



SLEW DRIVES

CATALOG





TGB GROUP TECHNOLOGIES

With more than 30 years of experience in slew drives, slewing rings, bearings, gears, and power transmission, TGB Group Technologies has become a global leader in the development and production of motion solutions for the industrial, renewable energy, and linear markets.

Headquartered in Barcelona, TGB has a global presence with factories in China and India, a network of sales offices and warehouses throughout the world, and an R&D department in Barcelona that allows us to offer the best customized solution with the highest quality.



www.tgb-group.com



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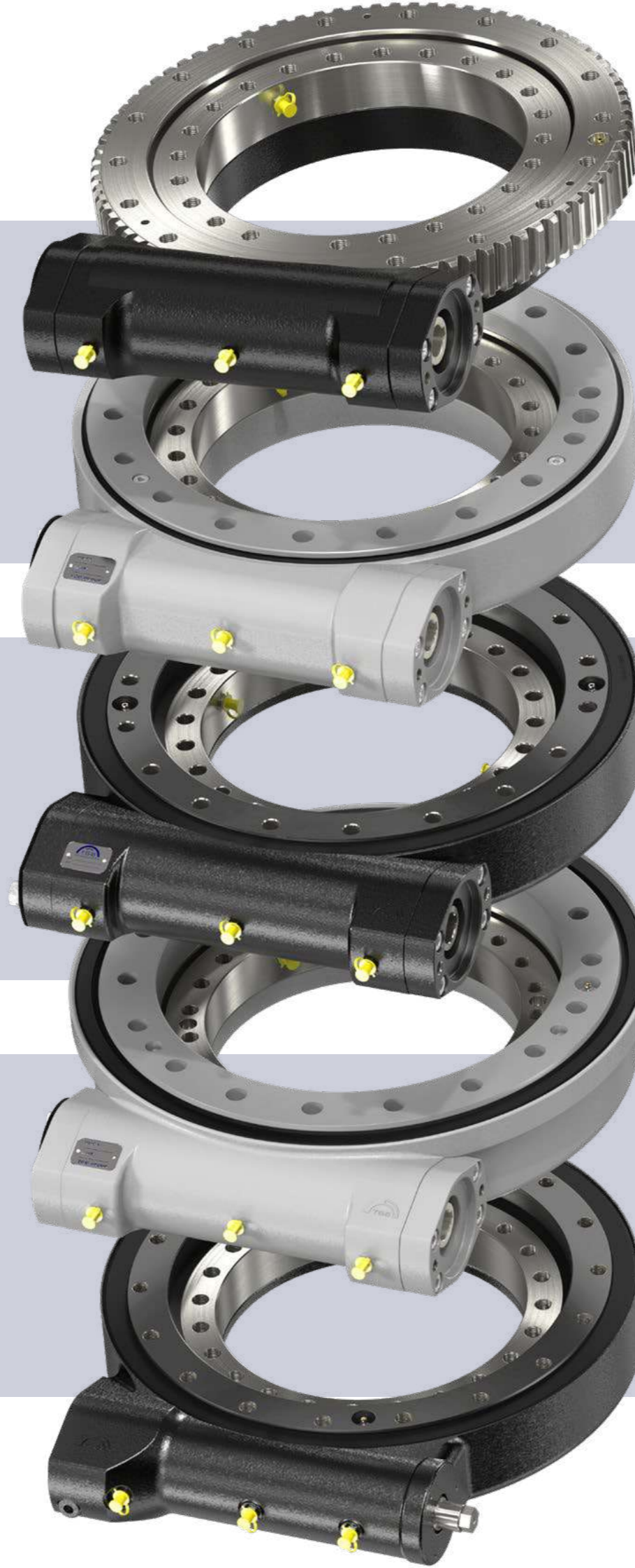
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This catalog uses both metric and imperial notation standards, depending on the unit of measurement, to ensure clarity and precision for international users.

METRIC UNITS

For units such as N·m, kN·m, kN, and kg, the following numeric format is used:

1.000.000,00

Period (.) as the thousand separator

Comma (,) as the decimal marker

IMPERIAL UNITS

For units such as ft·lbf, x10³ ft·lbf, x10³ lbf, and lbs, the following numeric format is used:

1,000,000.00

Comma (,) as the thousand separator

Period (.) as the decimal marker

This distinction helps ensure that all technical values are clearly interpreted, avoiding confusion across different regional formats. Please refer to the appropriate format when reading tables, diagrams, and specifications throughout this catalog.

INTRODUCTION

A slew drive is a compact rotary system that provides rotary motion to a structure or object around an axis. It is designed to be installed directly into the customer's application, making it easy to integrate and maintain. Its compact and hermetic design makes it ideal for applications that need to withstand high loads and severe environmental conditions.

TGB's slew drives are precision-engineered units meticulously matched to ensure optimal performance and reliability. The compact system eliminates the time-consuming and prone process of assembling individual components and conducting adjustments. TGB assumes full responsibility for the system's design and compatibility and can be your source of supply.

Our comprehensive range of slew drives caters to diverse applications and requirements, with various sizes and configurations, usually immediately available in stock.

Also, we are committed to providing customer service and technical support to ensure your satisfaction and the smooth operation of our slew drives.

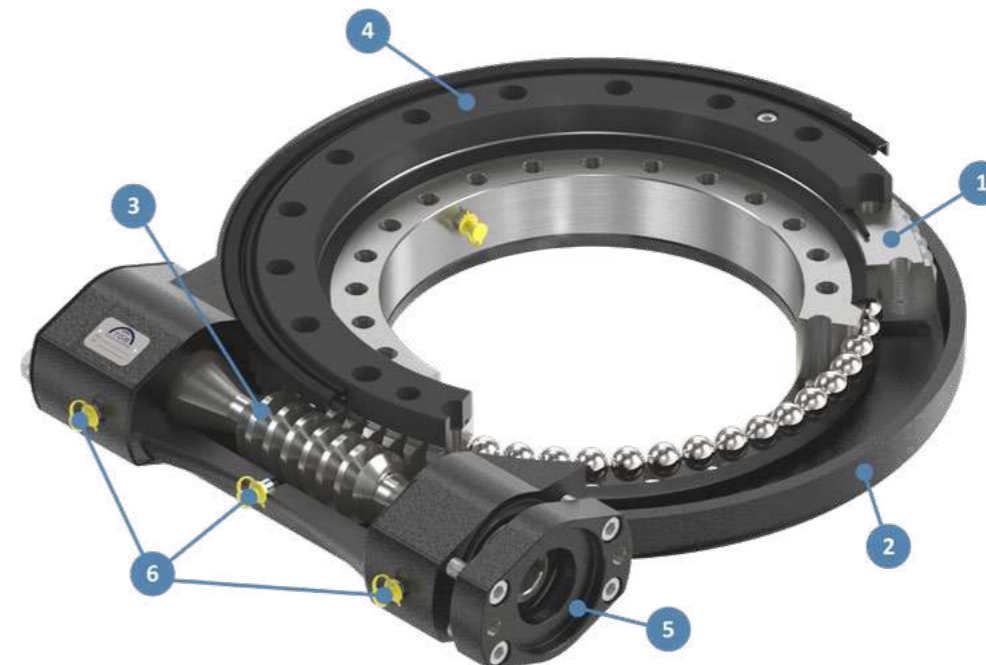
Slew drives offer a versatile and efficient solution for a variety of applications. With a compact design that optimizes building space, these drives provide exceptional load capacity despite reduced installation space. In addition to being designed for a long service life with low maintenance requirements, their modular structure allows the quick realization of special versions according to customer needs, ensuring easy integration into existing constructions.

All this makes our slew drives an outstanding choice for a wide range of applications around the world

PRODUCT DESCRIPTION

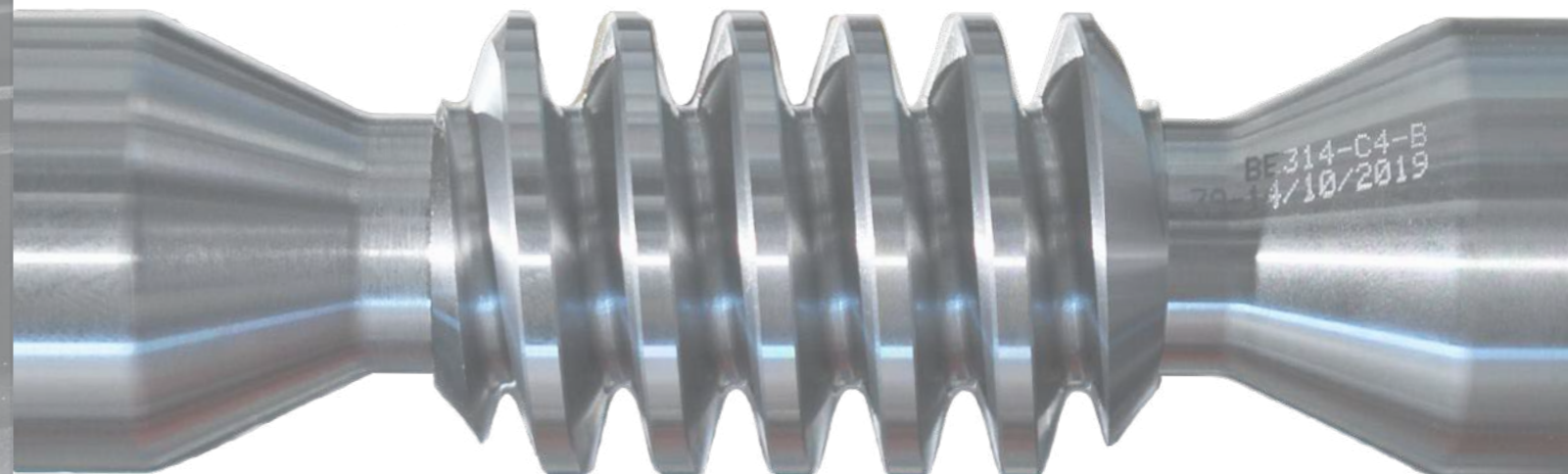
Slew drives are compact rotary systems designed to be installed directly on the customer's applications, which give rotational movement to the structure while at the same time being able to withstand high loads and critical environmental conditions due to its enclosed system.

These rotating systems are composed of a **slewing ring** ①, mounted on or inside a **housing** ②, and assembled with the **screw worm** ③, which is the part in charge of the transmission of the torque to the slewing ring. A **top plate** ④ can be used to give a little thickness and avoid contacts during rotation. Inside that housing, there are also a couple of bearings that hold the screw worm together with their corresponding motor cap and encoder cap, the **motor flanges** ⑤. These caps can be adapted to fit directly a hydraulic motor or a gearbox by means of an adapter flange. The drive has its own **grease nipples** ⑥ that allow the regreasing of the slew drive for maintenance.



WORM-DRIVEN SLEW DRIVES

The worm is operated by an electric, hydraulic or pneumatic motor, and acts as a speed reducer, allowing the slewing ring to move at a speed much lower with respect to the speed of the worm gear. This provides high torque at the output, which is useful for moving heavy loads. An advantage of the worm-driven slew drive is that it can provide very precise motion control and has the ability to self-lock, which means that the slewing ring cannot move the worm, preventing reverse motion.



PRODUCT RANGE OVERVIEW

TGB Group has different slew drive models designed for different kinds of applications.

All the drives can be adapted according to clients requirements, for example, adding splined shafts, slewing rings with double raceway, holes in imperial, double worm drives are available for high torque requirements, etc.

Our product range is characterized by its adaptability, ensuring that whatever your project requires, we have the perfect slew drive model ready to meet the challenge.

BE Series



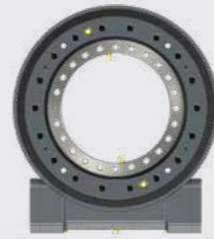
Standard series for industrial applications

LBE Series



BE Series light version with aluminum housing for reduced weight

PRO Series



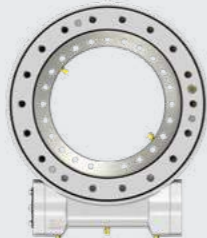
Reinforced design, lowest backlash, best sealing and easy maintenance

TE Series



Withstand high loads, prepared for high holding torque applications and guarantees dust protection

TGE Series



Simple version similar to TE Series with basic sealing between slewing ring and housing

TGO Series



Open version designed for applications requiring gear control and enhanced accessibility

GE Series



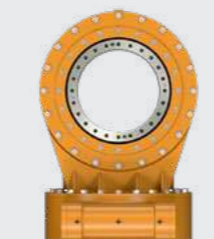
Non-self-locking version able to reach higher speeds, withstanding lower loads

LGE Series



LGE Series light version with aluminum housing for reduced weight

DAD Series



Combined vertical and horizontal series to give a full rotational movement in azimuth and zenith directions

PRO Series

Introducing the Next Generation of Precision Slew Drives

A state-of-the-art slew drive that sets a new standard for operational excellence. TGB's new slew drive is engineered for applications demanding the utmost precision and reliability without the maintenance traditionally associated.

ALMOST FREE MAINTENANCE

ENHANCED PRECISION

MORE HOLDING TORQUE

MINIMAL BACKLASH

INDUSTRIAL DESIGN

APPLICATION EXAMPLES



Conveyor Belts



Forestry



Excavators



Conveyor Rollers



Sewage Treatment



Cutting Machines



Fairgrounds



Scanners



Lifting Claw



Offshore



Harvesting



Lifting Boat Cranes



Cutting Grass



Coal Mining



Bottling Machines



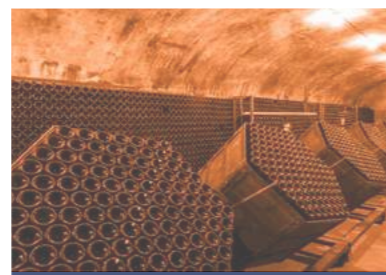
Aerial Platforms



Harvesting



Lifting Platforms



Gyropalletes



Vacuum Trucks



Single or Double Axis Solar Tracker



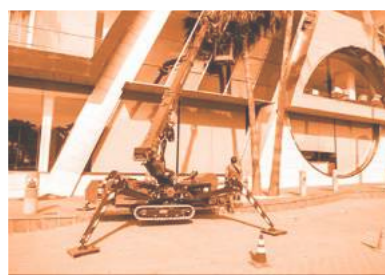
Offshore Crane



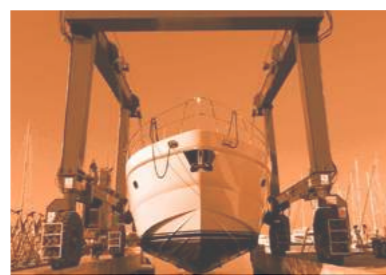
Forklift Attachments



Olive Harvester



Spider cranes



Lifting boat cranes



Convoy trucks



Demolition



Windmill Service crane



Solar Panel Cleaning



Wind Machines



Grain Bulk Truck



Aerial Platforms



Concrete Pumps



Jet Bridge Finger



Tower Cranes

If your specific application is not listed, our Sales Department will be pleased to assist you in finding the best solution. You can also submit a direct product inquiry for further guidance. For the Inquiry Form, please refer to page 60.

BASIC INSTRUCTIONS

Slewing drives present some characteristics that should be taken into account to choose the proper series for each application.

- **MAXIMUM OUTPUT SPEED:** as a general guideline, it must be less than 1 rpm.
- **STANDARD TEMPERATURE WORKING RANGE:** between -20 and 70 °C.
- **MOUNTING POSITION:** slewing drives can be used both in horizontal and in vertical positions. It is recommended to fix the slew drive when it is installed in vertical position, with the screw worm in the lower position. For other mounting positions, please contact TGB's Technical Department.
- **LOAD DIAGRAM:** show its limit static load with a safety factor of 1. TGB Group recommends adding an application factor to the loads according to the following table. To ensure the drive chosen is the right one, the load case of the application must be below the limit curve.

Application	Application criteria	Application factor
Casting	Extreme application	1,5
Machines for building / Cranes	Extreme application	1,25
Vehicles and mounting on vehicles	Extreme application	1,25
Forklifts / Bulldozers	Light shocks	1,1
Treatment plants	Vibrations	1,25
Wind turbines	Danger of streaking	2,0
Robots	Rigidity	1,25
Antennas	Precision	1,5
Machines-tool	Precision	1,5
Measurement technique	Smooth operation	2,0

Load diagrams are also limited by the bolts. They are only valid if all the bolts of the slewing drive are used to fix it to the structure. The quality of the bolts is considered grade 10.9; the threaded length should be at least 1.5 times the bolt diameter and the recommended flange thickness 2 times the bolt diameter. If the bolt curve does not appear in the chart, this means that this curve is above the slewing ring chart.

In case you have questions regarding the application for breach of any point of the ones mentioned above, or various load cases are applied, we recommend contacting TGB. In case the slewing drive chosen does not adapt to your application, we recommend consulting the slewing ring catalog, as there exist a major variety of products and features.

TGB Group also offers the possibility of making customized designs in case none of the slew drives that appear on this catalog fit for your application. And also provide a complete solution, including motor and gearbox calculations following the loads supplied by the customer according to each application.

TRANSPORT, HANDLING AND STORAGE

Transport only in horizontal position, avoiding possible impacts. The vertical series should be transported and stored in vertical position. The slewing drive should be manipulated carefully, and wear working gloves all the time. The threaded holes can be used to fix eye bolts to handle the slew drive safely with a hoisting device. Store always in horizontal position and in closed rooms. Keep it away from areas where it could get wet.

INSTALLATION

Prior to the installation, a cleaning of the slewing drive and the structure where it is going to be mounted must be done. It is not allowed the use of steam high-pressure systems. Before the installation of the slew drive on the structure, please check the slew drive for physical damage and ensure that the drive moves smoothly. If the slew drive makes noise before installation, please check whether lubrication is good enough. It should be checked that the slewing drive is fully supported by the structure. The supporting surface must accomplish some requirements, considering a maximum flatness deviation. The maximum value for flatness deviation can be reached only once per 180°. The maximum values for a range of sizes of slew drive are shown in the table below.

Slew Drive Size		≤ 236	≤ 314	≤ 523	≤ 700
Flatness deviation	mm	0,1	0,12	0,15	0,2
	in	0.004	0.005	0.006	0.008

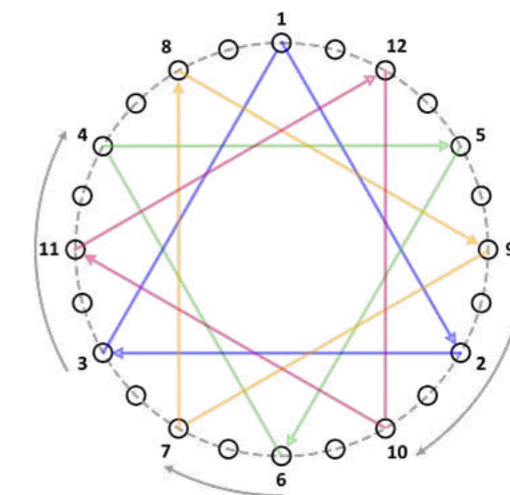
The slewing drive must be mounted without any external loads. It is convenient to perform working tests in the structure before the loads are applied. The bolts used must be from the dimension, quantity and quality indicated. Bolts with a fully threaded shaft and split washers should not be used. The grip ratio (grip length divided by the diameter of the bolt) shall be observed, from minimum ≥ 2 to maximum ≤ 10 (recommended value 5). The threaded length should be at least 1.5 times the bolt diameter. Slewing drive function, lifespan, and durability of the bolt connection are affected in case of non-compliance of the above-mentioned points. On the below table, the recommended tightening torques for each bolt size can be observed.

Mounting bolt dimension	Tightening torque
	Quality grade 10.9
	N·m
M6	14
M8	35
M10	69
M12	120
M16	295
M20	580

Mounting bolt dimension	Tightening torque
	Quality grade 10.9
	ft·lbf
1/4-20 UNC	12
5/16-18 UNC	24
3/8-16 UNC	45
1/2-13 UNC	110
5/8-11 UNC	210
3/4-10 UNC	380

For tightening the bolts, the following procedure should be followed in order to avoid deviation between bolt tightening forces:

- Slightly apply thread locker to the bolt threads (last three to five filets) to ensure uniform frictional resistance.
- Preload the bolts crosswise in 3 steps: 30%, 80%, and 100% of the tightening torque. The scheme shows an example of the order to be followed when tightening the bolts.



Once the screw is tightened, mark the surface of the screw and the structure surface
It is useful to inspect the bolts tightening

LUBRICATION

For all applications, a proper lubrication is necessary for a smooth operation of the slewing drive. All the TGB Group slew drives are supplied slightly pre-lubricated, but it is always recommended to add grease prior to initial operation. There are three parts that need to be lubricated: the slewing ring raceway, the screw worm and the bearings.

The quantity of grease required is around 60 cc for the screw worm, 10 cc for each tapered roller bearing, and 10 cc each 250 mm of diameter for the slewing ring raceway. See the [Installation & Maintenance Manual](#) for precise numbers of each model.

The procedure to regrease consists in injecting grease into all grease nipples one after the other while rotating the slewing drive. The slewing drives must be regreased after each cleaning and also before and after large periods of inactivity.

Re-lubrication is needed to assure a minimum quality on the grease inside the drive. In case no comparative results are available, the following table can be used as a reference.



Slewing ring grease nipples
Tapered bearing grease nipples
Screw worm grease nipple

Working conditions	Slewing Ring and Screw Worm Re-lubrication intervals
Rotational speeds < 0,5rpm Non-extreme environmental conditions (solar trackers)	Every 400 hours of operation or once every 12 months
Rotational speeds > 0,5rpm Non-extreme environmental conditions (man lift, industrial applications)	Every 200 hours of operation or once every 6 months
Extreme climatic conditions (sea / desert / Arctic climate / very dirty surroundings) (tunnelling machines / steel mills)	Every 100 hours of operation or once every 3 months
Bearing re-lubrication intervals	
All working conditions	Every 400 hours or every 12 months

MAINTENANCE AND SECURITY CONTROLS

TGB Group recommends retightening the bolts to the prescribed torque after no more than 100 working hours to compensate for the possible settling. This should be done without external loads applied to the bolt union. This inspection should be repeated from then on every 3 months of working. The frequency of the inspection must be reduced under special working conditions.



INSTALLATION AND MAINTENANCE MANUAL

For detailed installation and maintenance instructions, please scan the QR code below. The manual provides step-by-step guidance to ensure proper assembly, safe operation, and long-term performance of your slew drive.



If you have any questions or require further assistance, please do not hesitate to contact our Technical Support Department. Our team is available to help you with any inquiries related to installation, operation, and maintenance.

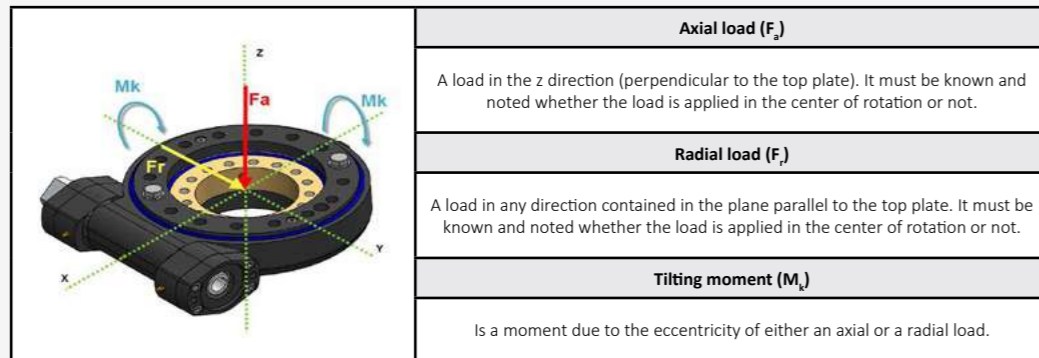


SELECTION CRITERIA

PROCEDURE FOR SELECTING A SLEW DRIVE

1. DEFINE APPLICATION REQUIREMENTS

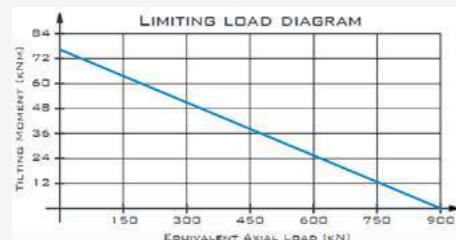
- Determine load capacity (axial, radial, and tilting moment)
- Identify operating conditions (speed, temperature, environment)
- Specify mounting and space constraints



2. MATCH PROJECT NEEDS WITH SLEW DRIVE DATA

- Select worm gear or spur gear based on efficiency, speed requirements, gear ratio and backlash needs
- Decide on enclosed or open housing depending on protection needs
- Selecting a slew drive using the limiting load diagram:

- The operating point, including the application service factor, must lie below the selected curve.
- Check the selected slew drive at TGB Group for service life and static suitability.



For a TGB check of the service life and static suitability of the selected slew drive, please provide us with the **INQUIRY FORM** (see page 40) and a sketch of the application for inspection.

3. SELECT THE APPROPRIATE SLEW DRIVE

Check which drive would offer the best conditions according to your application:



- Available with 3.1 and 3.2 certificates, ensuring compliance with industry standards.
- Surface treatments and coatings as protection options, from C3 to C5M, and hot zinc for offshore applications.
- Our slew drives feature high-quality materials.

	Series	Sizes	Description	Maximum torque		Nominal torque		Holding torque		Tilting moment		Radial static load		Axial static load		Output speed	Product Image		
				kN-m	x10 ³ ft.lbf	kN-m	x10 ³ ft.lbf	kN-m	x10 ³ ft.lbf	kN-m	x10 ³ ft.lbf	kN	x10 ³ lbf	kN	x10 ³ lbf			rpm	
driven by screw worm	BE and LBE	100	Standard series for industrial applications (LBE is light version with aluminum housing)	from 0,64 to 42,82	from 0,47 to 31,58	from 0,25 to 42,82	from 0,18 to 31,58	from 0,95 to 75,00	from 0,70 to 55,32	from 1,60 to 540,00	from 1,18 to 398,28	from 15,00 to 1600,00	from 3,37 to 359,70	from 10,20 to 4000,00	from 2,29 to 899,24	1			
		236 (-2B)																314 (-2B)	435 (-2B)
	PRO	314		Reinforced design, lowest backlash, best sealing and easy maintenance	from 9,30 to 30,00	from 6,86 to 22,13	from 7,90 to 25,00	from 5,83 to 18,44	from 30,00 to 50,00	from 22,13 to 36,88	from 27,50 to 540,00	from 20,28 to 149,78	from 204,00 to 203,00	from 45,86 to 151,75	from 54,700 to 1808,00	from 122,97 to 406,46	1		
		435																	500
	TE	160		Withstand high loads, prepared for high holding torque applications and guarantees dust protection	from 1,20 to 67,52	from 0,89 to 49,80	from 0,60 to 52,74	from 0,44 to 38,90	from 5,00 to 275,00	from 3,69 to 202,83	from 7,10 to 540,00	from 5,24 to 398,28	from 64,00 to 1600,00	from 14,39 to 359,70	from 84,00 to 4000,00	from 18,88 to 899,24	< 1,50		
		236 (-2B)																	314
	TGO	400			Open version designed for applications requiring gear control and enhanced accessibility	from 10,50 to 30,50	from 7,74 to 22,50	from 7,50 to 23,50	from 5,31 to 17,33	from 37,00 to 95,20	from 27,29 to 70,27	from 52,00 to 326,00	from 38,35 to 240,45	from 222,00 to 640,00	from 49,91 to 143,88	from 740,00 to 1710,00	from 166,36 to 384,43	1	
		435																	
	GE and LGE	236			Non-selflocking version (LGE is light version with aluminum housing)	from 3,28 to 15,30	from 2,42 to 11,28	from 2,52 to 7,57	from 1,86 to 5,58	from 12,60 to 18,30	from 9,29 to 13,50	from 13,00 to 105,00	from 9,59 to 77,44	from 156,00 to 413,00	from 35,07 to 92,85	from 366,00 to 1170,00	from 82,28 to 263,03	< 2	
		314																	
DAD	160	Dual axis drive, combines vertical and horizontal series to give a full rotation in azimuth and zenith directions	from 1,20 to 50,00		from 0,89 to 36,88	from 0,60 to 28,00	from 0,44 to 20,65	from 5,00 to 105,00	from 3,69 to 77,44	from 7,10 to 340,00	from 5,24 to 250,77	from 64,00 to 1242,00	from 14,39 to 279,21	from 84,00 to 2755,00	from 18,88 to 619,35	1			
	5																	6	8S
driven by pinion	TGP	Light 229 - 1091	Allows efficiency in power transmission and results in higher speeds		from 3,06 to 52,93	from 2,26 to 39,04	from 2,66 to 37,07	from 1,96 to 27,34	from 3,06 to 52,93	from 2,26 to 39,04	from 22,50 to 545,00	from 16,60 to 402,96	from 162,00 to 1145,00	from 36,42 to 257,41	from 471,00 to 3066,00	from 105,89 to 689,27	< 87		
		Medium 311 - 1091																	Heavy 455 - 955

*-2B: double ball row *-2: double screw worm *-2-2B: double ball row and screw worm

PRE-SALES

KNOW-HOW

Driving Your Project to Success

Our pre-sales services are designed to support the success of your project by providing expert technical guidance and assistance. With our team's extensive experience, we help you through every stage of the process, from conceptualization to full integration.

- Technical Consulting
- Design and Calculation
- Construction and Drafting
- FE Analysis
- Product Training Courses

We are committed to addressing all critical factors to meet the diverse demands of various applications.



INDUSTRIAL SERIES

AFTER SALES

SUPPORT

Expert Assistance Beyond Project Completion

Our after-sales services ensure long-term success and optimal performance for your slew drives, providing continuous support even after your project is completed.

- Installation Support
- Optimization Advice
- Repair and Maintenance
- Lubricant Analysis & Sealing Assessment
- Component Testing
- Bolting Inspection
- Express Spare Parts Service
- Long-Term Packaging

We ensure your slew drive systems perform optimally throughout their lifespan.



DESCRIPTION

BE

It consists of a straight screw worm and a slewing ring, which guarantees a smooth and controlled rotation of the slew drive by utilizing the maximum holding torque that the teeth can withstand. This kind of slew drive includes an external lip seal that provides higher protection against dust and water.

MAIN FEATURES

- NBR Lip Seal
- IP 65
- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)

LBE

Low-weight drives with the same geometry and dimensions as the BE drives. It has a housing of aluminum, which reduces considerably the slew drive weight and allows using it in special applications where weight is critical. It also includes an external lip seal.

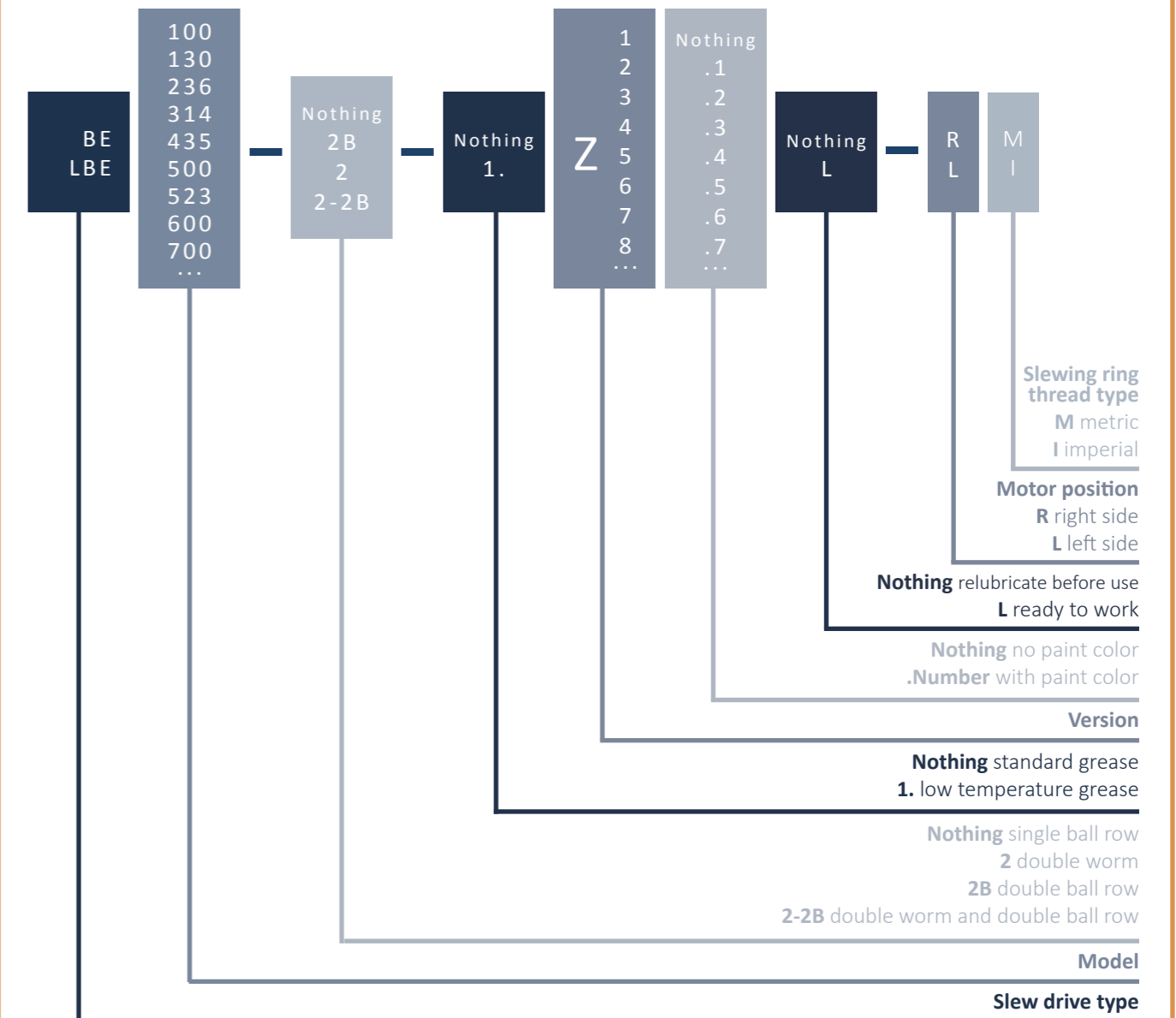
MAIN FEATURES

- NBR Lip Seal
- Aluminum housing
- IP 65
- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)



CODE DESCRIPTION

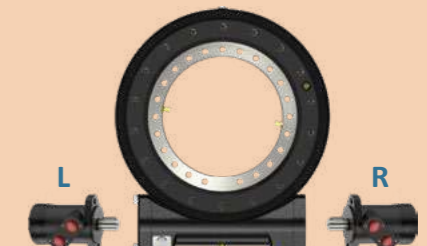
BE AND LBE SLEW DRIVES

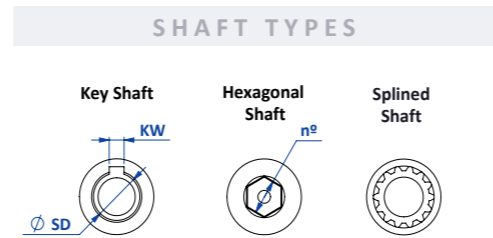
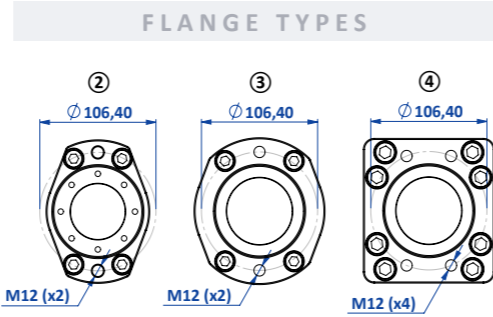
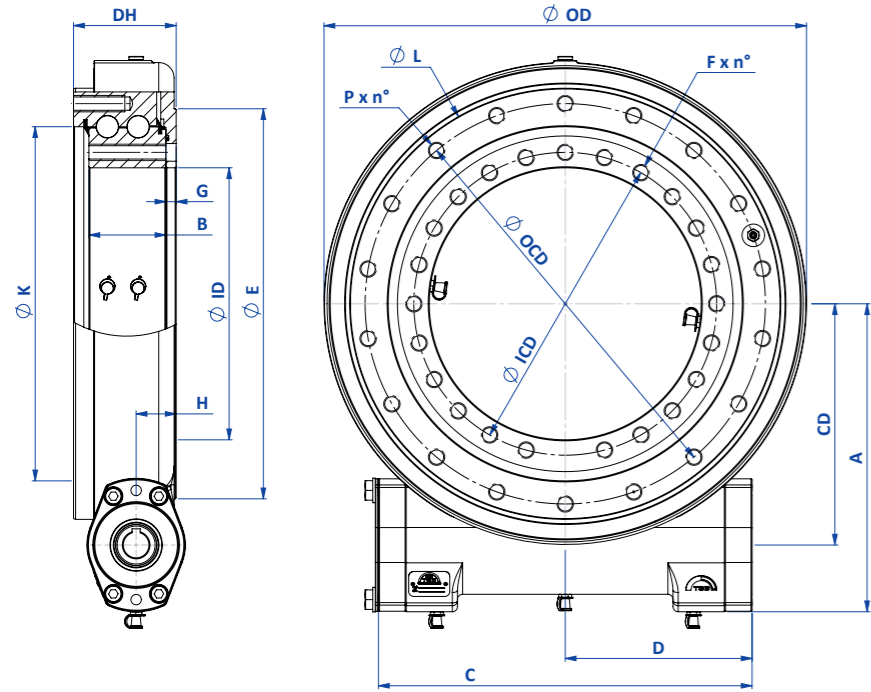


Example



Motor position





DIMENSIONS

	BE236-2B-Z1		BE314-2B-Z1		BE435-2B-Z1		BE523-2B-Z1		BE600-2B-Z1		BE700-2B-Z14		BE702-2B-Z1	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Ø OD	270	10.63	370	14.57	470	18.50	559	22.01	612	24.09	770	30.31	770	30.31
Ø ID	98	3.86	145	5.71	265	10.43	324	12.76	380	14.96	525	20.67	525	20.67
Ø OCD	190	7.48	270	10.63	390	15.35	480	18.90	520	20.47	675	26.57	675	26.57
P x n°	M12 ↓24 mm x 8		M16 ↓30 mm x 16		M16 ↓40 mm x 18		M16 ↓32 mm x 20		M16 ↓32 mm x 32		M20 ↓35 mm x 36		M20 ↓40 mm x 36	
Ø ICD	120,50	4.74	175	6.89	295	11.61	365	14.37	420	16.54	565	22.24	565	22.24
F x n°	M12 ↓24 mm x 10		M16 ↓30 mm x (16-2)		M16 x (24-1)		M16 ↓45 mm x 20		M16 ↓30 mm x (32-1)		M20 ↓35 mm x (36-1)		M20 ↓40 mm x (36-1)	
DH	107	4.21	100	3.94	100	3.94	100	3.94	130	5.12	157	6.18	155	6.10
CD	135	5.31	175	6.89	235	9.25	282	11.10	305	12.01	392	15.43	392	15.43
A	199,50	7.85	239,50	9.43	299,50	11.79	346,50	13.64	369,50	14.55	458	18.03	457	17.99
B	73	2.87	75	2.95	75	2.95	77	3.03	82	3.23	107	4.21	107	4.21
C	304	11.97	344	13.54	364	14.33	390	15.35	424	16.69	454	17.87	470	18.50
D	152	5.98	172	6.77	182	7.17	195	7.68	212	8.35	227	8.94	235	9.25
Ø E	190	7.48	250	9.84	380	14.96	460	18.11	480	18.90	625	24.61	625	24.61
G	10	0.39	10	0.39	10	0.39	10	0.39	18	0.71	21	0.83	30	1.18
H	39	1.54	39	1.54	39	1.54	39	1.54	56	2.20	61	2.40	65	2.56
Ø K	163	6.42	225	8.86	345	13.58	422	16.61	480	18.90	627	24.69	622	24.49
Ø L	220	8.66	320	12.60	420	16.54	510	20.08	550	21.65	715	28.15	715	28.15

FLANGES and SHAFTS

	BE236-2B-Z1		BE314-2B-Z1		BE435-2B-Z1		BE523-2B-Z1		BE600-2B-Z1		BE700-2B-Z14		BE702-2B-Z1	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
KW	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31	10	0.39	10	0.39
Ø SD	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98	32	1.26	32	1.26
Input	Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ③ Key Shaft		Flange ④ Key Shaft	
Output	Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ③ Key Shaft		Flange ④ Key Shaft	

SIZES

BE236-2B-Z1



BE314-2B-Z1



BE435-2B-Z1



BE523-2B-Z1



BE600-2B-Z1



BE700-2B-Z14

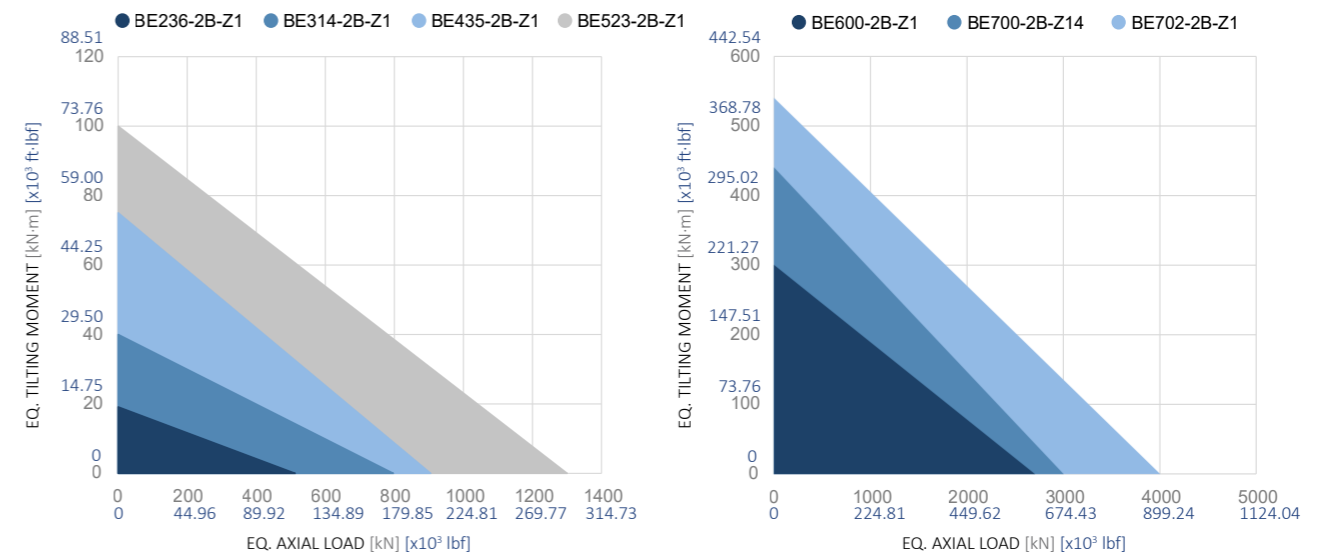


Option with reinforced flange. For more information, please contact us.

BE702-2B-Z1



MOMENT LOADING CHARTS



RATINGS

		BE236-2B-Z1	BE314-2B-Z1	BE435-2B-Z1	BE523-2B-Z1	BE600-2B-Z1	BE700-2B-Z14	BE702-2B-Z1
Min. input torque	N·m	2 - 6	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10
	ft·lbf	1.48 - 4.43	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38
Gear ratio		44:1	61:1	85:1	103:1	92:1	102:1	121:1
Efficiency		40 %	40 %	40 %	40 %	40 %	40 %	40 %
Max. torque	kN·m	6,50	9,10	12,31	15,60	30,00	42,82	15,36
	x10³ ft·lbf	4.79	6.71	9.08	11.51	22.13	31.58	11.33
Nominal torque	kN·m	3,38	4,48	10,20	14,70	25,00	42,82	15,36
	x10³ ft·lbf	2.49	3.30	7.52	10.84	18.44	31.58	11.33
Holding torque	kN·m	25,00	34,00	39,00	55,00	50,00	75,00	70,00
	x10³ ft·lbf	18.44	25.08	28.76	40.57	36.88	55.32	51.63
Tilting moment	kN·m	19,10	40,00	100,00	140,50	300,00	440,00	540,00
	x10³ ft·lbf	14.09	29.5	73.76	103.63	221.27	324.53	398.28
Radial static load	kN	200,00	297,00	500,00	560,00	1050,00	883,00	1600,00
	x10³ lbf	44.96	66.77	112.4	125.89	236.05	198.51	359.69
Axial static load	kN	513,00	797,00	1300,00	1500,00	2700,00	3000,00	4000,00
	x10³ lbf	115.33	179.17	292.25	337.21	606.98	674.43	899.24
Max. output speed		1	1	1	1	1	1	1
Weight	Kg	35,16	55,50	74,20	99,99	126,91	212,91	233,34
	lbs	77.51	122.36	163.58	220.44	279.79	469.39	514.43
Paint		RAL9005	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005

DESCRIPTION

TE

Consists of a globoid screw worm and a helical slewing ring, providing a high contact ratio between the worm teeth and the slewing ring teeth. This allows the slew drive series to withstand high holding torques, which is critical for solar tracker applications where the drive must resist high loads due to wind gusts. This series includes an external lip seal to provide higher protection against dust and water.

MAIN FEATURES

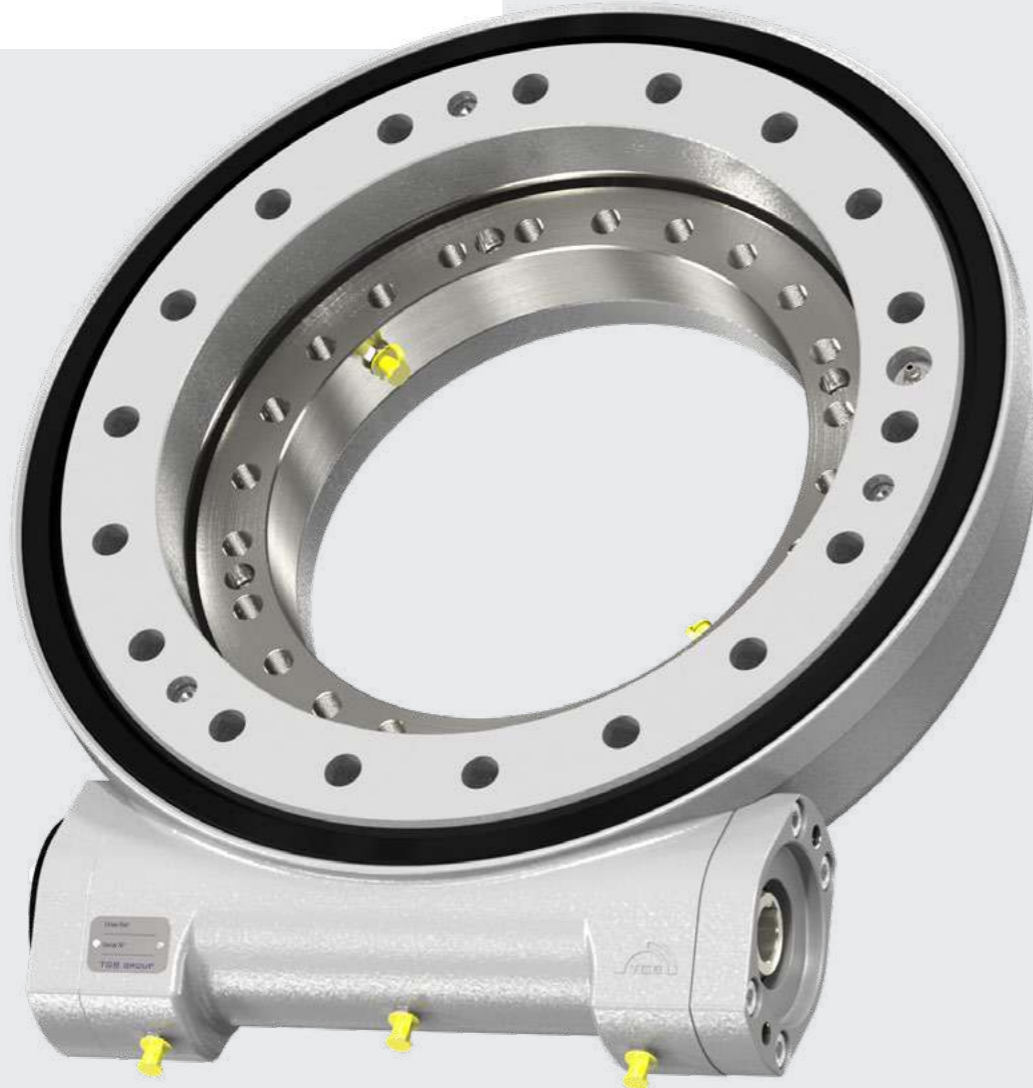
- Double worm option for higher torques
- NBR Lip Seal
- IP 65
- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)

TGE

They are the most standard and cost-effective slew drives, featuring a basic seal to protect the internal components. These drives consist of a helical slewing ring combined with a globoid screw worm, which can withstand high loads due to the increased number of teeth in contact between both parts. They are suitable for standard applications where no special environmental protection is required.

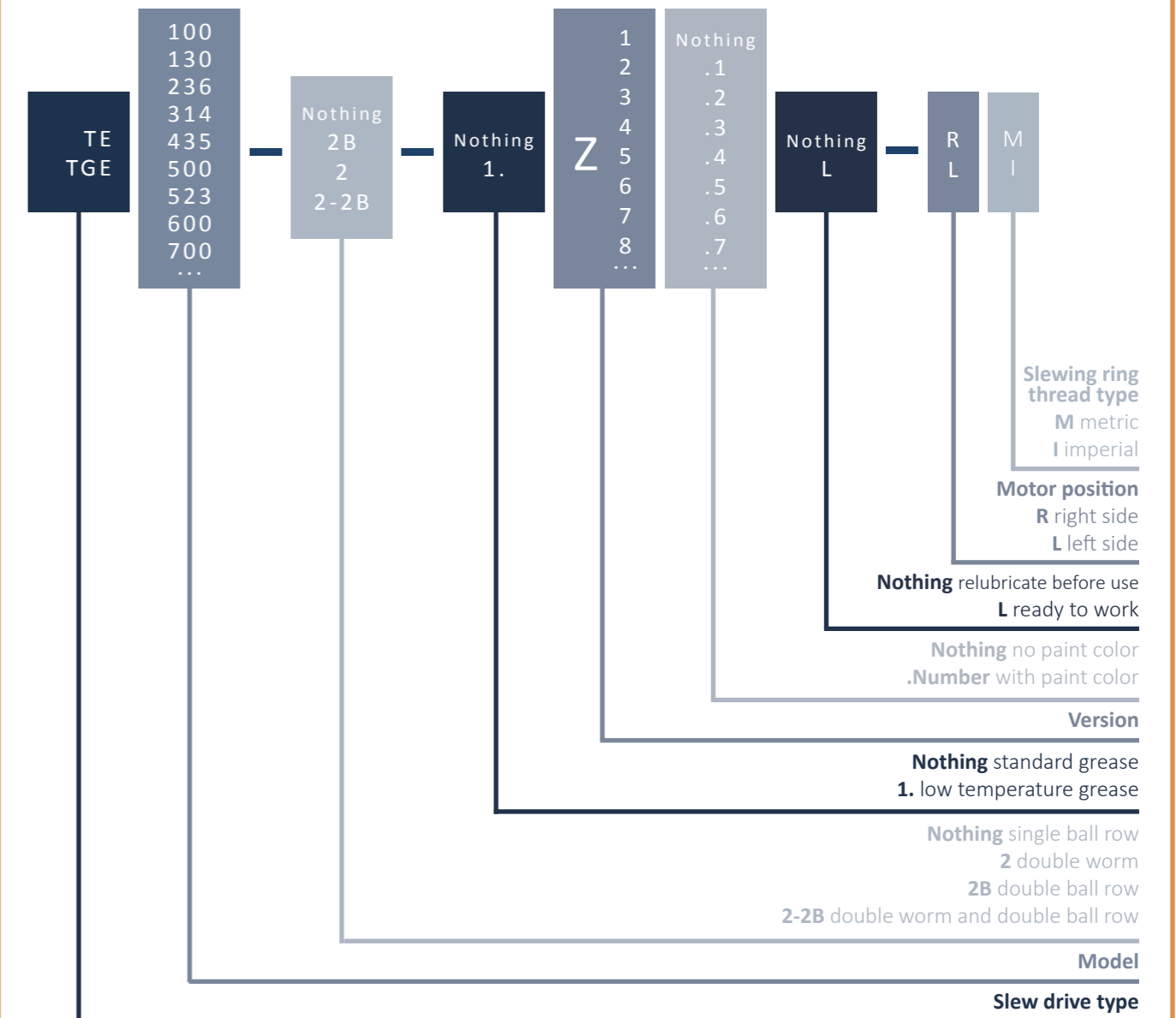
MAIN FEATURES

- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)



CODE DESCRIPTION

TE AND TGE SLEW DRIVES

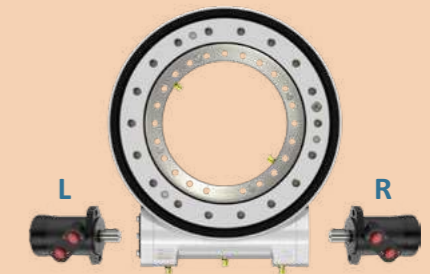


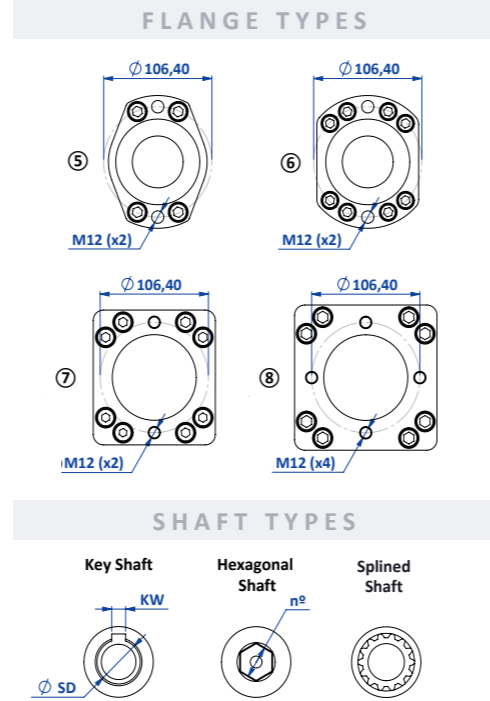
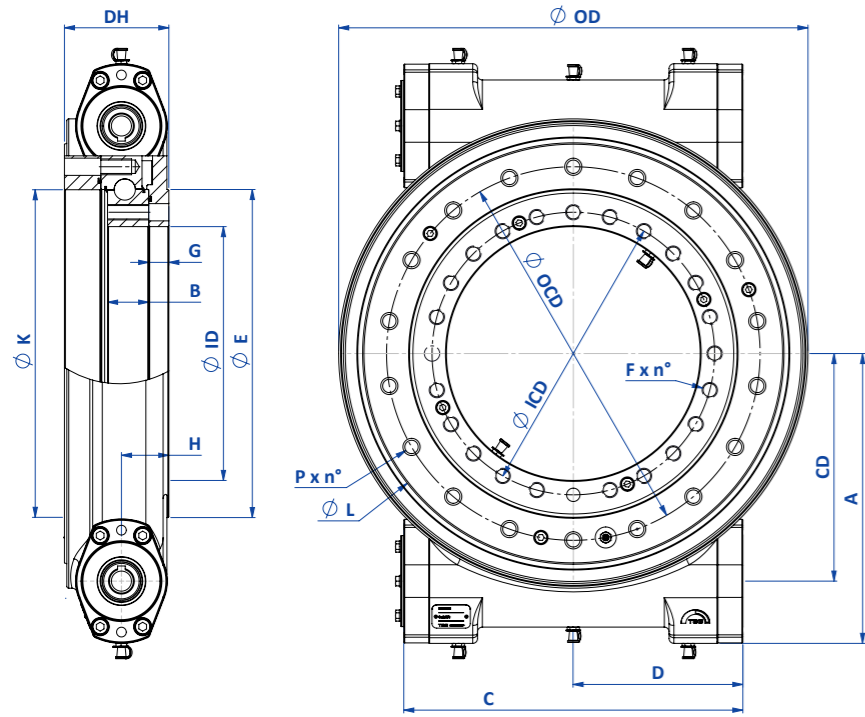
Example



with double worm
TE436-2-Z1-RM

Motor position





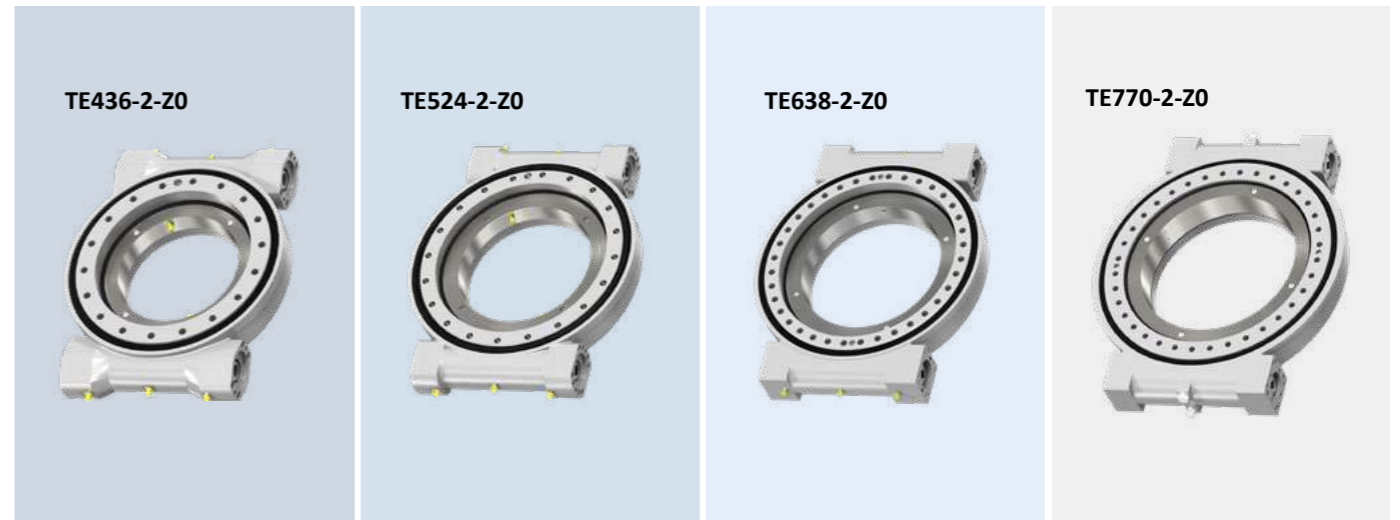
DIMENSIONS

	TE436-2-Z0		TE524-2-Z0		TE638-2-Z0		TE770-2-Z0	
	mm	in	mm	in	mm	in	mm	in
Ø OD	480	18.90	570	22.44	639	25.16	832	32.76
Ø ID	265	10.43	332	13.07	425	16.73	512	20.16
Ø OCD	390	15.35	479,40	18.87	584,20	22.99	675	26.57
P x n°	M16 ↓30 mm x 18		M16 ↓32 mm x 20		M20 ↓40 x 36		M20 ↓40 mm x 36	
Ø ICD	295	11.61	365,10	14.37	466,70	18.37	560	22.05
F x n°	M16 ↓30 mm x (24-1)		M16 ↓32 mm x 20		M20 ↓40 x (36-1)		M20 ↓40 mm x 29	
DH	108	4.25	108	4.25	130	5.12	148	5.83
CD	240	9.45	285	11.22	350	13.78	416	16.38
A	304	11.97	349	13.74	415	16.34	466	18.35
B	44	1.73	47	1.85	36	1.42	65	2.56
C	380	14.96	407	16.02	482,50	18.99	538	21.18
D	190	7.48	203,50	8.01	245	9.65	272,50	10.73
Ø E	340	13.39	406	15.98	550	21.65	628	24.72
G	26	1.02	30	1.18	30	1.18	47	1.85
H	51	2.01	55	2.17	65	2.56	83,50	3.29
Ø K	342	13.46	430	16.93	540	21.26	630	24.80
Ø L	426	16.77	509	20.04	629	24.76	748	29.45

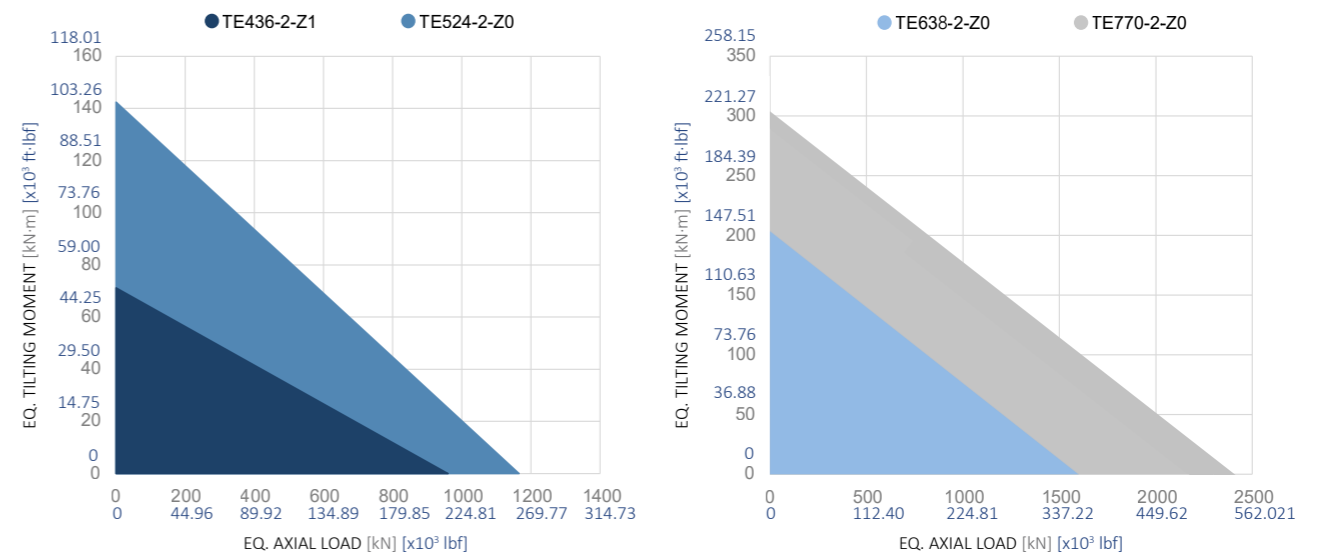
FLANGES and SHAFTS

	TE436-2-Z0		TE524-2-Z0		TE638-2-Z0		TE770-2-Z0	
	mm	in	mm	in	mm	in	mm	in
KW	8	0.31	8	0.31	8	0.31	8	0.31
Ø SD	25	0.98	25	0.98	25	0.98	25	0.98
Input	Flange ⑤ Key Shaft Flange ⑤		Flange ⑥ Key Shaft Flange ⑥		Flange ⑦ Key Shaft Flange ⑦		Flange ⑧ Key Shaft Flange ⑧	
Output	Hex. 21 mm Shaft		Hex. 21 mm Shaft		Hex. 24 mm Shaft		Hex. 24 mm Shaft	

SIZES

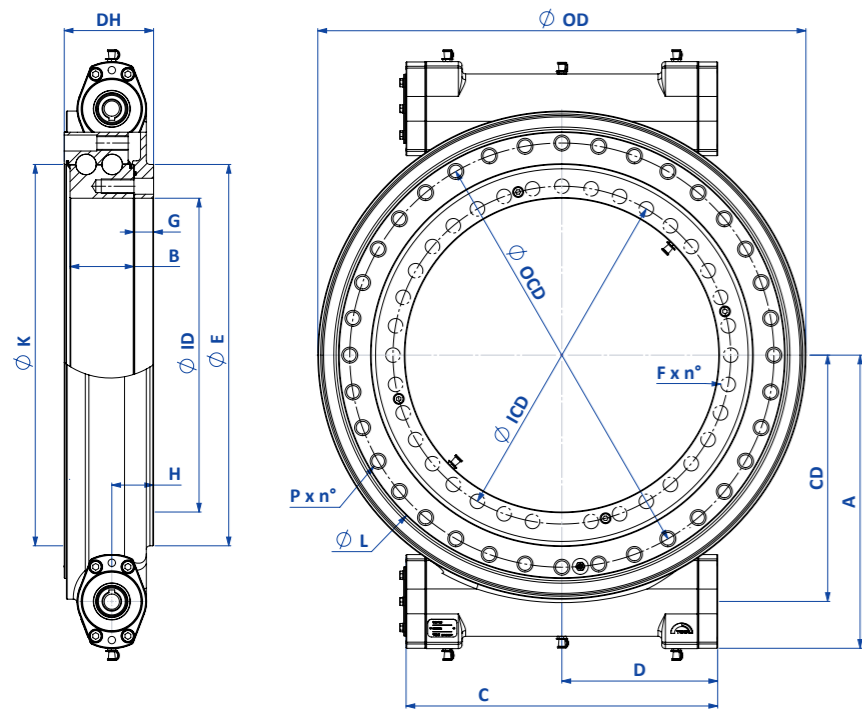


MOMENT LOADING CHARTS

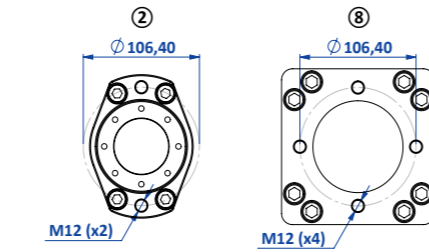


RATINGS

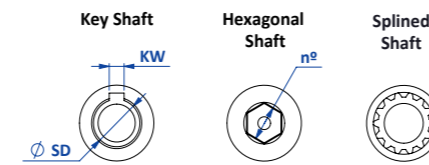
		TE436-2-Z0	TE524-2-Z0	TE638-2-Z0	TE770-2-Z0
Min. input torque	N·m	2 - 10	2 - 10	2 - 10	2 - 10
	ft·lbf	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38
Gear ratio		86:1	104:1	90:1	108:1
Efficiency		40%	35%	35%	40%
Max. torque	kN·m	-	19,44	48,00	58,00
	x10³ ft·lbf	-	14.34	35.40	42.78
Nominal torque	kN·m	16,20	16,34	-	-
	x10³ ft·lbf	11.95	12.05	-	-
Holding torque	kN·m	74,00	110,00	181,00	275,00
	x10³ ft·lbf	54.58	81.13	133.55	202.83
Tilting moment	kN·m	71,20	142,40	203,00	310,00
	x10³ ft·lbf	52.51	105.03	149.79	228.64
Radial static load	kN	360,00	435,00	650,00	950,00
	x10³ lbf	80.93	97.79	146.13	213.57
Axial static load	kN	960,00	1166,00	1600,00	2400,00
	x10³ lbf	215.82	262.13	359.70	539.54
Max. output speed	rpm	1	1	1	< 1,50
Weight	Kg	-	-	-	-
	lbs	-	-	-	-
Paint		RAL7040	RAL7040	RAL7040	RAL7040



FLANGE TYPES



SHAFT TYPES



DIMENSIONS

	TE639-2-2B-Z0		TE770-2-2B-Z0	
	mm	in	mm	in
Ø OD	672	26.46	832	32.76
Ø ID	432	17.01	512	20.16
Ø OCD	584	22.99	675	26.57
P x n°	M20 ↓40 mm x 36		M20 ↓40 mm x 36	
Ø ICD	465	18.31	560	22.05
F x n°	M20 ↓40 mm x (36-2)		M20 ↓40 mm x (30-1)	
DH	123	4.84	151	5.94
CD	339,10	13.35	416	16.38
A	403,60	15.89	486	19.13
B	88	3.46	90	3.54
C	429	16.89	538	21.18
D	214,50	8.45	272,50	10.73
Ø E	525	20.67	628	24.72
G	27	1.06	47	1.85
H	57,50	2.26	78	3.07
Ø K	525	20.67	620	24.41
Ø L	615	24.21	748	29.45

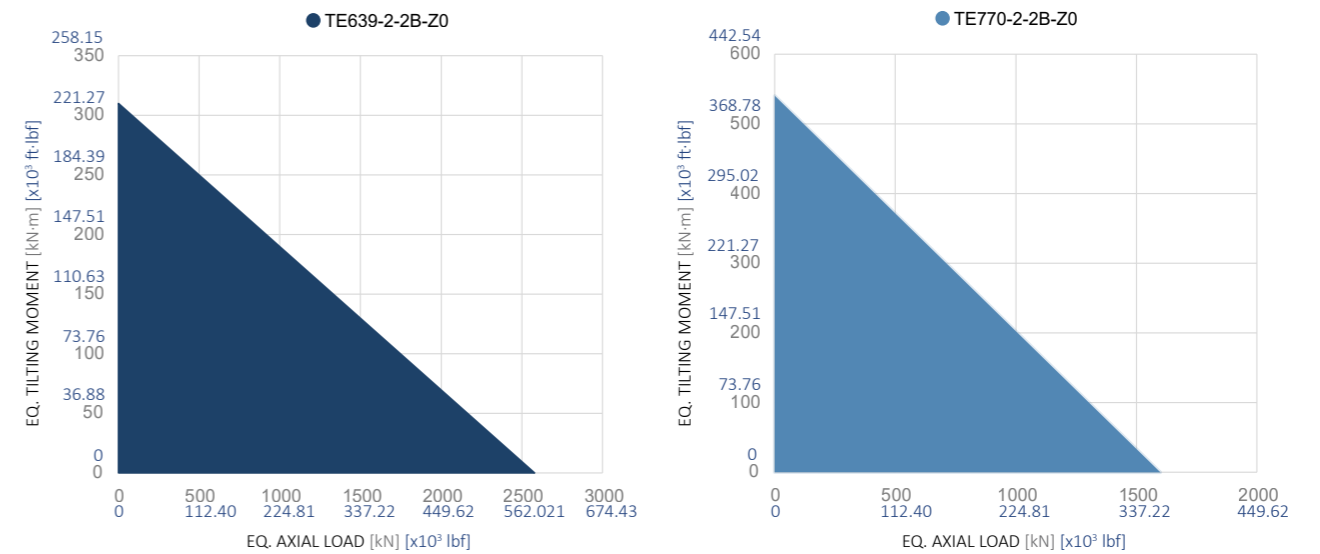
FLANGES and SHAFTS

	TE639-2-2B-Z0		TE770-2B-Z0	
	mm	in	mm	in
KW	8	0.31	8	0.31
Ø SD	25	0.98	25	0.98
Input	Flange 2 Key Shaft		Flange 8 Key Shaft	
Output	Flange 2 Hex. 24 mm Shaft		Flange 8 Hex. 21 mm Shaft	

SIZES

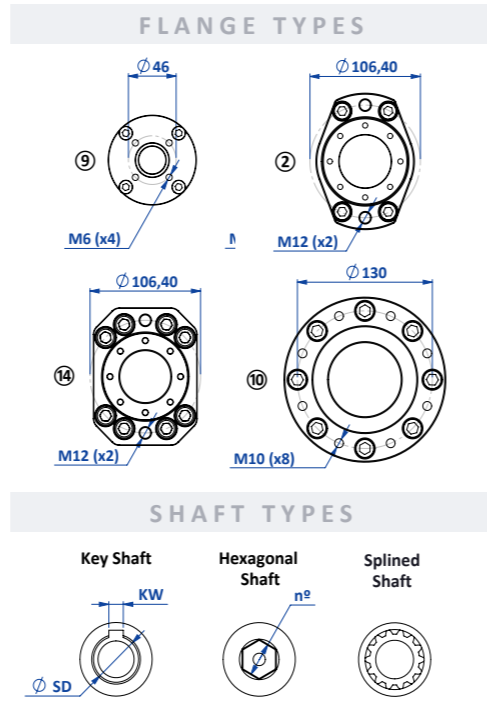
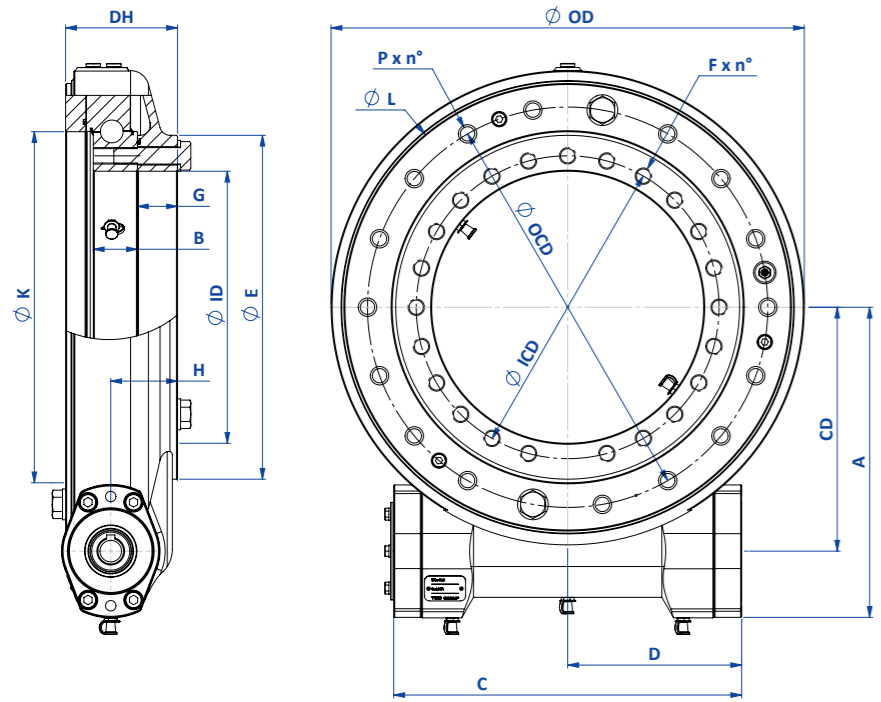


MOMENT LOADING CHARTS



RATINGS

		TE639-2-2B-Z0	TE770-2-2B-Z0
		Min. input torque	N·m ft·lbf
Gear ratio		125:1	108:1
Efficiency		40 %	40 %
Max. torque	kN·m	54,90	58,00
	x10³ ft·lbf	40.49	42.78
Nominal torque	kN·m	42,10	-
	x10³ ft·lbf	31.05	-
Holding torque	kN·m	105,70	275,00
	x10³ ft·lbf	77.96	202.83
Tilting moment	kN·m	310,00	540,00
	x10³ ft·lbf	228.64	398.28
Radial static load	kN	1300,00	1600,00
	x10³ lbf	292.25	359.69
Axial static load	kN	2580,00	4000,00
	x10³ lbf	580.01	899.24
Max. output speed	rpm	1	< 1,50
Weight	Kg	149,55	-
	lbs	329.7	-
Paint		RAL7040	RAL7040



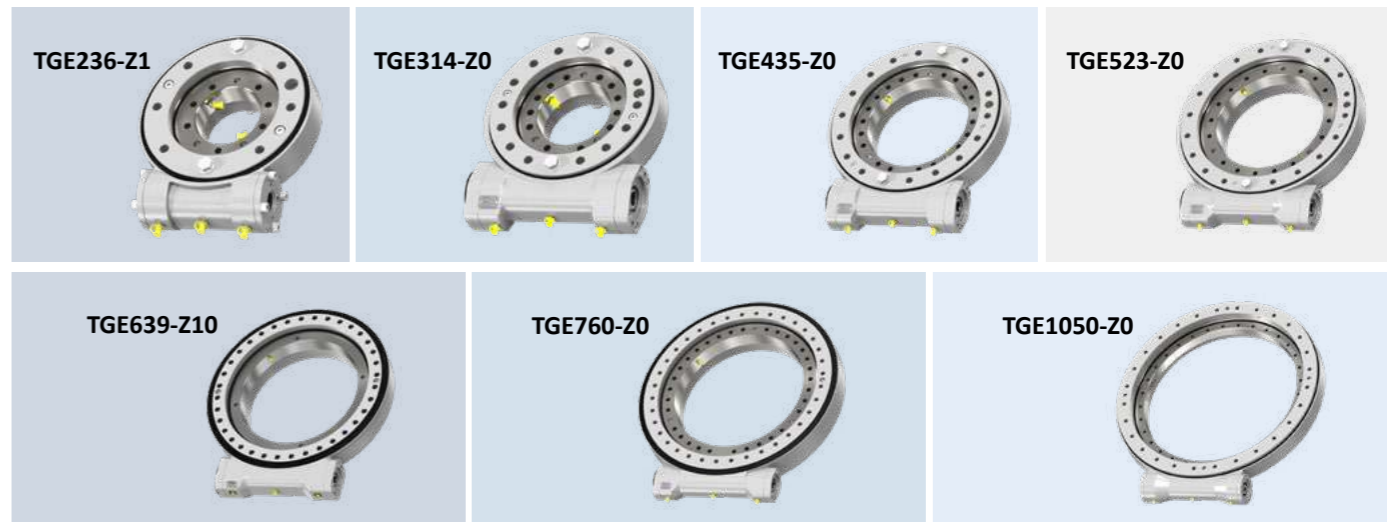
DIMENSIONS

	TGE236-Z1		TGE314-Z0		TGE435-Z0		TGE523-Z0		TGE639-Z10		TGE760-Z0		TGE1050-Z0	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Ø OD	257,60	10.14	345	13.58	461	18.15	550	21.65	668	26.30	792	31.18	1104	43.46
Ø ID	98	3.86	150	5.91	265	10.43	324	12.76	432	17.01	512	20.16	830	32.68
Ø OCD	203,20	8	270	10.63	390	15.35	480	18.90	584	22.99	675	26.57	1000	39.37
P x n°	M12 x 8		M16 x 16		M16 x 18		M16 x 20		M20 ↓40 x 36		M20 ↓35 mm x 36		M20 ↓40 x 28	
Ø ICD	120,65	4.75	175	6.89	295	11.61	365	14.37	465	18.31	565	22.24	870	34.25
F x n°	M12 x 10		M16 x (16-1)		M16 x (24-1)		M16 x 20		M20 ↓40 x (36-1)		M20 x (36-1)		M20 x 32	
DH	80,40	3.17	107,50	4.23	109	4.29	122,50	4.82	136	5.35	130	5.12	140,50	5.53
CD	133,62	5.26	174,16	6.86	237,59	9.35	275,47	10.84	339,10	13.35	401,89	15.82	567	22.32
A	176,12	6.56	238,66	9.40	302,09	11.89	339,97	13.39	404,10	15.91	466,39	18.36	645	25.39
B	34	1.34	44	1.73	43	1.69	48	1.89	57	2.24	60	2.36	52,50	2.07
C	184,50	7.26	323	12.72	339	13.35	390	15.35	429	16.89	468	18.42	550	21.65
D	92,25	3.63	161,50	6.36	169,50	6.67	195	7.68	214,50	8.44	234	9.21	275	10.83
Ø E	153	6.02	216	8.50	335	13.19	406	15.98	520	20.47	628	24.72	944	37.17
G	25,40	1	38	1.50	39	1.54	47	1.85	50	1.97	47	1.85	25	0.98
H	44,45	1.75	57	2.24	65	2.56	66	2.60	75	2.95	76,20	3	59,25	2.33
Ø K	163	6.42	222	8.74	342	13.46	422	16.61	520	20.47	630	24.80	935	36.81
Ø L	237,50	9.35	315	12.60	436	17.17	522	20.55	620	24.41	744	29.29	1080	42.52

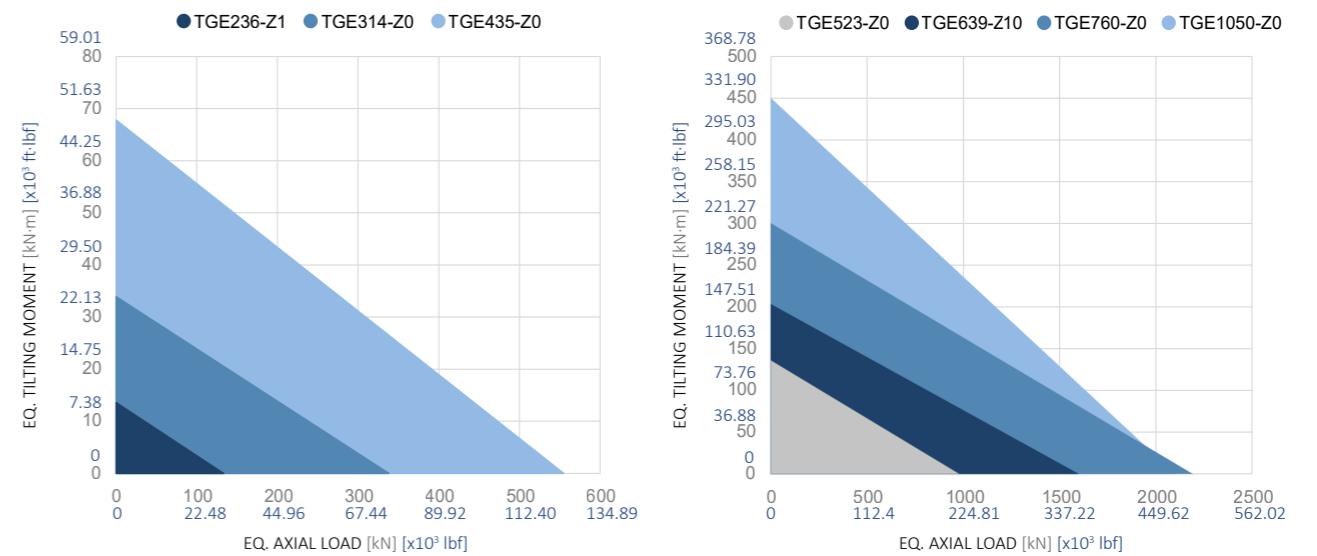
FLANGES and SHAFTS

	TGE236-Z1		TGE314-Z0		TGE435-Z0		TGE523-Z0		TGE639-Z10		TGE760-Z0		TGE1050-Z0	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
KW	5	0.20	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31
Ø SD	16	0.63	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98
Input	Round Flange Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ⑩ Key Shaft		Flange ② Key Shaft		Flange ⑩ Key Shaft	
Output	Round Flange Hex. 16 mm Shaft		Flange ② Hex. 24 mm Shaft		Flange ② Hex. 24 mm Shaft		Flange ② Hex. 24 mm Shaft		Flange ⑩ Hex. 24 mm Shaft		Flange ② Hex. 24 mm Shaft		See Drawing	

SIZES



MOMENT LOADING CHARTS



RATINGS

		TGE236-Z1	TGE314-Z0	TGE435-Z0	TGE523-Z0	TGE639-Z10	TGE760-Z0	TGE1050-Z0
Min. input torque	N·m	2 - 6	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10
	ft·lbf	1.48 - 4.43	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38
Gear ratio		71:1	61:1	85:1	102:1	125:1	150:1	150:1
Efficiency		40 %	40 %	40 %	40 %	40 %	40 %	40 %
Max. torque	kN·m	1,46	8,84	12,31	18,03	23,50	45,32	36,00
	x10³ ft·lbf	1,08	6,52	9,08	13,3	17,33	33,43	26,55
Nominal torque	kN·m	1,04	7,32	10,20	15,10	20,50	35,26	30,00
	x10³ ft·lbf	0,77	5,40	7,52	11,14	15,12	26,01	22,13
Holding torque	kN·m	9,40	35,00	43,20	65,10	38,00	142,50	80,00
	x10³ ft·lbf	6,93	25,81	31,86	48,02	28,03	105,10	59,00
Tilting moment	kN·m	13,60	33,90	67,80	135,60	203,40	300,00	450,00
	x10³ ft·lbf	10,03	25,00	50,01	100,01	150,02	221,27	331,90
Radial static load	kN	53,00	135,00	222,00	391,00	640,00	832,00	800,00
	x10³ lbf	11,91	30,35	49,91	87,90	143,88	187,04	179,85
Axial static load	kN	133,00	338,00	555,00	977,00	1598,00	2190,00	2100,00
	x10³ lbf	29,90	75,99	124,77	219,64	359,24	492,33	472,10
Max. output speed		rpm	1	1	1	1	1	0,75
Weight	Kg	19,52	45,14	63,67	92,72	136,59	194,69	303,91
	lbs	43,03	99,52	140,37	204,40	301,10	429,20	670,00
Paint		RAL7040	RAL7040	RAL7040	RAL7040	RAL7040	RAL7040	RAL7040

DESCRIPTION

TGO

This series is the open version of the TGE series, meaning the inner components remain the same. However, unlike the previous series, the housing does not cover the slewing ring.

It features a helical slewing ring combined with a globoid screw worm, allowing it to withstand high loads due to the increased number of teeth in contact between both parts. This makes it suitable for standard applications where no special environmental requirements are needed.

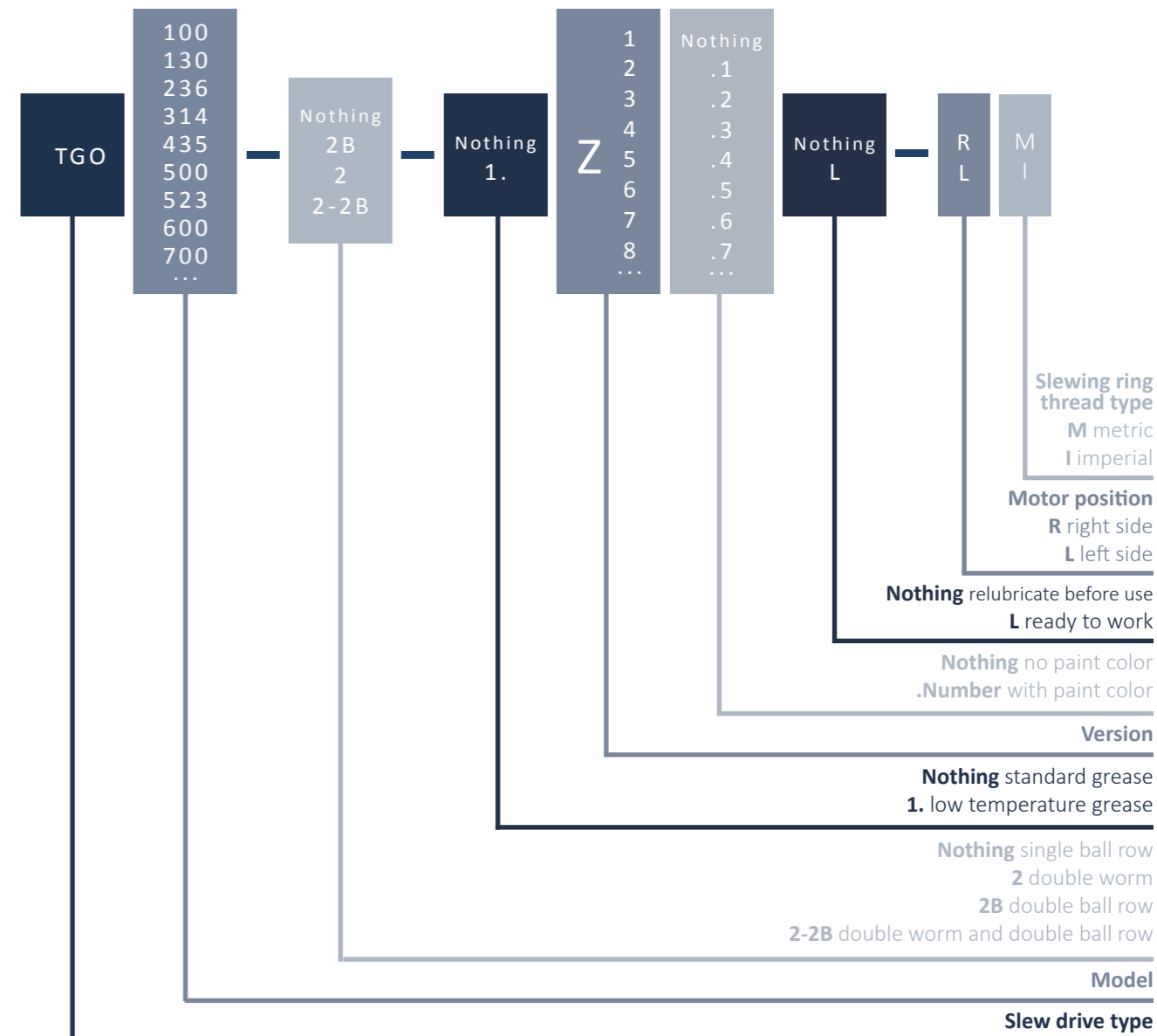
MAIN FEATURES

- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)



CODE DESCRIPTION

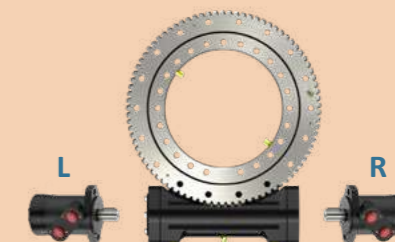
TGO SLEW DRIVES

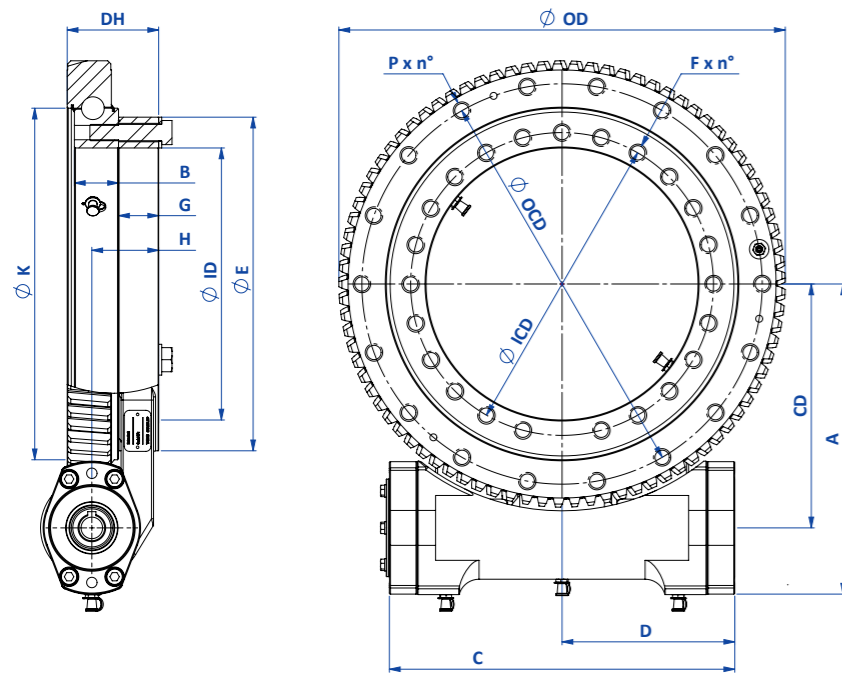


Example

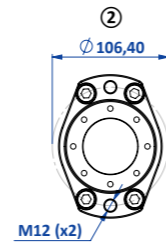


Motor position

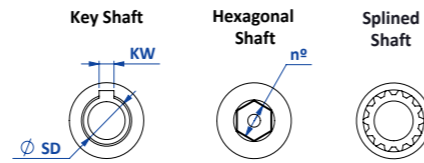




FLANGE TYPES



SHAFT TYPES



DIMENSIONS

	TGO400-Z0		TGO435-Z0		TGO523-Z0		TGO639-Z0		TGO920-Z1	
	mm	in	mm	in	mm	in	mm	in	mm	in
∅ OD	400,14	15.75	434,84	17.12	522,51	20.57	638,10	25.12	917,47	36.12
∅ ID	229	9.02	265	10.43	324	12.76	414	16.30	755	29.72
∅ OCD	358	14.09	390	15.35	480	18.90	584	22.99	868	34.17
P x n°	M16 x 18		M16 x 18		M16 x 20		M20 x 36		M12 x 20	
∅ ICD	259	10.20	295	11.61	365	14.37	465	18.31	782	30.79
F x n°	M16 x (20-1)		M16 x (24-1)		M16 x 20		M20 x (36-1)		∅13 mm x (20)	
DH	89,50	3.52	89,10	3.51	103	4.06	106,50	4.19	72	2.83
CD	220	8.66	237,59	9.35	275,47	10.84	339,10	13.35	476,42	18.76
A	284,50	11.20	302,10	11.89	339,97	13.39	403,60	15.89	540,92	21.30
B	44	1.73	43	1.69	48	1.89	57	2.24	44	1.73
C	324,50	12.78	336,50	13.25	384,20	15.13	429	16.89	495	19.49
D	162,25	6.39	168,25	6.62	192,10	7.56	214,50	8.44	247,50	9.74
∅ E	290	11.42	324,50	12.78	420	16.54	533	20.98	830	32.68
G	38	1.50	39,10	1.54	47	1.85	41,50	1.63	20	0.79
H	65	2.56	65,10	2.56	66	2.60	69,50	2.74	50	1.97
∅ K	308	12.13	342,50	13.48	422	16.61	525	20.67	827	32.56

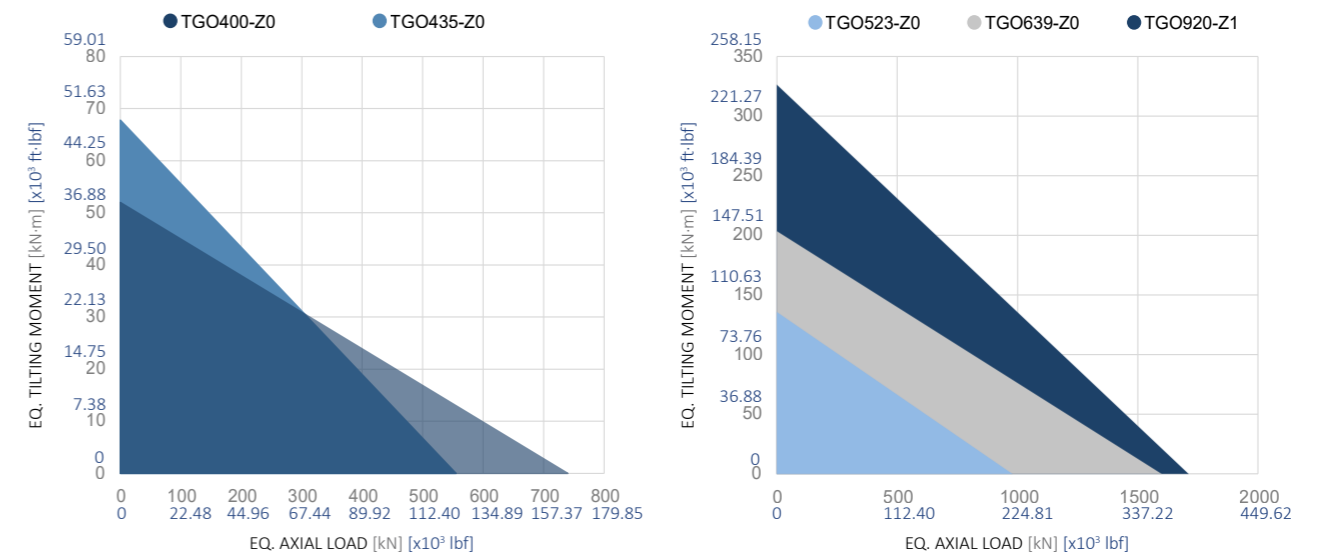
FLANGES and SHAFTS

	TGO400-Z0		TGO435-Z0		TGO523-Z0		TGO639-Z0		TGO920-Z1	
	mm	in	mm	in	mm	in	mm	in	mm	in
KW	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31
∅ SD	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98
Input	Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft	
Output	Flange ② Hex. 24 mm Shaft		Flange ② Hex. 24 mm Shaft		Flange ② Hex. 24 mm Shaft		Flange ② Hex. 24 mm Shaft		Flange ② Key Shaft	

SIZES



MOMENT LOADING CHARTS



RATINGS

		TGO400-Z0	TGO435-Z0	TGO523-Z0	TGO639-Z0	TGO920-Z1
Min. input torque	N·m	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10
	ft·lbf	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38	1.48 - 7.38
Gear ratio		78:1	85:1	102:1	125:1	180:1
Efficiency		40 %	40 %	40 %	40 %	40 %
Max. torque	kN·m	10,50	12,31	18,03	30,50	4,20
	x10 ³ ft·lbf	7.75	9.08	13.30	22.50	3.10
Nominal torque	kN·m	7,50	10,20	15,10	23,50	3,58
	x10 ³ ft·lbf	5.53	7.52	11.14	17.33	2.64
Holding torque	kN·m	37,00	43,20	65,10	95,20	5,05
	x10 ³ ft·lbf	27.29	31.86	48.02	70.22	3.72
Tilting moment	kN·m	52,00	67,80	135,60	203,40	326,00
	x10 ³ ft·lbf	38.35	50.01	100.01	150.02	240.45
Radial static load	kN	276,00	222,00	391,00	640,00	222,00
	x10 ³ lbf	62.05	49.91	87.90	143.88	49.91
Axial static load	kN	740,00	555,00	977,00	1598,00	1710,00
	x10 ³ lbf	166.36	124.77	219.64	359.24	384.42
Max. output speed		rpm	1	1	1	1
Weight	kg	47,34	49,17	78,63	106,69	103,62
	lbs	104.37	104.37	173.35	235.20	228.44
Paint		RAL9005	RAL9005	RAL9005	RAL9005	RAL9005

DESCRIPTION

GE

It is a non-self-locking slew drive, which makes it more efficient and allows higher speeds. It includes an external lip seal, and is also a non-symmetrical module, thus preventing collisions with structures.

MAIN FEATURES

- NBR Lip Seal
- IP 65
- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)

LGE

Low weight drives with same geometry and dimensions as the GE drives. It has a housing of aluminum, what reduces considerably the slew drive weight and allows using it in special applications where weight is critical. It also includes an external lip seal.

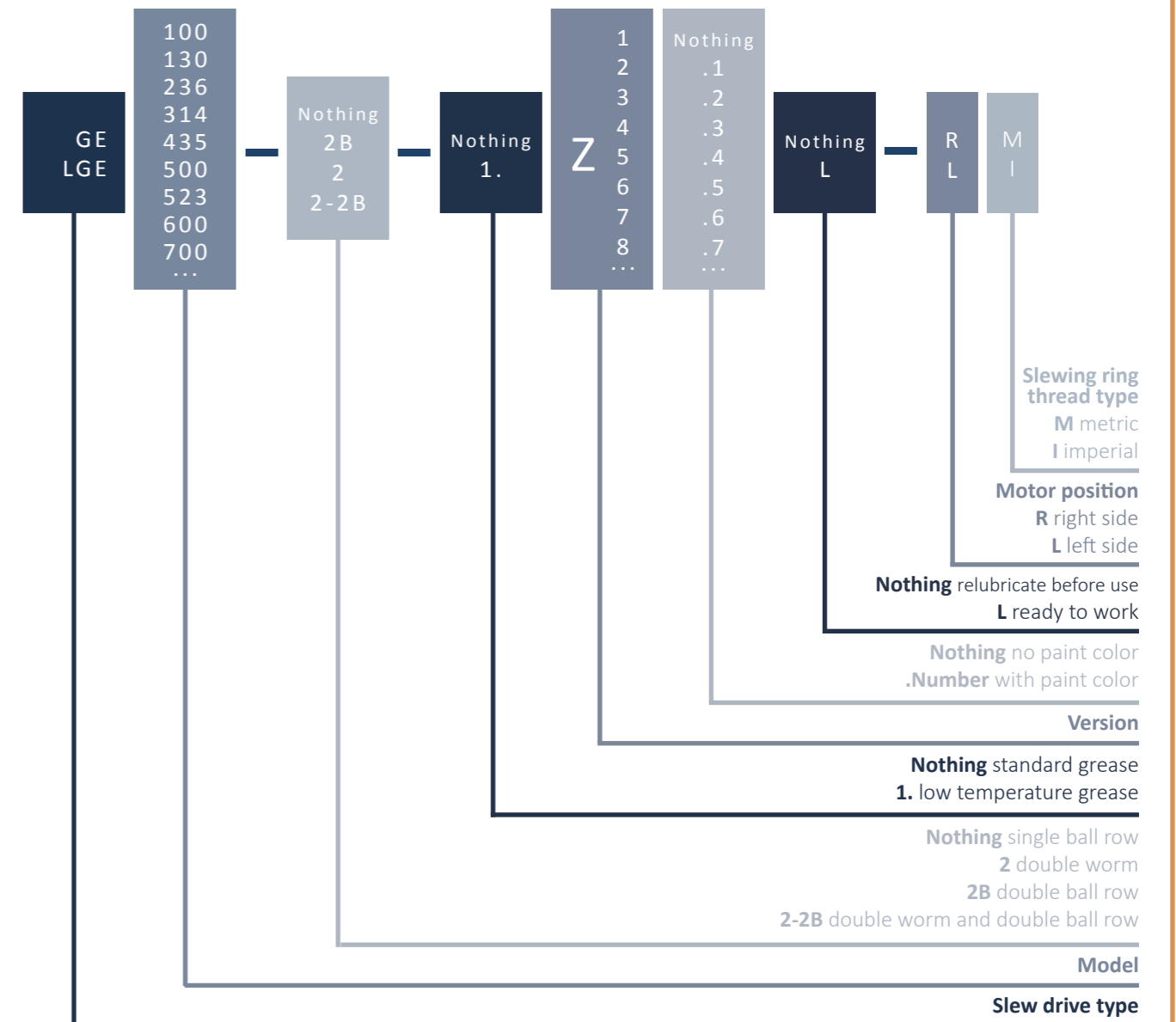
MAIN FEATURES

- Aluminum housing
- NBR Lip Seal
- IP 65
- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)



CODE DESCRIPTION

GE AND LGE SLEW DRIVES

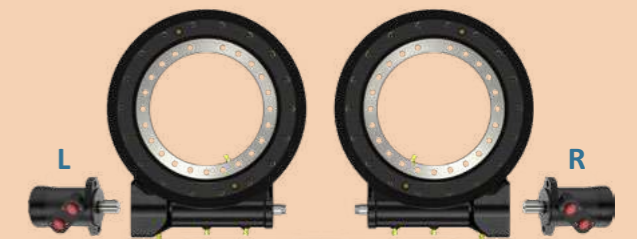


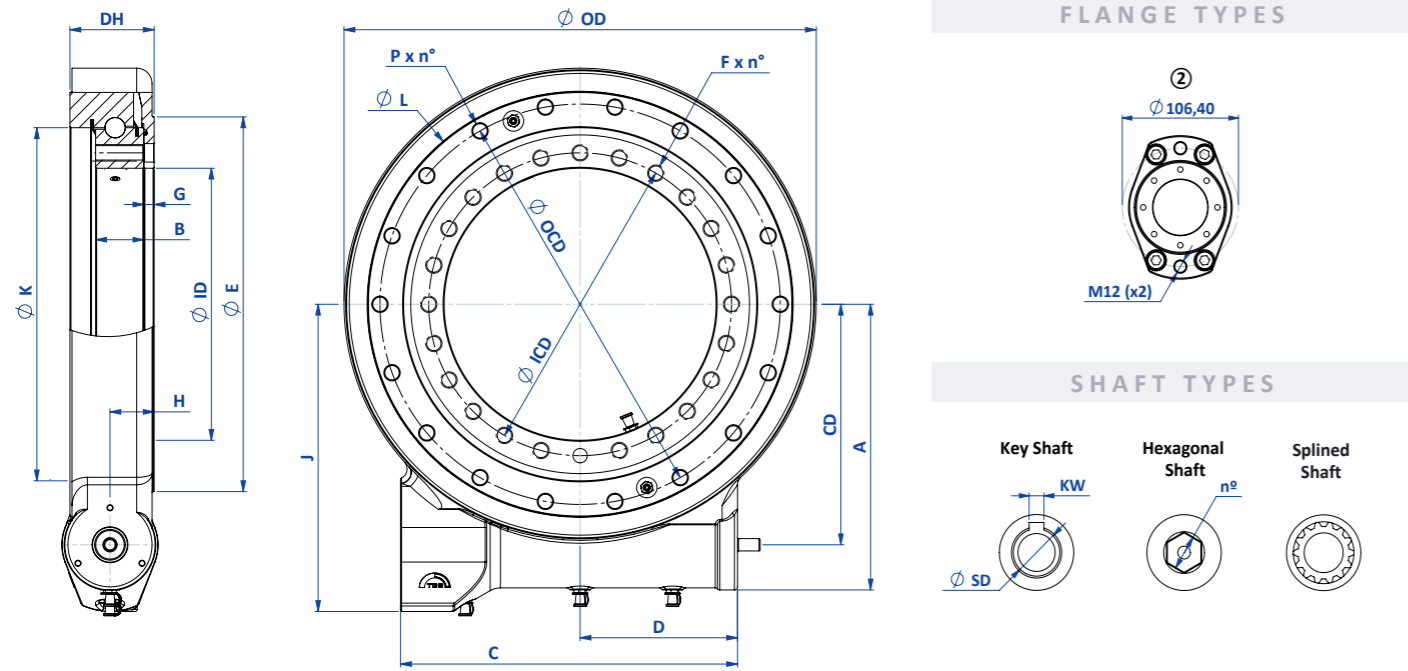
Example



with paint specification and greased ready to work
GE435-Z1.2L-RM

Motor position





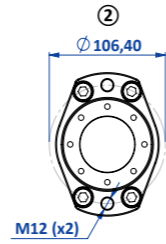
DIMENSIONS

	GE236-Z0		GE314-Z0		GE435-Z0		GE523-Z0		LGE236-Z0		LGE314-Z0		LGE435-Z0	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Ø OD	268	10.55	342	13.46	460	18.11	550	21.65	268	10.55	342	13.46	460	18.11
Ø ID	92	3.62	145	5.71	265	10.43	324	12.76	92	3.62	145	5.71	265	10.43
Ø OCD	196	7.72	270	10.63	390	15.35	479	18.86	196	7.72	270	10.63	390	15.35
P x n°	M12 ↓25 mm x 12		M16 ↓35 mm x 16		M16 ↓35 mm x 18		M16 ↓35 mm x 20		M12 ↓25 mm x 12		M16 ↓35 mm x 16		M16 ↓35 mm x 18	
Ø ICD	114	4.49	175	6.89	295	11.61	365	14.37	114	4.49	175	6.89	295	11.61
F x n°	Ø14 mm x (12)		M16 x (16-1)		M16 x (24-1)		M16 x (20-1)		Ø14 mm x (12)		M16 x (16-1)		M16 x (24-1)	
DH	82	3.23	82	3.23	82	3.23	82	3.23	82	3.23	82	3.23	82	3.23
CD	135	5.31	173,75	6.84	234,29	9.22	279,50	11.00	135	5.31	173,75	6.84	234,29	9.22
A	179	7.05	217,75	8.57	278,29	10.96	323,50	12.74	179	7.05	217,75	8.57	278,29	10.96
B	47	1.85	47	1.85	47	1.85	47	1.85	47	1.85	47	1.85	47	1.85
C	318	12.52	318	12.52	350,30	13.79	328,30	12.93	318	12.52	318	12.52	350,30	13.79
D	138	5.43	138	5.43	153,30	6.04	153,30	6.04	138	5.43	138	5.43	153,30	6.04
Ø E	175	6.89	250	9.84	365	14.37	424	16.69	175	6.89	250	9.84	365	14.37
G	10	0.39	10	0.39	10	0.39	10	0.39	10	0.39	10	0.39	10	0.39
H	43	1.69	43	1.69	43	1.69	43	1.69	43	1.69	43	1.69	43	1.69
Ø K	158	6.22	225	8.86	344	13.54	435	17.13	158	6.22	225	8.86	344	13.54
Ø L	217	8.54	294	11.57	414	16.29	505	19.88	217	8.54	294	11.57	414	16.29

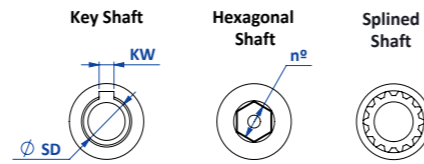
FLANGES and SHAFTS

	GE236-Z0		GE314-Z0		GE435-Z0		GE523-Z0		LGE236-Z0		LGE314-Z0		LGE435-Z0	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
KW	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31	8	0.31
Ø SD	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98	25	0.98
Input	Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft		Flange ② Key Shaft	
Output	See Drawing Hex. 19 mm Shaft		See Drawing Hex. 19 mm Shaft		See Drawing Ø12 Shaft		See Drawing Ø12 Shaft		See Drawing Hex. 19 mm Shaft		See Drawing Hex. 19 mm Shaft		See Drawing Hex. 19 mm Shaft	

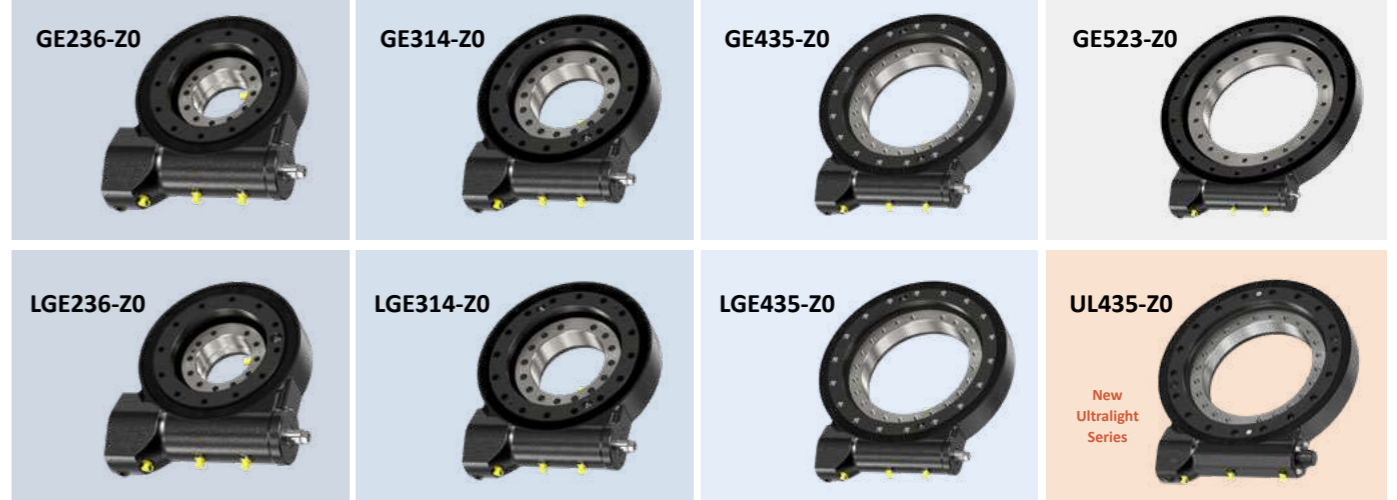
FLANGE TYPES



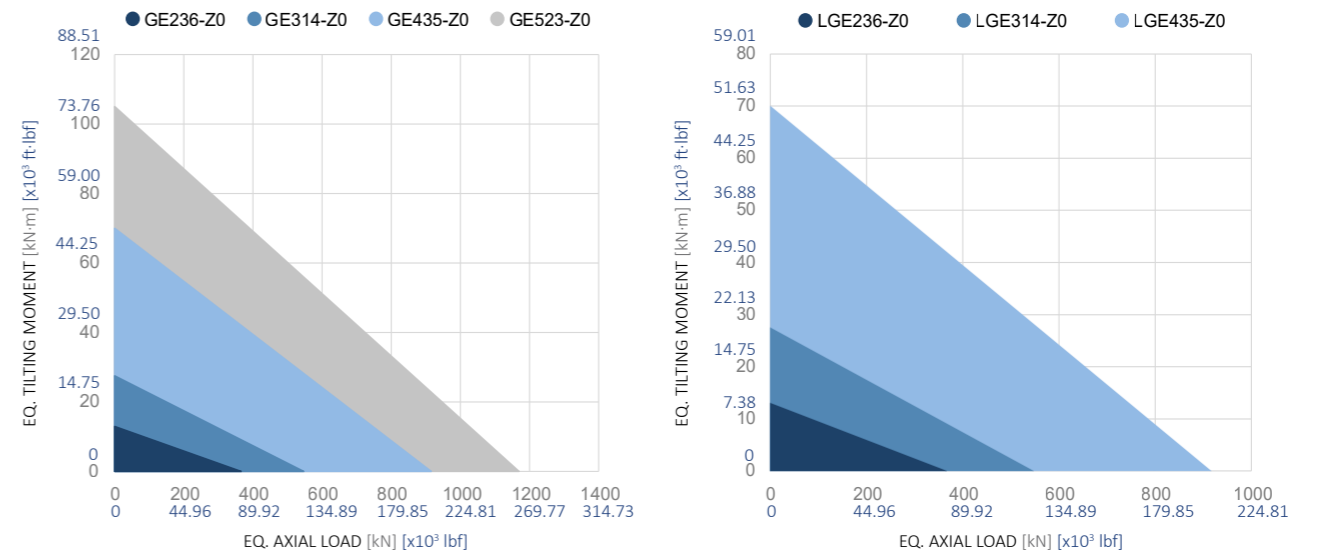
SHAFT TYPES



SIZES



MOMENT LOADING CHARTS



RATINGS

		GE236-Z0	GE314-Z0	GE435-Z0	GE523-Z0	LGE236-Z0	LGE314-Z0	LGE435-Z0	UL435-Z0
		Min. input torque	N·m ft-lbf	2 - 6 1.48 - 4.43	2 - 10 1.48 - 7.38	2 - 10 1.48 - 7.38	2 - 10 1.48 - 7.38	2 - 6 1.48 - 4.43	2 - 10 1.48 - 7.38
Gear ratio		46:1	61:1	85:1	103:1	46:1	61:1	85:1	85:1
Efficiency		40%	40%	50%	50%	40%	40%	40%	-
Max. torque	kN·m	3,28	9,10	12,60	15,30	3,28	9,10	12,60	12,60
	x10³ ft-lbf	2.42	6.71	9.29	11.28	2.42	6.71	9.29	9.29
Nominal torque	kN·m	2,52	4,48	6,25	7,57	2,52	4,48	6,25	10,20
	x10³ ft-lbf	1.86	3.30	4.61	5.58	1.86	3.30	4.61	7.53
Holding torque	kN·m	-	-	15,00	18,30	-	-	12,60	15,00
	x10³ ft-lbf	-	-	11.06	13.50	-	-	9.29	11.06
Tilting moment	kN·m	13,00	27,50	70,00	105,00	13,00	27,50	70,00	75,00
	x10³ ft-lbf	9.59	20.28	51.63	77.44	9.59	20.28	51.63	55.32
Radial static load	kN	156,00	204,00	341,00	413,00	156,00	204,00	341,00	338,00
	x10³ lbf	35.07	45.86	76.66	92.85	35.07	45.86	76.66	75.99
Axial static load	kN	366,00	547,00	916,00	1170,00	366,00	547,00	916,00	905,00
	x10³ lbf	82.28	122.97	205.93	263.03	82.28	122.97	205.93	203.42
Max. output speed	rpm	1	-	2	1,75	1	1	1	1
Weight	kg	29,80	40,60	55,24	73,68	21,43	30,36	43,22	36,43
	lbs	65.70	89.50	121.78	162.44	47.25	66.93	95.28	80.30
Paint		RAL9005	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005

DESCRIPTION

DAD

This is the Dual Axis Drive series. It consists of a combination of a vertical and horizontal slew drive, allowing movement on both axes so that the entire unit can perform all the required motions of a solar tracker. This type of slew drive includes an external lip seal, providing enhanced protection against dust and water.

MAIN FEATURES

- NBR Lip Seal
- IP 65
- Supplied in different colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial
- Different shaft types (keyed or splined)



CODE DESCRIPTION

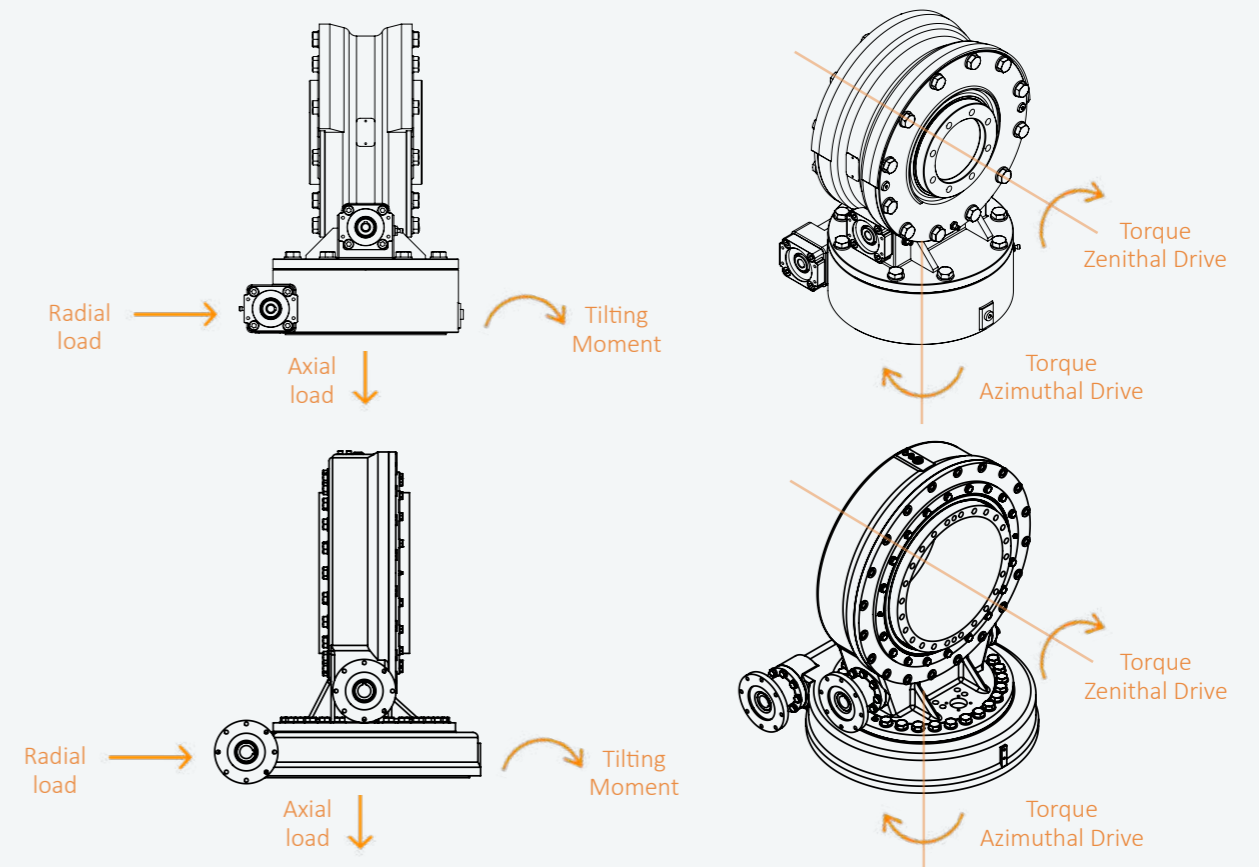
DAD SLEW DRIVES

DAD System Overview

The DAD system consists of two slew drives: the DADA and the DADZ.

- **DADA** (DADAzimuthal): This module provides azimuthal rotation, allowing precise horizontal movement.
- **DADZ** (DADZenithal): This module enables zenithal rotation, controlling vertical movement with accuracy.

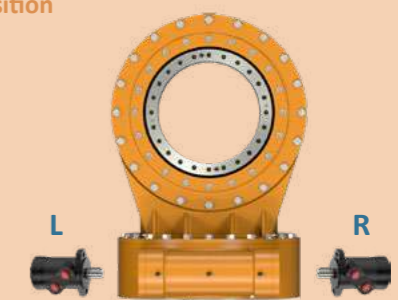
Together, these components ensure smooth and reliable positioning for various applications.

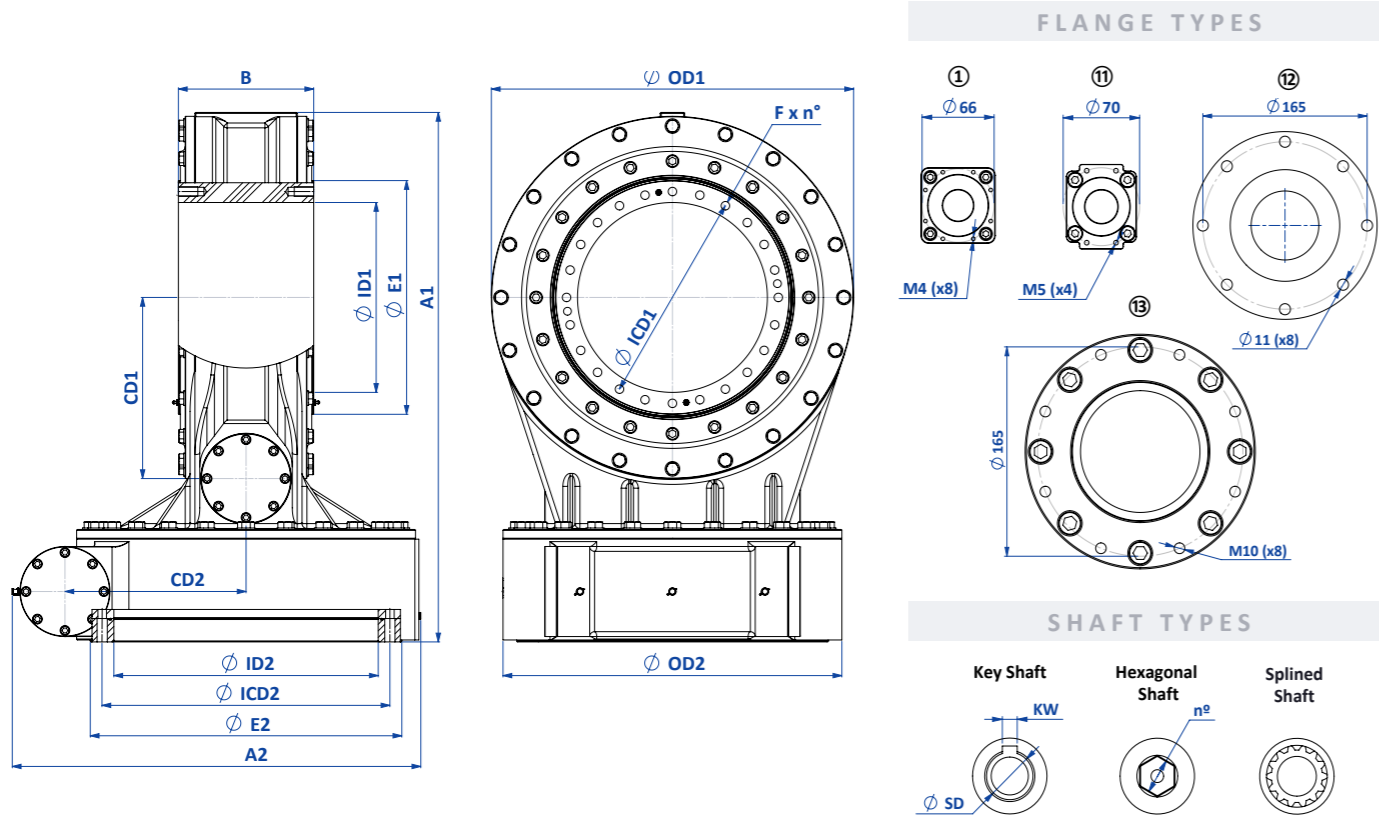


Example



Motor position



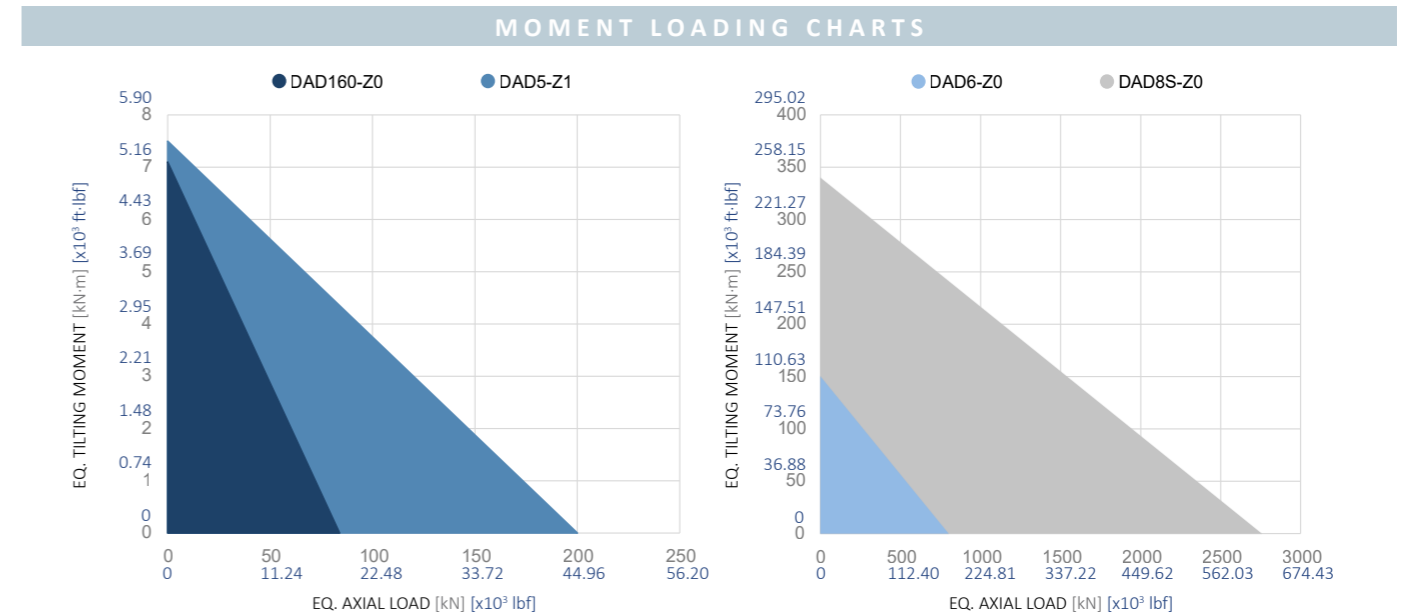


DIMENSIONS

	DAD160-Z0		DAD5-Z1		DAD6-Z0		DAD8S-Z0	
	mm	in	mm	in	mm	in	mm	in
Ø OD1	188	7.40	308	12.13	708	27.87	744	29.29
Ø OD2	184	7.24	264	10.39	680	26.77	696	27.40
Ø ID1	50	1.97	98	3.86	400	15.75	390	15.35
Ø ID2	30	1.18	96	3.78	431,80	17.00	543	21.38
Ø ICD1	70	2.76	120	4.72	435	17.13	435	17.13
F x n°	M10 ↓20 mm x 8 (both sides)		M12 ↓24 mm x 8 (both sides)		M20 ↓40 mm x 24 (both sides)		M20 ↓40 mm x 24 (both sides)	
Ø ICD2	130	5.12	203	7.99	582	22.91	591	23.27
A1	346	13.62	442	17.40	952,50	37.50	1087,50	42.81
A2	231,70	9.12	319	12.56	777,50	30.61	830,50	32.70
B	99	3.90	160	6.30	264	10.39	278	10.94
CD1	100,50	3.95	135	5.31	345	13.58	372	14.65
CD2	93,70	3.69	135	5.31	345	13.58	372	14.65
Ø E1	85	3.35	148	5.83	470	18.50	480	18.90
Ø E2	150	5.91	230	9.06	615	24.21	640	25.20

FLANGES and SHAFTS

	DAD160-Z0		DAD5-Z1		DAD6-Z0		DAD8S-Z0	
	mm	in	mm	in	mm	in	mm	in
KW	4	0.16	4	0.16	10	0.39	10	0.39
Ø SD	12	0.47	12	0.47	38	1.50	38	1.50
Azimuthal	Flange ① Key Shaft		Flange ⑪ Key Shaft		Flange ⑫ Key Shaft		Flange ⑬ Key Shaft	
Zenithal	Flange ① Key Shaft		Flange ⑪ Key Shaft		Flange ⑫ Key Shaft		Flange ⑬ Key Shaft	



RATINGS

		DAD160-Z0	DAD5-Z1	DAD6-Z0	DAD8S-Z0
		Min. input torque	N·m ft·lbf	2 - 10 1.48 - 7.38	2 - 10 1.48 - 7.38
Gear ratio		62:1	46:1	102:1	80:1
Efficiency		30%	40%	34%	30%
Max. torque	kN·m	1,20	5,68	50,00	50,00
	x10³ ft·lbf	0,89	4,19	36,88	36,88
Nominal torque	kN·m	0,60	2,80	-	28,00
	x10³ ft·lbf	0,44	2,07	-	20,65
Holding torque	kN·m	5,00	10,80	84,00	105,00
	x10³ ft·lbf	3,69	7,97	61,95	77,44
Tilting moment	kN·m	7,10	7,50	150,00	340,00
	x10³ ft·lbf	5,24	5,53	110,63	250,77
Radial static load	kN	64,00	75,00	315,00	1242,00
	x10³ lbf	14,36	16,86	70,91	279,78
Axial static load	kN	84,00	200,00	800,00	2755,00
	x10³ lbf	18,86	44,96	44,96	619,33
Max. output speed	rpm	1	1	1	1
Weight	Kg	32,56	89,70	596,41	928,58
	lbs	71,81	197,89	1312,71	2047,31
Paint		RAL7040	RAL7040	RAL7040	RAL2005

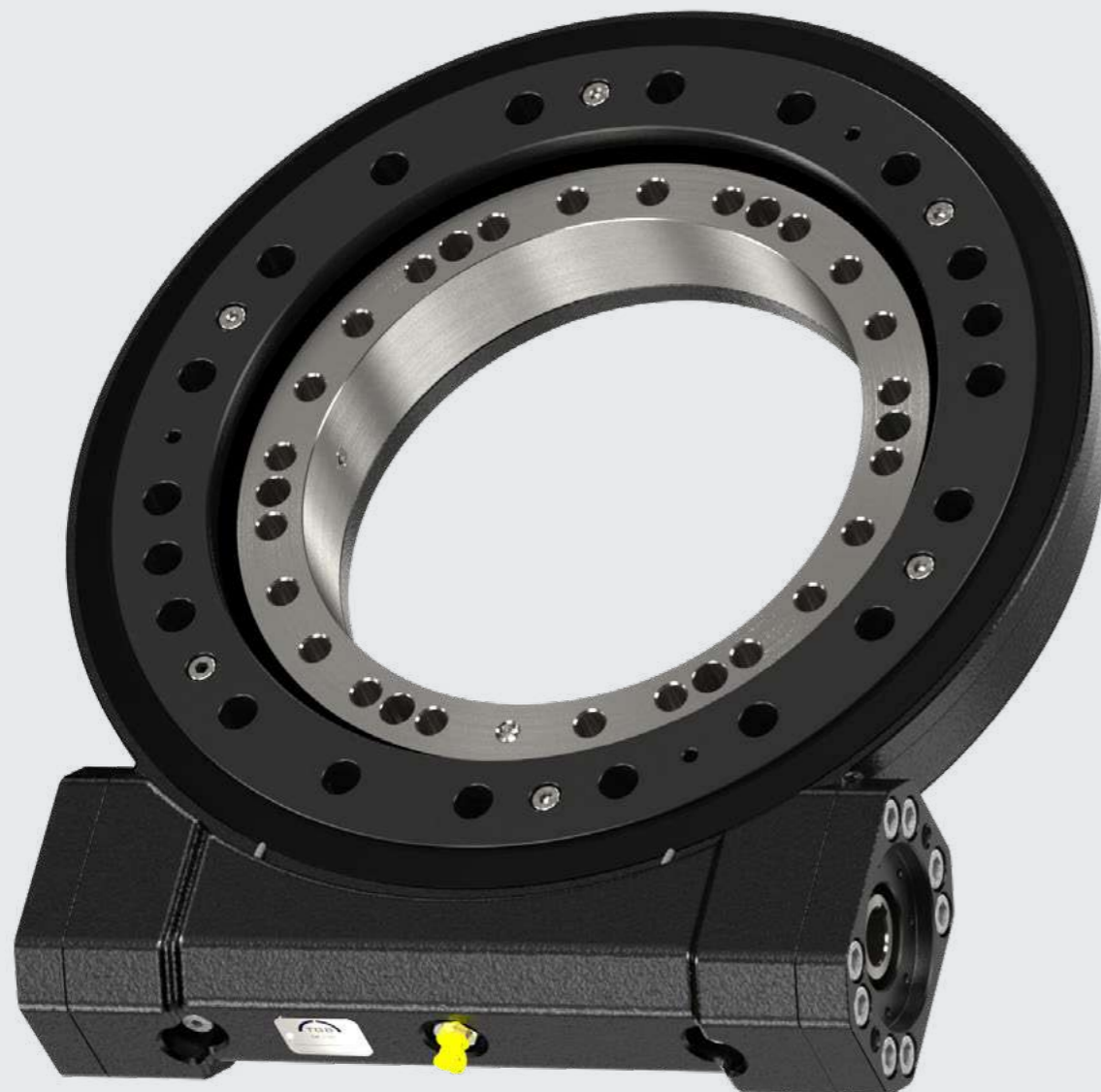
DESCRIPTION

PRO

The new generation of slew drives has a helical slewing ring combined with a globoid screw worm. It provides a better sealing and tightness, and is more geometrically robust. It has only one grease point, as the slewing ring and tapered bearings are maintenance-free. It is ideally interchangeable with the BE series.

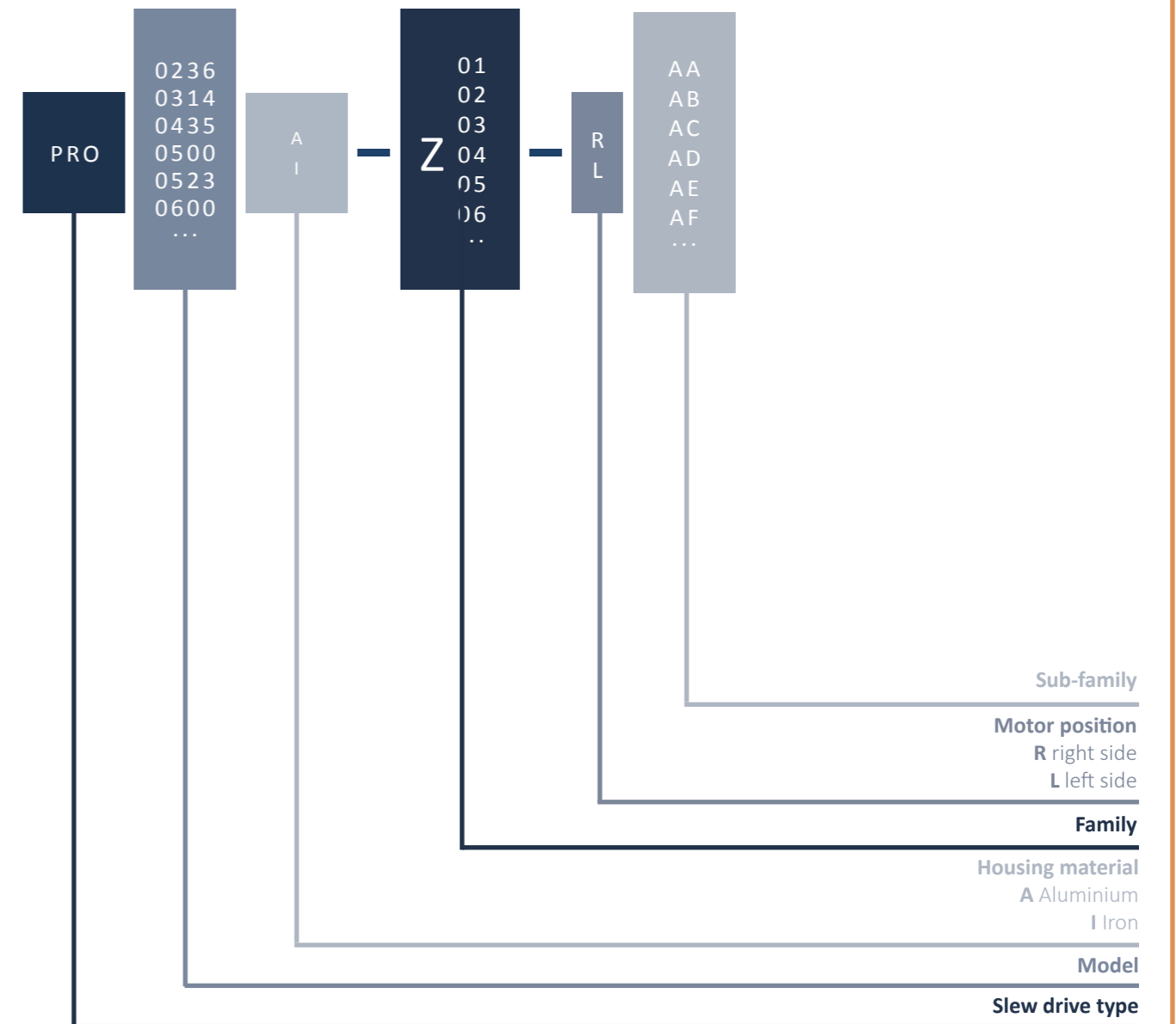
MAIN FEATURES

- NBR Lip Seal
- IP 65
- Supplied with in colors
- Supplied with paint for extra corrosion protection
- Sizes in Metric and Imperial

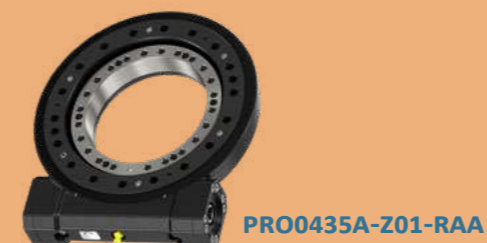


CODE DESCRIPTION

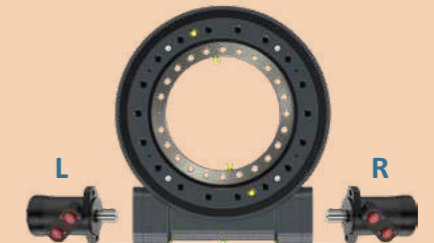
PRO SLEW DRIVES

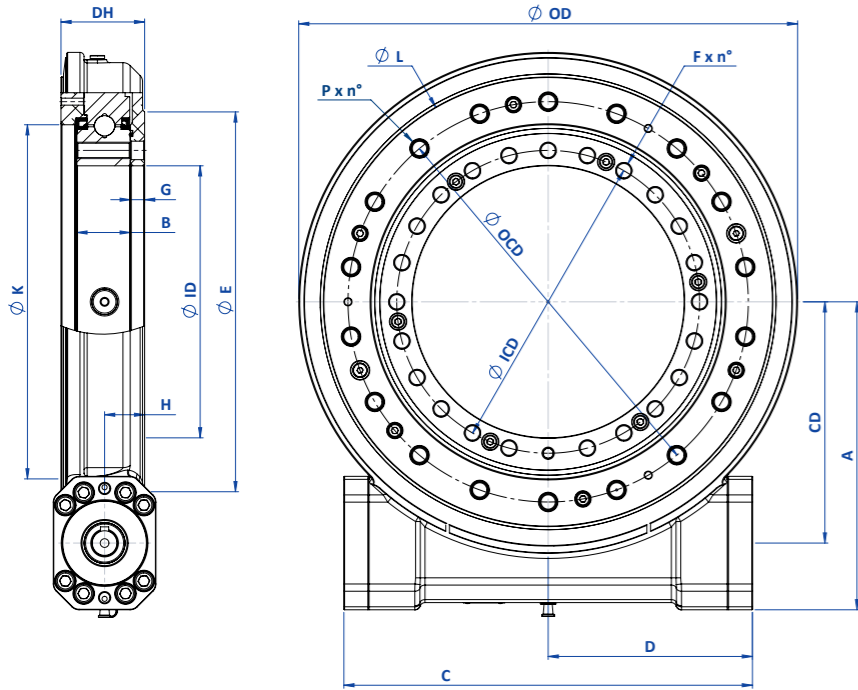


Example

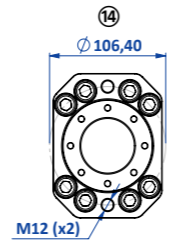


Motor position

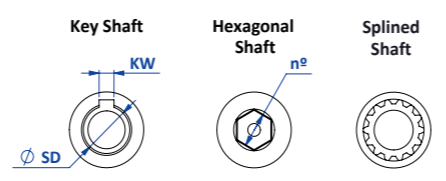




FLANGE TYPES



SHAFT TYPES



DIMENSIONS

	PRO0236A-Z01-RAA		PRO0314A-Z01-RAA		PRO0435A-Z01-RAA		PRO0500A-Z02-RAB	
	mm	in	mm	in	mm	in	mm	in
Ø OD	286	11.26	364	14.33	486	19.13	520	20.47
Ø ID	98	3.86	145	5.71	265	10.43	300	11.81
Ø OCD	190	7.48	270	10.63	390	15.35	420	16.54
P x n°	M12 ↓22 mm x 8		M16 ↓28 mm x 16		M16 ↓28 mm x 18		M16 ↓28 mm x 24	
Ø ICD	120,50	4.74	175	6.89	295	11.61	330	12.99
F x n°	M12 x 10		M16 x (16-1)		M16 x (24-1)		Ø17,50 mm x (24)	
DH	82	3.23	81,50	3.21	81,50	3.21	97,50	3.84
CD	135	5.31	175	6.89	235	9.25	253	9.96
A	200	7.87	240	9.45	300	11.81	318	12.52
B	51	2.01	52	2.05	52	2.05	52	2.05
C	333	13.11	353	13.90	399	15.71	434	17.09
D	166,50	6.56	176,50	6.95	199	7.83	217	8.54
Ø E	187	7.36	250	9.84	370	14.57	400	15.75
G	14	0.55	14	0.55	14	0.55	30	1.18
H	39	1.54	39	1.54	39	1.54	55	2.17
Ø K	150	5.91	220	8.66	345	13.58	378	14.88
Ø L	238	9.37	320	12.60	438	17.24	472	18.58

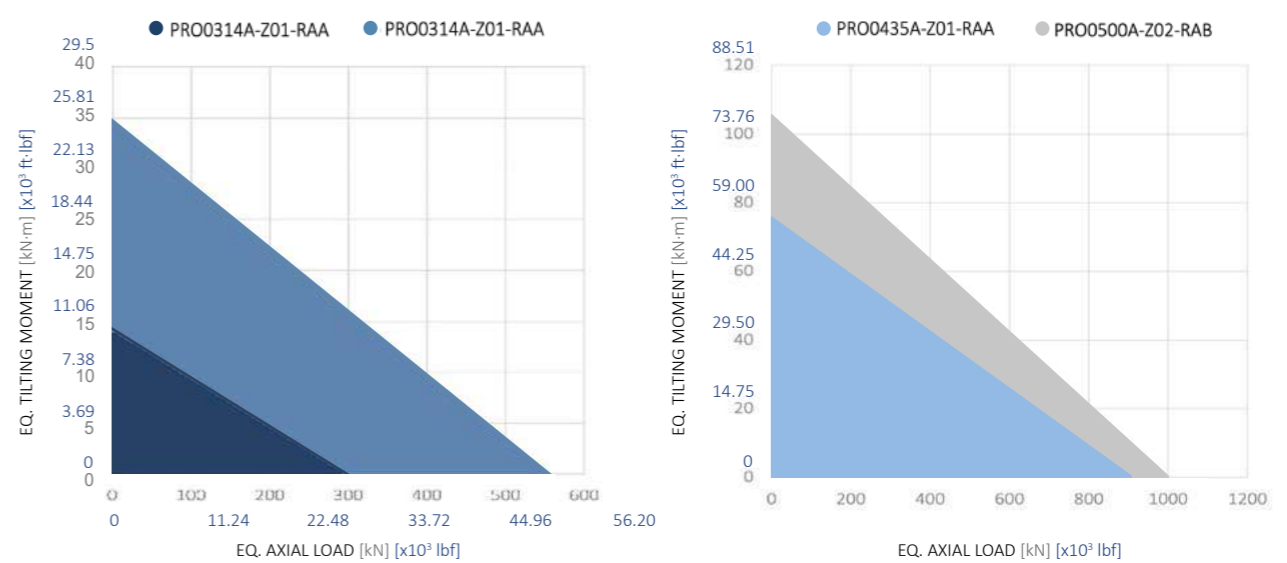
FLANGES and SHAFTS

	PRO0236A-Z01-RAA		PRO0314A-Z01-RAA		PRO0435A-Z01-RAA		PRO0500A-Z02-RAB	
	mm	in	mm	in	mm	in	mm	in
KW	8	0.31	8	0.31	8	0.31	8	0.31
Ø SD	25	0.98	25	0.98	25	0.98	25	0.98
Input	Flange 14 Key Shaft		Flange 14 Key Shaft		Flange 14 Key Shaft		Flange 14 Key Shaft	
Output	Flange 14 Key Shaft		Flange 14 Key Shaft		Flange 14 Key Shaft		Flange 14 Key Shaft	

SIZES



MOMENT LOADING CHARTS



RATINGS

		PRO0236A-Z01-RAA	PRO0314A-Z01-RAA	PRO0435A-Z01-RAA	PRO0500A-Z02-RAB
		Min. input torque	N·m ft·lbf	2 - 6 1.48 - 4.43	2 - 10 1.48 - 7.38
Gear ratio		44:1	61:1	85:1	92:1
Efficiency		48%	52%	44%	42%
Max. torque	kN·m	6,50	9,30	12,90	16,20
	x10³ ft·lbf	4,79	6,86	9,51	11,94
Nominal torque	kN·m	5,50	7,90	10,90	13,70
	x10³ ft·lbf	4,06	5,83	8,05	10,10
Holding torque	kN·m	25,00	30,00	38,00	46,00
	x10³ ft·lbf	18,44	22,13	28,04	33,92
Tilting moment	kN·m	14,00	27,50	75,00	103,00
	x10³ ft·lbf	10,32	20,28	55,32	75,92
Radial static load	kN	94,00	204,00	338,00	380,00
	x10³ lbf	21,11	45,88	75,99	85,26
Axial static load	kN	290,00	547,00	905,00	1000,00
	x10³ lbf	65,12	123,58	203,35	224,81
Max. output speed	rpm	1	1	1	1
Weight	Kg	24,11	33,59	46,35	52,59
	lbs	53,14	74,06	102,18	115,96
Paint		RAL9005	RAL9005	RAL9005	RAL9005

OTHER PRODUCTS

TGP

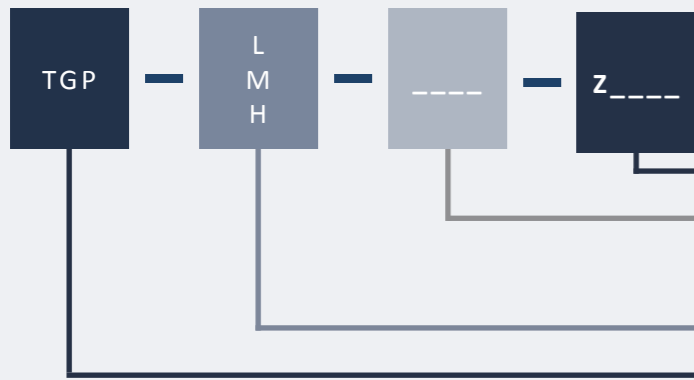
Slew Drive for High-Speed Rotation Applications

PINION-DRIVEN SLEW DRIVES

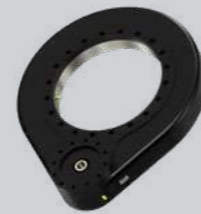
The motor-driven system allows for greater efficiency in power transmission and results in higher speeds. Although pinion systems generally do not have the self-locking feature like worm gear systems, they can offer very precise control and can be equipped with brakes and other mechanisms to maintain position.



PINION-DRIVEN SLEW DRIVE



Example



TGP-L-0541-Z1000

TRP

Compact-Enclosed Slew Drive with a Pinion

SLEW DRIVE WITH OUTPUT PINION

A compact enclosed-gearing slewing drive designed to function as a high-speed drive component for slew bearing systems. Supplied with an integrated pinion and mounting interface for seamless installation, ensuring efficient and reliable connection with the slew bearing assembly.

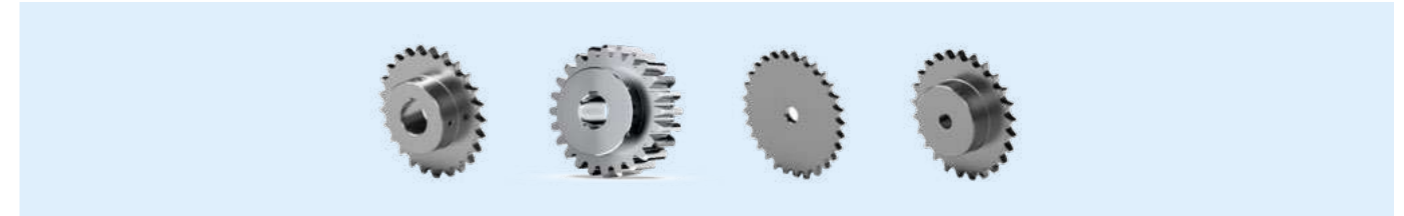


ACCESSORIES

MOTOR CAPS, ADAPTER SHAFTS, ADAPTER FLANGES AND TOP PLATES



PINIONS



AC / DC / HYDRAULIC MOTORS / REDUCERS / ENCODERS



ORDERING INFORMATION

INQUIRY FORM

Comercial		Date		Client	
Target slew ring		Ref.		E <input type="checkbox"/> I <input type="checkbox"/> SD <input type="checkbox"/>	
Target slew drive					
Working position		Horizontal <input type="checkbox"/>		Vertical <input type="checkbox"/>	
Output torque	Nominal			[kNm]	
	Maximum			[kNm]	
	Holding			[kNm]	
Output speed	Nominal (continuous)			[rpm]	
	Maximum (intermittent)			[rpm]	
Combined nominal loads	Axial			[kN]	
	Radial			[kN]	
	Tilting moment			[kNm]	
Combined maximum loads	Axial			[kN]	
	Radial			[kN]	
	Tilting moment			[kNm]	
Desired lifetime [hours]					
Working conditions	Minimum temperature			[°C]	
	Maximum temperature			[°C]	
	Site / Location				
Load case 1 (Dynamic)	Load	[kN o kNm]	Working time	Number of starts per hour	<i>The sum of all percentages must equal 100%. Add more load cases if required.</i>
	Output torque				
	Axial				
	Radial	%:			
Tilting moment	h:				
Load case 2 (Dynamic)	Load	[kN o kNm]	Working time	Number of starts per hour	
	Output torque				
	Axial				
	Radial	%:			
Tilting moment	h:				
Load case 3 (Static)	Load	[kN o kNm]	Working time	Number of starts per hour	
	Output torque				
	Axial				
	Radial	%:			
Tilting moment	h:				
Motorization	AC <input type="checkbox"/> DC <input type="checkbox"/> Hydraulic <input type="checkbox"/>	Comments:			
Pinion					
Limit dimensions	Width	Length	Height		
	Comments				

Working position	
Nominal torque	
Is the output torque that the slew drive must be working with during at least the 90% of the working time. Is a dynamic torque	
Maximum torque	
Is the output torque that the slew drive must be working with during at least the 10% of the working time. Is a dynamic torque	
Holding torque	
Is the torque applied from the slew ring to the worm due to a external load. Is a static torque. It can be higher than the maximum toque	
Nominal output speed	
Desired speed for the application at the nominal conditions	
Maximum output speed	
Maximum desired speed for the application	
Combined loads	
It is necessary to know the combined loads (loads that are applied together to the slew drive/slew ring). The result of axial, radial and tilting moment acting together is not the same that the same loads acting separately.	
Axial load	
A load in z direction (perpendicular to the top plate). It must be known and noted whether the load is applied in the center of the rotation or not.	
Radial load	
A load in any direction contained in the plane parallel to the top plate. It must be known and noted whether the load is applied in the center of the rotation or not.	
Tilting moment	
Is a moment due to the eccentricity of either an axial or a radial load.	
Desired lifetime	
Is the target total amount of working hours for the slew drive/slew ring	
Working conditions	
The working conditions refer to the place in where the drive is intended to be used. Minimum and maximum temperature are used to verify if the grease is appropriate. The site/location allows TGB to ensure if the drive is properly sealed or protected (for example: dusty environments)	



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