



Multi-Tech Reducers

REDUCERS UP TO 350 IN-LBS

Add your own stepper or servomotor to our NEMA gearboxes. Highly efficient - helical-spur geartrains transmit 96% of the available power per stage, leading the industry. Low backlash ratings - less than 60 arc-minutes, create the ideal gear reducer for applications such as process conveyors, pumps, and dispensers. Shock load capability 200% - is standard in the Multi-Tech product offering, as it is in all of Bison's products. Gloss black powder coat finish - provides the durability needed for demanding environments. Grease lubricated for all position mounting.

Specifications

185 & 385 Multi-Tech Reducers

Gearing:	Hardened steel, AGMA Class 9
Housing:	Precision machined die cast aluminum
Lubrication:	Grease filled, sealed and gasketed
Bearings:	Needle and thrust ball

Shafts:	Hardened steel
Mounting:	Face or base, any angle
Input Features:	• 1/4" diameter, for NEMA 23 mounting • 3/8" or 1/2" diameter, for NEMA 34 mounting • 3000 RPM maximum input speed

Optional Features

- Footplate
 - 185 series
Part number: P125-100-9998
 - 385 series
Part number: P125-287-0200

Additional Information

See pages 86-87 for additional accessories

185 NEMA 23 Input

Part Number	Ratio	Rated Torque		Radial Load		Axial Load		Inertia		Backlash arc-min
		In-Lbs	N-m	lb	kg	lb	kg	oz-in-sec ²	kg-m ²	
060-185-0003	3.0065	20	2.26	200	90.9	25	11.4	4X10-4	6X10-6	60
060-185-0005	4.9573	32	3.62	200	90.9	25	11.4	9X10-5	6X10-7	60
060-185-0007	6.6667	45	5	200	90.9	25	11.4	7X10-5	5X10-7	60
060-185-0013	12.9411	90	10.16	200	90.9	25	11.4	5X10-5	4X10-7	60
060-185-0025	25.2381	90	10.16	200	90.9	25	11.4	4X10-5	3X10-7	60
060-185-0049	48.9916	150**	16.95	130	59.1	25	11.4	4X10-5	3X10-7	60
060-185-0096	95.5442	150**	16.95	150	68.2	25	11.4	3X10-5	4X10-7	60

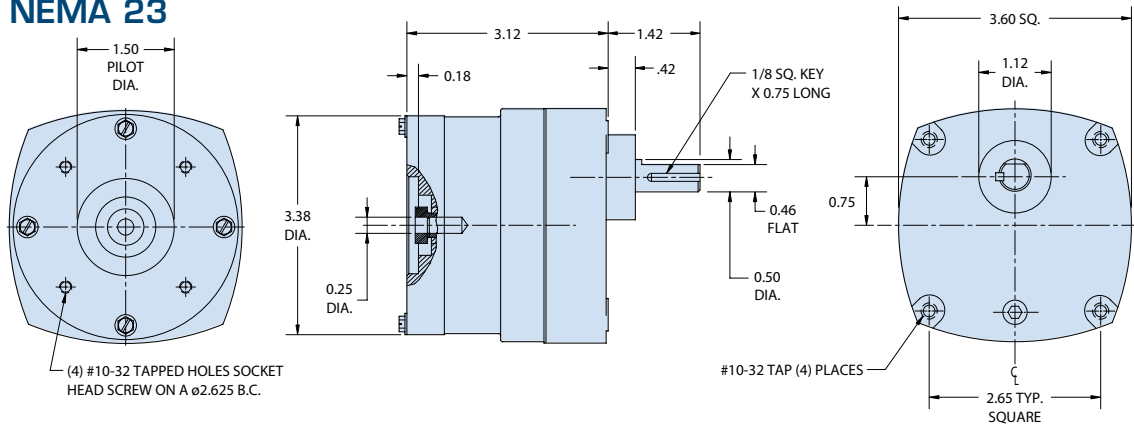
385 NEMA 34 Input

Part Number	Input	Ratio	Rated Torque		Radial Load		Axial Load		Inertia		Backlash arc-min
			In-Lbs	N-m	lb	kg	lb	kg	oz-in-sec ²	kg-m ²	
060-385-0003	3/8" Input Shaft	3.0625	88	9.94	170	77.3	40	18.2	1X10-3	9X10-6	60
060-385-0005	3/8" Input Shaft	4.5208	130	14.69	170	77.3	40	18.2	1X10-3	8X10-6	60
060-385-0011	3/8" Input Shaft	10.8889	300**	34	200	90.9	40	18.2	8X10-4	6X10-6	60
060-385-0015	3/8" Input Shaft	15.3013	300**	34	220	100	40	18.2	7X10-4	5X10-6	60
060-385-0021	3/8" Input Shaft	20.7958	300**	34	230	104.5	40	18.2	7X10-4	5X10-6	60
060-385-0030	3/8" Input Shaft	29.8324	300**	34	250	113.6	40	18.2	7X10-4	5X10-6	60
060-385-0050	3/8" Input Shaft	50.0889	350**	40	250	113.6	40	18.2	6X10-4	5X10-6	60
060-385-1003	1/2" Input Shaft	3.0625	88	9.94	170	77.3	40	18.2	1X10-3	9X10-6	60
060-385-1005	1/2" Input Shaft	4.5208	130	14.69	170	77.3	40	18.2	1X10-3	8X10-6	60
060-385-1011	1/2" Input Shaft	10.8889	300**	34	200	90.9	40	18.2	8X10-4	6X10-6	60
060-385-1015	1/2" Input Shaft	15.3013	300**	34	220	100	40	18.2	7X10-4	5X10-6	60
060-385-1021	1/2" Input Shaft	20.7958	300**	34	230	104.5	40	18.2	7X10-4	5X10-6	60
060-385-1030	1/2" Input Shaft	29.8324	300**	34	250	113.6	40	18.2	7X10-4	5X10-6	60
060-385-1050	1/2" Input Shaft	50.0889	350**	40	250	113.6	40	18.2	6X10-4	5X10-6	60

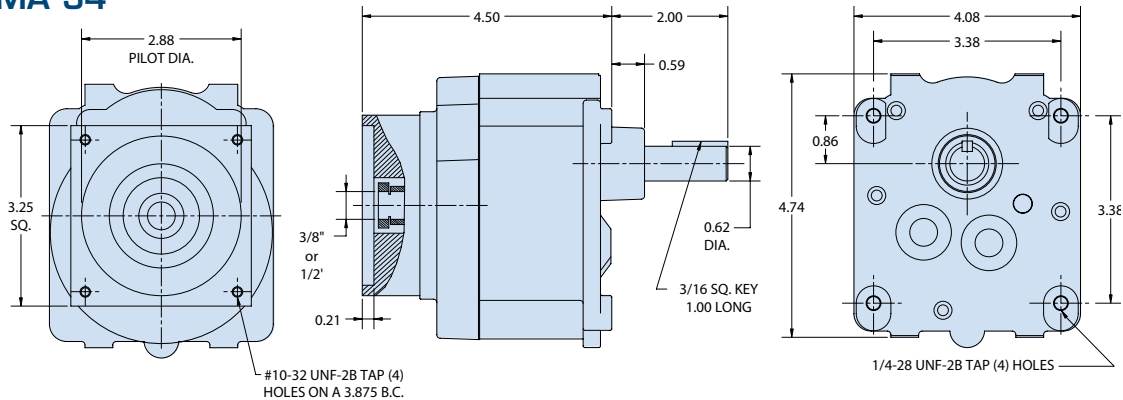
** Gear limited.

Multi-Tech Reducers

185 NEMA 23



385 NEMA 34



Superior Seals

DID YOU KNOW?

Since most Bison gearboxes are oil lubricated for life, we understand the importance of precision ground seal areas. Bison shafts are hardened prior to grind in order to minimize wear on the seal journal. After heat treat, shafts are plunge ground on an automated grinding wheel, maintaining tight tolerances on grind diameter, lead, surface finish, and roundness. This superior seal grind coupled with spring loaded lip seals provides dependable, leak-free performance and the flexibility to mount all Bison gearmotors in any orientation.

Perfection DRIVEN

