## **PR23**

# Pulley Reducer For NEMA 23 Motors

User's Guide

Revision B

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### **Description**

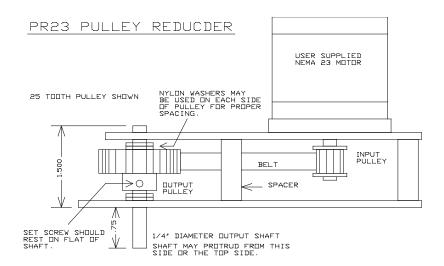
The PR23 pulley reducer attaches to any NEMA size 23 motor. The output shaft and face plate also adhere to the NEMA 23 standard allowing the PR23 to be placed between the motor and mechanics without any modifications. The PR23 can be used as a reducer or increaser depending on the mounting of the pulleys.

Check the package for the following hardware:

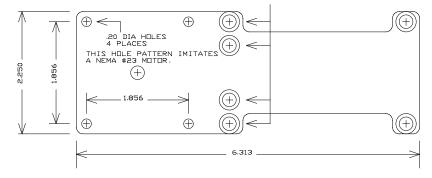
- 1 Pulley reducer.
- 1 Small pulley.
- 8 10-32 x 1/2" screws.
- 8 10-32 lock nuts.
- 3 Hex wrenches.

#### Installation

Begin by sliding the pulley onto the motor shaft without tightening the set screw. Slip the motor shaft and pulley into the cutout on the PR23 frame and attach the belt. Bolt the motor to the PR23 using 4 screws and 4 lock nuts provided. Slide the motor to increase the belt tension then tighten the screws. Slide the pulley up or down so the belt is straight then tighten the set screw. The pulley reducer may be mounted using 4 screws and lock nuts provided. The PR23's output shaft can exit either side of the housing by loosening the set screw of the output pulley, removing the shaft and installing from the other side. The PR23 can be used as a reducer or increaser depending on the mounting of the pulleys. Place the large pulley on the output shaft and the small pulley on the motor shaft to reduce the speed and increase the torque and resolution. Place the large pulley on the motor shaft and the small pulley on the output shaft to increase the speed and decrease the torque and resolution. The spacers can be moved to prevent interference with the belting when swapping pulleys.



MOUNT THESE TWO SPACERS TO PREVENT USE DUTSIDE HOLES FOR ALL RATIOS EXCEPT 4:1 WHICH REQUIRES INSIDE HOLES



#### NOTES:

- IDTES:
  1 DD NOT OVER-TIGHTEN BELT.
  2 ARRANGE WASHERS SO OUTPUT PULLEY DOES NOT INTERFER WITH HOUSING OR BEARINGS.
  3 DUTPUT PULLEY SHOULD SPIN FREELY AND SHOULD NOT HAVE RESISTANCE DUE TO WASHERS.
  4 MAKE SURE THAT SET SCREW ON OUTPUT PULLEY IS ALIGNED TO THE FLAT ON THE SHAFT.
  5 IT'S OFTEN NECESSARY TO LOAD MOUNTING SCREWS BEFORE ASSEMBLY DN 4:1 UNIT BECAUSE SCREW HOLES ARE NOT ACCESSABLE DUE TO PULLEY DIAMETER.

RATIO	# TEETH ON PULLEY	BELT #	SPACER HOLES
2:1	20	100	DUTSIDE
2.5:1	25	100	DUTSIDE
3:1	30	110	DUTSIDE
4:1	40	120	INSIDE

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