

100T  RW SERIES
PLANETARY GEAR REDUCER

SZW PLANETARY REDUCER

– RW SERIES PRODUCT

Overview

The hard surface wheel gear and nitride inside gear ring processing make it low noise. Consistent high standard manufacture confirms its load-carrying capacity and working reliability. The wheel gear was optimized by computer design, which has a high safety margin and mechanical efficiency.

Product Feature

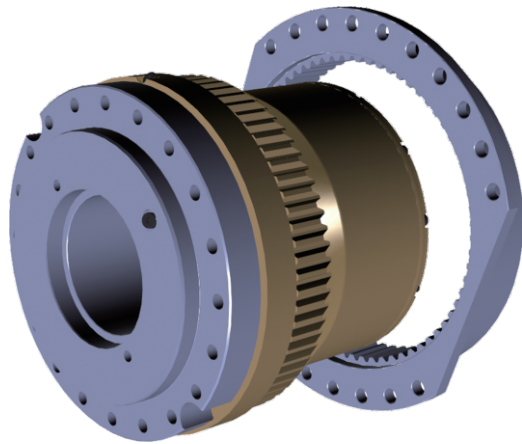
- Structure compact, space saving, two or three planetary gear transmission
- high load capacity shaft bearing system , may withstand the wire rope traction
- simple installation
- refuel convenient
- high efficiency , long life span

Applicable Scope

Planetary reducer is suitable for all known windlass mechanism of cranes like car or crawler crane, railway crane, bridge crane, crown crane, ship deck and wharf crane. Because it can be installed in the inner of the roller very compactly, so it is easy to fix and space saving.

Working Condition

Planetary reducer was design work at the temperature -20°C to +40°C. Some environmental factor will affect the product function like salt water, salty air, sand, super pressure and heavy vibration, severe impact and environment temperature, foreign sundries and so on. To confirm the safety of planetary reducer, these working conditions must be informed to the manufacturer.



PRODUCT MODELS

Tonnages	Speed Ratios	Gear box Torques	gearmotor speeds	Drum Diameters	Product Models	Weights
3T	76	3000	1400	232	RW0376-3-3000-232	50.5kg
5T	56	5000		273	RW0356-5-5000-273	62kg
	78				RW0378-5-5000-273	
10T	81	10000		351	RW0381-10-10000-351	125kg
	110				RW03110-10-10000-351	
20T	81	26000		510	RW0381-20-26000-510	157.19kg
	131		RW03131-20-26000-510			
100T	140	42500		RW03140-100-42500	302kg	

Install

Planetary reducer was added middle load industrial gear lubricants ISO VG 220 before they leave the factory.

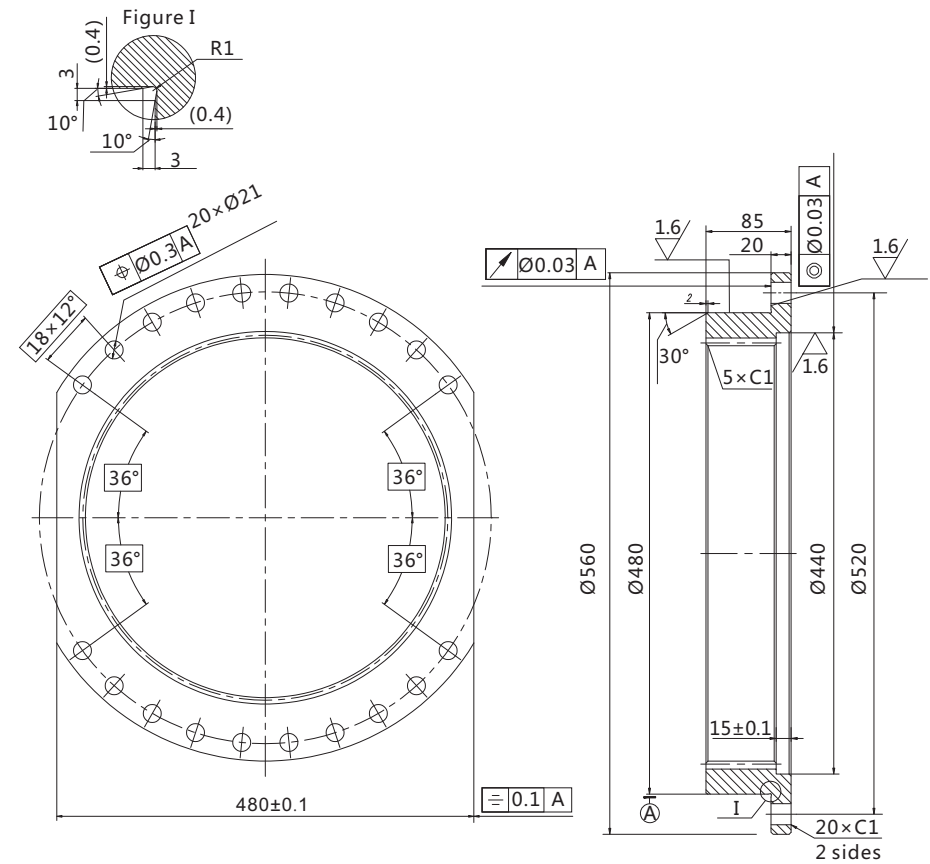
Before installation, the connection of reducer must be cleaned up. The spline was welded in the roller to confirm the spline and roller connector coaxial. And then put the reducer into roller and connect with the rack stably. The M12 screw should be more than 10.9 grade

which are used for Lock reducer and rack. And screw the screws according to the torque of corresponding screw performance grade.

(10.9 grade screw tightening force torque is 100~110N·m)

The rack used to fix planetary reducer must be fastness, support surface clean and perpendicular to the axis of the drive so that it can guarantee the rack and ruin vertical. Finally, the screw at the vent cap changed to vent cap. Vent cap was afford by the user.

(the vent cap should be upward to avoid oil leakage)



external splines 78.2-1995 Flat root		
module	m	6
number of teeth	z	70
pressure angle	a	30°
modification coefficient	x	0
dimension over two balls in same plane	M	406.27
measure bar	dp	Ø10
large diameter	di	Ø429
reference circle	d	Ø420
minor diameter	da	Ø414.2
Involute circle diameter	dFa	Ø427.2min
Tooth profile tolerance	Fa	0.035
Helix total tolerance	Fβ	0.035
radial runout of tooth ring	Fr	0.05
surface roughness	others	√
heat treatment	tempering 24-28HRC	
Surface treatment	blueing	

Technical requirement

1. Blanks must be forged and the category of forging is CB/T12363-1990;
2. Undeclared chamfer 1x45°;
3. Parts are noiermentt due burr and sharp edges;
4. Unmarked Tolerance GB/T 1804-m.

