

MAGNAGEAR[®] XTR FOR THE GRAIN INDUSTRY

BALDOR • DODGE[®]



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BALDOR•DODGE MAGNAGEAR® XTR FOR THE GRAIN INDUSTRY

With over 6 decades of experience providing gear reducers for the grain industry, Baldor•Dodge knows what it takes to keep a reducer running in tough grain applications.

With hollow shaft mounting capabilities now exceeding 900Hp, the MagnaGear XTR brings the same great features you have come to expect from Baldor•Dodge gearing to higher horsepower drives.

Grain handling is one of the most challenging applications for conveyor drive equipment. Environmental contaminant levels are high. Temperatures swing between extreme heat and cold. Production is critical and downtime is not an option.

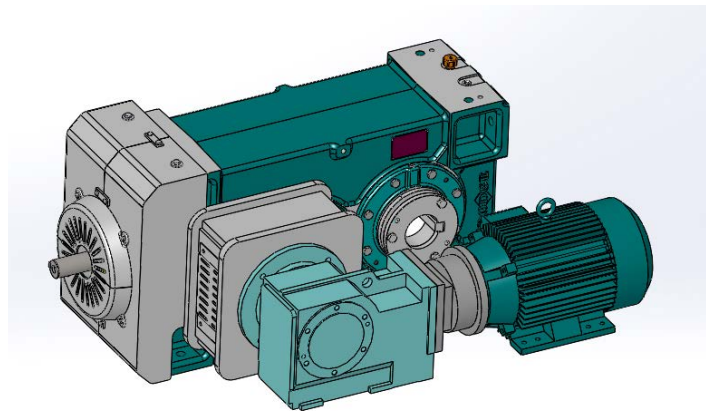


The MagnaGear XTR was designed to provide long, trouble free service in these harsh environments:

- The MagnaGear XTR features a heavy duty design that meets or exceeds AGMA standards including an unadjusted bearing L-10 life of 5,000 hours
- The standard harsh duty sealing system is designed for the difficult environments found in grain handling applications. No seal upgrade is needed with a MagnaGear XTR
- A proprietary lift off backstop design minimizes wear and can be used with oils containing EP additives - eliminating a safety concern found with most other gear reducers on the market
- Patented Twin Tapered Bushing system provides a secure, concentric fit and easy hollow shaft mounting and dismounting.

Multiple Inching Drive Options

Baldor•Dodge engineering can design an inching drive with the right Hp and speed for your application.



MAGNAGEAR XTR REDUCERS: FEATURE RICH AND BUILT TO LAST.

Tandem Sealing System

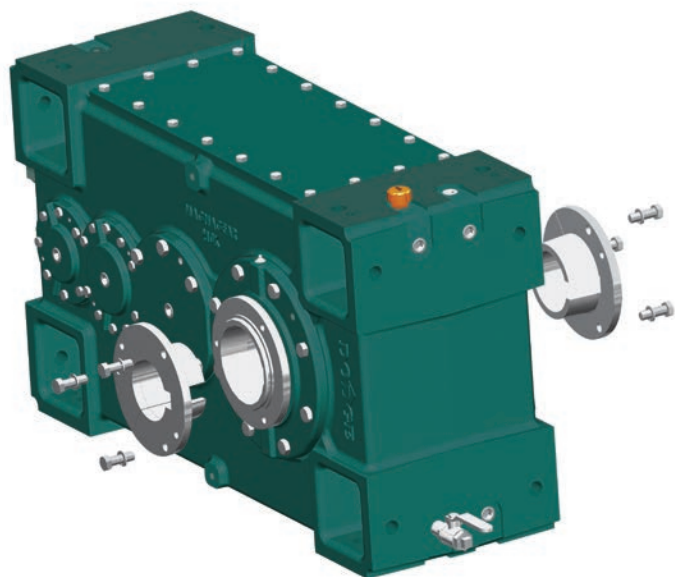
Standard seal system includes dual seals with a purgable grease cavity on the input and output shaft. The inner seal is made from HNBR material which provides excellent wear resistance, synthetic oil compatibility and superior low temperature performance to standard seal materials.

Longer Life Bearings

Bearing designs meet or exceed AGMA standards, resulting in a projected L-10 life over twice that of the competition.

Twin Tapered Bushing System

The patented Dodge Twin Tapered Bushing hollow shaft system provides a concentric grip on the pulley shaft and easy installation and removal.



Other Standard Features Include:

- Flippable housings for maximum versatility
- A magnetic drain plug
- An oil drain valve
- Condition monitoring pads cast in the housing
- 42 month from date of manufacture or 36 months in service warranty protection

Superior Backstop Design

Lift off style backstops eliminate wear and heat generation during normal operation. EP and synthetic oil compatibility eliminate potential safety concerns found with other manufacturers.



An optional Hydra-Lock Desiccant Breather

Breather provides additional protection against moisture and includes a 3 micron filter element to keep contaminants out.



MAGNA Gear XTR MECHANICAL HP AND THERMAL HP RATING TABLES

MagnaGear XTR Hollow Shaft Mechanical Hp Rating Table

Right Angle MagnaGear XTR Mechanical Hp Ratings							
Output speeds and Hp ratings are for 1750 RPM input speed							
Nominal Ratio	Output Speed	Case Size					
		G100	G150	G210	G285	G390	G600
		Input Hp Rating					
12.5	140	199	317	439	566	665	1014
14	125	178	284	394	538	628	1014
16	109	161	256	355	478	595	1014
18	97	140	223	318	435	567	1014
20	88	126	201	288	393	532	910
22.4	78	115	183	250	355	480	824
25	70	106	169	226	313	434	749
28	63	94	150	205	291	372	670
31.5	56	86	137	189	263	331	610
35.5	49	77	123	167	239	298	490
40	44	66	106	146	208	272	473
45	39	59	94	130	187	245	420
50	35	56	89	121	167	221	383
56	31	50	80	110	155	199	349
63	28	45	73	101	140	174	300

MagnaGear XTR input Hp rating is at a 1.0 service factor. To determine the service factor for a particular application, divide the MagnaGear XTR input Hp rating by the input motor Hp.

MagnaGear XTR Hollow Shaft Thermal Hp Rating Tables

Right Angle MagnaGear XTR Thermal Hp Ratings with no Fan							
Thermal Ratings are for a 1750 RPM input speed and a 100 F ambient temperature							
Nominal Ratio	Case Size						
	G100	G150	G210	G285	G390	G600	
	Thermal Hp Rating						
12.5 - 18	82	107	134	149	158	195	
20 - 28	72	94	119	132	140	173	
31.5 - 45	65	85	107	119	126	156	
50 - 63	58	74	94	104	111	137	

Right Angle MagnaGear XTR Thermal Hp Ratings with a Directional Shaft Fan							
Thermal Ratings are for a 1750 RPM input speed and a 100 F ambient temperature							
Nominal Ratio	Case Size						
	G100	G150	G210	G285	G390	G600	
	Thermal Hp Rating						
12.5 - 18	141	182	230	262	363	501	
20 - 28	120	156	195	223	309	425	
31.5 - 45	96	125	157	180	249	356	
50 - 63	81	104	132	151	208	286	

Thermal rating must be larger than input motor Hp rating. If a shaft fan is required, see next page for fan part numbers.

MAGNA Gear XTR REDUCERS AND ACCESSORIES PART NUMBERS

MagnaGear XTR Hollow Shaft Reducer Part Numbers

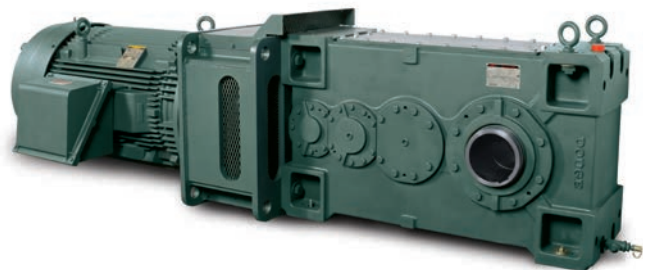
MagnaGear XTR Right Angle Hollow Shaft Gear Reducer Part Numbers												
Nominal Ratio	Case Size											
	G100		G150		G210		G285		G390		G600	
	No Backstop	With Backstop	No Backstop	With Backstop	No Backstop	With Backstop	No Backstop	With Backstop	No Backstop	With Backstop	No Backstop	With Backstop
12.5	448900	448915	449047	449062	449192	449207	449369	449354	449483	449498	448580	448595
14	448901	448916	449048	449063	449193	449208	449370	449355	449484	449499	448581	448596
16	448902	448917	449049	449064	449194	449209	449371	449356	449485	449500	448582	448597
18	448903	448918	449050	449065	449195	449210	449372	449357	449486	449501	448583	448598
20	448904	448919	449051	449066	449196	449211	449373	449358	449487	449502	448584	448599
22.4	448905	448920	449052	449067	449197	449212	449374	449359	449488	449503	448585	448600
25	448906	448921	449053	449068	449198	449213	449375	449360	449489	449504	448586	448601
28	448907	448922	449054	449069	449199	449214	449376	449361	449490	449505	448587	448602
31.5	448908	448923	449055	449070	449200	449215	449377	449362	449491	449506	448588	448603
35.5	448909	448924	449056	449071	449201	449216	449378	449363	449492	449507	448589	448604
40	448910	448925	449057	449072	449202	449217	449379	449364	449493	449508	448590	448605
45	448911	448926	449058	449073	449203	449218	449380	449365	449494	449509	448591	448606
50	448912	448927	449059	449074	449204	449219	449381	449366	449495	449510	448592	448607
56	448913	448928	449060	449075	449205	449220	449382	449367	449496	449511	448593	448608
63	448914	448929	449061	449076	449206	449221	449383	449368	449497	449512	448594	448609

MagnaGear XTR Hollow Shaft Accessories Part Numbers

	G100		G150		G210		G285		G390		G600	
Shaft Fan Kits	454005		454008		454011		451526		965285/964019*		448804 / 448805*	
Hydra-Lock Dessiccant Breather	964366		964366		964366		964366		964366		964368	
Hollow Shaft Twin Tapered Bushing Kits	3-7/16"	454062	4-7/16"	454081	4-15/16"	454099	6"	454114	7"	454130	8"	448689
	3-3/16"	454063	4-3/16"	454082	4-7/16"	454100	5-7/16"	454116	6-1/2"	454131	7"	448688
	3"	454064	3-15/16"	454083	4-3/16"	454101	4-7/16"	454118	6"	454133	6-1/2"	448686

*G390 and G600 shaft fans are uni-directional. 965285h and 448804 are for CW input shaft rotation, 964019 and 448805 are for the CCW input shaft rotation. Direction of rotation to be as viewed when looking towards the high speed (input) end of the reducer.

Available shaft mounting systems include a swing base assembly or a tunnel housing (alignment free drive).



Swing bases and tunnel housings are both great ways to shaft mount a MagnaGear XTR reducer and motor. Designed to fit your application, they can be used with standard flexible or fluid input couplings and a variety of motor frame sizes.

MAGNA GEAR XTR REDUCERS STOCK SELECTIONS

For maximum availability, MagnaGear XTR sizes G150 through G390 are in stock in most popular ratios. Stock accessories include backstops, mechanical shaft fans and twin tapered bushing kits.

MagnaGear XTR Hollow Shaft Gear Reducers and Accessories Stock Selections

Output speeds and Hp ratings are for a 1750RPM input. Thermal Hp ratings are for a 100F ambient temperature.

Ratio	Output Speed	Input Hp Rating	Case Size	MagnaGear XTR Part Number	Thermal Hp Rating with No Fan	Thermal Hp Rating with Shaft Fan	Shaft Fan Kit Part Number	Backstop Part Number	Hollow Shaft Diameter	Twin Tapered Bushing Kit Part Number
16	109	256	G150	449049BC	107	182	454008	453923	4-7/16	454081
		355	G210	449194BC	134	230	454011	453924	4-15/16	454099
		478	G285	449371BC	149	262	451526	453925	6	454114
		595	G390	449485BC	158	280	454016	453926	7	454130
20	88	201	G150	449051BC	94	155	454008	453923	4-7/16	454081
		288	G210	449196BC	119	195	454011	453924	4-15/16	454099
		393	G285	449373BC	132	223	451526	453925	6	454114
		532	G390	449487BC	140	237	454016	453926	7	454130
25	70	169	G150	449053BC	94	155	454008	453923	4-7/16	454081
		226	G210	449198BC	119	195	454011	453924	4-15/16	454099
		313	G285	449375BC	132	223	451526	453925	6	454114
		434	G390	449489BC	140	237	454016	453926	7	454130
31.5	56	137	G150	449055BC	85	125	454008	453923	4-7/16	454081
		189	G210	449200BC	107	157	454011	453924	4-15/16	454099
		263	G285	449377BC	119	180	451526	453925	6	454114
		331	G390	449491BC	126	192	454016	453926	7	454130

MagnaGear XTR Input Hp rating is at a 1.0 service factor. To determine the service factor for a particular application, divide the MagnaGear XTR input Hp rating by the input motor Hp. Thermal Hp rating must be higher than input motor Hp rating. If a shaft fan is required, see above table for fan part numbers.

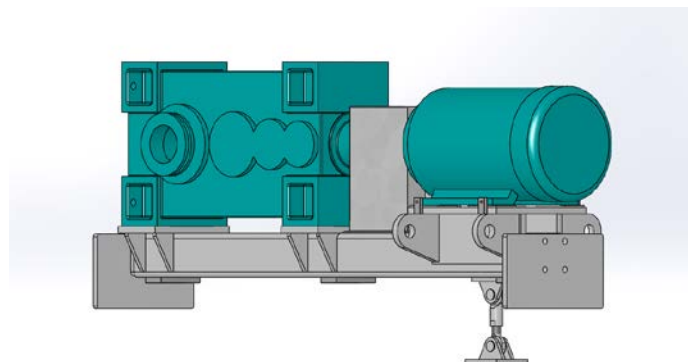
Baldor•Dodge System-1 solutions

The System-1 team can provide a complete solution of Baldor•Dodge components for your application. By optimizing component selection, System-1 can maximize your equipment performance and reliability while minimizing overall costs.

No need to worry about managing several vendors with multiple quotes, orders, invoices, deliveries and warranties.

System-1 will provide a single point of contact throughout the project, from the initial product selection and quoting through drive assembly and coordinated shipment.

Let System-1 coordinate your next MagnaGear XTR drive assembly.



MAGNA GEAR XTR STOCK BROCHURE

INSTRUCTIONS FOR USE

MagnaGear XTR Mechanical Hp Selection (pages 4 and 5)

1. Determine the required gear reducer output speed and design horsepower (Hp) rating for the application. The design Hp can be determined by multiplying the input motor Hp rating by a recommended service factor for the application type. Recommended service factors for common applications are published by AGMA and can be found in the MagnaGear XTR catalog CA1610.
2. Once the correct output speed and design Hp are known, go to the MagnaGear XTR mechanical Hp rating table on page 4. Find the gear ratio and output speed in the first two columns that most closely match the required output speed. Then find the MagnaGear XTR input Hp rating in the same row that is equal to or above the design Hp requirement determined in step 1. The top of the column with this Hp rating will have the MagnaGear XTR case size required.
3. Use the thermal Hp rating table on page 4 to confirm the thermal Hp rating with no fan for the MagnaGear XTR case and ratio determined in step 2. The thermal Hp rating should be larger than the input motor Hp. No service factor is required for the thermal Hp rating. If the thermal rating with no fan is less than the input motor Hp rating, check the thermal rating with a shaft fan – if this rating is higher than the input Hp rating then a shaft fan will be required.
4. Use the MagnaGear XTR reducer part number table on page 5 to find the part number for the MagnaGear XTR with the ratio and case size determined in step 2. There are separate part numbers for MagnaGear XTR reducers with and without backstops. Use the MagnaGear XTR accessories part number table to find the shaft fan part number if it was determined in step 3 a fan is needed.
Also use this part number table to find the part numbers for the optional desiccant breathers as well as Twin Tapered Bushing Kits for shaft mounting. Other shaft diameters are available and can be found in the MagnaGear XTR catalog CA1610.

MagnaGear XTR Stock Reducers Selection (page 6)

1. Determine the required gear reducer output speed and design horsepower (Hp) rating for the application. The design Hp can be determined by multiplying the input motor Hp rating by a recommended service factor for the application type. Recommended service factors for common application are published by AGMA and can be found in the MagnaGear XTR catalog CA1610.
2. Once the correct output speed and design Hp are known, go to the MagnaGear XTR stock selection chart on page 6. Find the gear ratio and output speed in the first two columns that most closely match the required output speed. Then find the MagnaGear XTR input Hp rating in column 3 that is equal to or above the design Hp requirement determined in step 1. Column 5 will contain the part number for the appropriate MagnaGear XTR reducer.
3. Confirm the thermal Hp rating with no fan for the selected MagnaGear XTR. The thermal Hp rating should be larger than the input motor Hp. No service factor is required for the thermal Hp rating. If the thermal rating with no fan is less than the input motor Hp rating, check the thermal rating with a shaft fan – if this rating is higher than the input Hp rating then a shaft fan will be required. A fan can be ordered using the shaft fan kit part number given for the MagnaGear XTR selected.
4. The stock MagnaGear XTR reducers have hollow output shafts and require a Dodge Twin Tapered Bushing kit. A Twin Tapered Bushing Kit can be ordered using the part number given for the MagnaGear XTR selected.
5. The stock MagnaGear XTR reducers are backstop capable. If a backstop is required, one can ordered using the backstop part number given for the MagnaGear XTR selected.
6. The stock MagnaGear XTR gear reducer, fan, twin tapered bushing kit and back stop will ship separately.

Contact Baldor•Dodge Customer Service with any questions on product selections, or for products not found in this MagnaGear XTR flyer.

MISSION

**Our mission is to be the best (as determined by our customers)
marketers, designers and manufacturers of industrial electric motors,
drives and mechanical power transmissions products**

Taking care of our customers safely



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