HYDRA PART

WD7 - WD25

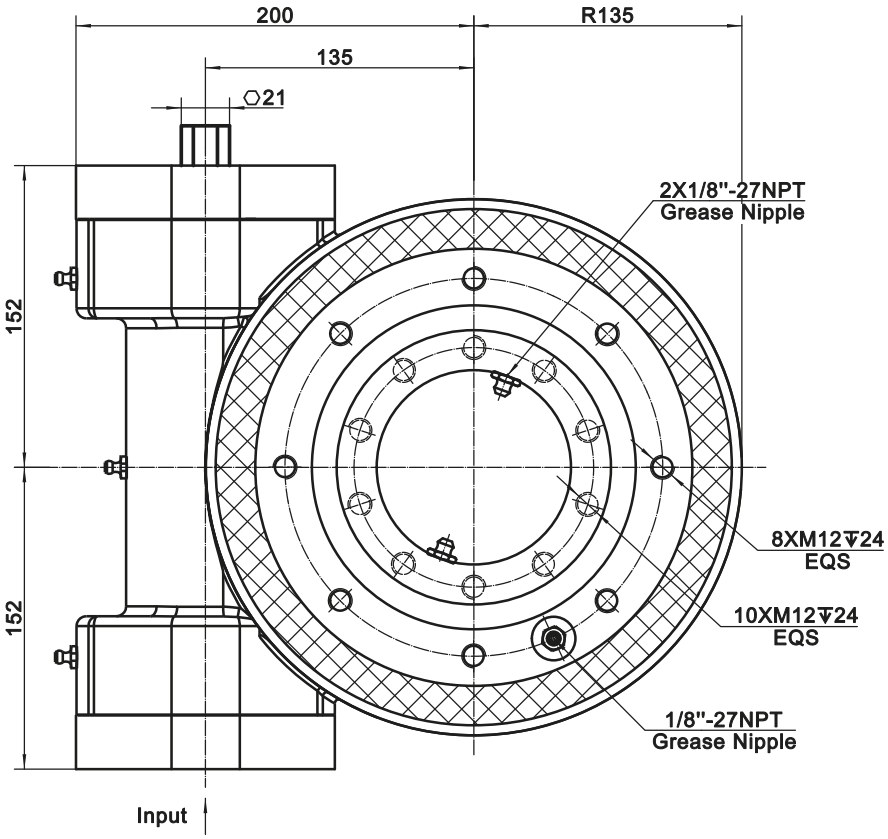
Worm Drives

High quality rotary bearing worm drive units operated hydraulically via the use of a hydraulic motor

Product Weights

Product Code	Description	Weight (Kg)
HP-WD7	WD7 Worm Drive	35.00
HP-WD9	WD9 Worm Drive	53.00
HP-WD12	WD12 Worm Drive	66.80
HP-WD14	WD14 Worm Drive	75.00
HP-WD17	WD17 Worm Drive	96.00
HP-WD21	WD21 Worm Drive	172.00
HP-WD25	WD25 Worm Drive	202.00

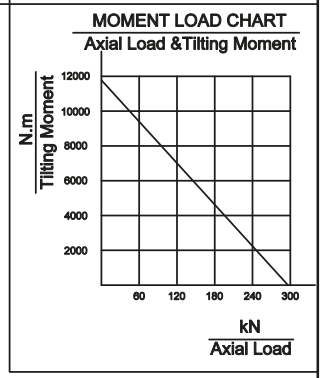
WD7

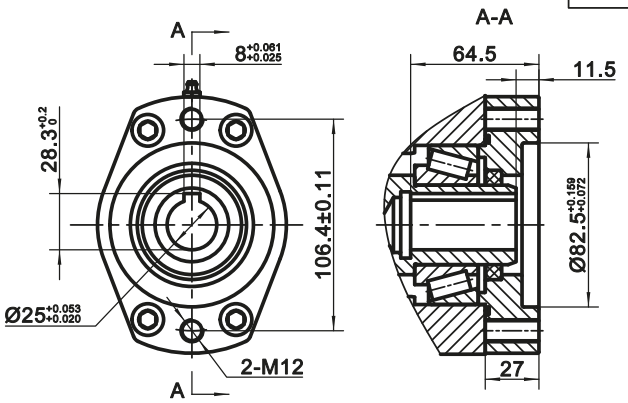


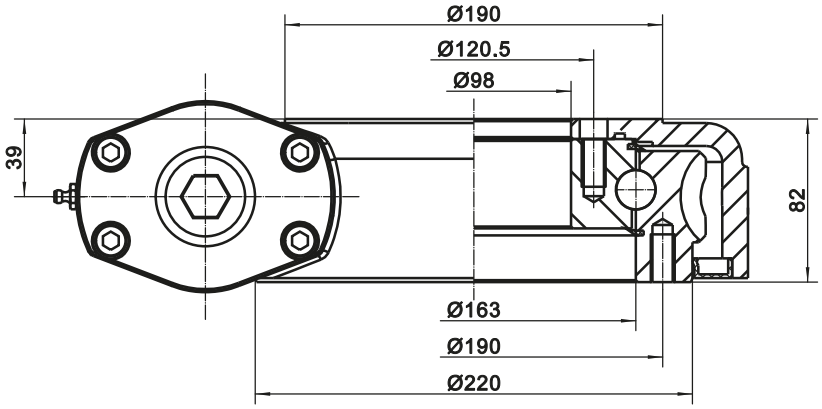
Slewing Drive Performance Parameters		
Rated Output Speed	<2.5rpm	
Output Torque	3350 N.m	2471 lbf.ft
Tilting Moment	11800 N.m	8704 lbf.ft
Holding Torque	6500 N.m	4794 lbf.ft
Static Axial Load Rating	290 kN	65250 lbf
Static Radial Load Rating	94 kN	21150 lbf
Gear Ratio	44:1	
Precision	≤0.15°	

HYDRA PART

Input
1:3



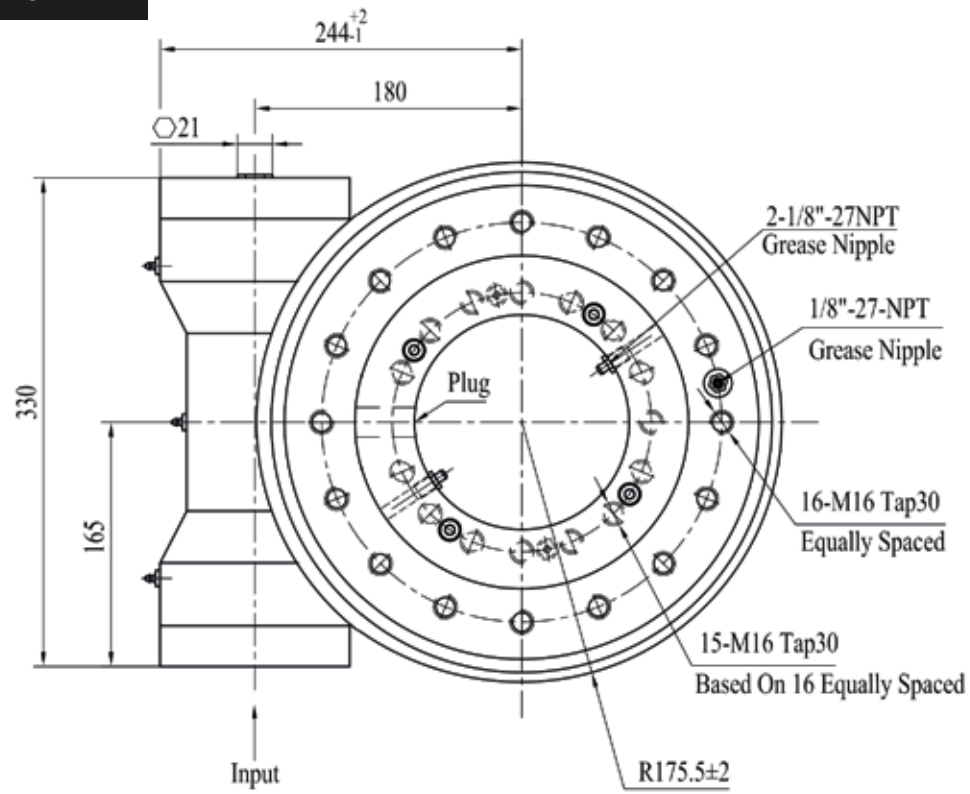




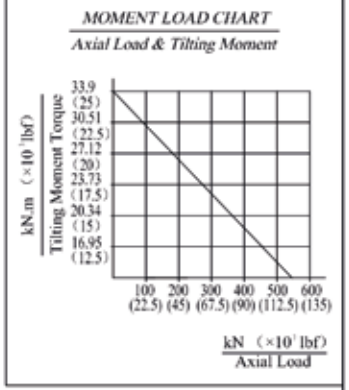
REV.	Date	Reviser	Description
Designed By	2018.12.4		
Checked By	2018.12.4		
Approved By	2018.12.4		

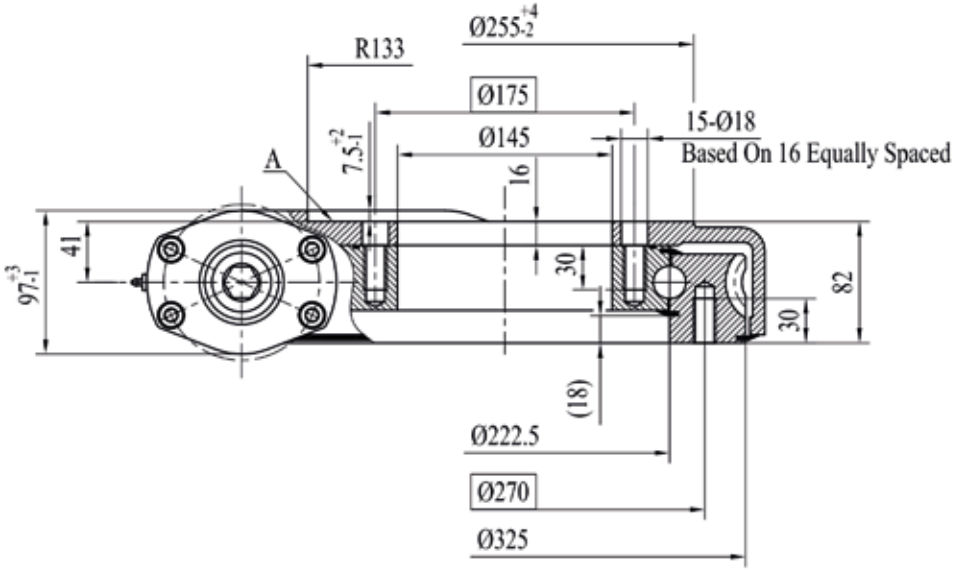
WEIGHT	SCALE	
28	1:2.5	Worm Drive
SYMBOLE ISO	SIZE A3	WD7 REV A
	SHEET 1/1	

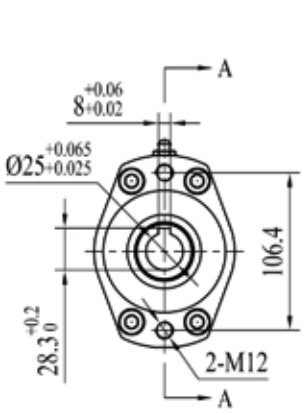
WD9

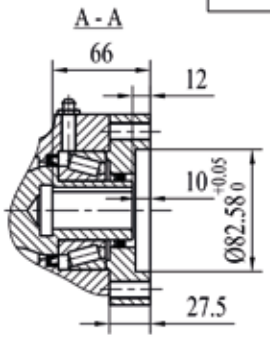


Worm Drive Performance Data		
Rated Output Speed	< 2.5 rpm	
Output Torque （Max.）	8 kN.m	5904 lbf.ft
Tilting Moment Torque （Max.）	33.9 kN.m	25.02×10 lbf.ft
Holding Torque	38.7 kN.m	28.56×10 lbf.ft
Axial Load （Max.）	550 kN	123.7×10 lbf
Radial Load （Max.）	205 kN	46.1×10 lbf
Ratio of Worm Gear	62:1	
Backlash	≤ 0.15 °	
Efficiency	40%	









Note: Side A facing up when mounted.

REV	DATE	REVISER	DESCRIPTION
DESIGNED BY		22-01-2013	
CHECKED BY		22-01-2013	
APPROVED BY		22-01-2013	

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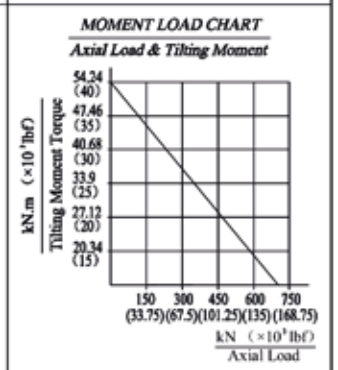
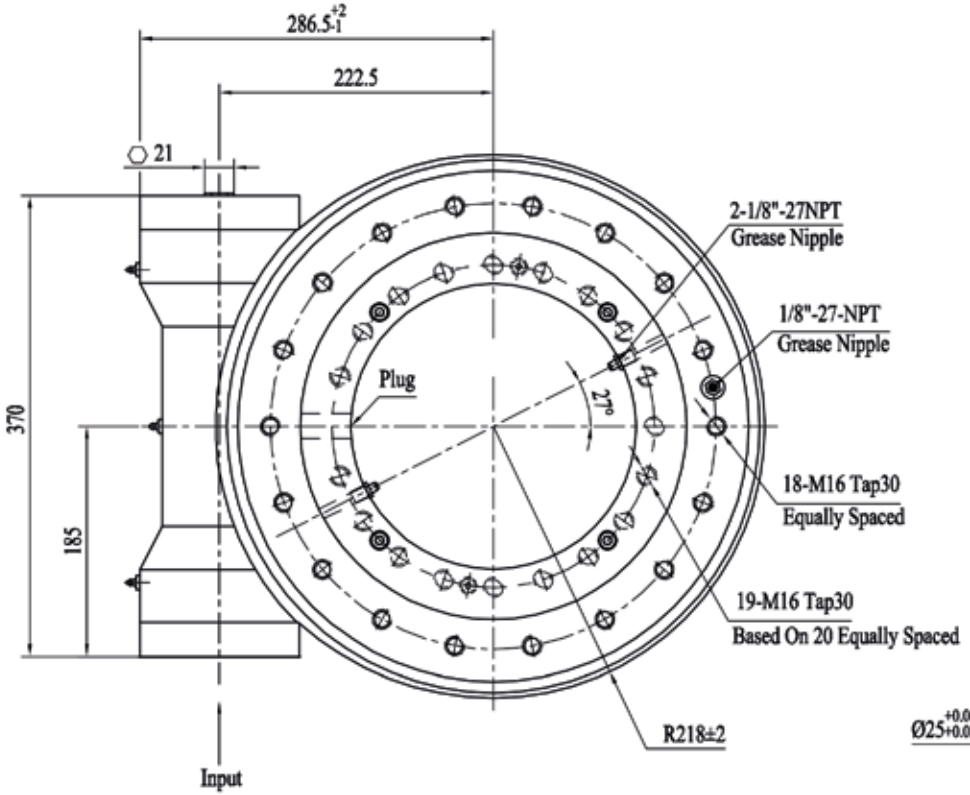
WEIGHT	SCALE	WORM DRIVE	
	1:3.5		
SYMBOLE ISO	SIZE A3	WD9	REV B
	SHEET 1 / 1		

WD12

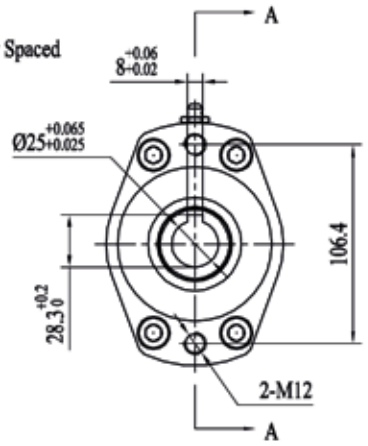
Worm Drive Performance Data		
Rated Output Speed	< 2.5 rpm	
Output Torque （Max.）	9.5 kN.m	7011 lbf.ft
Tilting Moment Torque （Max.）	54.3 kN.m	40×10 ³lbf.ft
Holding Torque	43 kN.m	31.7×10 ³lbf.ft
Axial Load （Max.）	725 kN	163×10 ³lbf
Radial Load （Max.）	270 kN	60.8×10 ³lbf
Ratio of Worm Gear	79:1	
Tracking Precision	≤ 0.15 °	
Theoretical Static Efficiency	40%	

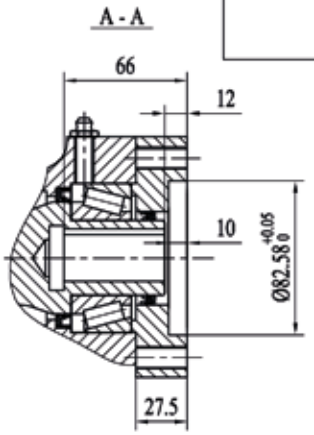


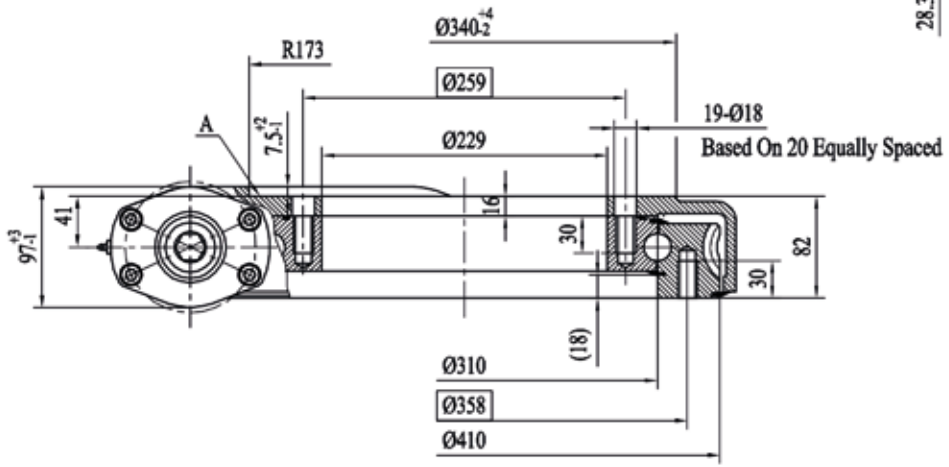


HYDRA PART

Input
1.5:1







Note: Side A facing up when mounted.

REV	DATE	REVISER	DESCRIPTION
DESIGNED BY		25-02-2013	
CHECKED BY		25-02-2013	
APPROVED BY		25-02-2013	

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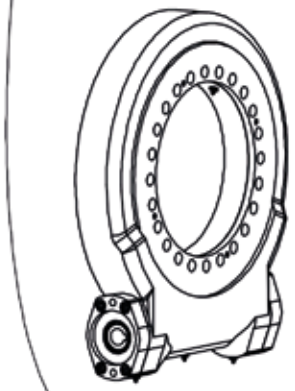
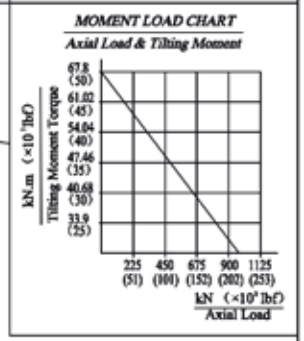
WEIGHT	SCALE	WORM DRIVE	
	1:4		
SIZE	A3	WD12	REV A
SHEET	1 / 1		

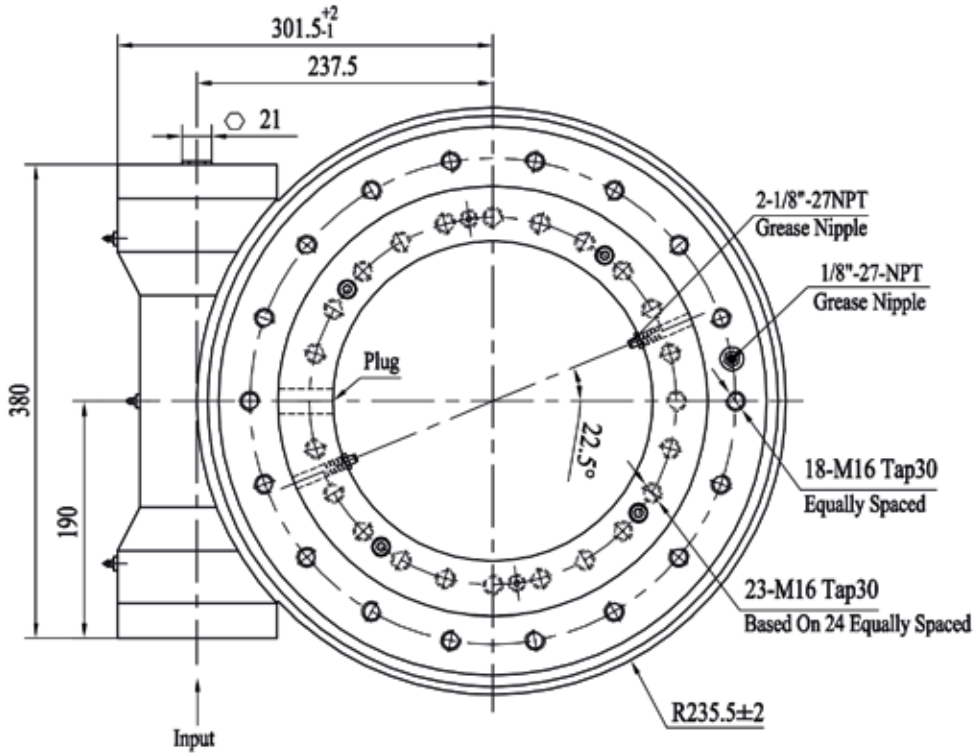
SYMBOLE ISO

WD14

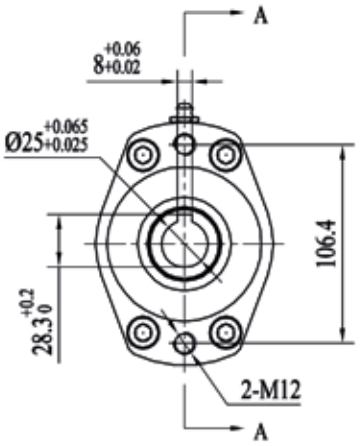


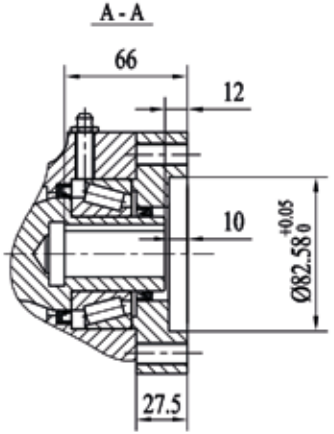
Worm Drive Performance Data		
Rated Output Speed	< 2.5 rpm	
Output Torque （Max.）	10.8 kN.m	7970 lbf.ft
Tilting Moment Torque （Max.）	67.8 kN.m	50.2× 10^3 lbf.ft
Holding Torque	48 kN.m	35.4× 10^3 lbf.ft
Axial Load （Max.）	920 kN	207× 10^3 lbf
Radial Load （Max.）	343 kN	77.2× 10^3 lbf
Ratio of Worm Gear	86:1	
Tracking Precision	≤ 0.13 °	
Theoretical Static Efficiency	≈40%	

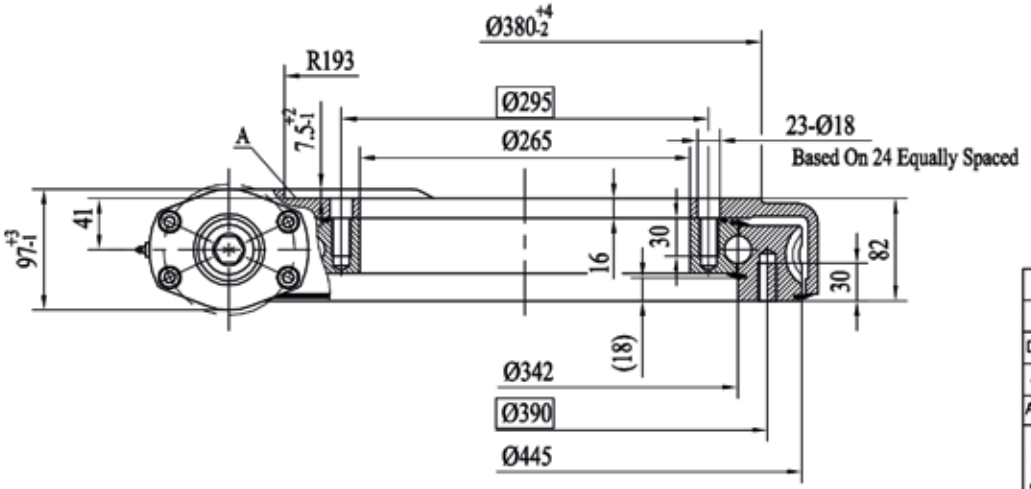




Input
1.5:1







Note: Side A facing up when mounted.

REV	DATE	REVISER	DESCRIPTION
DESIGNED BY		29-10-2012	
CHECKED BY		29-10-2012	
APPROVED BY		29-10-2012	

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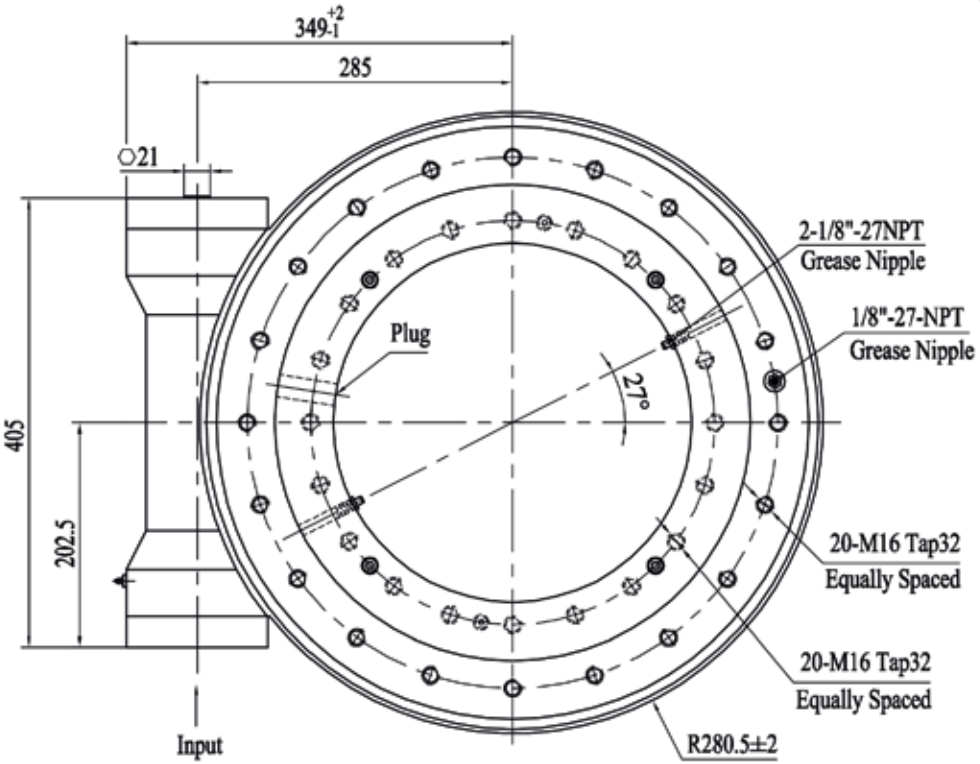
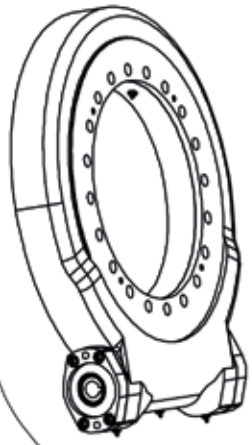
WEIGHT	SCALE	WORM DRIVE	
68.4	1:4		
SIZE		WD14	REV B
SHEET	1		

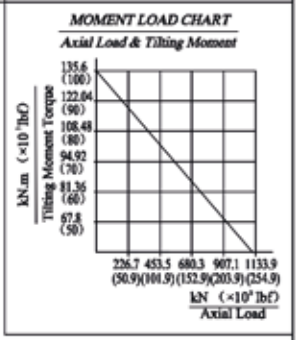
SYMBOLE ISO

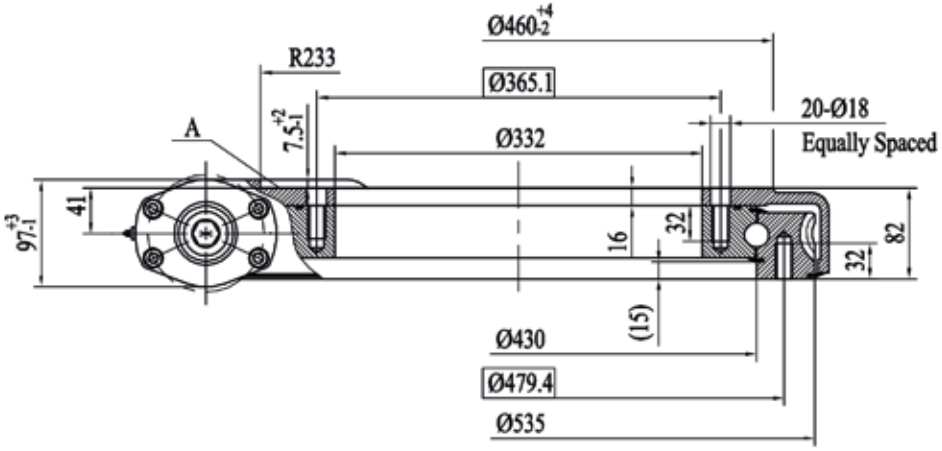
WD17



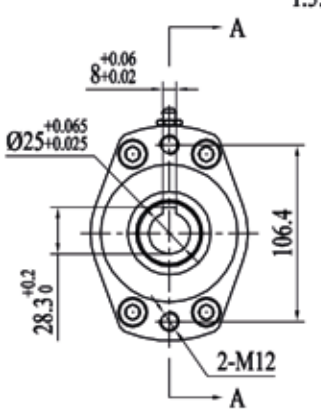


Worm Drive Performance Data		
Rated Output Speed	< 2.5 rpm	
Output Torque (Max.)	12.96 kN.m	9564 lbf.ft
Tilting Moment Torque (Max.)	135.6 kN.m	100× 10^3 lbf.ft
Holding Torque	72.3 kN.m	53.4× 10^3 lbf.ft
Axial Load (Max.)	1110 kN	250× 10^3 lbf
Radial Load (Max.)	414 kN	93.2× 10^3 lbf
Ratio of Worm Gear	104:1	
Tracking Precision	≤ 0.1 °	
Theroetical Static Efficiency	≈40%	

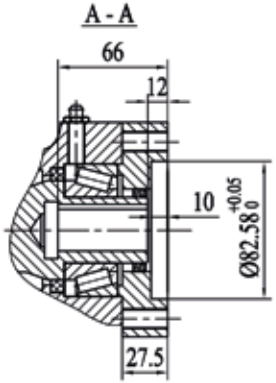




Input
1.5:1



A - A



Note:Side A facing up when mounted.

REV	DATE	REVISER	DESCRIPTION
DESIGNED BY		28-01-2013	
CHECKED BY		28-01-2013	
APPROVED BY		28-01-2013	

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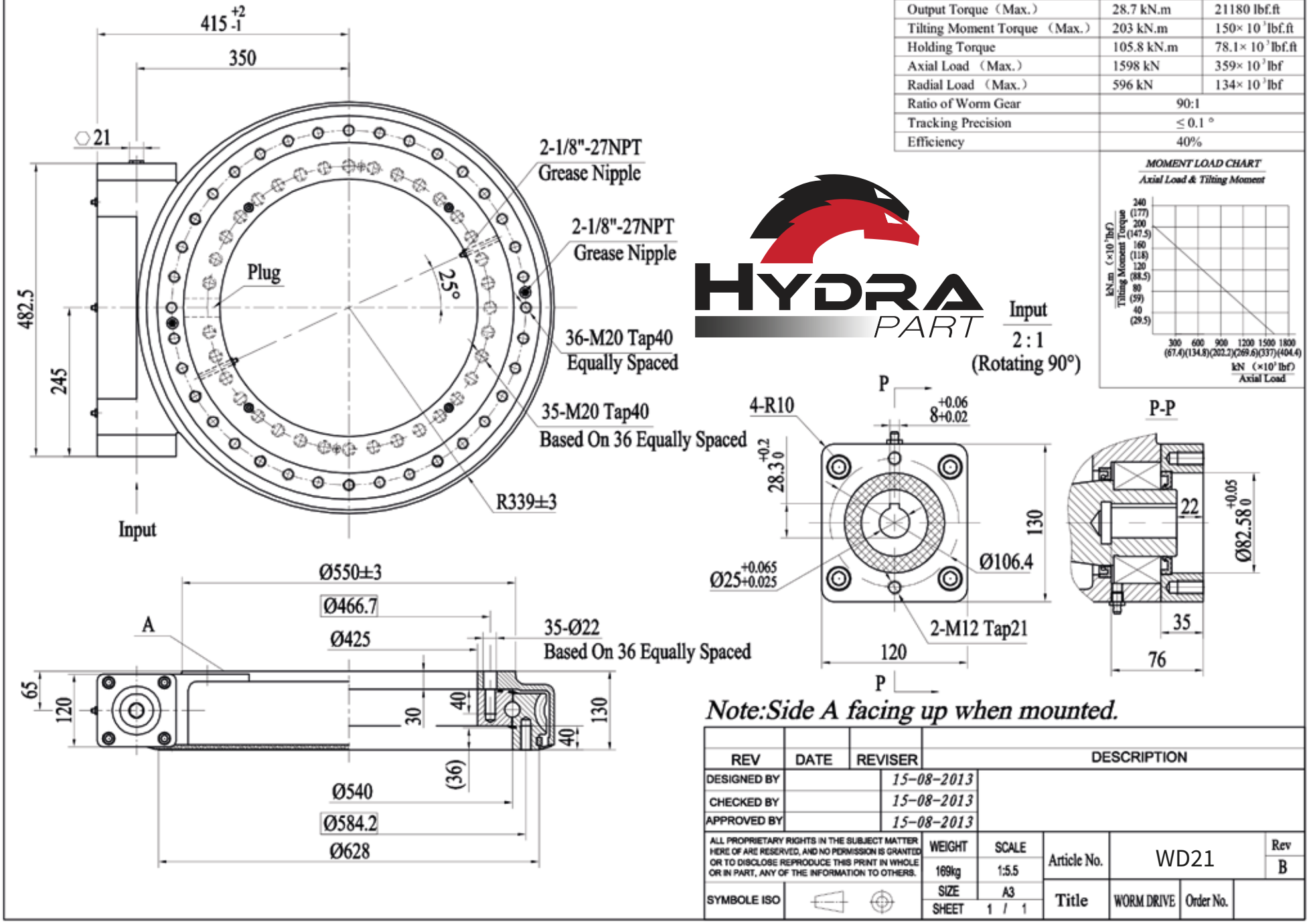
WEIGHT	SCALE	WORM DRIVE	
	1:4.5		
SYMBOLE ISO	SIZE A3	WD17	REV B
	SHEET 1 / 1		

WD21



Worm Drive Performance Data		
Rated Output Speed	< 2.5 rpm	
Output Torque （Max.）	28.7 kN.m	21180 lbf.ft
Tilting Moment Torque （Max.）	203 kN.m	150× 10^3 lbf.ft
Holding Torque	105.8 kN.m	78.1× 10^3 lbf.ft
Axial Load （Max.）	1598 kN	359× 10^3 lbf
Radial Load （Max.）	596 kN	134× 10^3 lbf
Ratio of Worm Gear	90:1	
Tracking Precision	≤ 0.1 °	
Efficiency	40%	

Note:Side A facing up when mounted.

REV	DATE	REVISER	DESCRIPTION
DESIGNED BY		15-08-2013	
CHECKED BY		15-08-2013	
APPROVED BY		15-08-2013	

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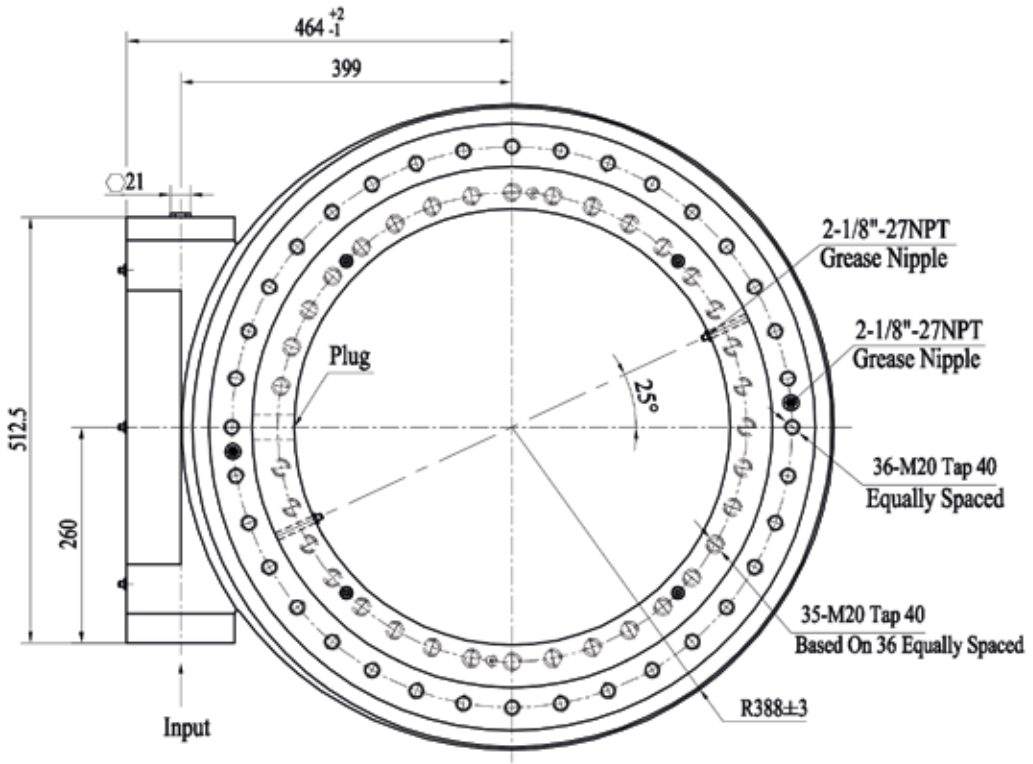
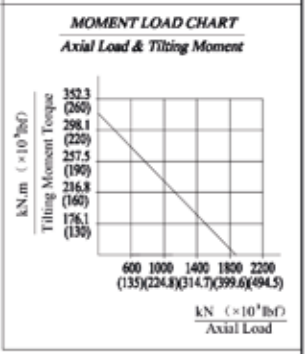
WEIGHT	SCALE	Article No.	WD21	Rev
169kg	1:5.5			B
SIZE	A3	Title	WORM DRIVE	Order No.
SHEET	1 / 1			

SYMBOLE ISO

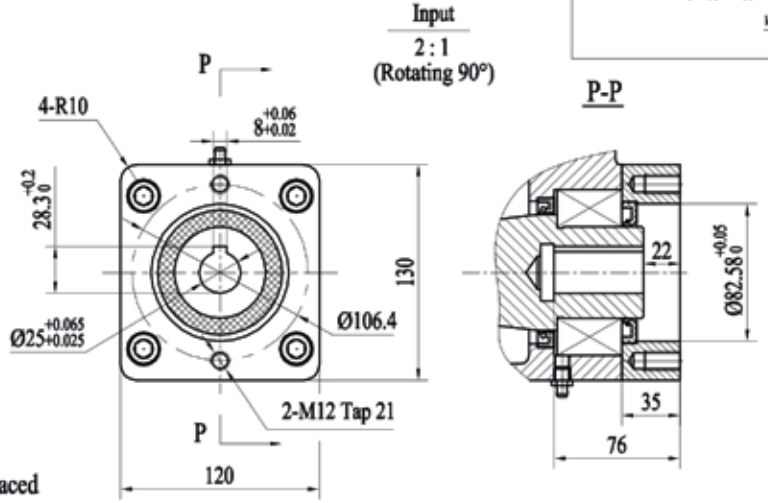
WD25

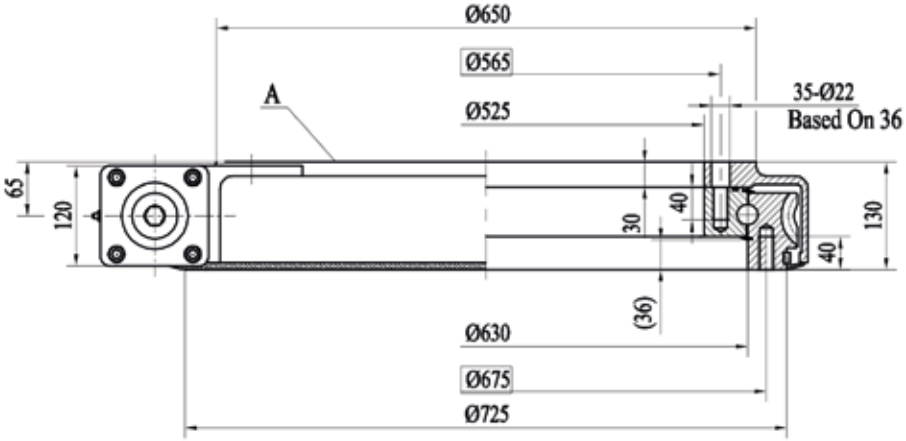


Worm Drive Performance Data		
Rated Output Speed	< 2.5 rpm	
Output Torque （Max.）	34.2 kN.m	25240 lbf.ft
Tilting Moment Torque （Max.）	310 kN.m	229× 10^3 lbf.ft
Holding Torque	158.3 kN.m	117× 10^3 lbf.ft
Axial Load （Max.）	1850 kN	416× 10^3 lbf
Radial Load （Max.）	690 kN	155× 10^3 lbf
Ratio of Worm Gear	104:1	
Tracking Precision	≤ 0.1 °	
Efficiency	40%	



HYDRA PART





Note: Side A facing up when mounted.

REV	DATE	REVISER	DESCRIPTION
DESIGNED BY		15-08-2013	
CHECKED BY		15-08-2013	
APPROVED BY		15-08-2013	

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WEIGHT	SCALE	Article No.	WD25	Rev
199 k g	1:6			B
SIZE	A3	Title	WORM DRIVE	Order No.
SHEET	1 / 1			

SYMBOLE ISO