

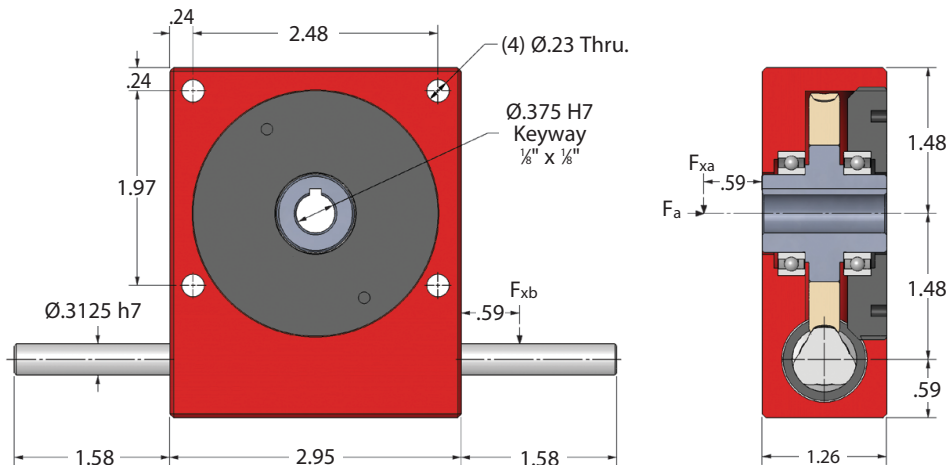
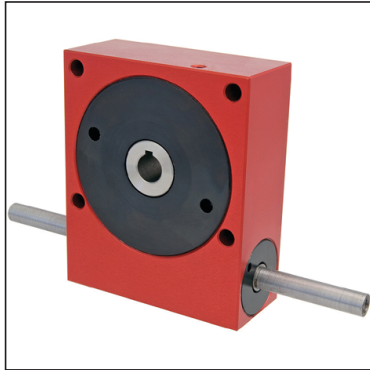
GEARBOXES

Precision Worm Gear Reducers

Shaft Input 44.3 – 159.3 lbf.in **5:1 - 120:1**

e-cad
Drawings
Available

PA40



Standard ≤30'	Part Number Low Backlash ≤8'	Red. Backlash ≤4'	Ratio	Efficiency at 1000 Rpm	Reflected Inertia at Input (lb.in ²)	Self Locking Output
PA40-10	PA40-10A	PA40-10AR	10:1	89%	1.00 x 10 ⁻²	✗
PA40-12	PA40-12A	PA40-12AR	12:1	87%	9.19 x 10 ⁻³	✗
PA40-15	PA40-15A	PA40-15AR	15:1	85%	8.51 x 10 ⁻³	✗
PA40-20	PA40-20A	PA40-20AR	20:1	83%	7.96 x 10 ⁻³	✗
PA40-30	PA40-30A	PA40-30AR	30:1	76%	7.59 x 10 ⁻³	✗
PA40-60	PA40-60A	PA40-60AR	60:1	65%	7.35 x 10 ⁻³	✓
PA40-120	PA40-120A	PA40-120AR	120:1	41%	7.18 x 10 ⁻³	✓
PA40-SP	PA40-SPA	PA40-SPAR	5:1-120:1	Special Ratios : Replace SP with required ratio		

Weight: 2.03 lb. **Greased for Life:** Shell Gadus S5 V42P 2.5.
F_{xb} at 1000 Rpm: 22.05 lb. **F_{xa} at 1000 Rpm:** 66.14 lb. **F_a at 1000 Rpm:** 44.09 lb.

Input Shaft Modifications:

Smaller Diameter, Mill Keyway/Flat, Shorten Shaft Length.
Circlip Groove, Pin Hole.

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