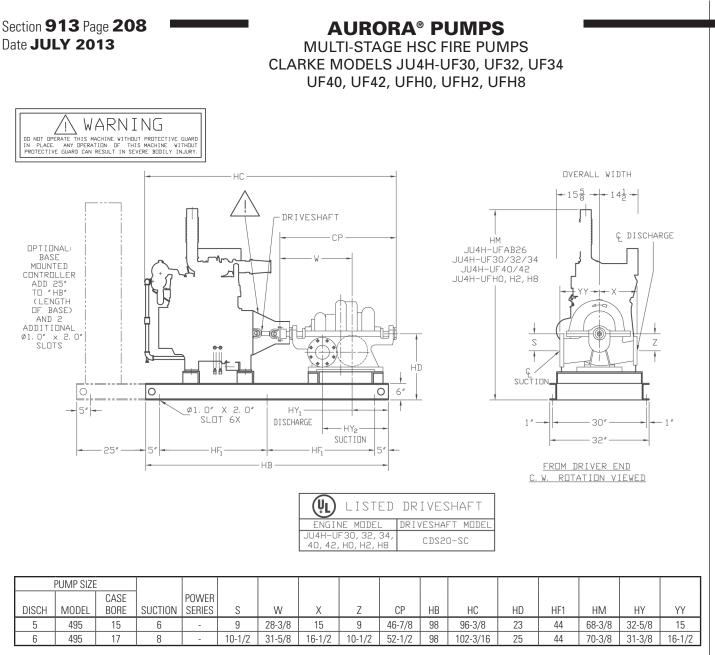
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AURORA[®]



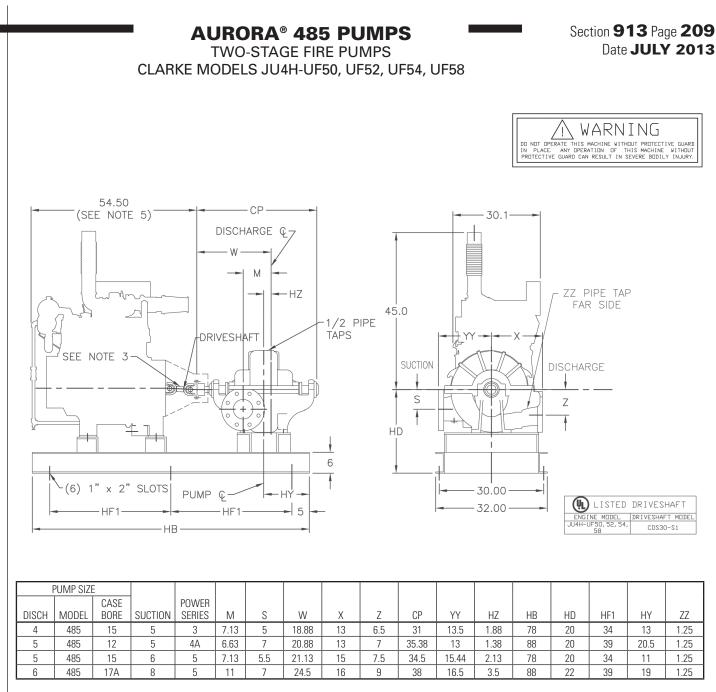
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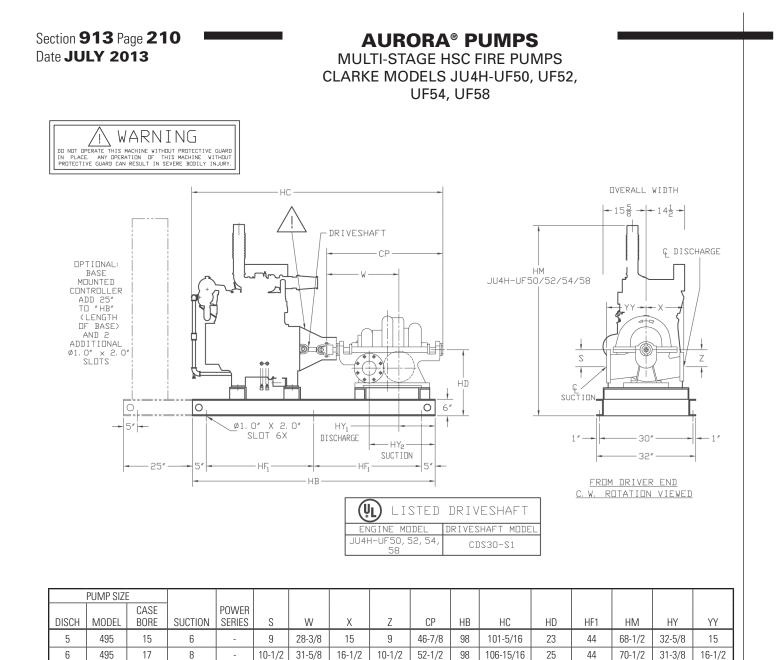
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PENTAIR

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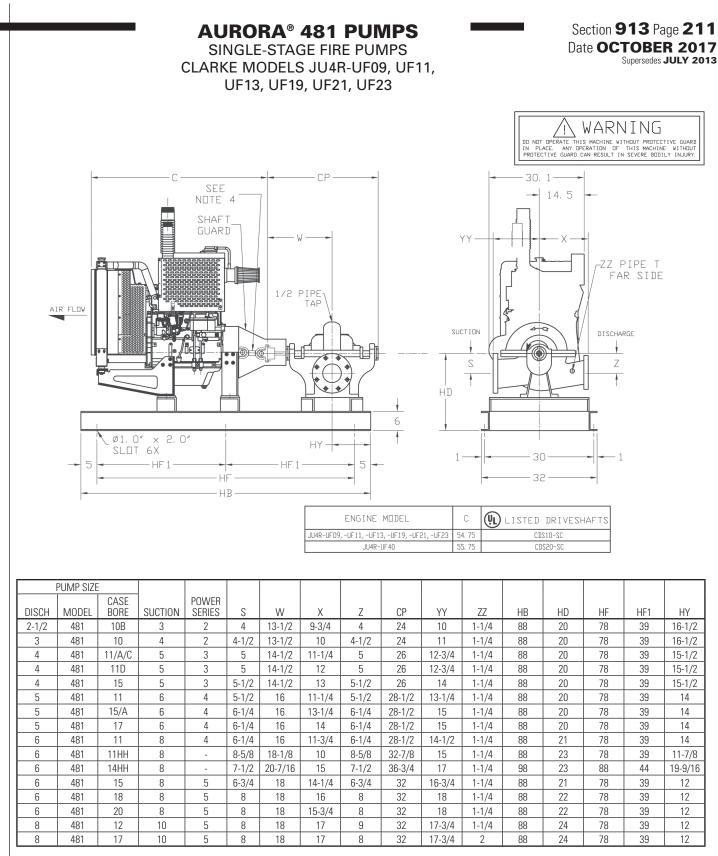
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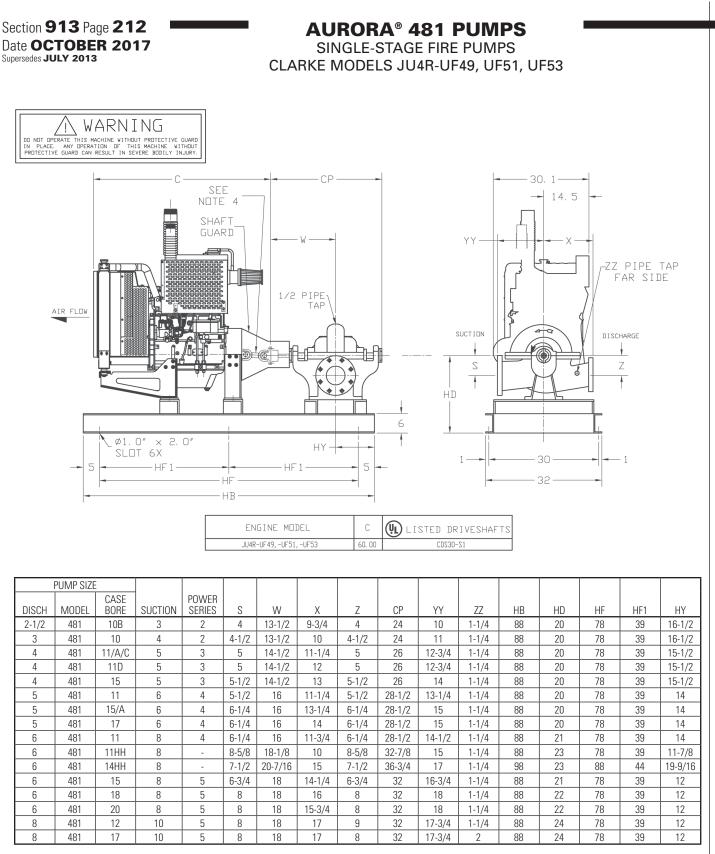
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5. Pump suction and discharge flanges are ANSI Standard flat face.

 Refer to individual engine dimension print for reference point used to determine "C" dimension.





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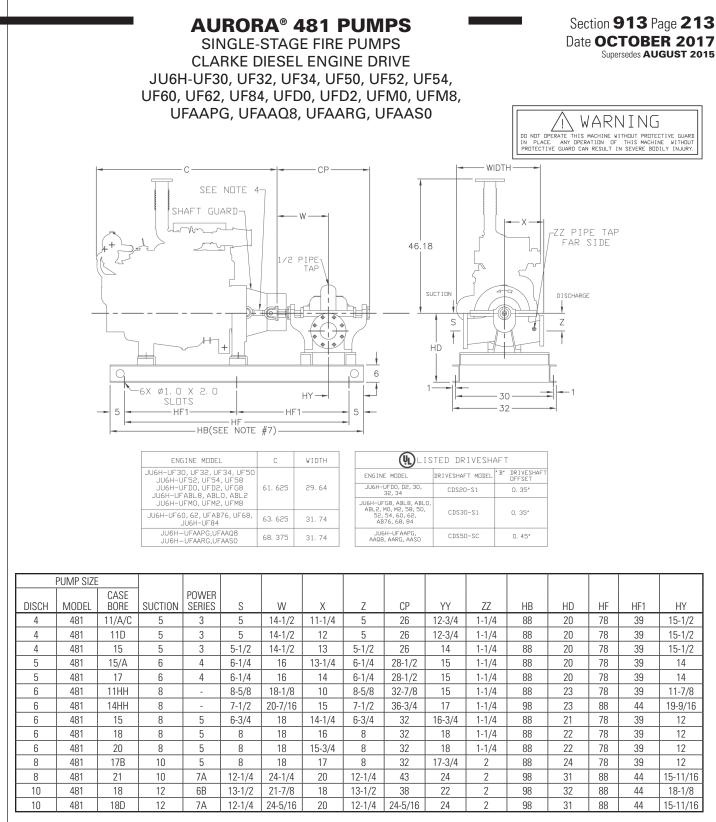
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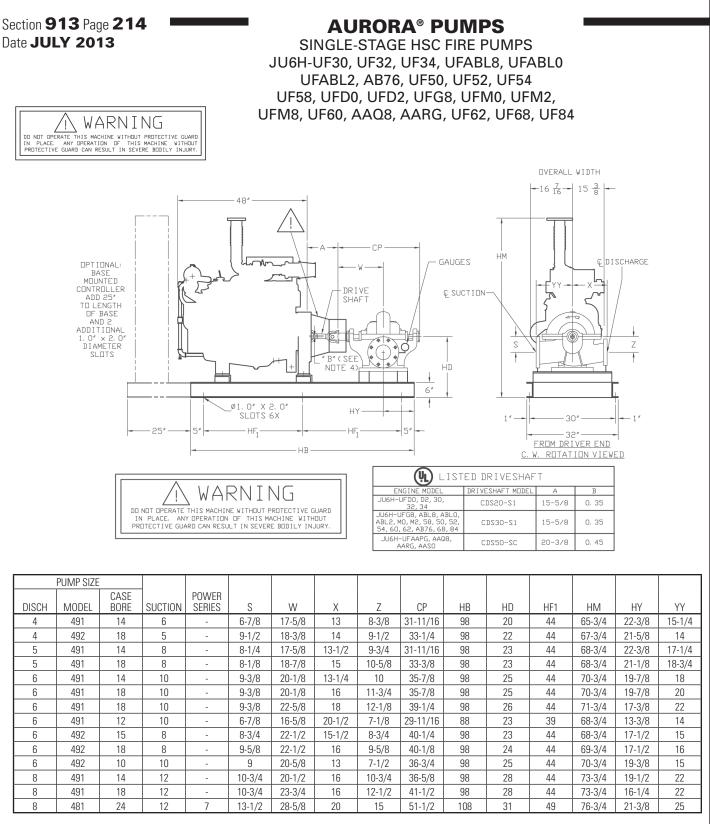
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4. Pump suction and discharge flanges are ANSI Standard flat face.

 Refer to individual engine dimension print for reference point used to determine engine overall length.

6. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



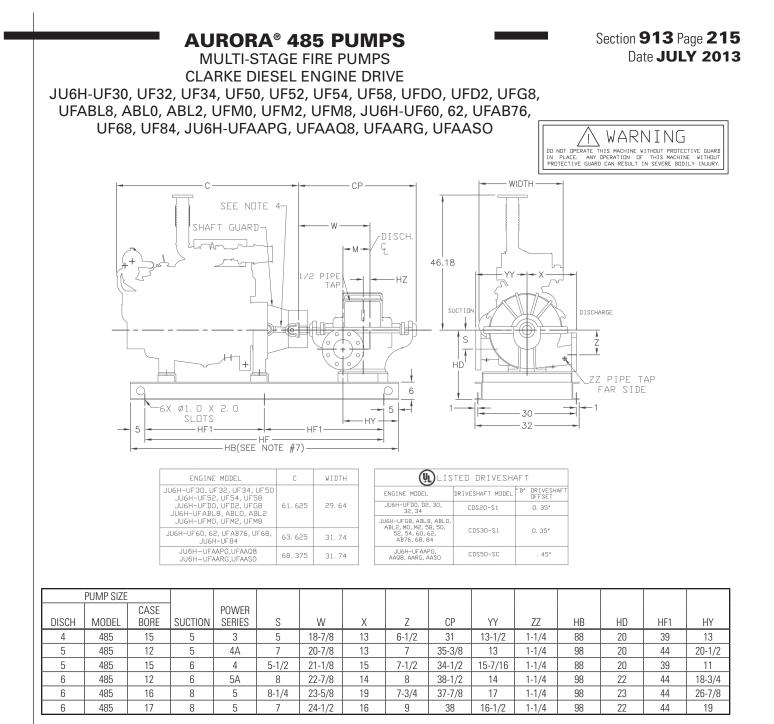
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PENTAIR

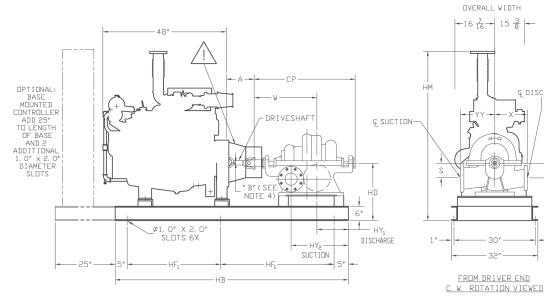
AURORA[®]

Section 913 Page 216 Date JULY 2013

AURORA® PUMPS

MULTI-STAGE HSC FIRE PUMPS JU6H-UF30, UF32, UF34, ABL8, ABL0 ABL2, AB76, UF50, UF52, UF54, UF58, UFD0, UFD2, UFG8, UFM0, UFM2, UFM8, UF60, AAPG, AAS0, AAQ8, AARG, UF62, UF68, UF84





LISTED DRIVESHAFT												
ENGINE MODEL	DRIVESHAFT MODEL	A	В									
JU6H-UFDO, D2, 30, 32, 34	CDS20-S1	15-5/8	0.35									
JU6H-UFG8, ABL8, ABL0, ABL2, M0, M2, 58, 50, 52, 54, 60, 62, AB76, 68, 84	CDS30-S1	15-5/8	0.35									
JU6H-UFAAPG, AAQ8, AARG, AASO	CDS50-SC	20-3/8	0.45									

	PUMP SIZE															
DISCH	MODEL	CASE BORE	SUCTION	POWER SERIES	S	W	Х	Z	СР	HB	HD	HF1	НM	YY	HY1	HY2
5	495	15	6	-	9	28-3/8	15	9	46-7/8	108	23	49	68-3/4	15	21-5/8	32-5/8
6	495	17	8	-	10-1/2	31-5/8	16-1/2	10-1/2	52-1/2	108	25	49	70-3/4	16-1/2	18-3/8	31-3/8

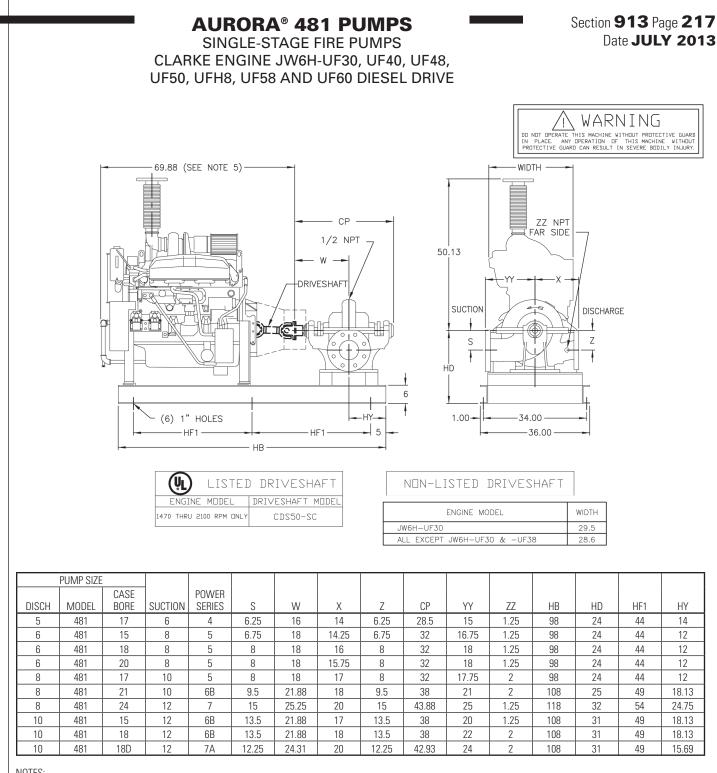
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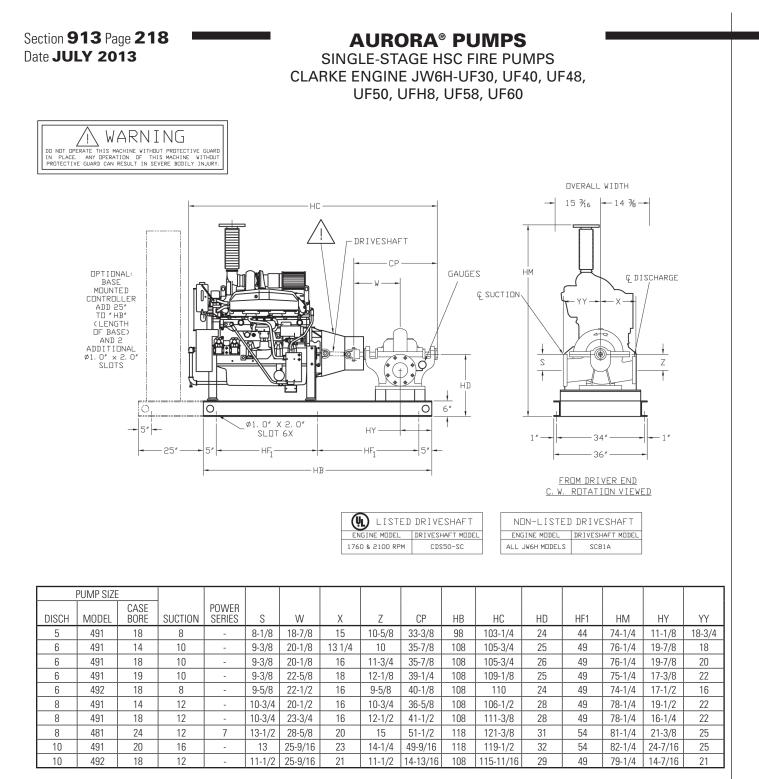
Ç DISCHARGE



NOTES:

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- Pump suction and discharge flanges are ANSI Standard flat face. 4.
- Refer to individual engine dimension print for reference point used to determine 5. engine overall length.
- 6. Left-hand (counterclockwise) rotation is not available.

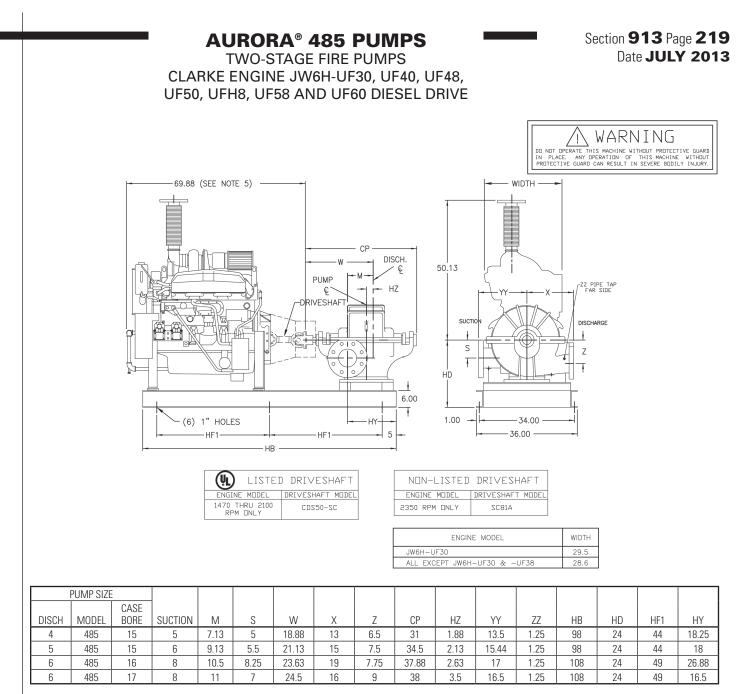




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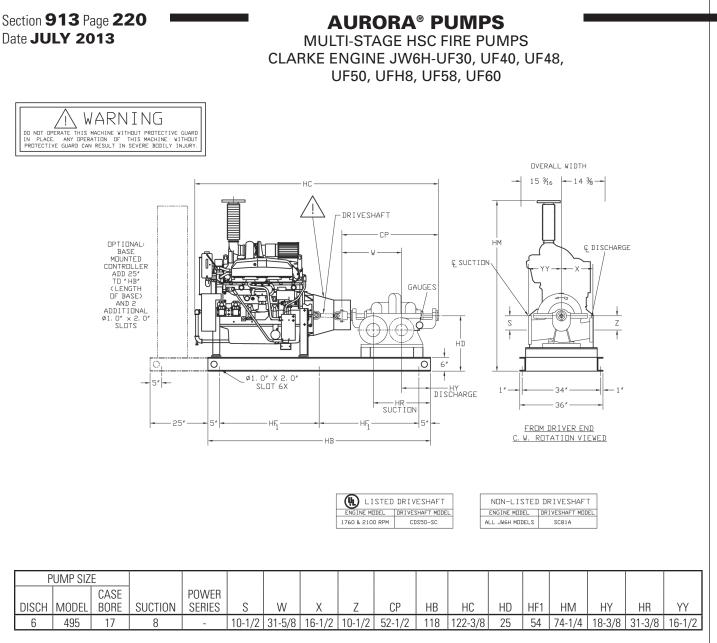
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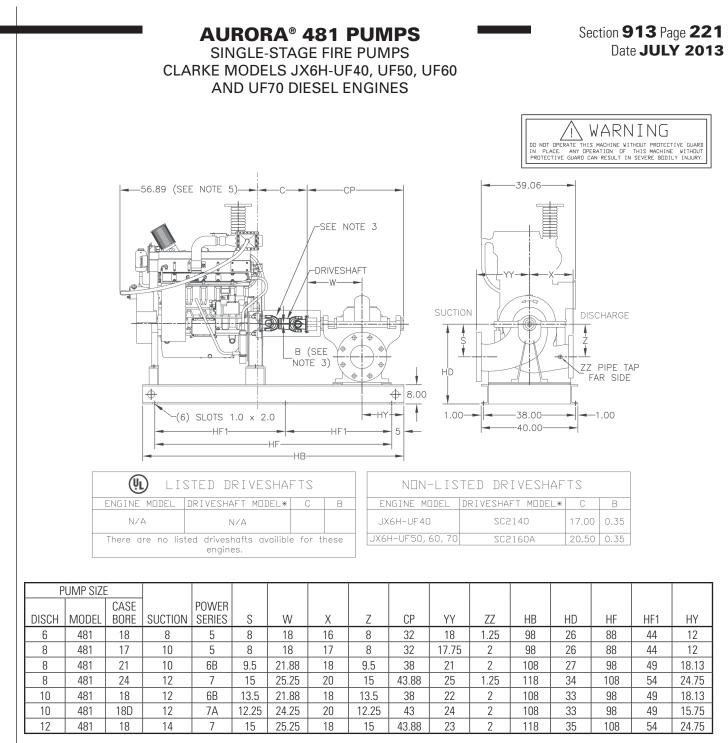


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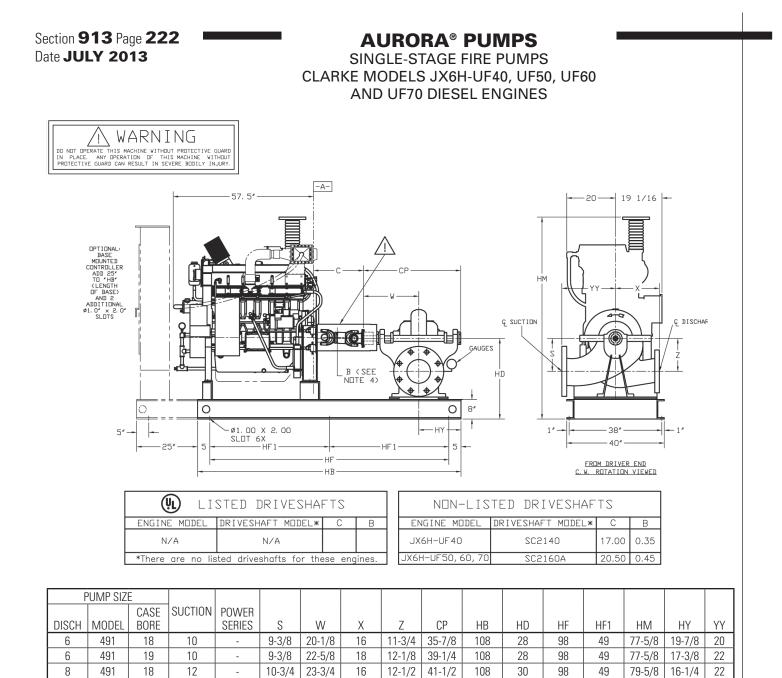
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AURORA[®]



8

10

10

481

491

492

24

20

18

1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 5.25.

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12

16

12

7

13-1/2

13

11-1/2

28-5/8

25-9/16

25-9/16

20

23

21

Dimensions shown are typical and may vary due to various to
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CAUTION:

51-1/2

49-9/16

45-13/16

118

118

118

33

35

31

15

14-1/4

11-1/2

The driveshaft is designed to operate at a 0° angle. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.12 inches above the pump shaft. The engine crankshaft may be parallel offset from the pump shaft 0.45" left or right. Refer to the engine manual for alignment instructions.

108

108

108

54

54

54

82-5/8

84-5/8

80-5/8

21-3/8

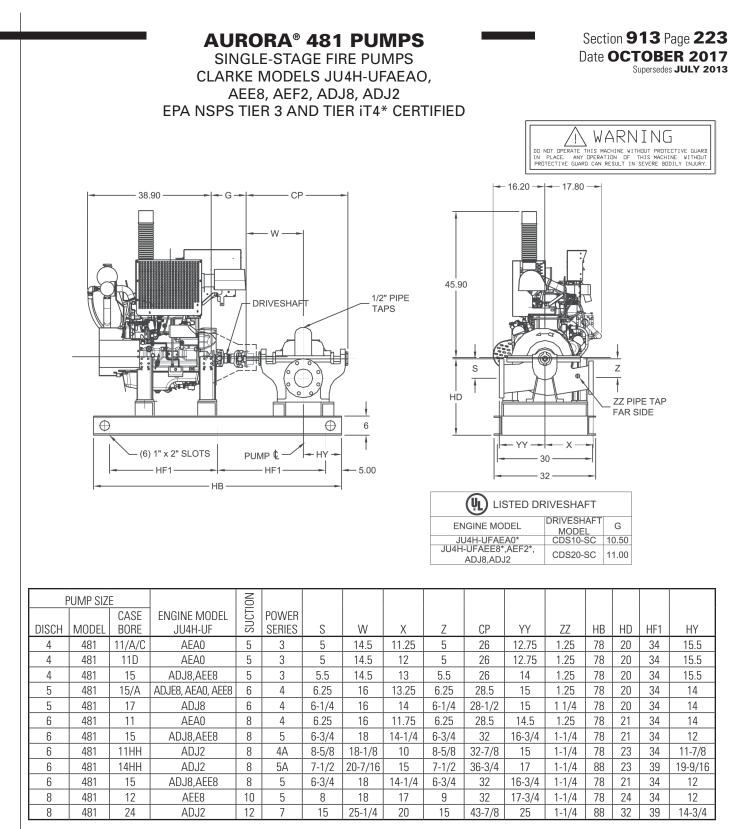
24-7/16

24-7/16

25

25

21



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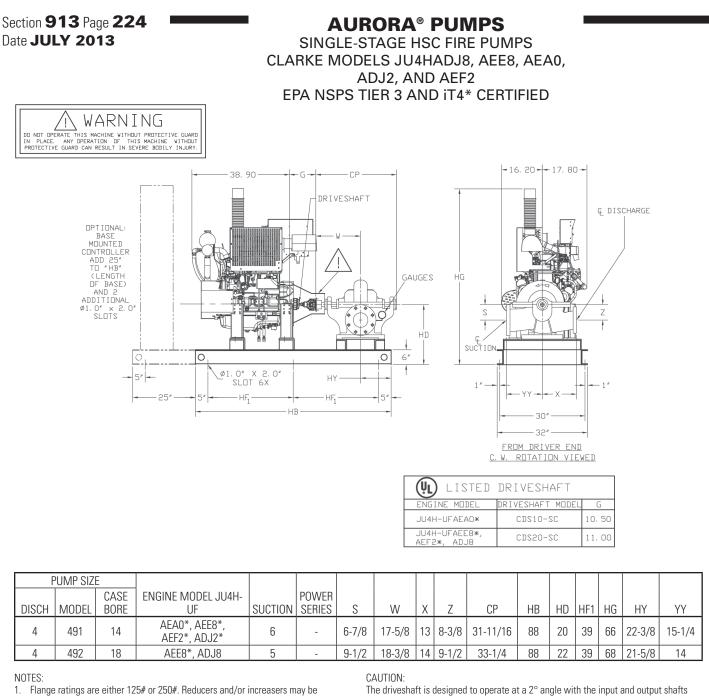
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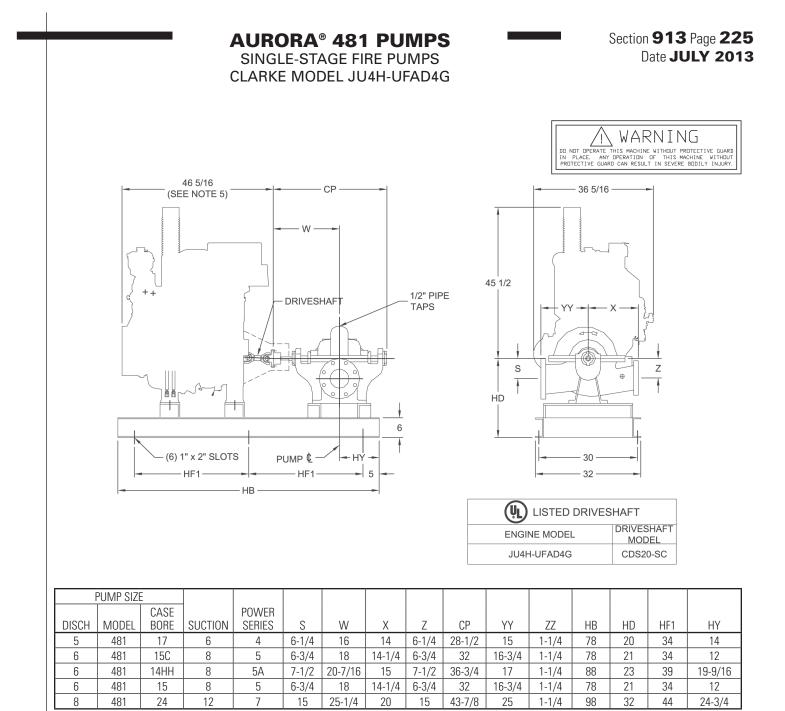
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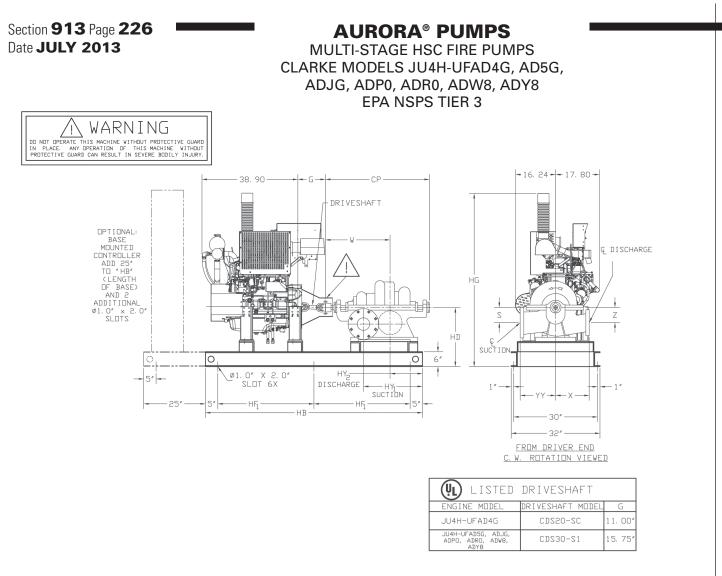
3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.25" ± 0.08 inches vertically above the pump shaft and 0.00" ± 0.08 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Refer to individual engine dimension print for reference point used to determine engine overall length.

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	PUMP SIZE		ENGINE														
DISCH	MODEL	CASE BORE	MODEL JU4H-UF	SUCTION	POWER SERIES	S	W	Х	Z	СР	HB	HD	HF1	HG	HY1	HY2	YY
5	495	15	ADY8	6	-	9	28-3/8	15	9	46-7/8	98	23	44	69	32-5/8	21-5/8	15

CAUTION:

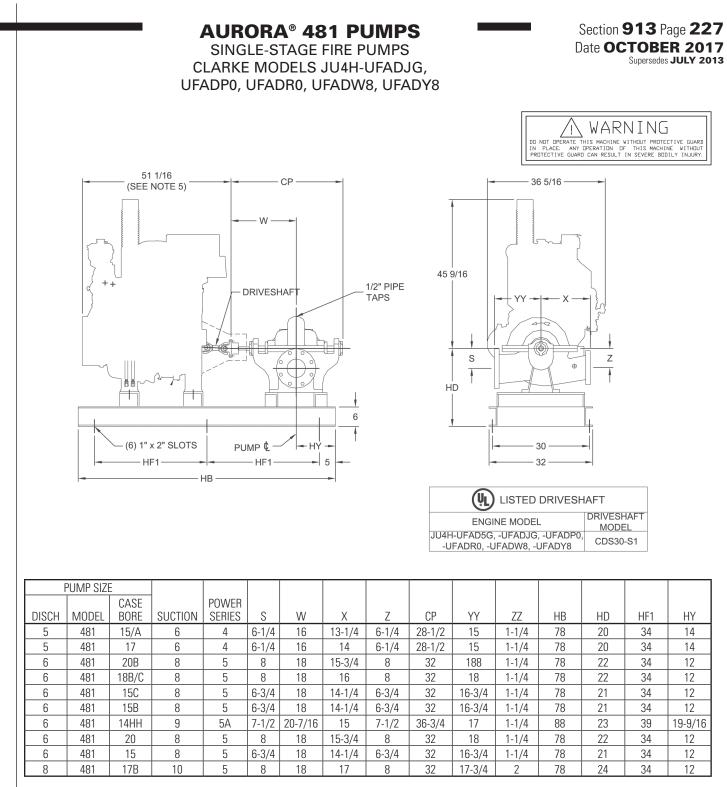
The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.25^{\circ} \pm 0.08$ inches vertically above the pump shaft and $0.00^{\circ} \pm 0.08$ inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.

^{1.} Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

^{3.} All bases are required to be completely filled with grout.

^{4.} Unit installation and final driveshaft alignment must be done by the installing contractor.

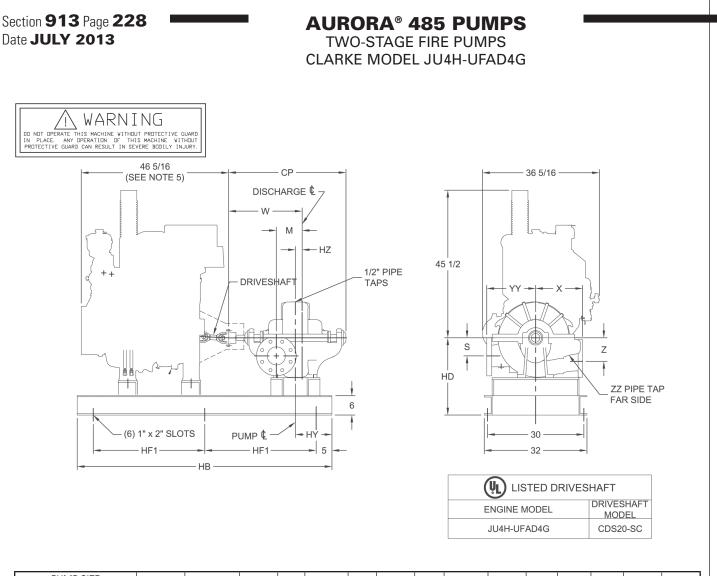


2. Not for construction purposes, unless certified.

- 3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.35" \pm 0.10$ inches vertically above the pump shaft and $0.00" \pm 0.10$ inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.
- 4. Pump suction and discharge flanges are ANSI Standard flat face.
- 5. Refer to individual engine dimension print for reference point used to determine engine overall length.
- 6. Left-hand (counterclockwise) rotation is not available.



^{1.} All dimensions are in inches and may vary ± .38.



l	PUMP SIZE																	
			CASE		POWER													
	DISCH	MODEL	BORE	SUCTION	SERIES	М	S	W	Х	Z	СР	YY	ΗZ	HB	HD	HF1	HY	ZZ
[4	485	15	5	3	7-1/8	5	18-7/8	13	6-1/2	31	13-1/2	1-7/8	78	20	34	13	1-1/4

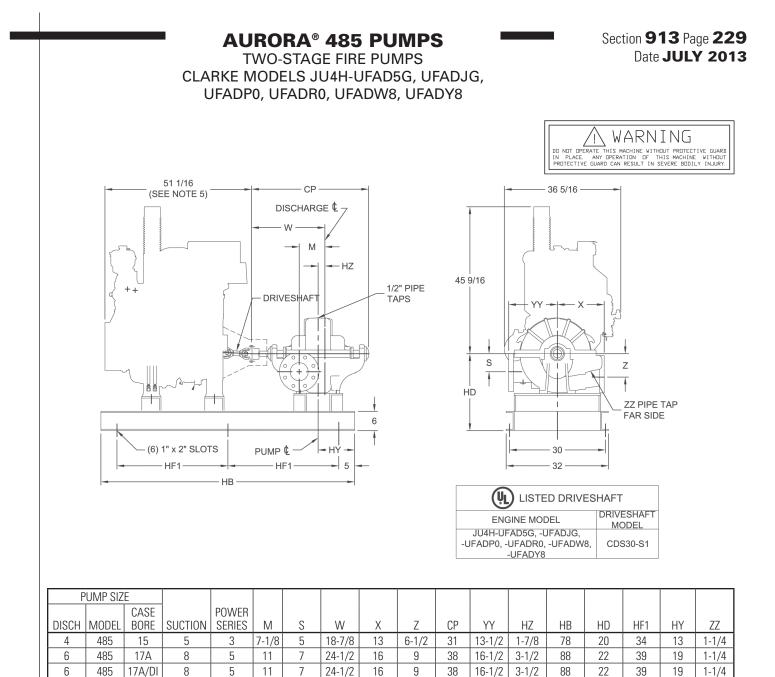
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.25" ± 0.08 inches vertically above the pump shaft and 0.00" ± 0.08 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Refer to individual engine dimension print for reference point used to determine engine overall length.

^{1.} All dimensions are in inches and may vary ± .38.



1. All dimensions are in inches and may vary ± .38.

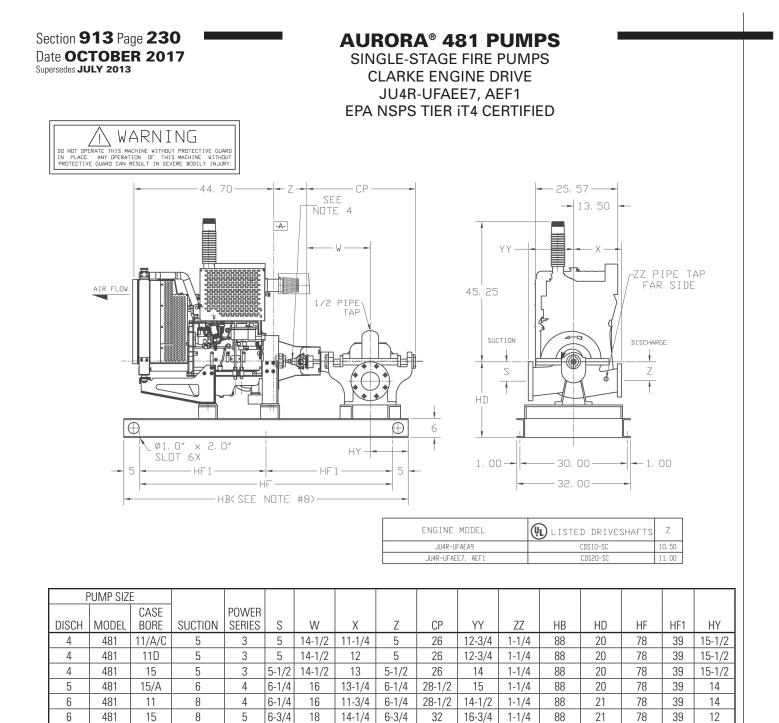
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.35" \pm 0.10$ inches vertically above the pump shaft and $0.00" \pm 0.10$ inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

 Refer to individual engine dimension print for reference point used to determine engine overall length.





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1. All dimensions are in inches and may vary ±3/8".

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- 2. Not for construction purposes, unless certified.
- 3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.25" ± 0.08 inches vertically above the pump shaft and 0.00" ± 0.08 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

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18

17

9

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17-3/4

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4. Pump suction and discharge flanges are ANSI Standard flat face.

1-1/4

5. Refer to individual engine dimension print for reference point used to determine "C" dimension.

88

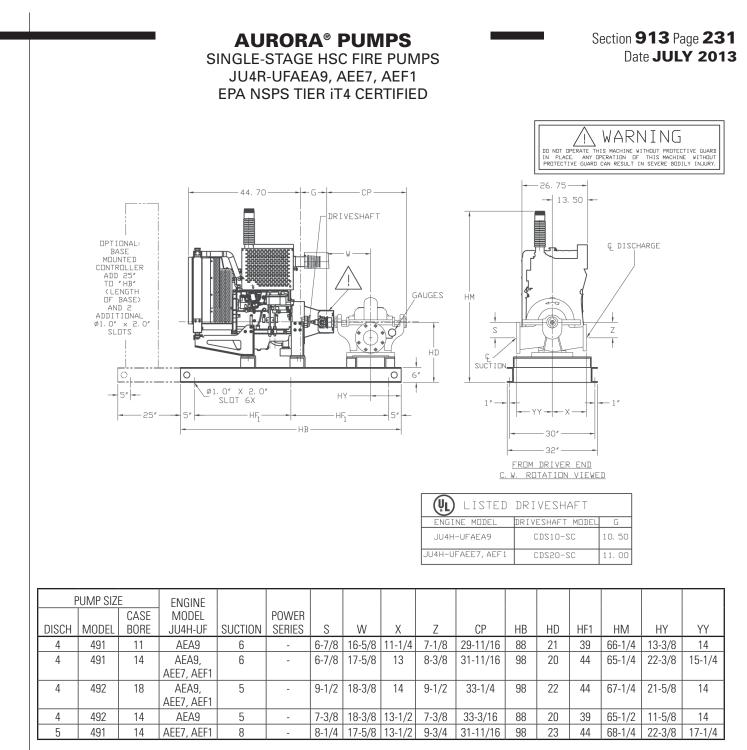
24

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- 6. Left-hand (counterclockwise) rotation is not available.
- Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

 Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

3. All bases are required to be completely filled with grout.

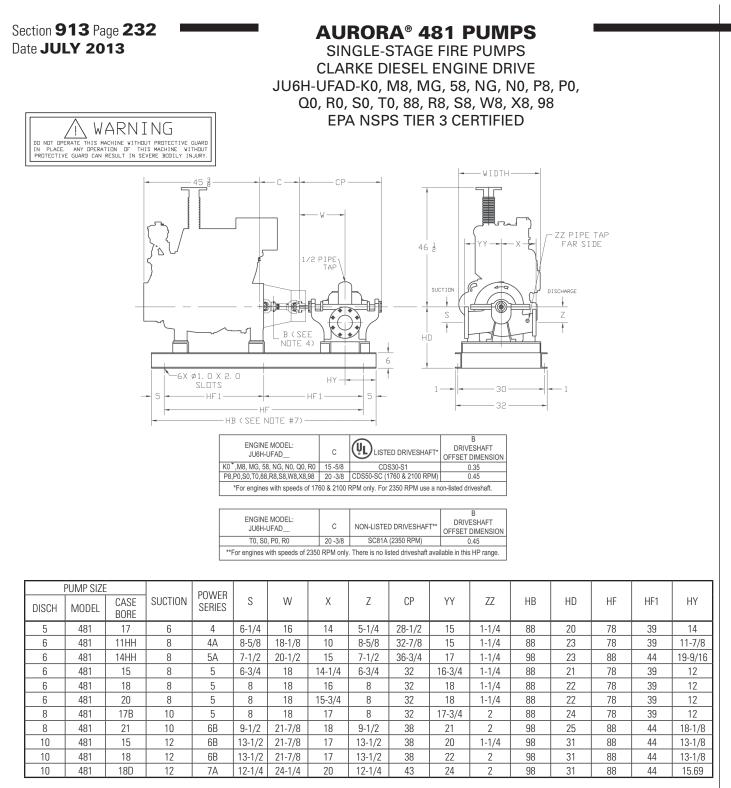
4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

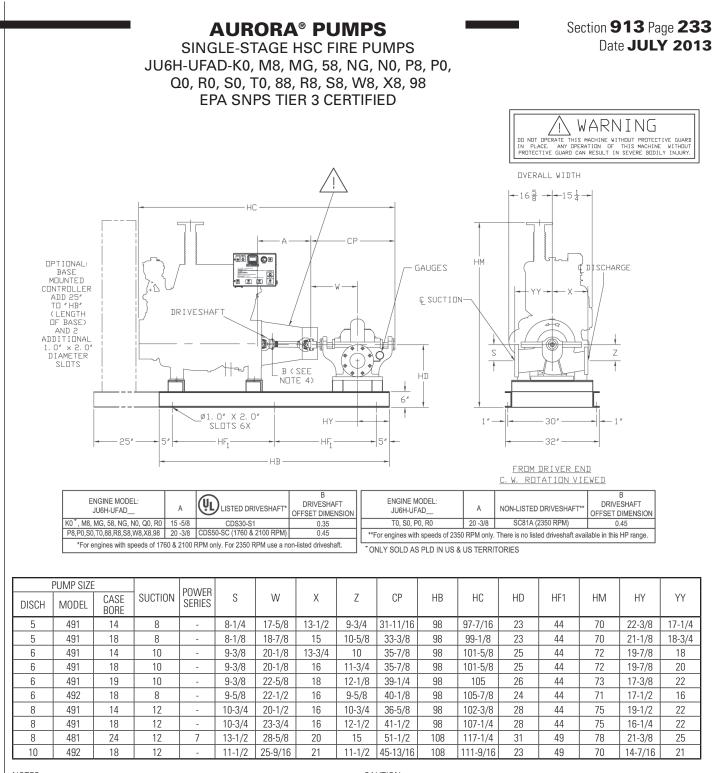
The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.25" \pm 0.08$ inches vertically above the pump shaft and $0.00" \pm 0.08$ inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.

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- 1. All dimensions are in inches and may vary ±3/8"
- 2. Not for construction purposes, unless certified.
- 3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" ± 0.10 inches vertically above the pump shaft and 0.00" ± 0.10 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.
- 4. Pump suction and discharge flanges are ANSI Standard flat face.
- 5. Left-hand (counterclockwise) rotation is not available.
- Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



NOTES:

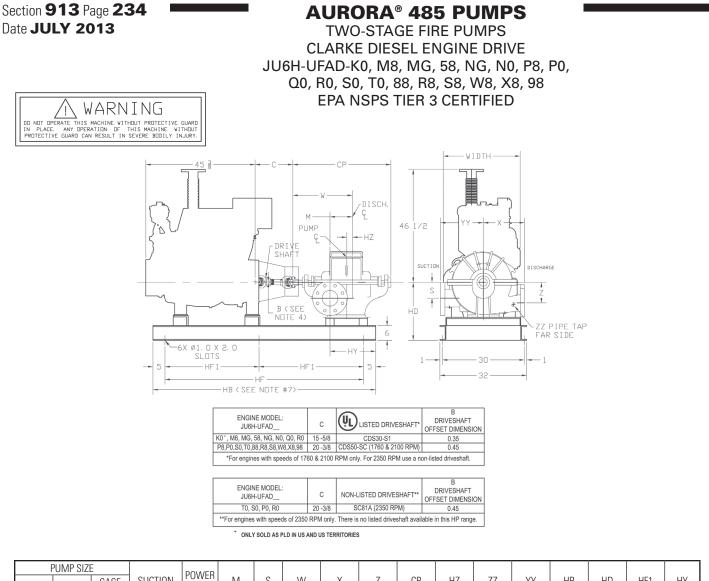
- 1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.
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- 3. All bases are required to be completely filled with grout.
- 4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.18 inches vertically above the pump shaft and 0.00" \pm 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.

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F	PUMP SIZE			POWER													
DISCH	MODEL	CASE BORE	SUCTION	SERIES	M	S	W	Х	Z	СР	HZ	ZZ	ΥY	HB	HD	HF1	HY
6	485	16	8	5	10-1/2	8-1/4	26-5/8	19	7-3/4	37-7/8	2-5/8	N/A	17	98	23	44	26-7/8
6	485	17	8	5	11	7	24-1/2	16	9	38	3-1/2	1-1/4	16-1/2	98	22	44	26-1/2

2. Not for construction purposes, unless certified.

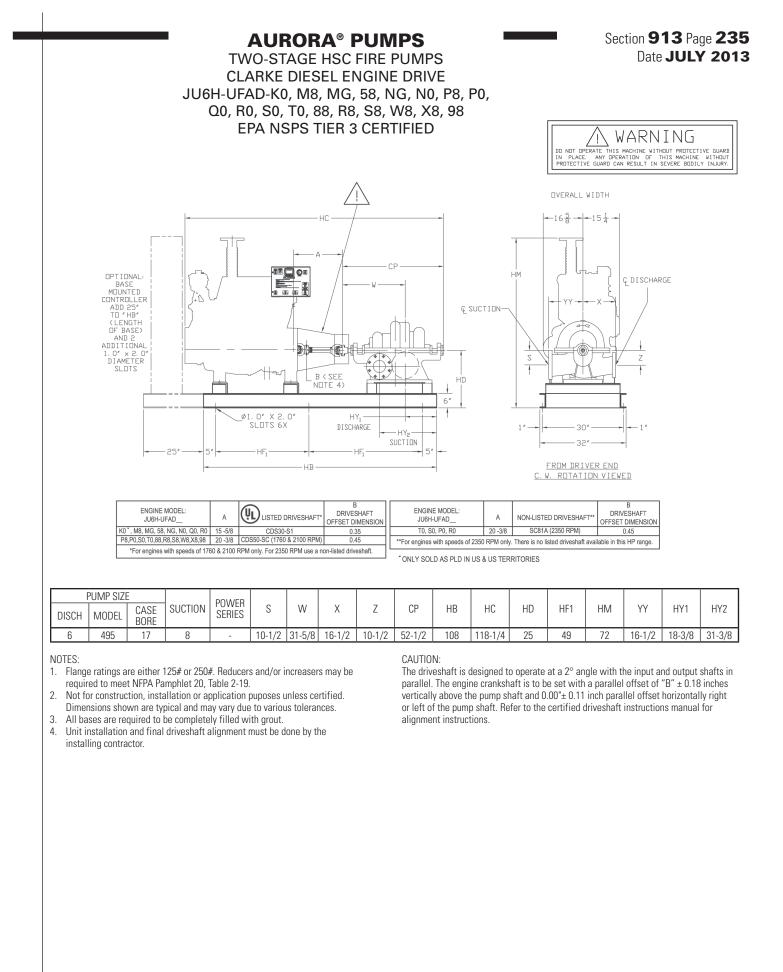
3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.10 inches vertically above the pump shaft and 0.00" \pm 0.10 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

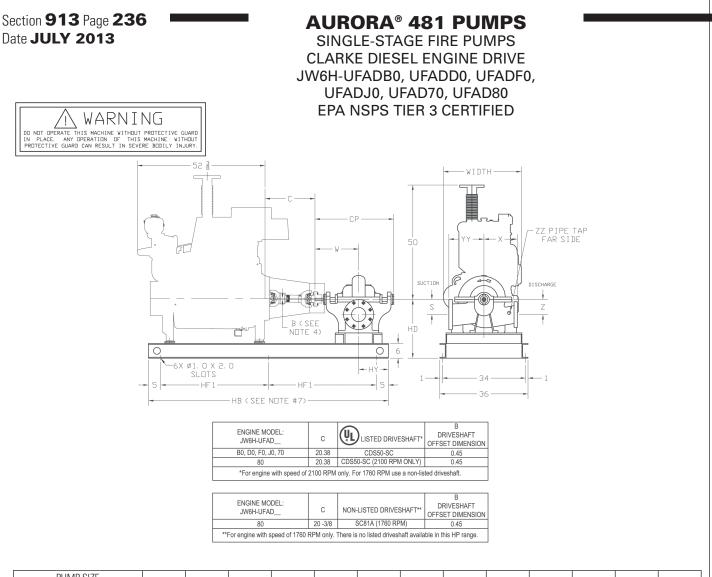
4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

^{1.} All dimensions are in inches and may vary ±3/8".





	PUMP SIZE			POWER											
DISCH	MODEL	CASE BORE	SUCTION	SERIES	S	W	Х	Z	СР	ΥY	ZZ	HB	HD	HF1	ΗY
6	481	20	8	5	8	18	15.75	8	32	18	1.25	98	24	44	12
8	481	17	10	5	8	18	17	8	32	17.75	2	98	24	44	12
8	481	21	10	6B	9.5	21.88	18	9.5	38	21	2	108	25	49	18.13
8	481	24	12	7	15	25.25	20	15	43.88	25	1.25	118	32	54	24.75
10	481	18	12	6B	13.5	21.88	18	13.5	38	22	2	108	32	49	18.13
10	481	18D	12	7A	12.25	24.25	20	12.25	43	24	2	108	31	49	15.75

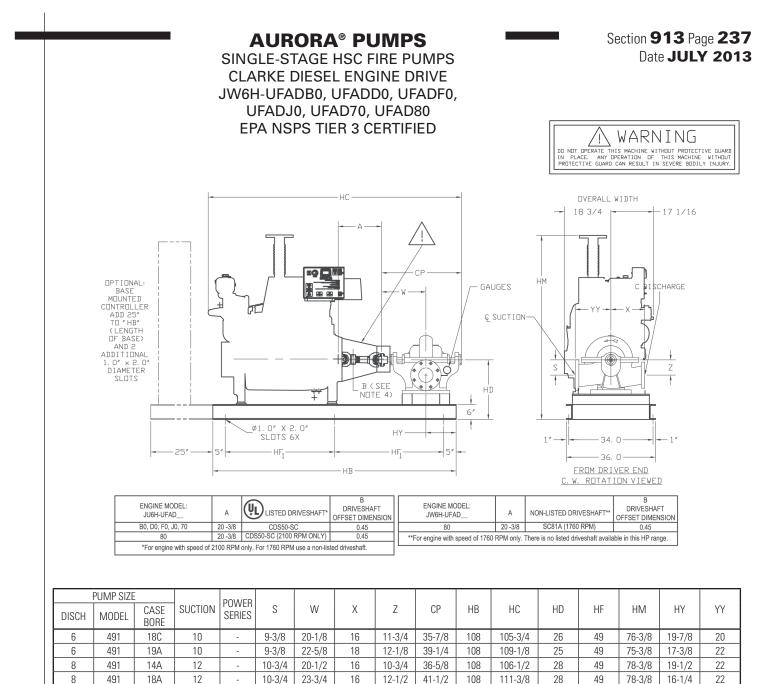
1. All dimensions are in inches and may vary $\pm 3/8^{"}$.

2. Not for construction purposes, unless certified.

- 3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.10 inches vertically above the pump shaft and 0.00" \pm 0.10 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.
- 4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



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1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

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12

-

-

-

13-1/2

13

11-1/2

28-5/8

25-9/16

25-9/16

20

23

21

Not for construction, installation or application puposes unless certified. 2. Dimensions shown are typical and may vary due to various tolerances.

All bases are required to be completely filled with grout. 3.

24

20

18

- Unit installation and final driveshaft alignment must be done by the 4.
- installing contractor.

CAUTION:

51-1/2

44-9/16

45-13/16

118

118

108

121-3/8

114-7/16

115-11/16

15

14-1/4

11-1/2

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.18 inches vertically above the pump shaft and 0.00" ± 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.

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81-3/8

82-3/8

79-3/8

21-3/8

24-7/16

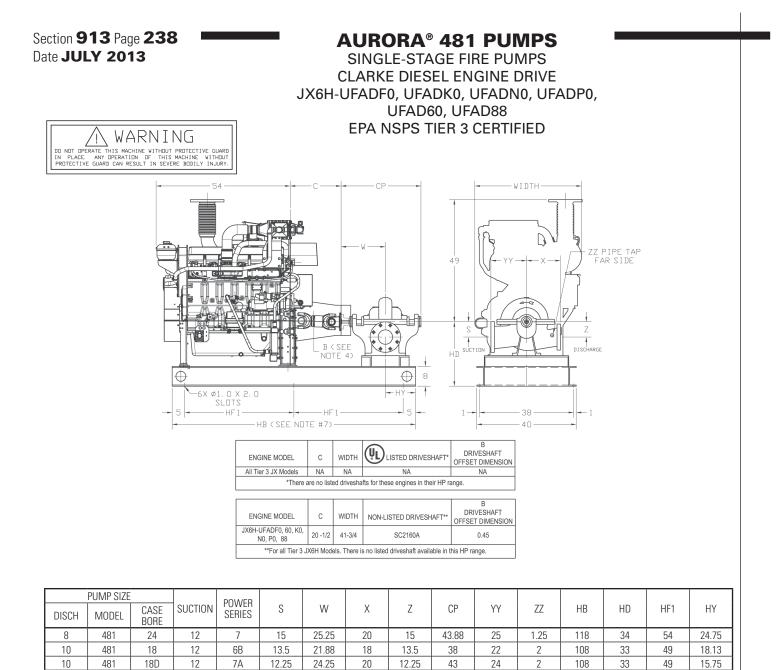
17-7/16

25

25

21

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1. All dimensions are in inches and may vary ±3/8".

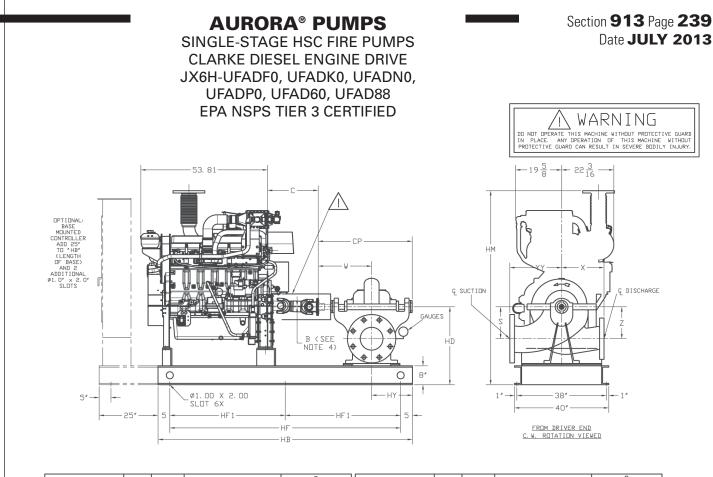
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.10 inches vertically above the pump shaft and 0.00" \pm 0.10 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



E	NGINE MODEL	С	WIDTH	NON-LISTED DRIVESHAFT**	B DRIVESHAFT OFFSET DIMENSION	ENGINE MODEL	С	WIDTH	LISTED DRIVESHAFT*	B DRIVESHAFT OFFSET DIMENSION
JX6	H-UFADFO,K0,N0,	20 -1/2	41-3/4	SC2160A	0.45	All Tier 3 JX Models	NA	NA	NA	NA
	PO,60,88	20 - 1/2	41-3/4	302100A	0.45	*Th	ere are no	listed drive	eshafts available for these engines	S.
	**For all Tier 3 J)	X6H Mode	els. There is	s no listed driveshaft available in t	his HP range.					

	ŀ	PUMP SIZE			POW-												
	DISCH	MODEL	CASE BORE	SUCTION	ER SERIES	S	W	Х	Z	СР	HB	HD	HF	HF1	ΗM	ΗY	ΥY
	6	491	19	10	-	9-3/8	22-5/8	18	12-1/8	39-1/4	108	28	98	49	76-7/8	16-5/8	22
	8	491	18	12	-	10-3/4	23-3/4	16	12-1/2	41-1/2	108	30	98	49	78-7/8	16-1/4	22
1	10	492	18	12	-	11-1/2	25-9/16	21	11-1/2	45-13/16	118	31	108	54	79-7/8	24-7/16	21

1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

2. Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

3. All bases are required to be completely filled with grout.

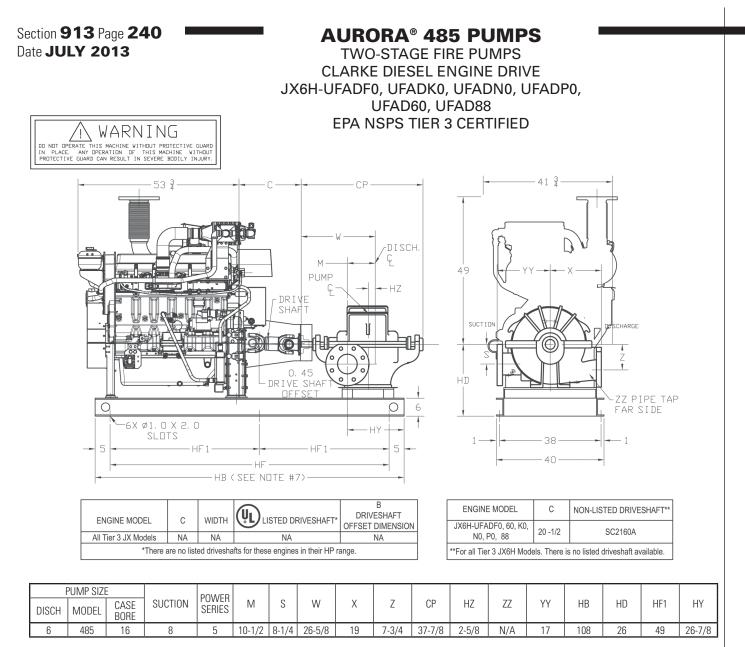
4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.18 inches vertically above the pump shaft and 0.00" \pm 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.

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AURORA°



1. All dimensions are in inches and may vary ±3/8".

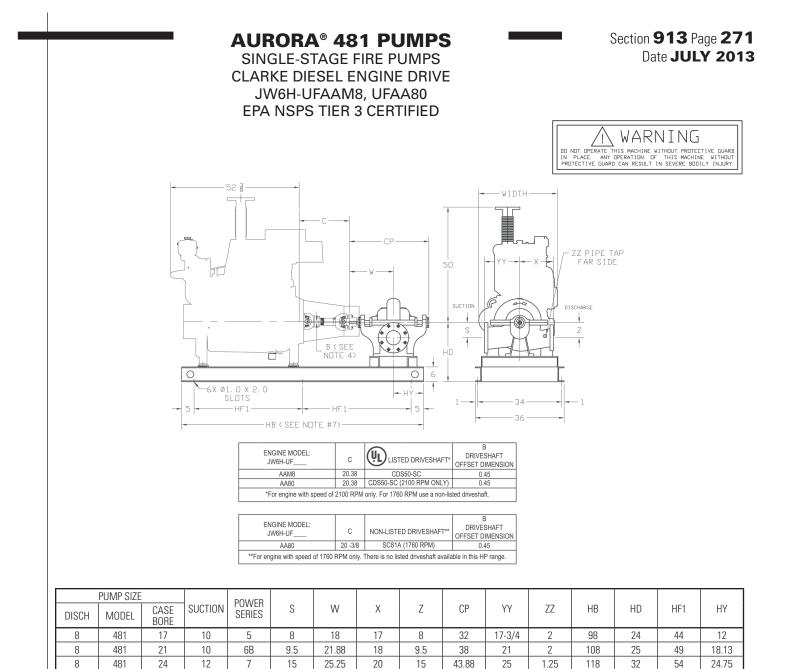
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.15 inches vertically above the pump shaft and 0.00" ± 0.15 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



10

10

1. All dimensions are in inches and may vary $\pm 3/8^{\circ}$.

18

18D

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2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.10 inches vertically above the pump shaft and 0.00" \pm 0.10 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

12

12

6B

7A

13.5

12.25

21.88

24.25

13.5

12.25

38

43

18

20

4. Pump suction and discharge flanges are ANSI Standard flat face.

2

2

5. Left-hand (counterclockwise) rotation is not available.

22

24

6. Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

108

108



32

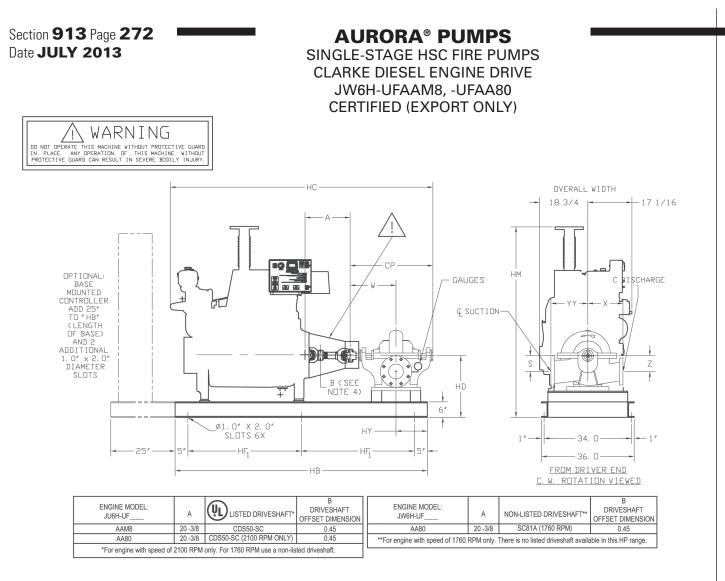
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18.13

15.75

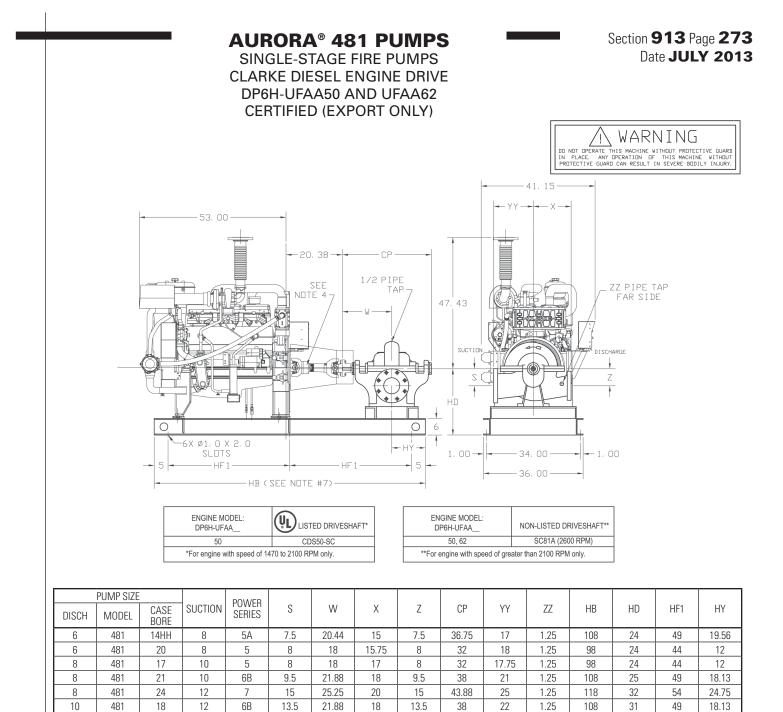


	PUMP SIZE			POWER												
DISCH	MODEL	CASE BORE	SUCTION	SERIES	S	W	Х	Z	СР	HB	HC	HD	HF	ΗM	ΗY	YY
6	491	18C	10	-	9-3/8	20-1/8	16	11-3/4	35-7/8	108	105-3/4	26	49	76-3/8	19-7/8	20
6	491	19	10	-	9-3/8	22-5/8	18	12-1/8	39-1/4	108	109-1/8	25	49	75-3/8	17-3/8	22
8	491	14	12	-	10-3/4	20-1/2	16	10-3/4	36-5/8	108	106-1/2	28	49	78-3/8	19-1/2	22
8	491	18	12	-	10-3/4	23-3/4	16	12-1/2	41-1/2	108	111-3/8	28	49	78-3/8	16-1/4	22
8	481	24	12	7	13-1/2	28-5/8	20	15	51-1/2	118	121-3/8	31	54	81-3/8	21-3/8	25
10	491	20	16	-	13	25-9/16	23	14-1/4	44-9/16	118	114-7/16	32	54	82-3/8	24-7/16	25
10	492	18	12	-	11-1/2	25-9/16	21	11-1/2	45-13/16	108	115-11/16	29	49	79-3/8	14-7/16	21

- 1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.
- 2. Not for construction, installation or application puposes unless certified.
- Dimensions shown are typical and may vary due to various tolerances.
- 3. All bases are required to be completely filled with grout.
- 4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.18 inches vertically above the pump shaft and 0.00" \pm 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.



10

1. All dimensions are in inches and may vary ±3/8".

18D

2. Not for construction purposes, unless certified.

481

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.11 inches vertically above the pump shaft and 0.00" ± 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

12

7A

12.25

24.25

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12.25

43

4. Pump suction and discharge flanges are ANSI Standard flat face.

1.25

5. Left-hand (counterclockwise) rotation is not available.

24

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

108

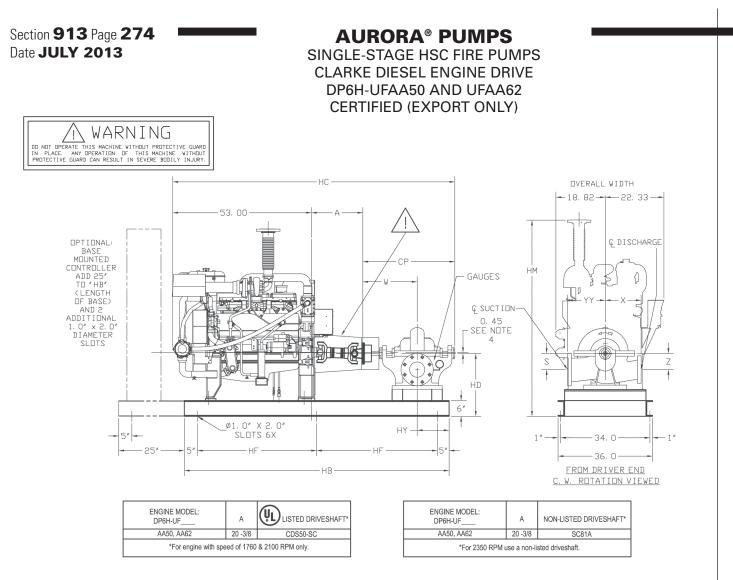
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15.75

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	PUMP SIZE			POWER												
DISCH	MODEL	CASE BORE	SUCTION	SERIES	S	W	Х	Z	СР	HB	HC	HD	HF	HM	ΗY	ΥY
6	491	19A	10	-	9-3/8	20-5/8	18	12-1/8	39-1/4	108	112-5/8	25	49	72-7/16	17-3/8	22
8	491	14A	12	-	10-3/4	20-1/2	16	10-3/4	36-5/8	108	110	28	49	75-7/16	19-1/2	22
8	491	18A	12	-	10-3/4	23-3/4	16	12-1/2	41-1/2	108	114-7/8	28	49	75-7/16	16-1/4	22

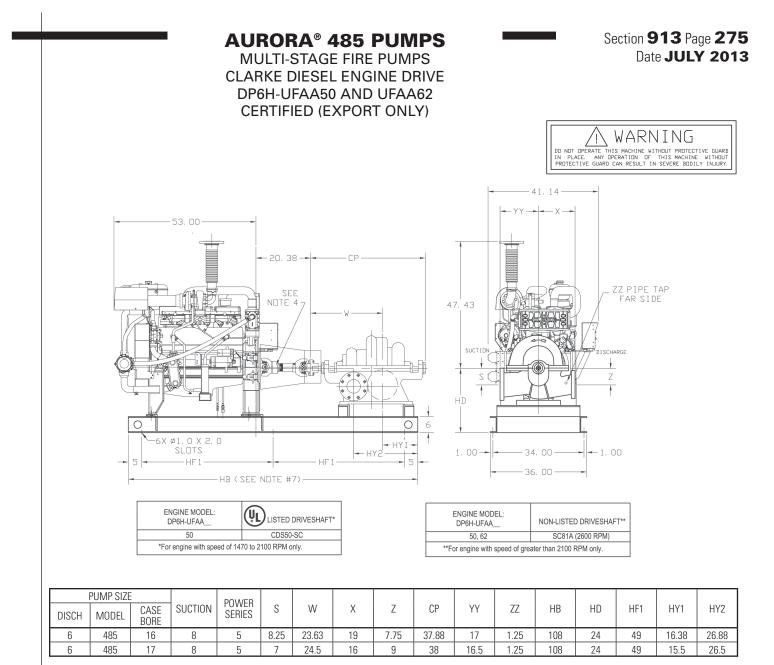
- 1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.
- Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

3. All bases are required to be completely filled with grout.

4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.45" \pm 0.11 inches vertically above the pump shaft and 0.00" \pm 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.11 inches vertically above the pump shaft and 0.00" ± 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

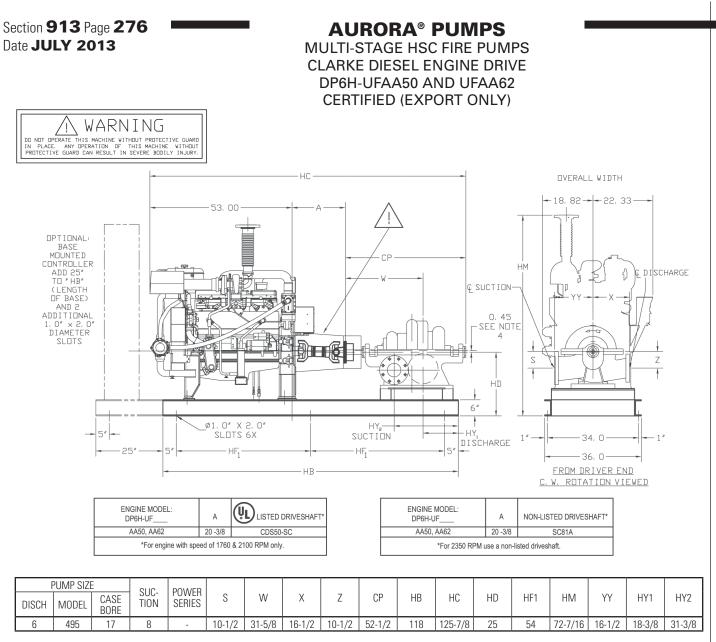
4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

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AURORA°



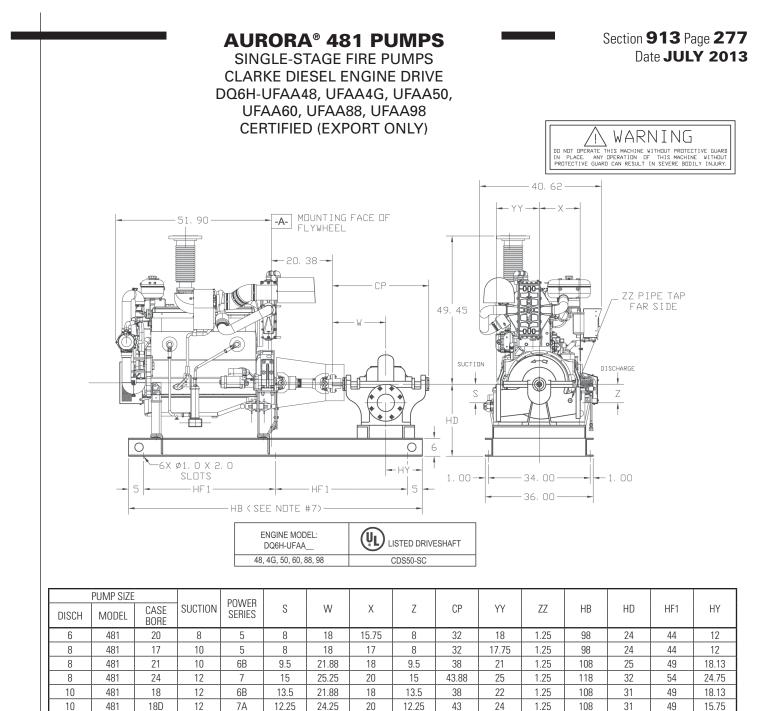
- 1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.
- Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

3. All bases are required to be completely filled with grout.

4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.45" \pm 0.11$ inches vertically above the pump shaft and $0.00" \pm 0.11$ inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.11 inches vertically above the pump shaft and 0.00" ± 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

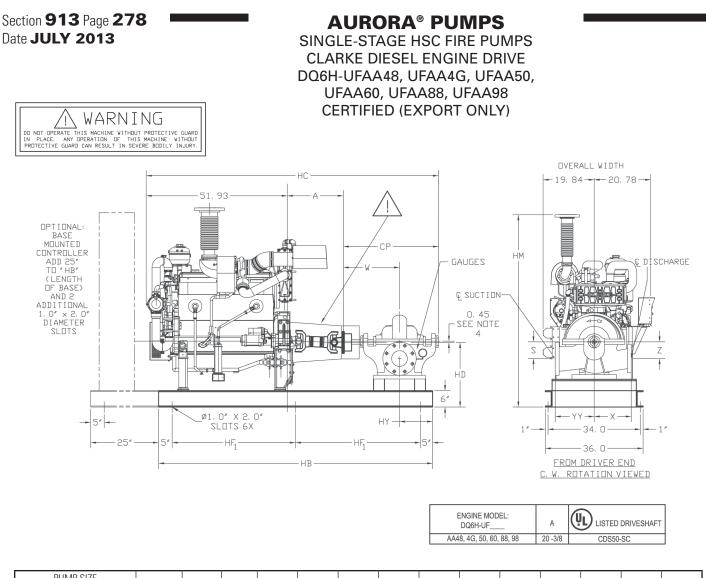
4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

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AURORA[®]



	PUMP SIZE			POWER												
DISCH	MODEL	CASE BORE	SUCTION	SERIES	S	W	Х	Z	СР	HB	HC	HD	HF	HM	ΗY	ΥY
6	491	18C	10	-	9-3/8	20-5/8	16	11-3/4	35-7/8	108	107-1/4	26	49	75-7/16	19-7/8	20
6	491	19A	10	-	9-3/8	22-5/8	18	12-1/8	39-1/4	108	111-1/2	25	49	74-7/16	17-3/8	22
8	491	18A	12	-	10-3/4	23-3/4	16	12-1/2	41-1/2	108	113-3/4	28	49	77-7/16	16-1/4	22
8	481	24	12	-	13-1/2	28-5/8	20	15	51-1/2	118	123-3/4	31	54	80-7/16	21-3/8	25
10	491	20A	16	-	13	25.56	23	14-1/4	44-9/16	118	116-7/8	32	54	81-7/16	24-7/16	25

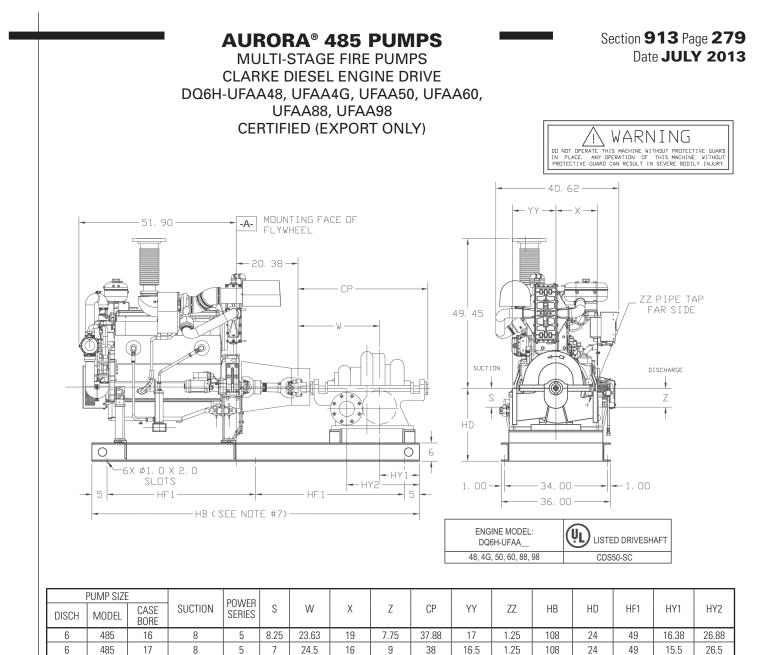
1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

2. Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

3. All bases are required to be completely filled with grout.

4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.45" \pm 0.11 inches vertically above the pump shaft and 0.00" \pm 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.11 inches vertically above the pump shaft and 0.00" ± 0.11 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

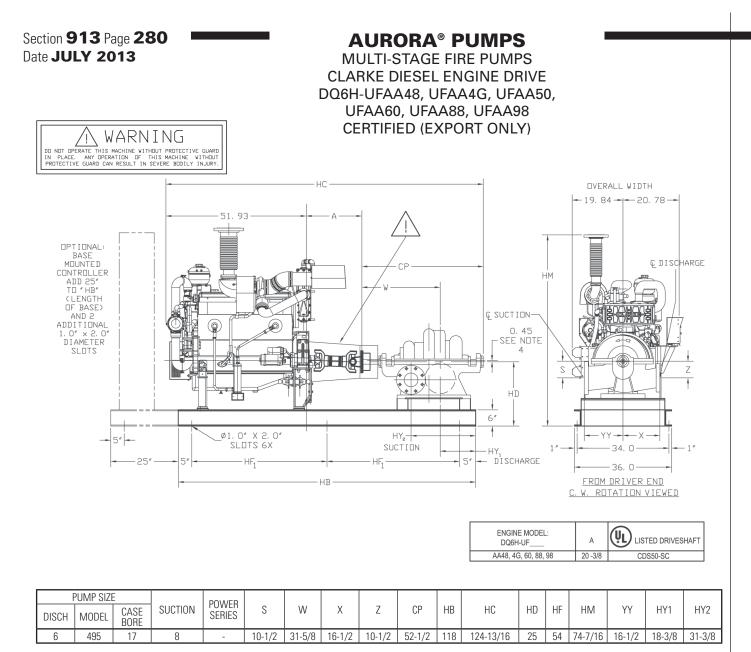
4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

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 Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

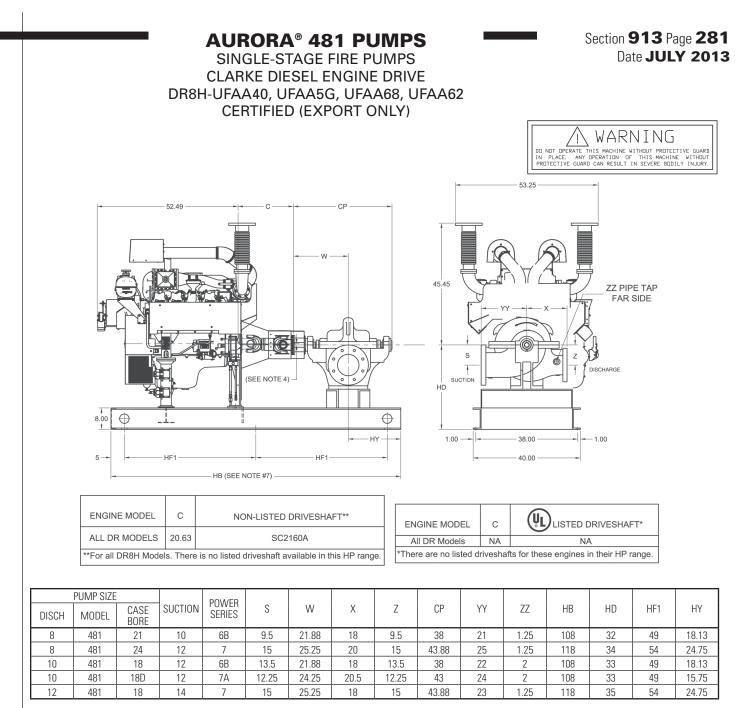
3. All bases are required to be completely filled with grout.

4. Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.45" \pm 0.11$ inches vertically above the pump shaft and $0.00" \pm 0.11$ inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.

^{1.} Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.15 inches vertically above the pump shaft and 0.00" ± 0.15 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

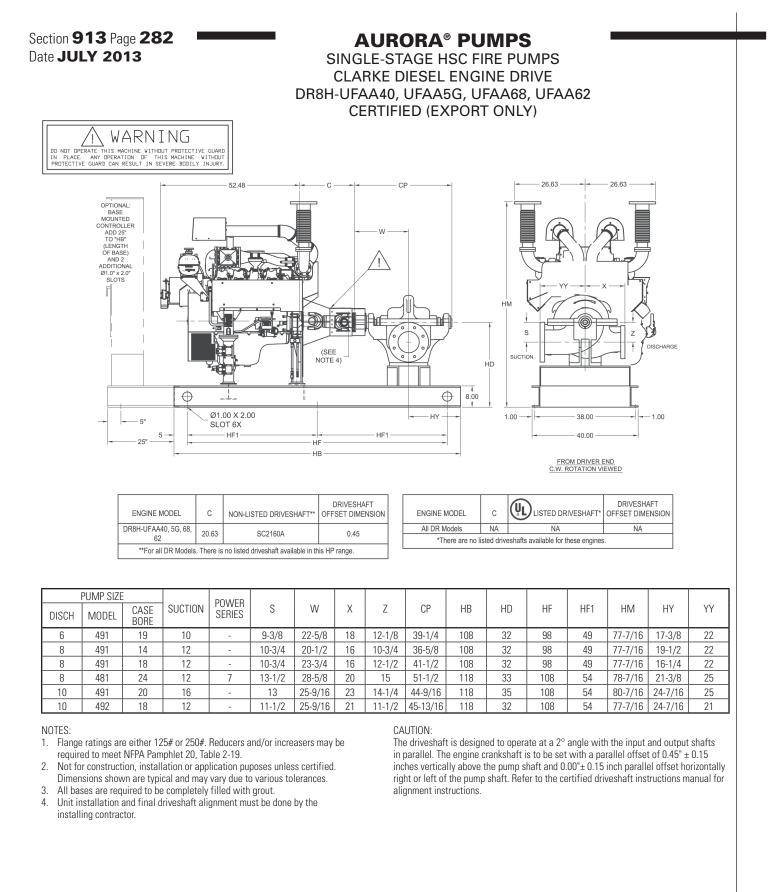
4. Pump suction and discharge flanges are ANSI Standard flat face.

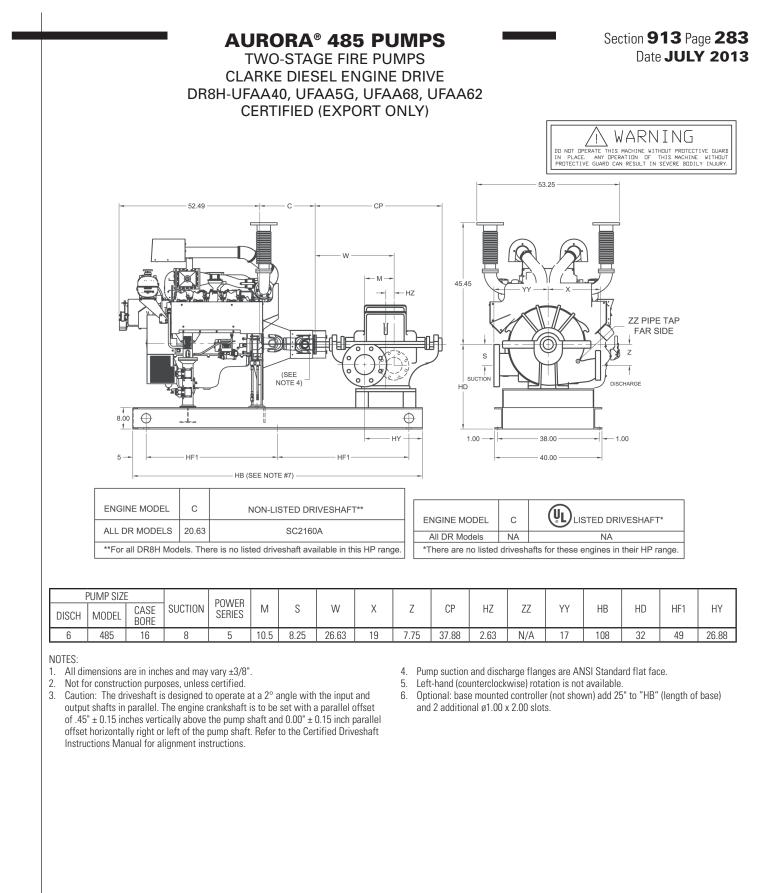
5. Left-hand (counterclockwise) rotation is not available.

6. Optional: base mounted controller (not shown) add 25" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.

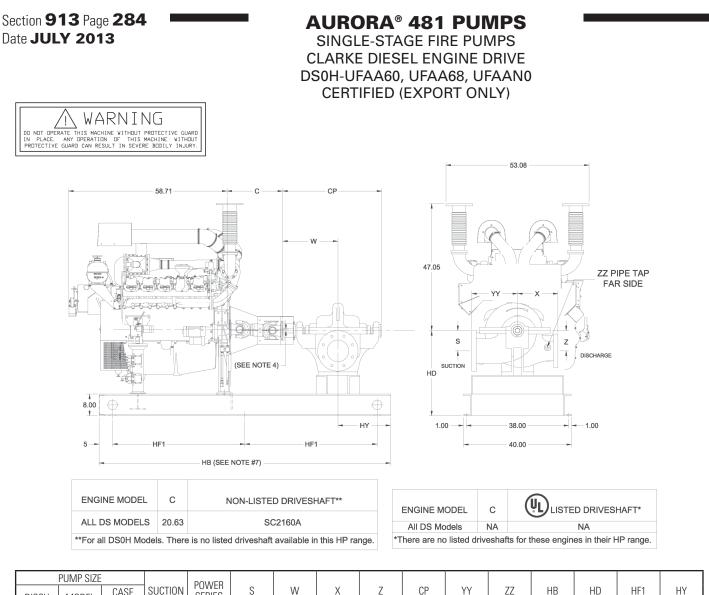
PENTAIR

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DENTAIR AURORA



	PUMP SIZE			POWER											
DISCH	MODEL	CASE BORE	SUCTION	SERIES	S	W	Х	Z	СР	ΥY	ZZ	HB	HD	HF1	HY
8	481	21	10	6B	9.5	21.88	18	9.5	38	21	2	108	32	49	18.13
8	481	24	12	7	15	25.25	20	15	43.88	25	1.25	118	34	54	24.75
10	481	18D	12	7A	12.25	24.25	20.5	12.25	43	24	2	108	33	49	15.75

1. All dimensions are in inches and may vary $\pm 3/8$ ".

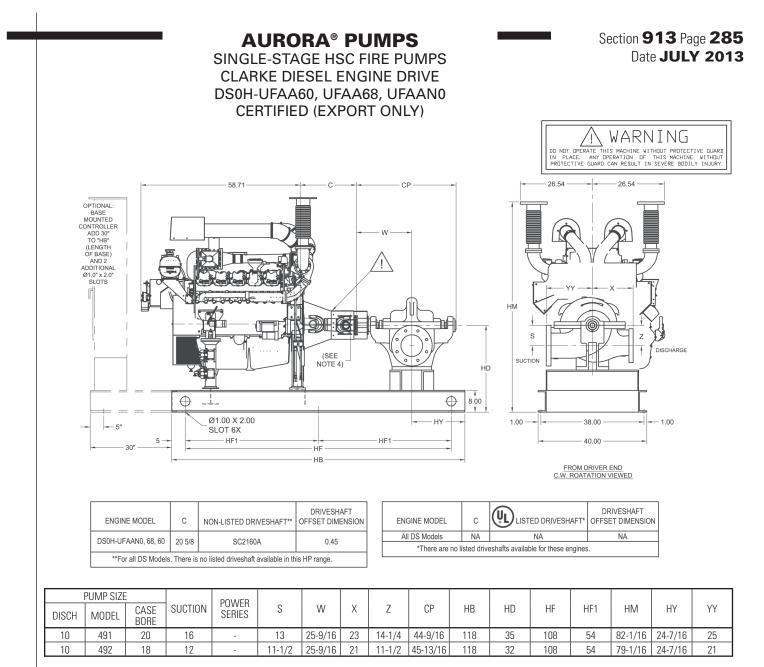
2. Not for construction purposes, unless certified.

3. Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of .45" ± 0.15 inches vertically above the pump shaft and 0.00" ± 0.15 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.

4. Pump suction and discharge flanges are ANSI Standard flat face.

5. Left-hand (counterclockwise) rotation is not available.

 Optional: base mounted controller (not shown) add 30" to "HB" (length of base) and 2 additional ø1.00 x 2.00 slots.



 Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

 Not for construction, installation or application puposes unless certified. Dimensions shown are typical and may vary due to various tolerances.

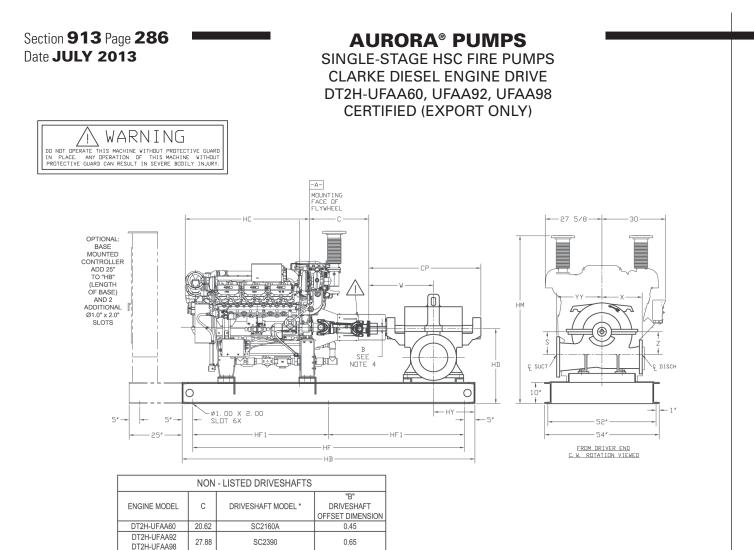
3. All bases are required to be completely filled with grout.

 Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.45^{"} \pm 0.15$ inches vertically above the pump shaft and $0.00^{"} \pm 0.15$ inche parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.





*There are no listed driveshafts for these engine models at this time

F	PUMP SIZI	E	ENGINE		POWER													
DISCH	MODEL	CASE BORE	MODEL DT2H	SUCTION	SERIES	S	W	Х	Z	СР	HB	HC	HD	HF	HF1	ΗM	HY	ΥY
10	492	18	UFAA60	12	-	10	25-9/16	21	17-1/2	45-13/16	128	58-7/8	34	118	59	80	24-7/16	21
10	492	18	UFAA92, 98	12	-	10	25-9/16	21	17-1/2	45-13/16	138	58-7/8	34	128	64	80	24-7/16	21
10	491	20	URAA60	16	-	13	25-9/16	23	14-1/4	44-9/16	128	58-7/8	37	118	59	83	24-7/16	25
10	491	20	UFAA92, 98	16	-	13	25-9/16	23	14-1/4	44-9/16	138	58-7/8	37	128	64	83	24-7/16	25

NOTES:

1. Flange ratings are either 125# or 250#. Reducers and/or increasers may be required to meet NFPA Pamphlet 20, Table 2-19.

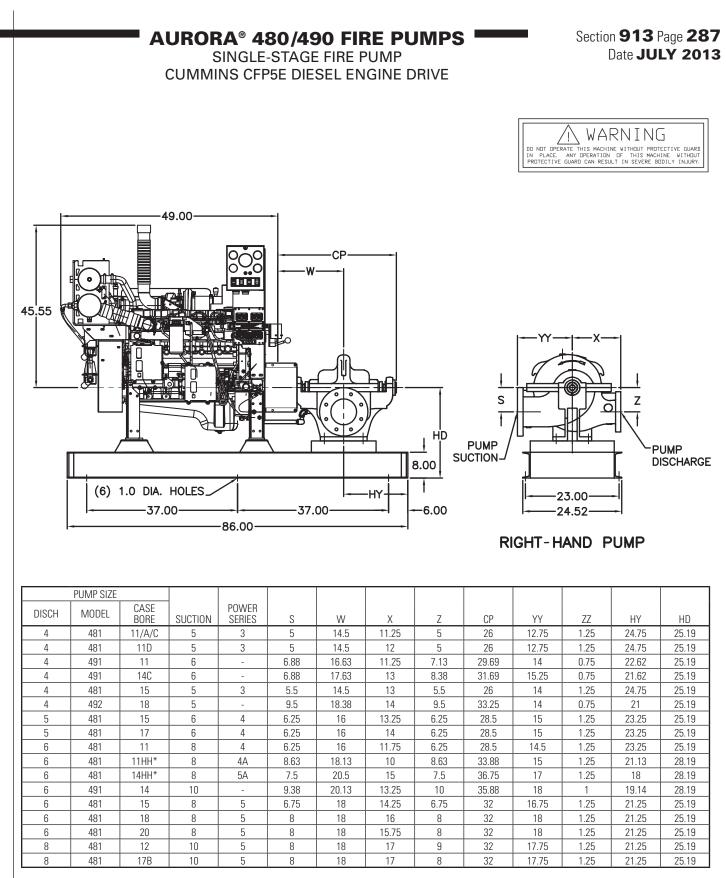
2. Not for construction, installation or application puposes unless certified.

Dimensions shown are typical and may vary due to various tolerances. 3. All bases are required to be completely filled with grout.

 Unit installation and final driveshaft alignment must be done by the installing contractor.

CAUTION:

The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of "B" \pm 0.15 inches vertically above the pump shaft and 0.00" \pm 0.15 inch parallel offset horizontally right or left of the pump shaft. Refer to the certified driveshaft instructions manual for alignment instructions.



1. All dimensions are in inches and may vary $\pm 3/8^{\circ}$.

2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

4. Refer to individual engine dimension print for reference point

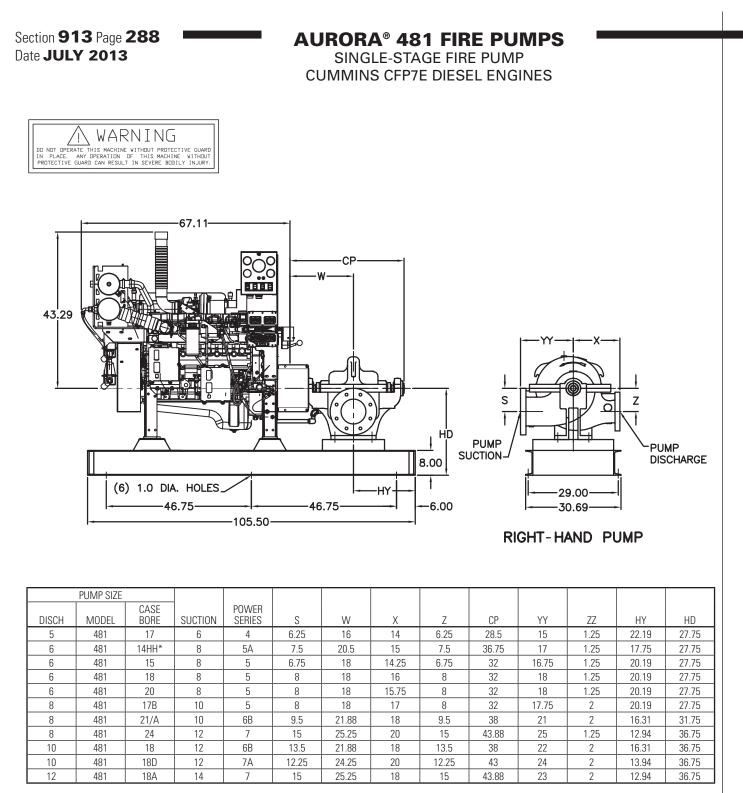
used to determine overall engine length.

5. Left hand (counterclockwise) rotation is not available.

* Pump sizes 6–481–11HH and 14HH are furnished as standard with 125# suction flange and 250# discharge flange.

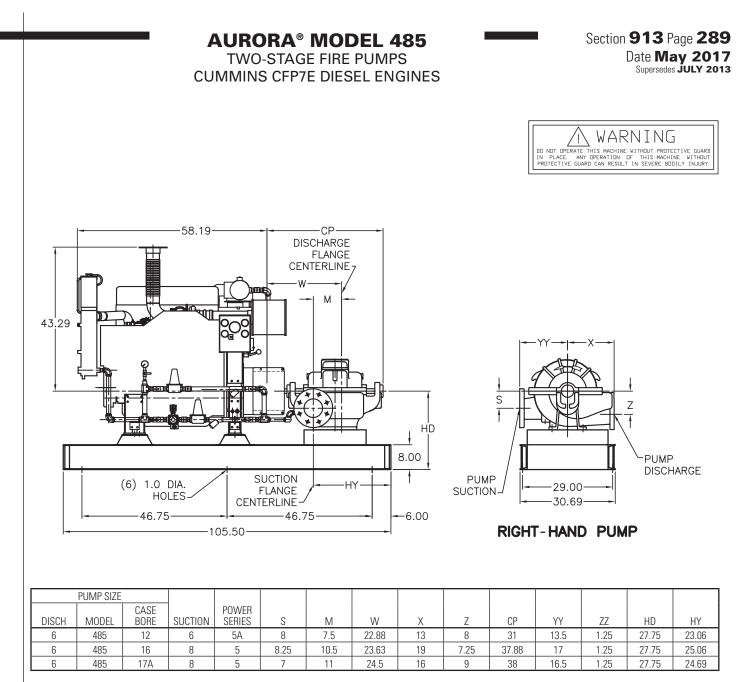


^{6.} The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.



- 1. All dimensions are in inches and may vary ±3/8".
- 2. Not for construction purposes, unless certified.
- 3. Suction and discharge flanges are ANSI Standard flat face.
- 4. Refer to individual engine dimension print for reference point used to determine overall engine length.
- 5. Left hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

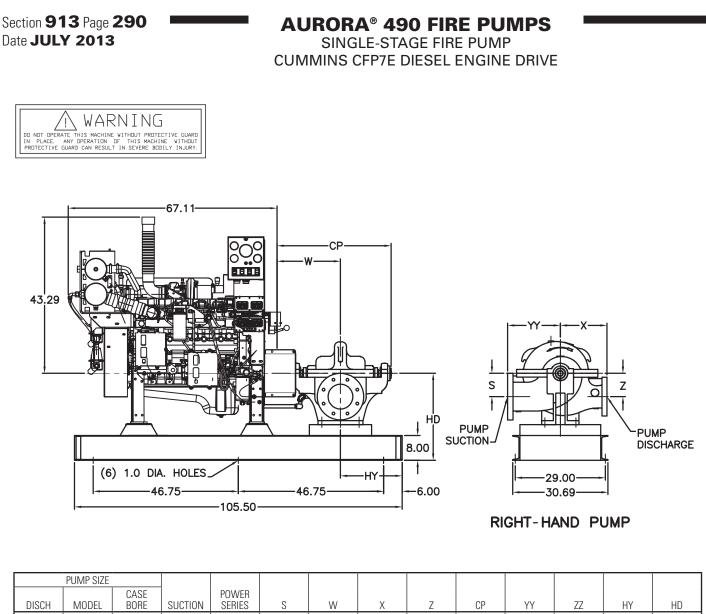
4. Refer to individual engine dimension print for reference point

used to determine overall engine length.

5. Left hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.

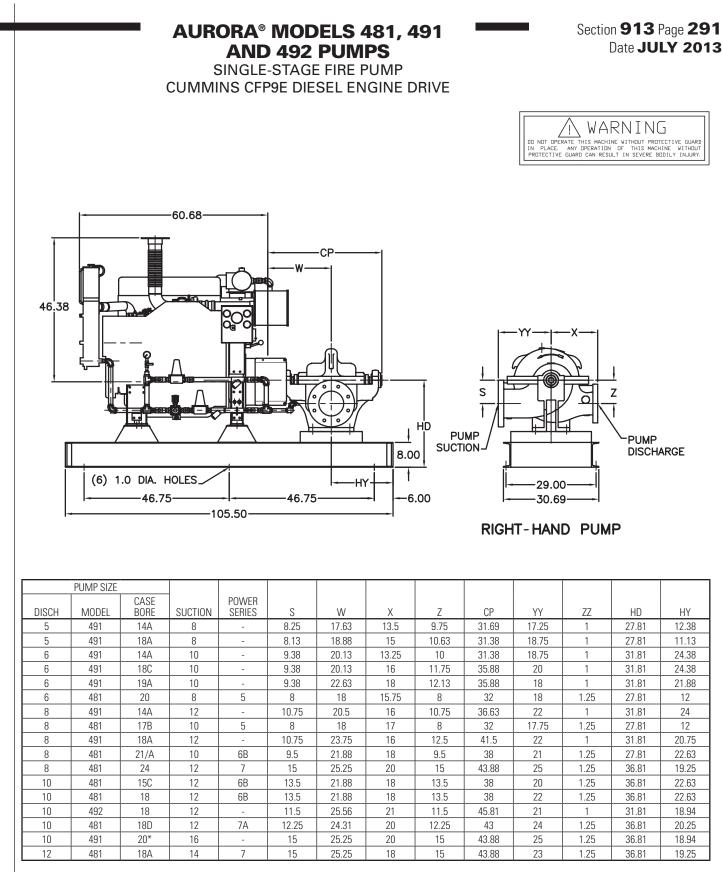




$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	DISCH	MODEL	BORE	SUCTION	SERIES	S	W	Х	Z	СР	YY	ZZ	HY	HD
5 491 18A 8 - 8.13 18.88 15 10.63 33.38 18.75 1 19.31 27.75 6 491 14A/C 10 - 9.38 20.13 13.25 10 35.88 18 1 18.06 31.75 6 491 18C 10 - 9.38 20.13 16 11.75 35.88 20 1 18.06 31.75 6 491 19A 10 - 9.38 22.63 18 12.13 39.25 22 1 15.56 31.75 8 491 14A 12 - 10.75 20.13 16 10.75 36.63 22 1 17.69 31.75	4	491	14C	6	-	6.88	17.63	13	8.38	31.69	15.25	0.75	20.56	27.75
649114A/C10-9.3820.1313.251035.8818118.0631.75649118C10-9.3820.131611.7535.8820118.0631.75649119A10-9.3822.631812.1339.2522115.5631.75849114A12-10.7520.131610.7536.6322117.6931.75	5	491	14A	8	-	8.25	17.63	13.5	9.75	31.69	17.25	1	20.56	27.75
649118C10-9.3820.131611.7535.8820118.0631.75649119A10-9.3822.631812.1339.2522115.5631.75849114A12-10.7520.131610.7536.6322117.6931.75	5	491	18A	8	-	8.13	18.88	15	10.63	33.38	18.75	1	19.31	27.75
6 491 19A 10 - 9.38 22.63 18 12.13 39.25 22 1 15.56 31.75 8 491 14A 12 - 10.75 20.13 16 10.75 36.63 22 1 17.69 31.75	6	491	14A/C	10	-	9.38	20.13	13.25	10	35.88	18	1	18.06	31.75
8 491 14A 12 - 10.75 20.13 16 10.75 36.63 22 1 17.69 31.75	6	491	18C	10	-	9.38	20.13	16	11.75	35.88	20	1	18.06	31.75
	6	491	19A	10	-	9.38	22.63	18	12.13	39.25	22	1	15.56	31.75
10 491 20* 16 - 13 25.69 23 14.25 44.56 25 1 12.63 36.75	8	491	14A	12	-	10.75	20.13	16	10.75	36.63	22	1	17.69	31.75
	10	491	20*	16	-	13	25.69	23	14.25	44.56	25	1	12.63	36.75

- 1. All dimensions are in inches and may vary ±3/8".
- 2. Not for construction purposes, unless certified.
- 3. Suction and discharge flanges are ANSI Standard flat face.
- 4. Refer to individual engine dimension print for reference point used to determine overall engine length.
- 5. Left hand (counterclockwise) rotation is not available.

- 6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.
- * Pump size 10-491-20 is furnished as standard with 125# suction flange and 250# discharge flange.



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

- 3. Suction and discharge flanges are ANSI Standard flat face.
- 4. Refer to individual engine dimension print for reference point

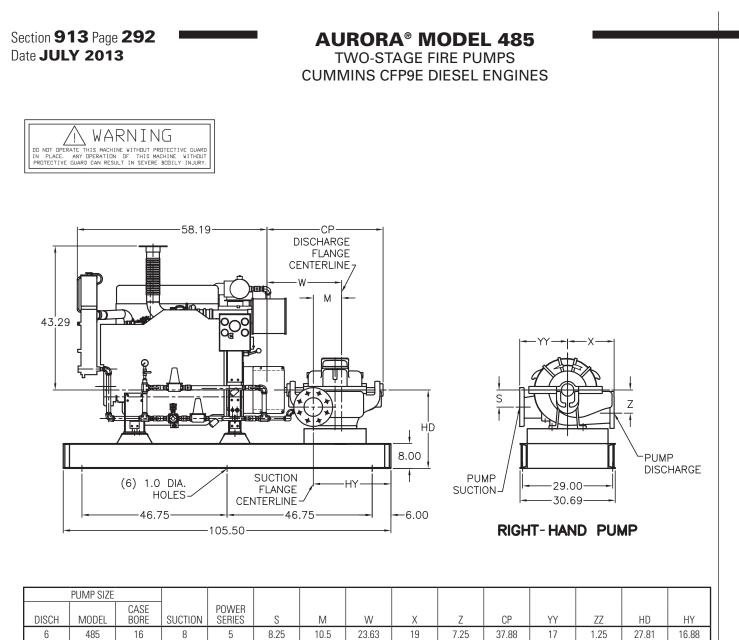
used to determine overall engine length.

5. Left hand (counterclockwise) rotation is not available.

 Pump size 10-491-20 is furnished as standard with 125# suction flange and 250# discharge flange.



^{6.} The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 ± 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.



24.5

16

9

38

11

6	485	16	8	
6	485	17A	8	

NOTES:

1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

5

7

4. Refer to individual engine dimension print for reference point

used to determine overall engine length.

5. Left hand (counterclockwise) rotation is not available.

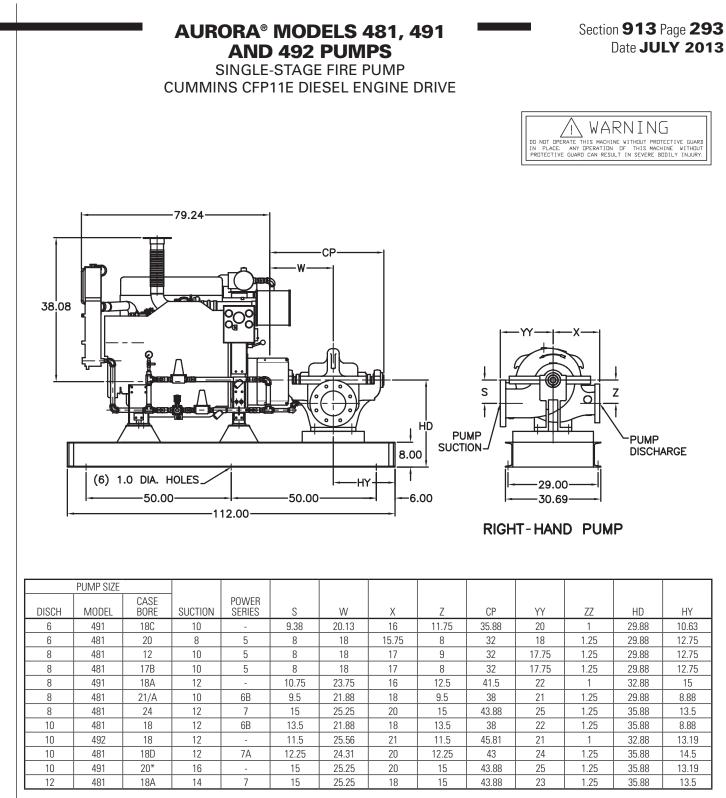
6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 ± 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.

16.5

1.25

27.81

16.5



1. All dimensions are in inches and may vary ±3/8".

2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

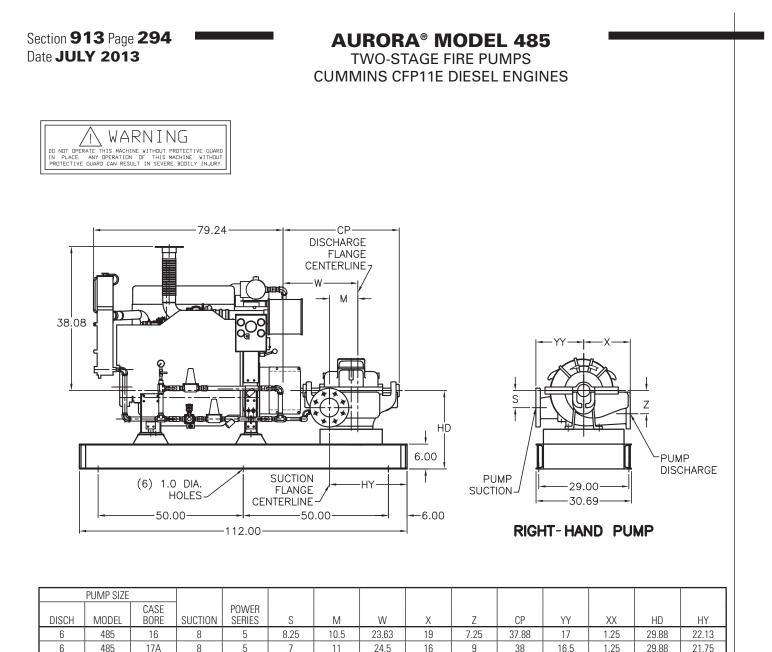
4. Refer to individual engine dimension print for reference point used to determine overall engine length.

5. Left hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.

 Pump size 10–491–20 is furnished as standard with 125# suction flange and 250# discharge flange.





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INUT	150

- All dimensions are in inches and may vary ±3/8". 1.
- 2. Not for construction purposes, unless certified.

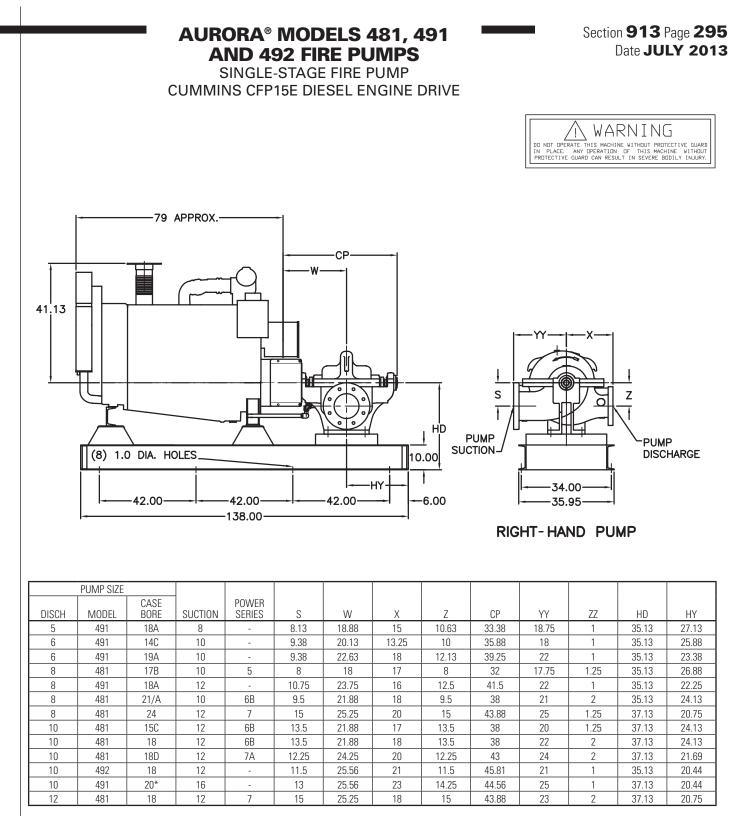
Suction and discharge flanges are ANSI Standard flat face. Refer to individual engine dimension print for reference point 3.

4.

used to determine overall engine length.

5. Left hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.



1. All dimensions are in inches and may vary ±3/8".

Not for construction purposes, unless certified. 2.

Suction and discharge flanges are ANSI Standard flat face. 3.

Refer to individual engine dimension print for reference point 4.

used to determine overall engine length.

5. Left-hand (counterclockwise) rotation is not available.

The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to 6 be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.

Pump size 10-491-20 is furnished as standard with 125# suction flange and 250# discharge flange.



Section 913 Page 296 Date JULY 2013		•	Т	WO-S	A® M FAGE F FP15E [IRE PU	JMPS		-		
DO NOT OPERATE THIS MACHINE WITHOUT PROTECTIVE GUA IN PLACE. ANY OPERATION OF THIS MACHINE WITHOU PROTECTIVE GUARD CAN RESULT IN SEVERE BODILY INJUR	ар Л. Т.										
41.13 (8)1.0 DIA. HOLES 42.00			E /		HD 10.00	PU SUCT	-				IP CHARGE
PUMP SIZE DISCH MODEL BORE SUCTION	POWER SERIES	S	M	W	Х	Z	СР	YY	ZZ	HD	HY

6

6

1. All dimensions are in inches and may vary ±3/8".

485

485

2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

16

17A

8

8

5

5

8.25

7

10.5

11

23.63

24.5

19

16

7.25

9

37.88

38

4. Refer to individual engine dimension print for reference point

used to determine overall engine length.

5. Left-hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.

17

16.5

1.25

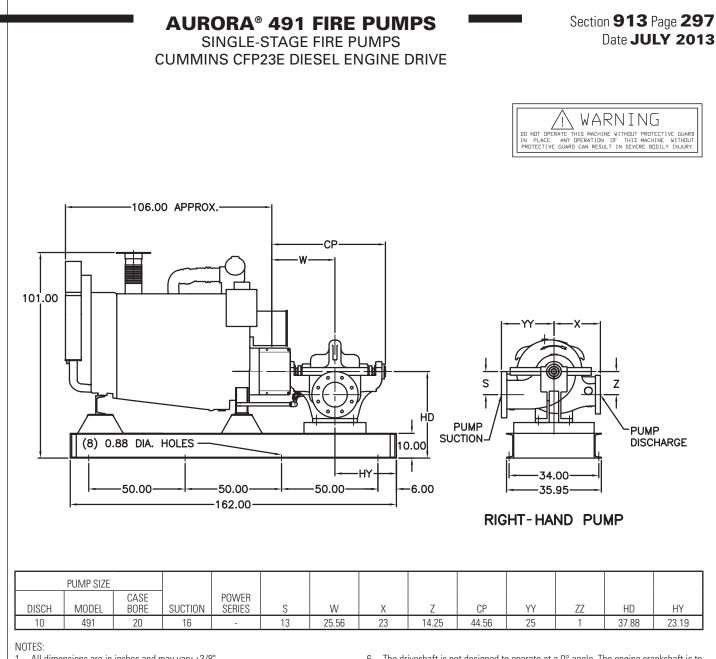
1.25

35.13

35.13

32.88

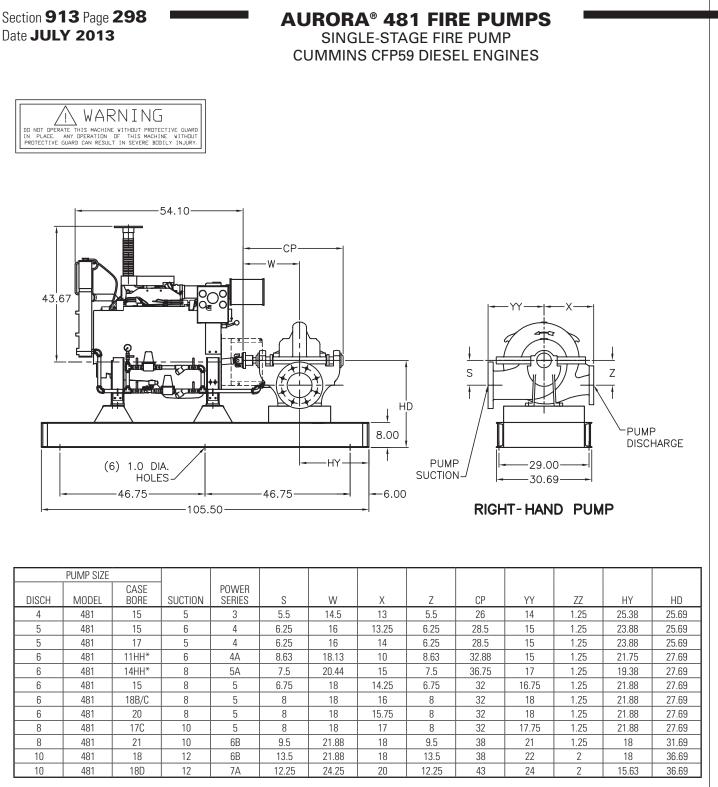
32.5



- 1. All dimensions are in inches and may vary ±3/8".
- Not for construction purposes, unless certified. 2.
- Suction and discharge flanges are ANSI Standard flat face. 3.
- Refer to individual engine dimension print for reference point 4. used to determine overall engine length.
- 5. Left-hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.





* Pump sizes 6–481–11HH and 14HH are furnished as standard with 125# suction flange and 250# discharge flange.



^{1.} All dimensions are in inches and may vary ±3/8".

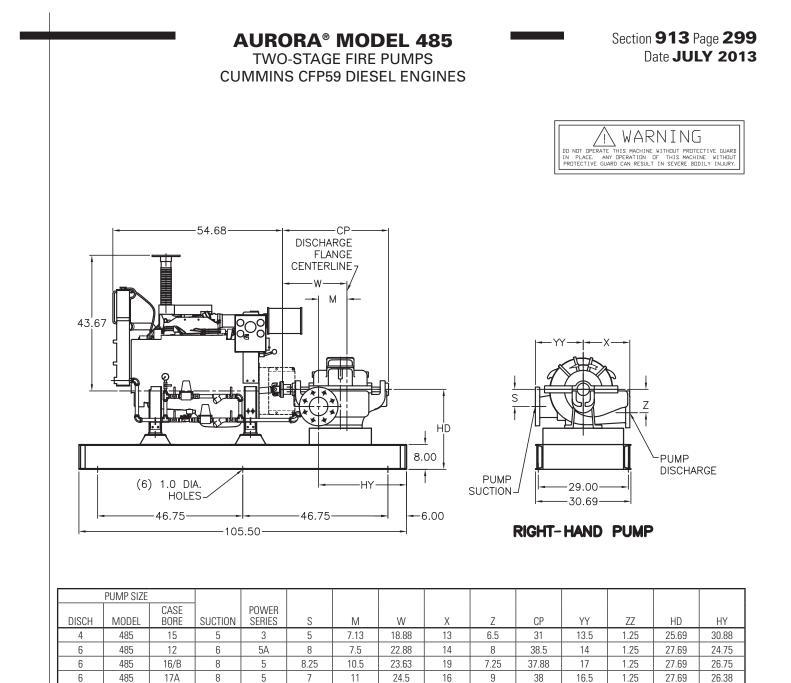
^{2.} Not for construction purposes, unless certified.

^{3.} Suction and discharge flanges are ANSI Standard flat face.

^{4.} Refer to individual engine dimension print for reference point used to determine overall engine length.

^{5.} Left-hand (counterclockwise) rotation is not available.

^{6.} The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 \pm 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.



1. All dimensions are in inches and may vary ±3/8".

Not for construction purposes, unless certified. 2.

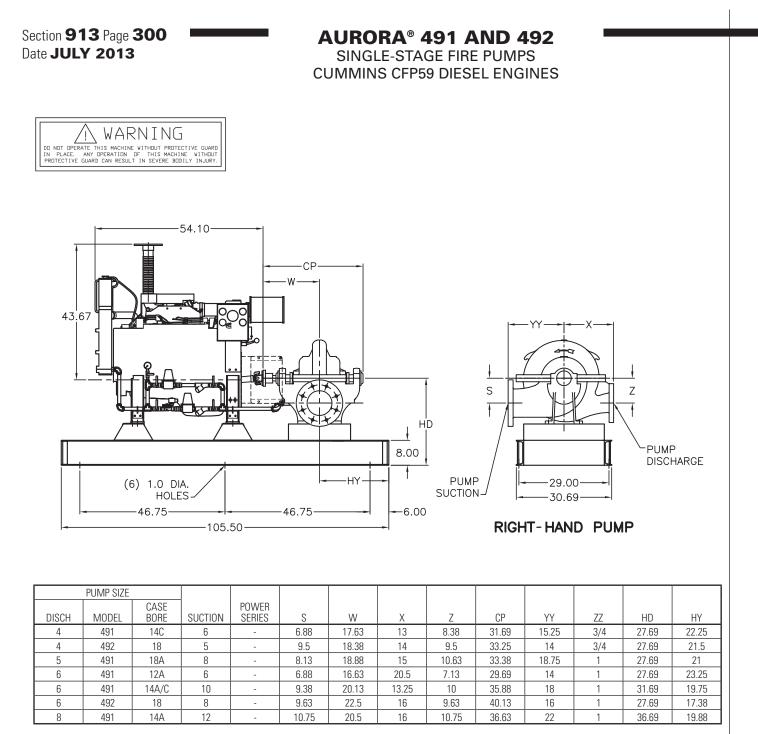
Suction and discharge flanges are ANSI Standard flat face. 3.

7

4. Refer to individual engine dimension print for reference point used to determine overall engine length.

5. Left-hand (counterclockwise) rotation is not available. 6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 ± 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.

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1. All dimensions are in inches and may vary ±3/8".

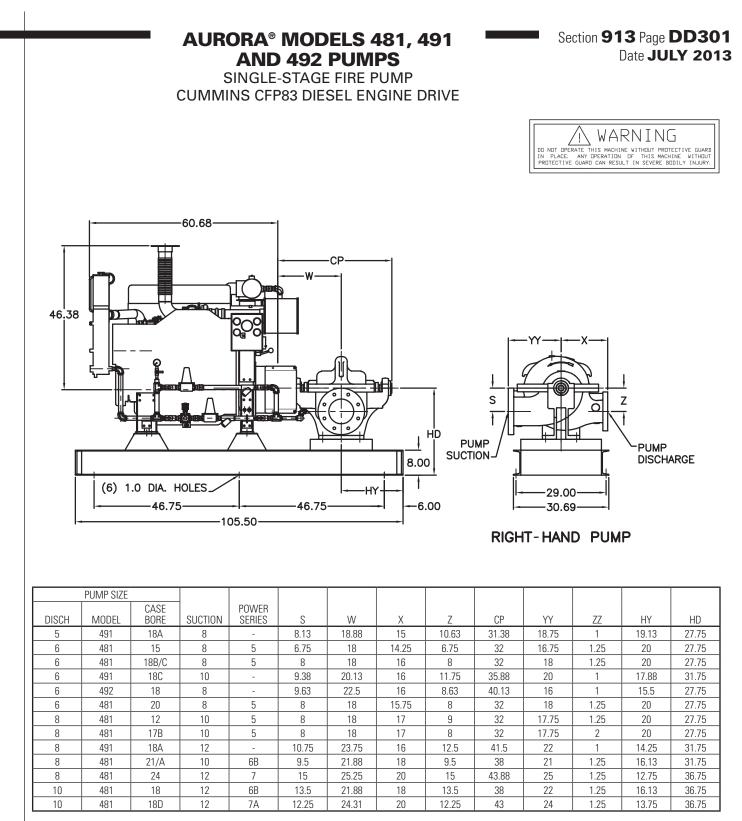
2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

4. Refer to individual engine dimension print for reference point used to determine overall engine length.

5. Left-hand (counterclockwise) rotation is not available.

^{6.} The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 ± 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.



1. All dimensions are in inches and may vary $\pm 3/8^{"}$.

2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

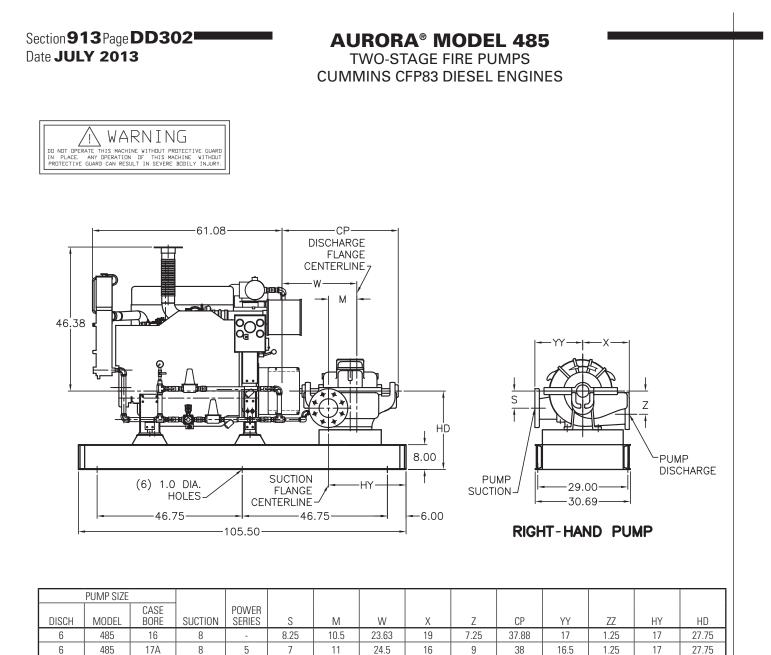
4. Refer to individual engine dimension print for reference point

used to determine overall engine length.

5. Left-hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 ± 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.





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- 1. All dimensions are in inches and may vary ±3/8".
- 2. Not for construction purposes, unless certified.

3. Suction and discharge flanges are ANSI Standard flat face.

4. Refer to individual engine dimension print for reference point

used to determine overall engine length.

5. Left-hand (counterclockwise) rotation is not available.

6. The driveshaft is not designed to operate at a 0° angle. The engine crankshaft is to be parallel offset of 0.50 ± 0.25 inch. The engine crankshaft may be parallel offset from the pump shaft 0.50 inch right or left.