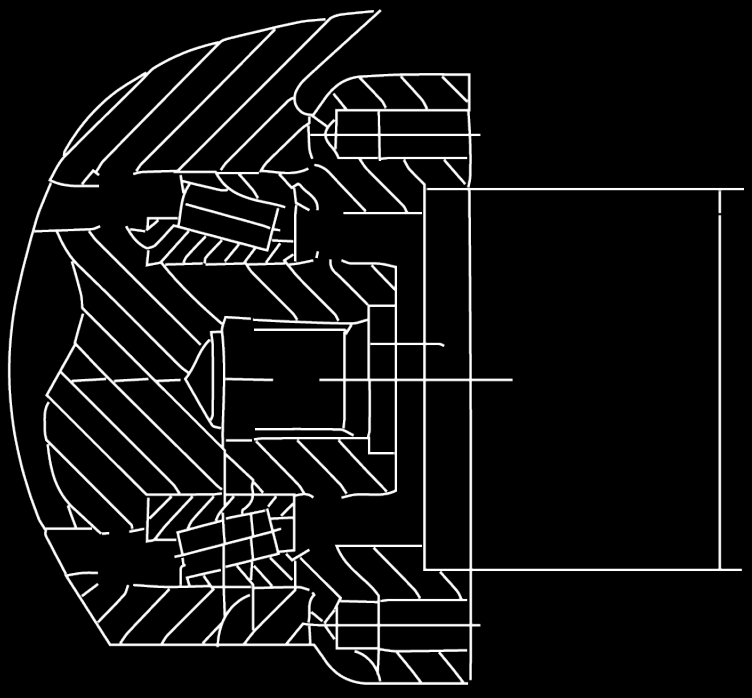
CHIARAVALLI® GROUP SpA

SLEWING DRIVE

Heavy Duty Applications



A slewing drive for heavy-duty applications is a robust mechanical device that combines a slewing ring with a worm gear system to provide high-torque rotational motion.
It is designed to handle significant loads and provide precise control in various demanding environments.
Key features include its ability to transmit power, reduce speed, and facilitate smooth rotational movement.
Slewing drives are essential in applications where robust, reliable, and precise rotational motion is required, such as:

- **Truck Cranes**
  Ensures accurate rotation and positioning of the crane boom for safe and efficient lifting operations.

- **Aerial Work Trucks**
  Provides stable and controlled movement of the work platform, enhancing worker safety and operational flexibility.

- **Port Machinery**
  Facilitates the handling and movement of heavy containers and cargo, optimizing efficiency in loading and unloading processes.

- **Wood Grabbing Machines**
  Offers reliable rotation and control for handling logs and timber, boosting efficiency in forestry and wood processing tasks.

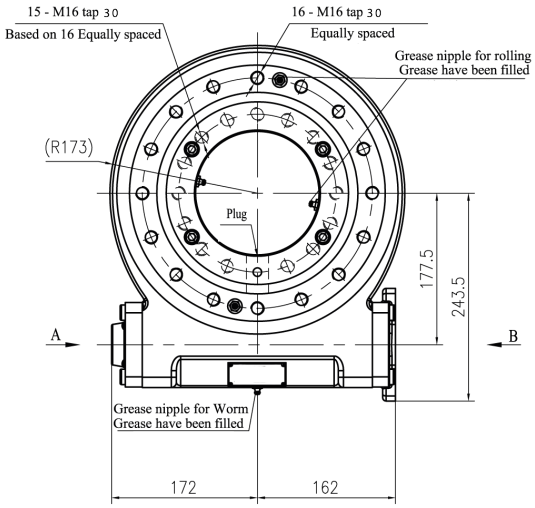
- **Beam Carriers**
  Ensures accurate positioning and transport of large beams in construction, contributing to structural integrity and project efficiency.

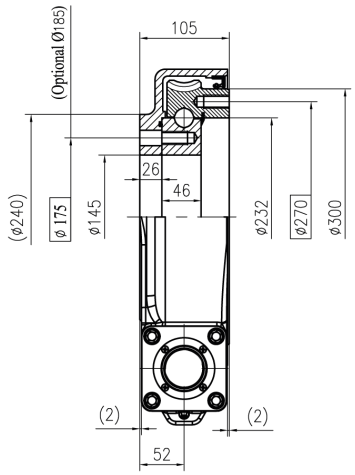
- **Fog Cannons**
  Enables precise targeting and distribution of water mist for dust suppression, enhancing environmental control and worker health in construction and mining sites.

PRODUCTS AVAILABLE ON REQUEST ONLY

WORM DRIVE CAPABILITY		
Nominal torque	6.3KN.m(SF=1 at n=1 rpm)	
Maximum torque	9.5KN.m	
Ratio of Worm Gear	62:1	
Backlash	0.15°	
Efficiency	≈ 40%	
Temperature	-30 ~ +80°C	
Holding torque	38.7KN.m	
Axial Static Load	Coa	578 kN
Radial Static Load	Cor	215 kN
Axial Dynamic Load	Ca	136 kN
Radial Dynamic Load	Cr	115 kN
Tilting Moment Torque	Com	35.6KN.m

View A





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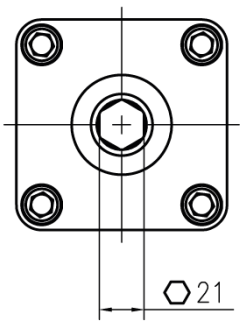

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Customized according to requests.

VIEW B OPTION

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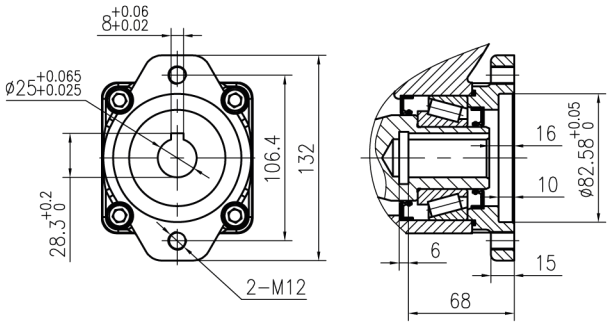

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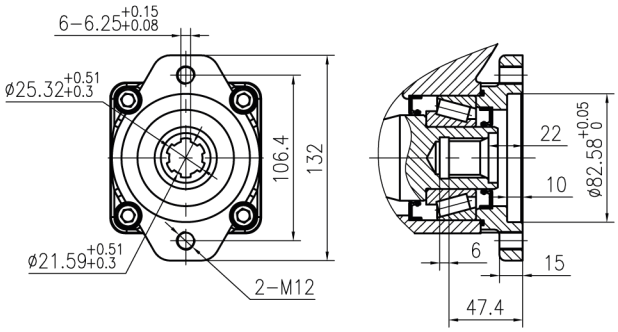
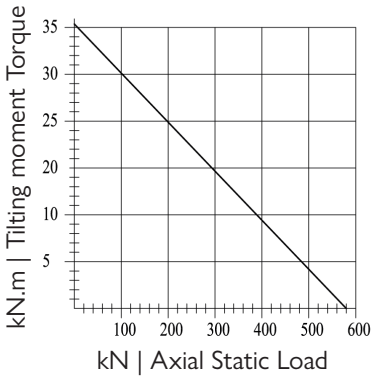


Moment Load Chart | Axial Static & Tilting Moment



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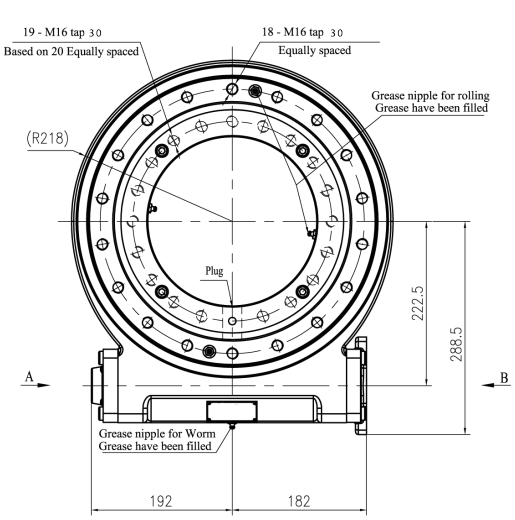
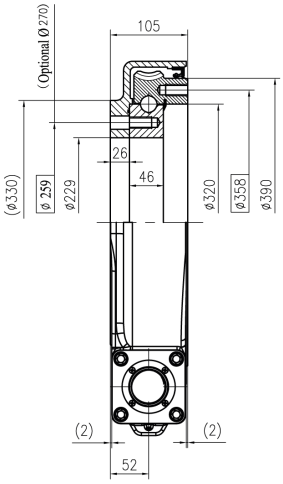
WORM DRIVE CAPABILITY		
Nominal torque	7.8 KN.m(SF=1 at n=1 rpm)	
Maximum torque	11.8 KN.m	
Ratio of Worm Gear	79:1	
Backlash	0.15°	
Efficiency	≈ 40%	
Temperature	-30 ~ +80°C	
Holding torque	43 KN.m	
Axial Static Load	Coa	760 kN
Radial Static Load	Cor	280 kN
Axial Dynamic Load	Ca	190 kN
Radial Dynamic Load	Cr	148 kN
Tilting Moment Torque	Com	57 KN.m

View A





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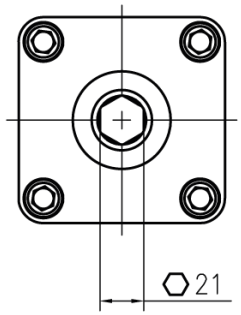

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VIEW B OPTION

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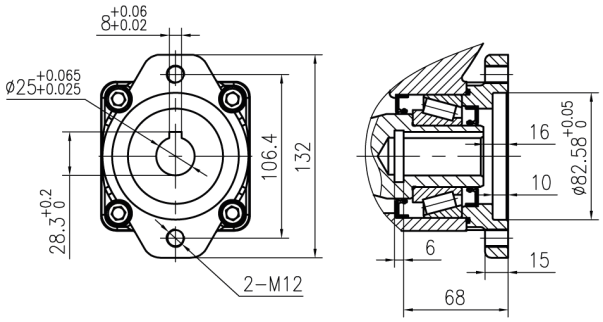

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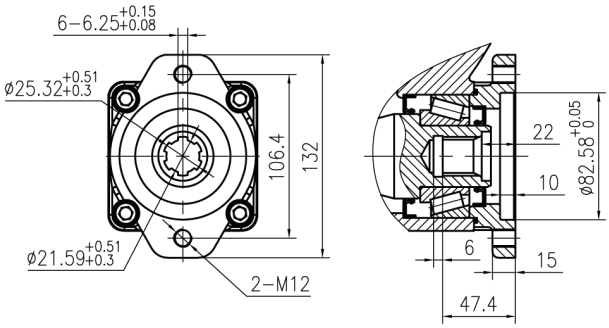
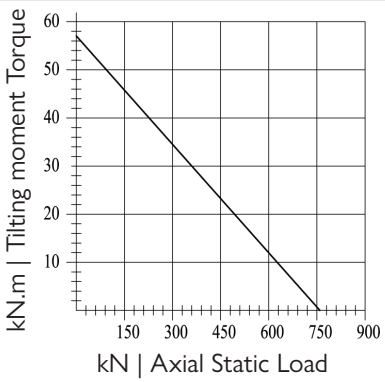


Moment Load Chart | Axial Static & Tilting Moment



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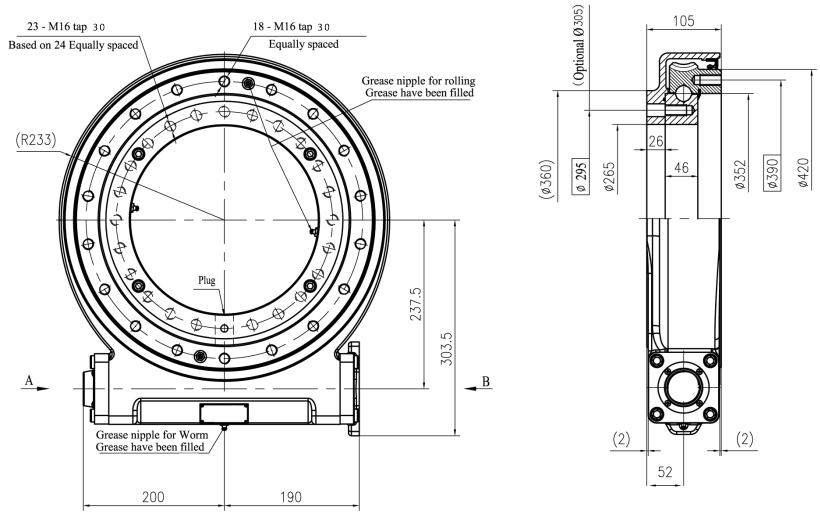
WORM DRIVE CAPABILITY		
Nominal torque	8.6 KN.m(SF=1 at n=1 rpm)	
Maximum torque	12.9 KN.m	
Ratio of Worm Gear	86:1	
Backlash	0.13°	
Efficiency	≈ 40%	
Temperature	-30 ~ +80°C	
Holding torque	48 KN.m	
Axial Static Load	Coa	960 kN
Radial Static Load	Cor	360 kN
Axial Dynamic Load	Ca	230 kN
Radial Dynamic Load	Cr	200 kN
Tilting Moment Torque	Com	71.2 KN.m

View A



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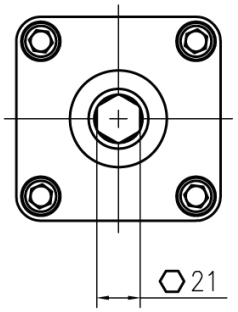

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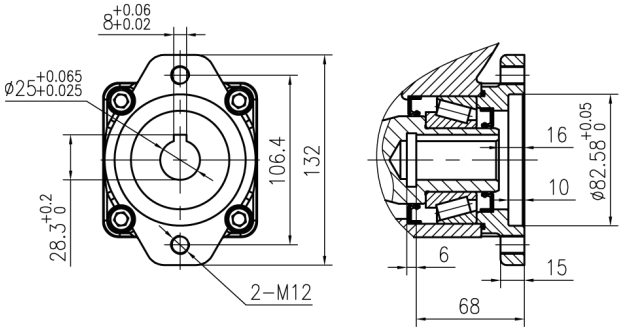
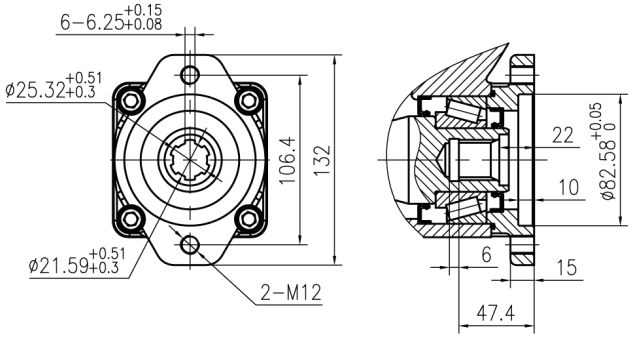
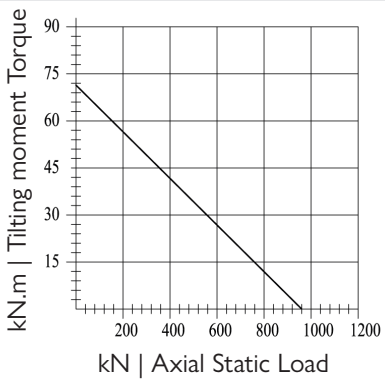


Input 6B Spline



Moment Load Chart | Axial Static & Tilting Moment



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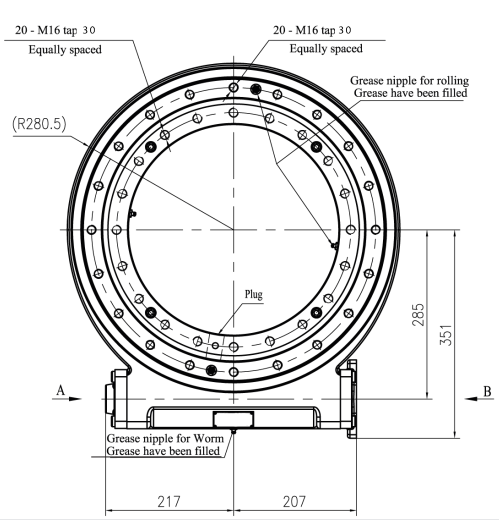
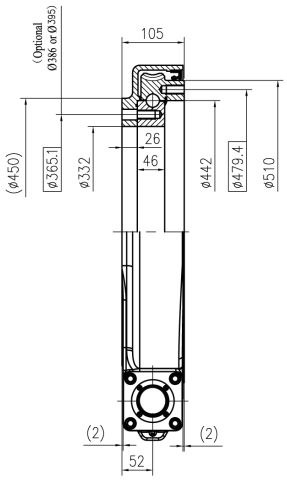
WORM DRIVE CAPABILITY		
Nominal torque	10.5 KN.m(SF=1 at n=1 rpm)	
Maximum torque	15.6 KN.m	
Ratio of Worm Gear	104:1	
Backlash	0.1°	
Efficiency	≈ 40%	
Temperature	-30 ~ +80°C	
Holding torque	72.3 KN.m	
Axial Static Load	Coa	1166 kN
Radial Static Load	Cor	435 kN
Axial Dynamic Load	Ca	280 kN
Radial Dynamic Load	Cr	231 kN
Tilting Moment Torque	Com	143 KN.m

View A





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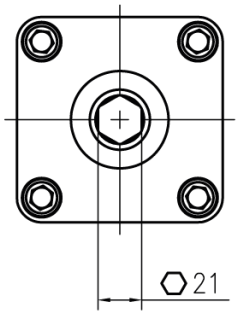

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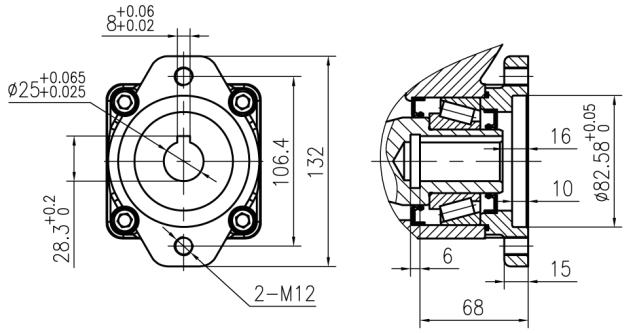
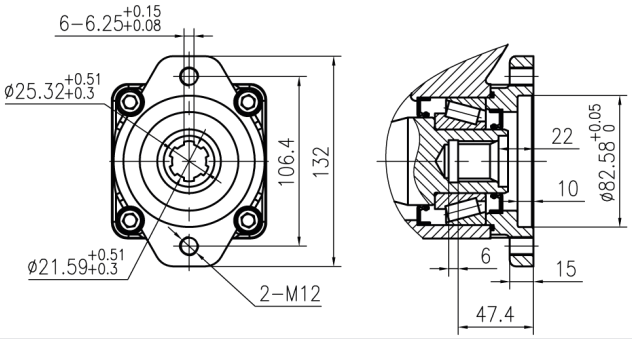
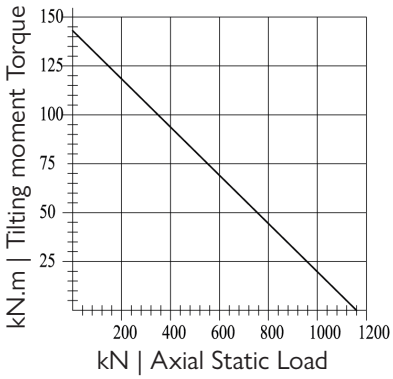


Input 6B Spline



Moment Load Chart | Axial Static & Tilting Moment



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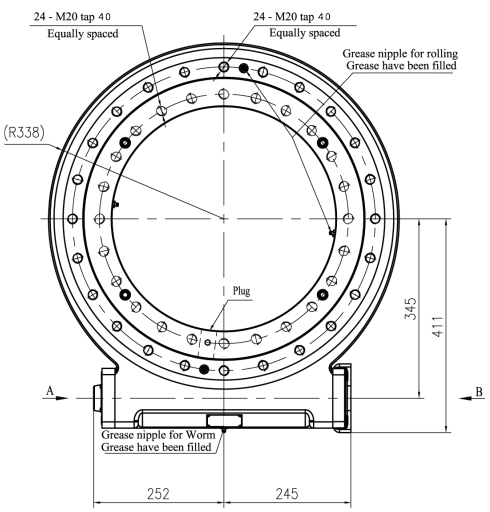
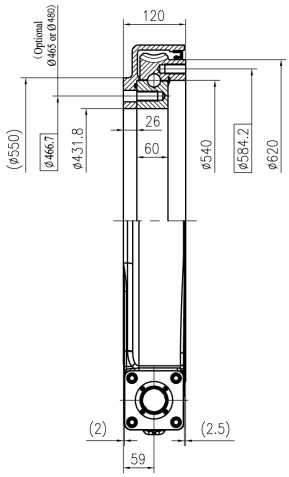
PRODUCT TEMPORARILY AVAILABLE ON REQUEST

WORM DRIVE CAPABILITY		
Nominal torque	23 KN.m(SF=1 at n=1 rpm)	
Maximum torque	34.5 KN.m	
Ratio of Worm Gear	90:1	
Backlash	0.1°	
Efficiency	≈ 40%	
Temperature	-30 ~ +80°C	
Holding torque	105.8 KN.m	
Axial Static Load	Coa	1598 kN
Radial Static Load	Cor	640 kN
Axial Dynamic Load	Ca	385 kN
Radial Dynamic Load	Cr	335 kN
Tilting Moment Torque	Com	203 kN.m

View A





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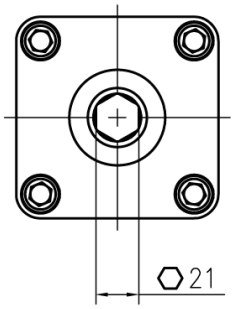

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VIEW B OPTION

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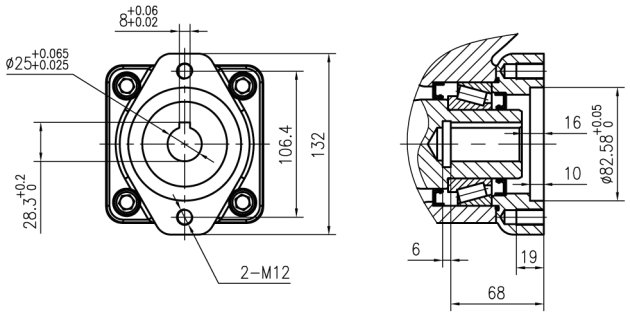

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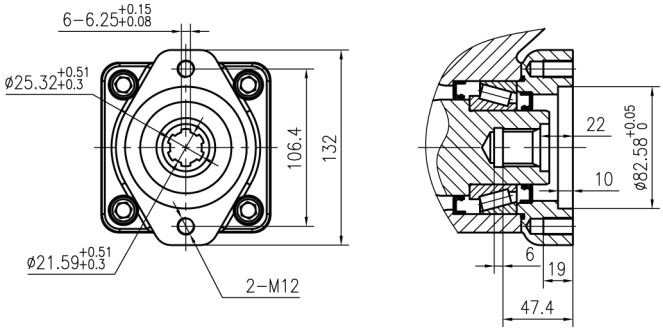
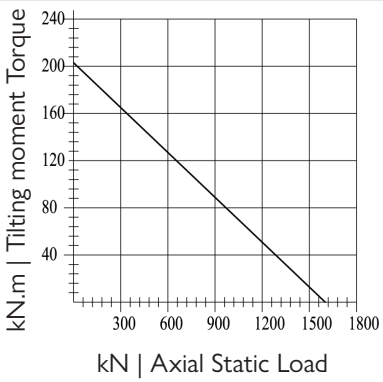


Moment Load Chart | Axial Static & Tilting Moment



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