



Gear Pump 101

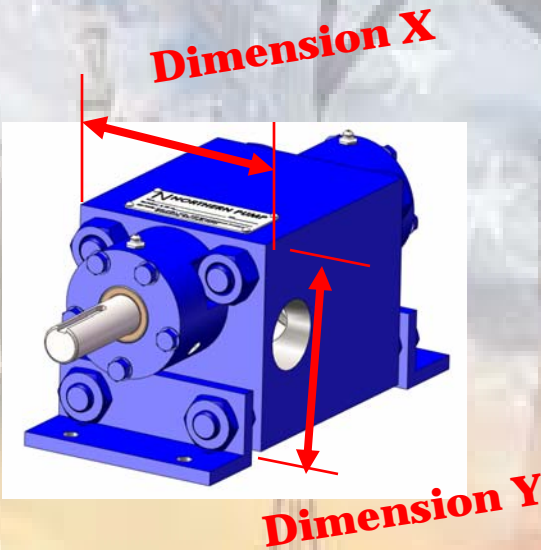
Lesson 4: Model Numbers

When your reputation depends on it!

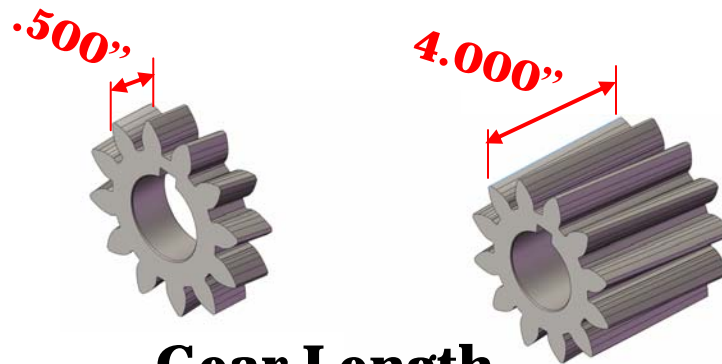
Northern[®] Lesson 4: Model Numbers

Introduction

- Accommodates virtually any specific flow rate.
- Sizing a combination of overall frame size and gear length.
- Displacement is increased or decreased by overlapping series sizes and gear lengths. ([See Pump 101 Lesson 2 for an explanation of displacement](#))
- Delivers a precise and predictable rate of flow to meet demands.
- Lesson 4 is “geared” towards understanding how pump model numbers are arranged.



Frame Size



Gear Length

Northern® Lesson 4: Model Numbers

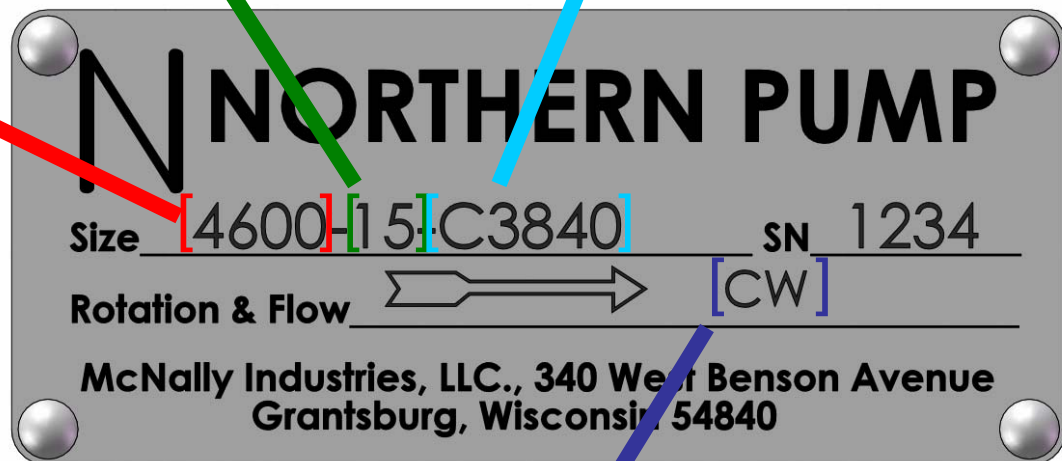
Name Plates

The example below explains the meaning of the information on a typical nameplate.

Frame Size = 4600

Gear Length = 1.5" Nominal

Northern Drawing C3840 Shows Detail of Pump Layout



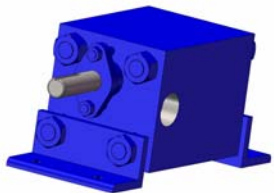
**Designed for
Clockwise Rotation
Only**

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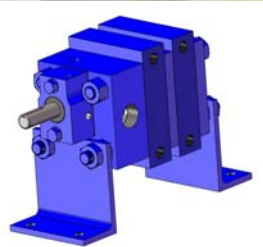
4300



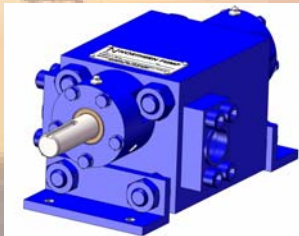
4500



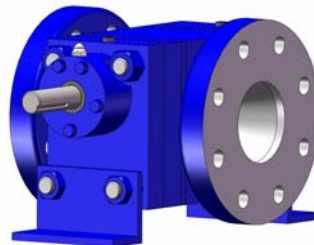
4400



4600



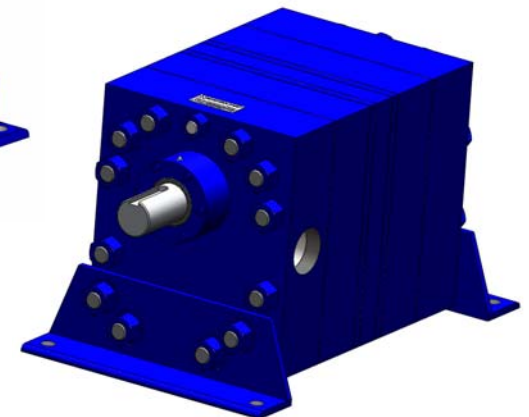
4800



4900



5000



Pump Series

- Motors:
 - ✓ Electric Motor Driven at Standard Motor Speeds (1150, 1750, or 3600 RPM)
 - ✓ Variable Frequency Drives (VFD)
- 4000 Series Pumps are available in 6 different “Frame Sizes”.
 - ✓ 4300, 4400, 4500, 4600, 4800, and 4900.
- NPC Series and vertical pumps.

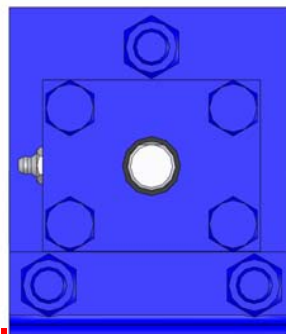
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4300 Series Frame Size

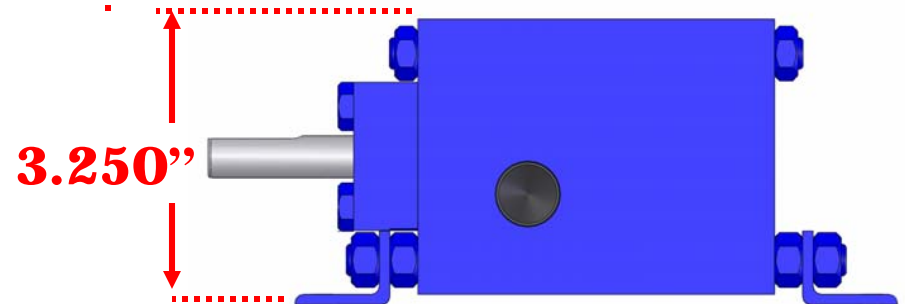
Available in a variety of configurations, material, and special features. For flow rate information visit:

http://www.northern-pump.com/product_information_packets.htm

4300-01	4300-02	4300-03	4300-04	4300-06	4300-08	4300-10	4300-12
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← 2.937" →



3.250"



NORTHERN PUMP

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4400 Series Frame Size

Available in a variety of configurations, material, and special features. For flow rate information visit:

http://www.northern-pump.com/product_information_packets.htm

4400-05

4400-07

4400-10

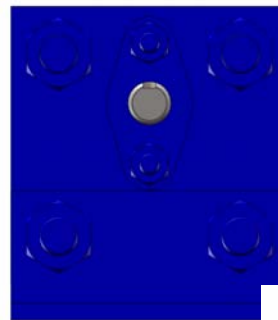
4400-15

4400-20

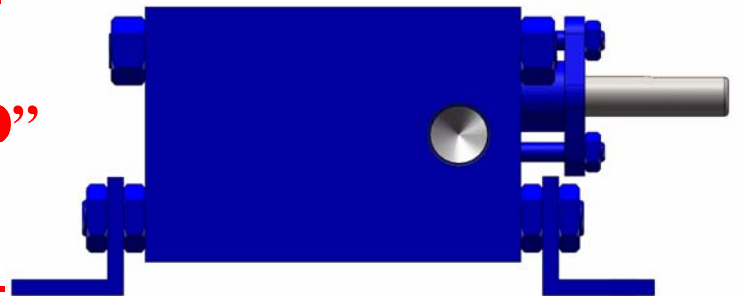
4400-25

4400-30

←4.000"→



4.000"



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4500 Series Frame Size

Available in a variety of configurations, material, and special features. For flow rate information visit:

http://www.northern-pump.com/product_information_packets.htm

4500-05

4500-07

4500-10

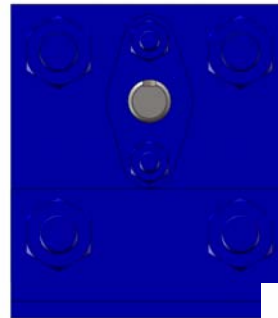
4500-15

4500-20

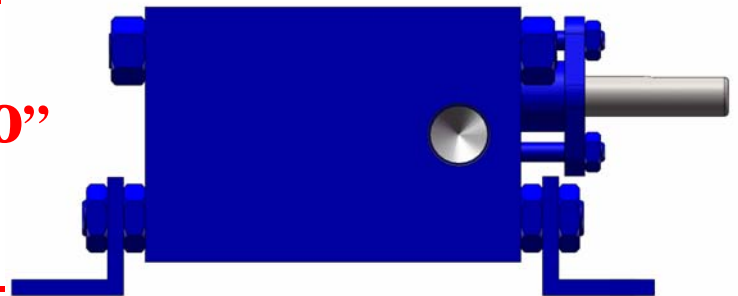
4500-25

4500-30

←4.500"→



4.500"



NORTHERN PUMP

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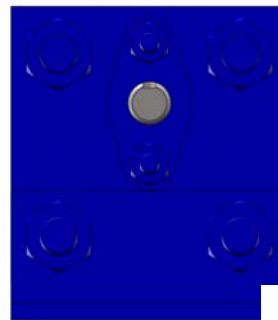
4600 Series Frame Size

Available in a variety of configurations, material, and special features. This is one of the most popular Northern® Pump frame sizes. For flow rate information visit:

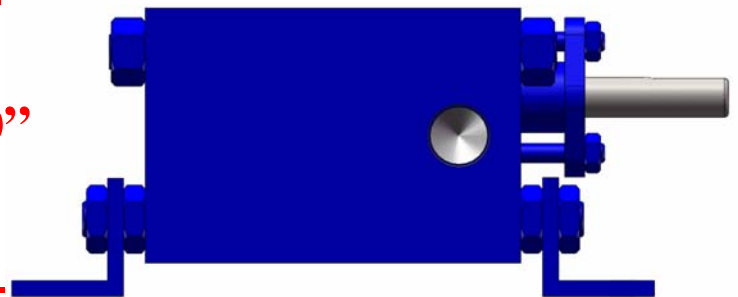
http://www.northern-pump.com/product_information_packets.htm

4600-05	4600-07	4600-10	4600-15	4600-20	4600-25	4600-30	4600-40
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← 5.500" →



5.500"



Northern[®] Lesson 4: Model Numbers

4800 Series Frame Size

Available in a variety of configurations, material, and special features. For flow rate information visit:

http://www.northern-pump.com/product_information_packets.htm

4800-05

4800-07

4800-10

4800-15

4800-20

4800-25

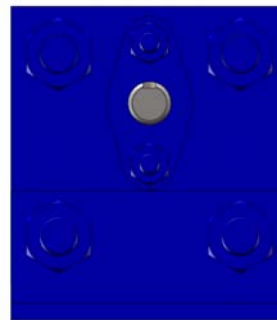
4800-30

4800-40

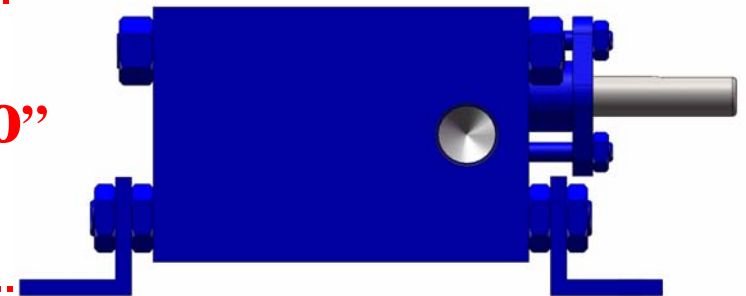
4800-50

4800-60

← 6.000" →



8.000"



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4900 Series Frame Size

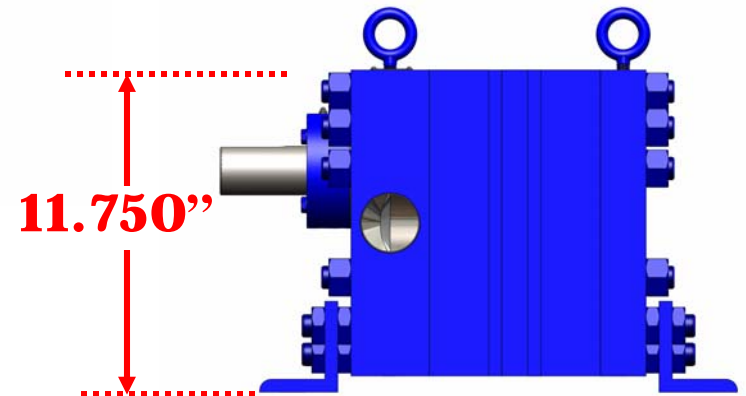
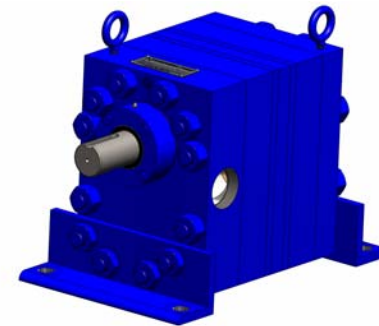
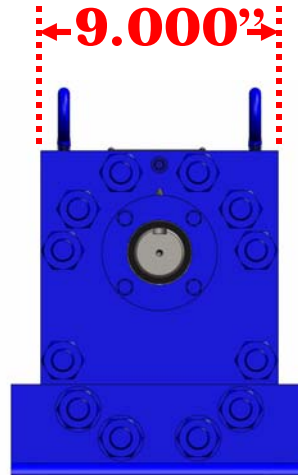
Available in a variety of configurations, material, and special features. Utilized extensively in the pipeline industry, a more regular return of the 4900 series seems very likely.

4900-10

4900-20

4900-30

4900-50



Northern[®] Lesson 4: Model Numbers

Gear Length

Combination of different frame sizes and gear lengths to accomplish specific flows.

-01



.125"

-02



.200"

-03



.300"

-04



.400"

-05



.500"

-06



.600"

-07



.750"

-10



1.000"

-15



1.500"

-20



2.000"

-25



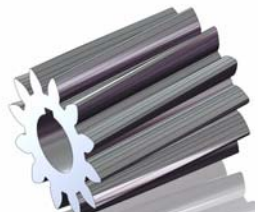
2.500"

-30



3.000"

-40



4.000"

-50



5.000"

-60



6.000"



NORTHERN[®] PUMP