

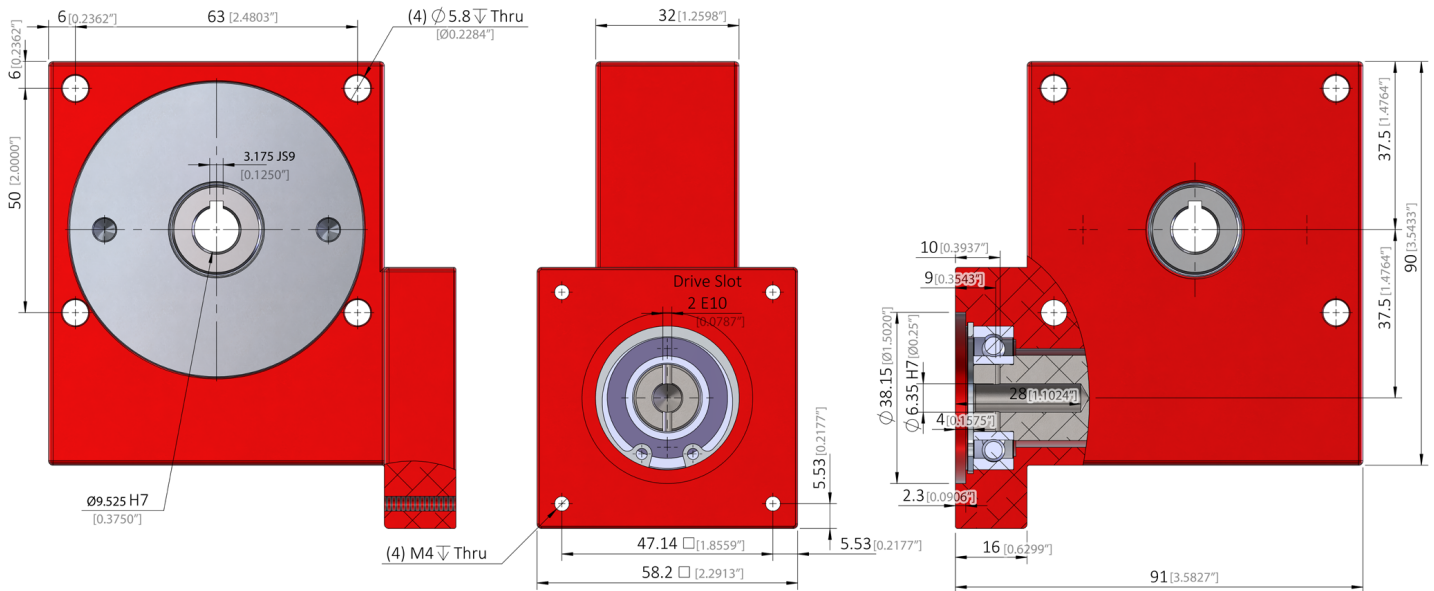
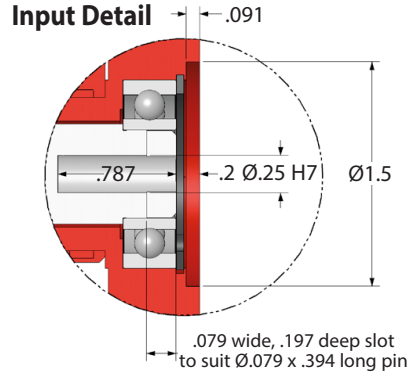
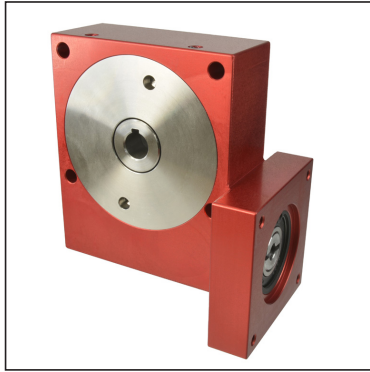
# GEARBOXES

## Precision Worm Gear Reducers

Nema 23 Flange Input 57.5 – 159.3 lb.in **5:1 - 120:1**

e-cad  
Drawings  
Available

**PFA40NM**



Standard ≤30'	Low Backlash ≤8'	Red. Backlash ≤4'	Ratio	Efficiency at 1000 Rpm	Reflected Inertia at Input (lb.in <sup>2</sup> )	Self Locking Output
PFA40-10NM	PFA40-10ANM	PFA40-10ARNM	10:1	89%	1.29 x 10 <sup>-2</sup>	✗
PFA40-12NM	PFA40-12ANM	PFA40-12ARNM	12:1	87%	1.24 x 10 <sup>-2</sup>	✗
PFA40-15NM	PFA40-15ANM	PFA40-15ARNM	15:1	85%	1.19 x 10 <sup>-2</sup>	✗
PFA40-20NM	PFA40-20ANM	PFA40-20ARNM	20:1	83%	1.16 x 10 <sup>-2</sup>	✗
PFA40-30NM	PFA40-30ANM	PFA40-30ARNM	30:1	76%	1.13 x 10 <sup>-2</sup>	✗
PFA40-60NM	PFA40-60ANM	PFA40-60ARNM	60:1	65%	1.12 x 10 <sup>-2</sup>	✓
PFA40-120NM	PFA40-120ANM	PFA40-120ARNM	120:1	41%	1.11 x 10 <sup>-2</sup>	✓
PFA40-SPNM	PFA40-SPANM	PFA40-SPARNM	5:1-120:1	Special Ratios : Replace SP with required ratio		

**Weight:** 2.54 lb. **Greased for Life:** Shell Gadus S5 V42P 2.5.  
**F<sub>a</sub> at 1000 Rpm:** 66.14 lb. **F<sub>t</sub> at 1000 Rpm:** 44.09 lb.

Modifications and custom designed gearboxes available. Contact Sales for details.  
Testing in your application is necessary.  
You will need to assess duty cycles and confirm suitability with your own calculations.  
All figures listed are to be used for guidance only.

### Output Torque lbf.in

Rpm Input	Reduction Ratio						
	10:1	12:1	15:1	20:1	30:1	60:1	120:1
3000	44.3	46.0	47.8	49.6	56.6	63.7	57.5
2000	48.7	51.3	54.9	58.4	64.6	70.8	63.7
1000	62.8	66.4	70.8	72.6	79.7	88.5	77.0
500	78.8	80.5	85.0	88.5	92.9	100.9	90.3
200	102.7	105.3	108.9	110.6	119.5	125.7	103.6
100	118.6	120.4	124.8	129.2	135.4	141.6	108.9
50	133.6	137.2	143.4	145.2	153.1	155.8	108.9
10	155.8	155.8	155.8	156.7	157.5	159.3	108.9