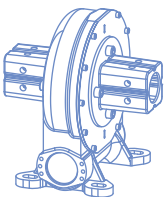




SoCare® VD Series Slew Drive for Solar Tracker System



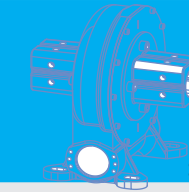
Vertical Rotary Slew Drives for Solar Tracking Systems

Engineered for precision and durability, our Vertical Rotary Slew Drive is the ideal solution for single and dual axis solar tracking applications. Designed to optimize energy output, this high-performance drive ensures smooth, reliable rotation and accurate positioning of solar panels.

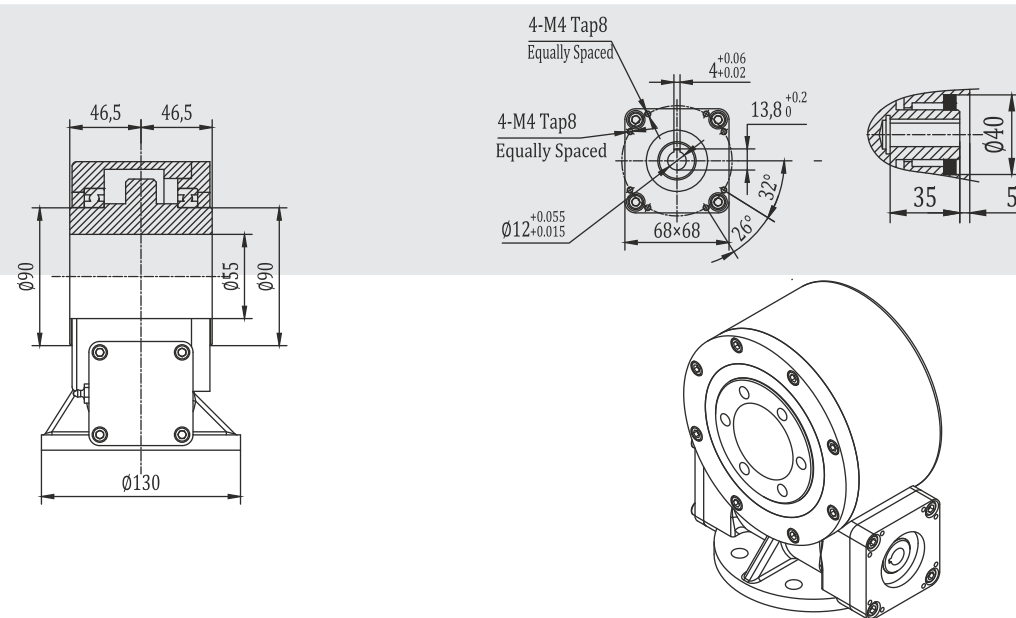
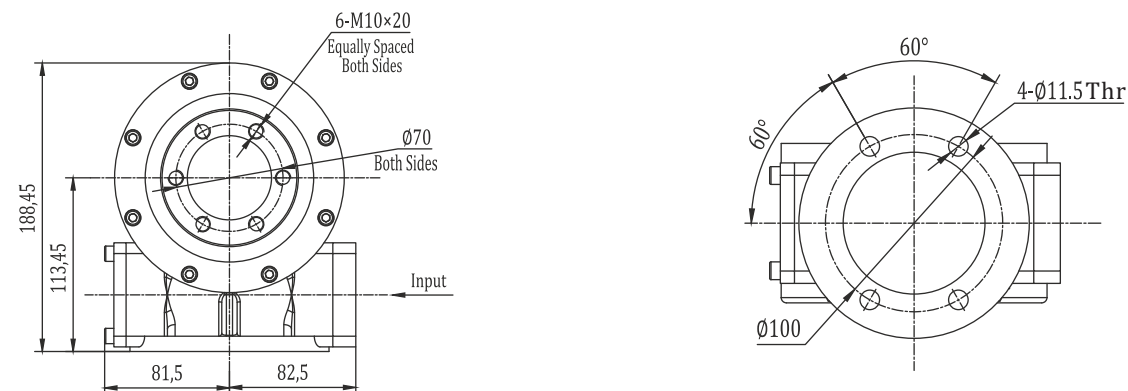
Built with an anti-corrosion enclosed housing to withstand harsh environmental conditions, the slew drive features advanced gear technology for reduced backlash and enhanced torque transmission. Its compact design allows for easy integration into various tracker architectures while minimizing maintenance requirements.

Features:

- °Enveloping Worm for multi-tooth contact
- °Higher capacity bearings
- °Static self-locking
- °Precision Tracking
- °Customizable Options
- °Weather-Resistant Design
- °Various outputs including square designs are available



VD3

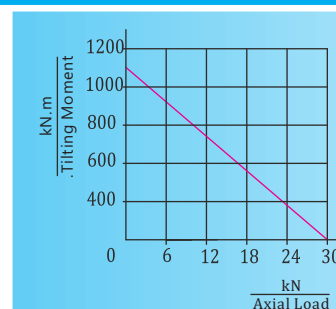


*Made to order input shaft and flange available upon request

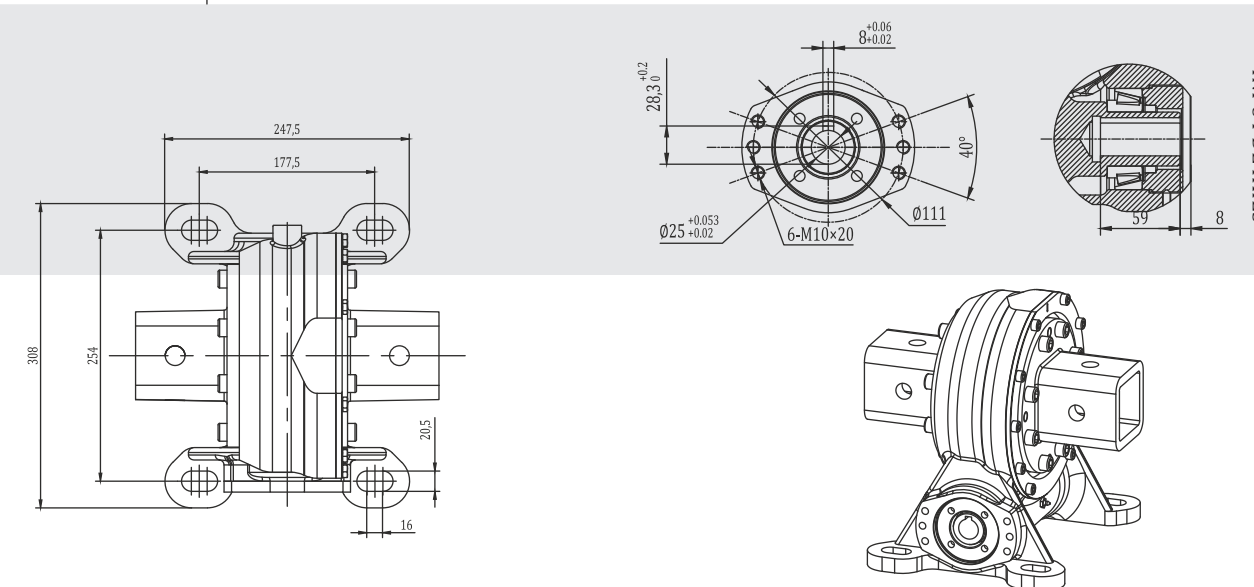
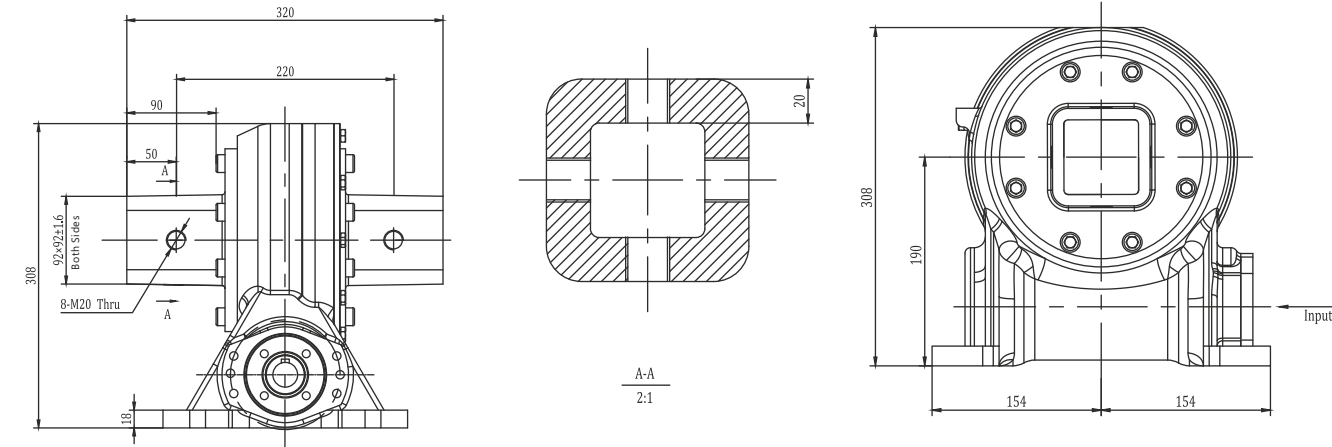
VD3 Slew Drive Performance Parameters

Gear Ratio	62:1	
Output Torque (max.)	1.2 kN.m	0.89×10 ³ lbf.ft
Tilting Moment (max.)	1.1 kN.m	0.81×10 ³ lbf.ft
Holding Torque	2.2 kN.m	1.6×10 ³ lbf.ft
Static Axial Load Rating	30 kN	6.7×10 ³ lbf
Static Radial Load Rating	15 kN	3.3×10 ³ lbf
Mechanical Efficiency	30%	
Self-locking	Reliable static self-locking	
Precision	≤0.2°	
IP Class	IP65	

Load Chart
Axial Load & Tilting Moment



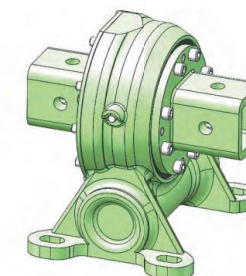
VD7

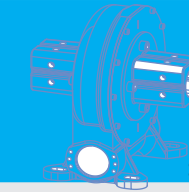


*Made to order input shaft and flange available upon request

VD7 Slew Drive Performance Parameters

Gear Ratio	60:1	
Output Torque (max.)	10.5 kN.m	7.75×10 ³ lbf.ft
Tilting Moment (max.)	10 kN.m	7.38×10 ³ lbf.ft
Holding Torque	42 kN.m	31×10 ³ lbf.ft
Static Axial Load Rating	100 kN	22.5×10 ³ lbf
Static Radial Load Rating	65kN	14.6×10 ³ lbf
Mechanical Efficiency	35%	
Self-locking	Reliable static self-locking	
Hard limit	±60° (Customized Available)	
Precision	≤0.2°	
IP Class	IP65	





SoCare® VD Series Slew Drives

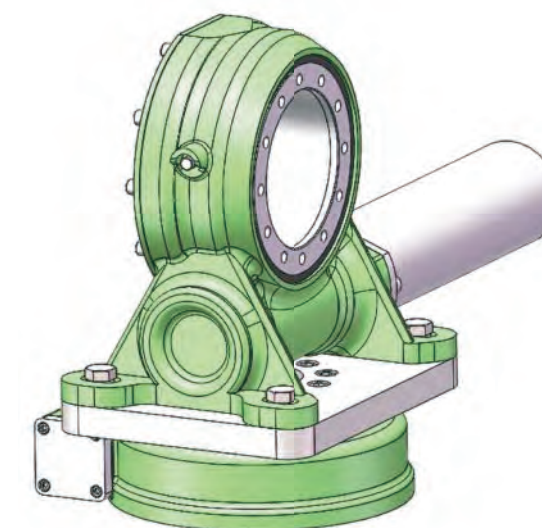
Vertical Rotary Slew Drives are for Solar Tracking System

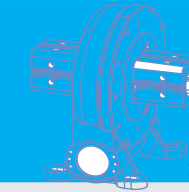
VD Vertical rotary slew drive features:

- ▣ Enveloping worm
- ▣ Multi-tooth contact
- ▣ Adopts bearings with higher capacity
- ▣ Reliable static self-locking
- ▣ Stable operation

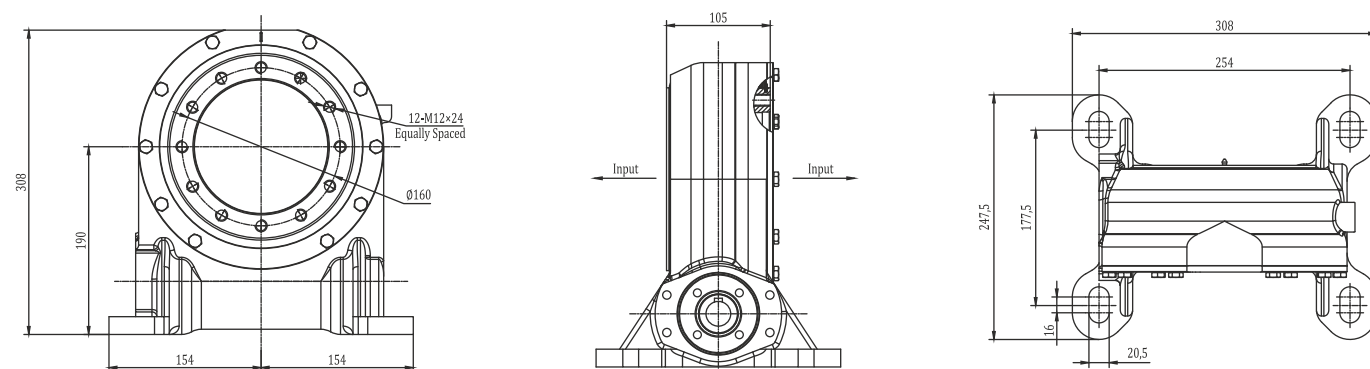
The series designed purpose is to cope with the required driving torque and holding torque caused by the increasing size of the current components.

In view of the harsh environment of the photovoltaic industry, SoCare ® currently has C5 anti-corrosion grade, IP65 protection grade products, and achieves full model coverage, the existing VD3/VD7/VD8/VD9/VD14 single-point slewing drive and SVD3/7/14 multi-point slew drives, the matching square tube range mold is 90-150mm, and can provide various shapes of output designs, providing customers with a variety of models to choose from, mainly used for flat uniaxial photovoltaic tracking brackets.

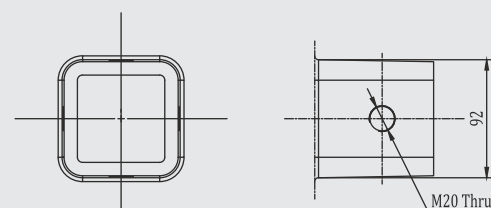




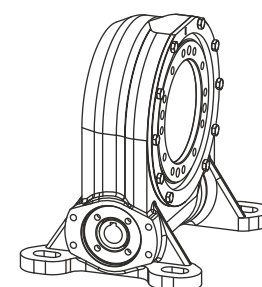
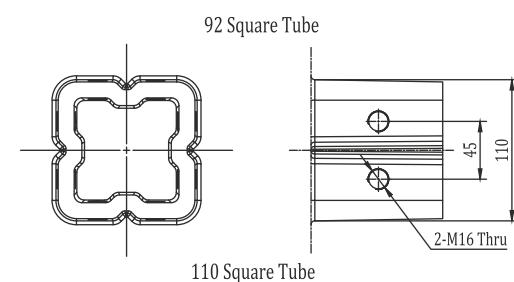
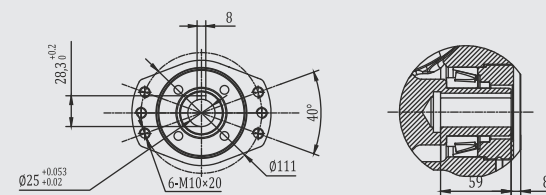
VD8



OUTPUT DETAILS



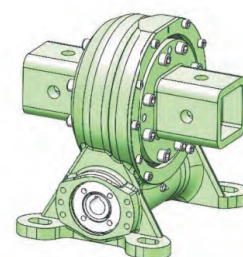
INPUT DETAILS



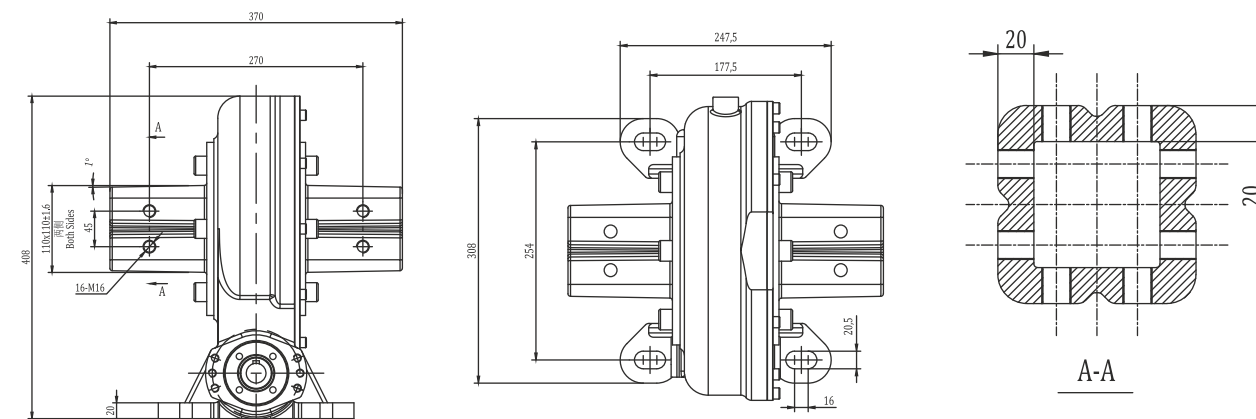
*Made to order input shaft and flange available upon request

VD8 Slew Drive Performance Parameters

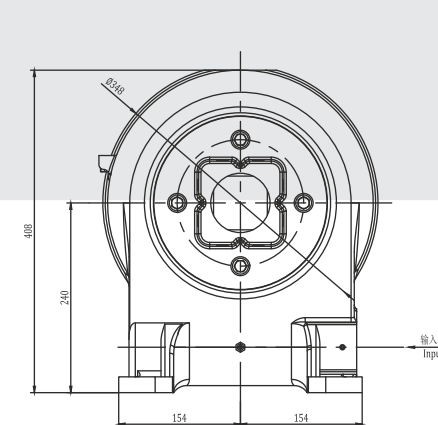
Gear Ratio	60:1	
Output Torque (max.)	12 kN.m	8.86×10 ³ lbf.ft
Tilting Moment (max.)	12 kN.m	8.86×10 ³ lbf.ft
Holding Torque	48 kN.m	35.4×10 ³ lbf.ft
Static Axial Load Rating	120 kN	30.6×10 ³ lbf
Static Radial Load Rating	80kN	18×10 ³ lbf
Mechanical Efficiency	35%	
Self-locking	Reliable static self-locking	
Hard limit	±60	
Precision	≤0.2°	
IP Class	IP65	



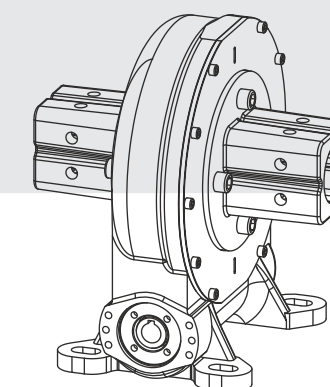
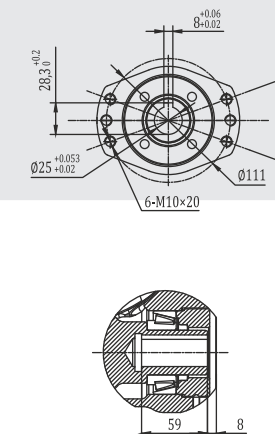
VD9



INPUT DETAILS



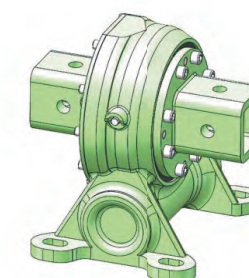
OUTPUT DETAILS

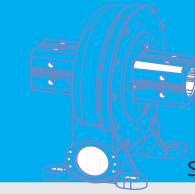


*Made to order input shaft and flange available upon request

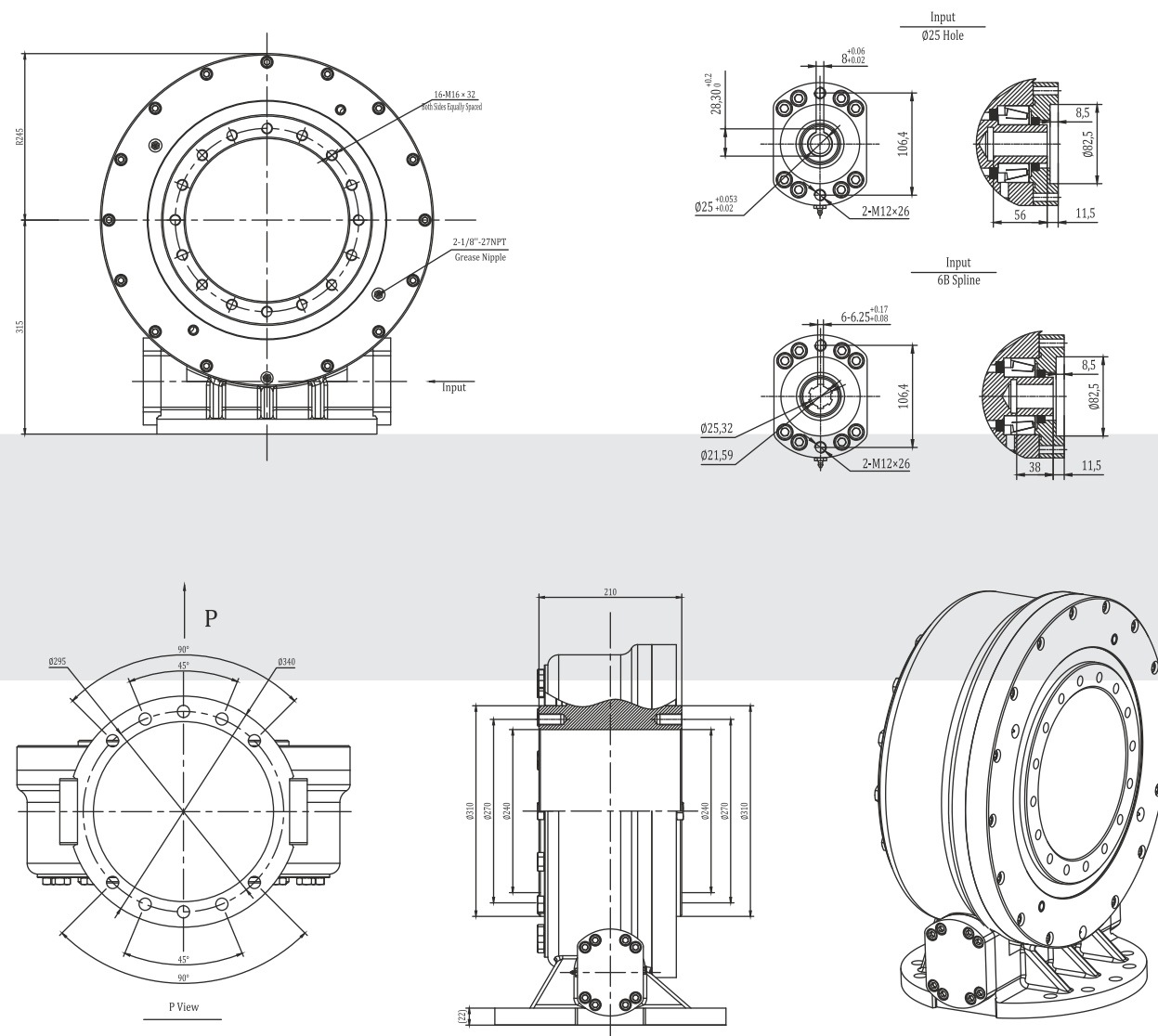
VD9 Slew Drive Performance Parameters

Gear Ratio	61:1	
Output Torque (max.)	12.2 kN.m	9.0×10 ³ lbf.ft
Tilting Moment (max.)	12 kN.m	8.9×10 ³ lbf.ft
Holding Torque	56 kN.m	41.3×10 ³ lbf.ft
Static Axial Load Rating	338 kN	76.1×10 ³ lbf
Static Radial Load Rating	120kN	27×10 ³ lbf
Mechanical Efficiency	35%	
Self-locking	Reliable static self-locking	
Hard limit	±60°	
Precision	≤0.2°	
IP Class	IP65	





VD14



*Made to order input shaft and flange available upon request

VD14 Slew Drive Performance Parameters

Gear Ratio	85:1	
Output Torque (max.)	20.4 kN.m	15.1×10 ³ lbf.ft
Tilting Moment (max.)	67.8 kN.m	50×10 ³ lbf.ft
Holding Torque	48 kN.m	35.4×10 ³ lbf.ft
Static Axial Load Rating	555 kN	124.9×10 lbf
Static Radial Load Rating	222 kN	49.9×10 ³ lbf
Mechanical Efficiency	40%	
Self-locking	Reliable static self-locking	
Precision	≤0.2°	
IP Class	IP65	

