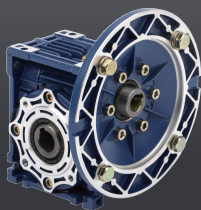


Worm gear reducer 蜗轮蜗杆减速机

Instruction manual
使用说明书



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蜗轮蜗杆减速机安装、使用和维护

Worm gear reducer installation, use and maintenance

型式说明:

减速机的输入形式分为, 孔输入、轴输入输出形式分为孔输入、单项轴输出、双向轴输出及带蜗杆尾出轴输出。

Type description:

The input form of the reducer is divided into hole input and shaft input and output. The forms are divided into hole input, single shaft output, two-way shaft output and shaft output with worm tail.

一. 基本性能

- 1、蜗轮蜗杆减速机机座号有:25、30、40、50、63、75、90、110、130、150共10种
- 2、单机速比有5、7.5、10、15、20、25、30、40、50、60、80、100共12种其中(25机座无80、100速比, 30机座无100速比, 63以上机座无5速比)。
- 3、减速机可正、反向运转。

one Basic performance

- 1, worm gear reducer machine numbers are :25, 30, 40, 50, 63, 75, 90, 110, 130, 150 a total of 10 kinds
- 2, single speed ratio of 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100 a total of 12 of them (No 80, 100 speed ratio for 25 engines, no 100 speed ratio for 30 engines, and no 5 speed ratio for 63 or more engines).
- 3, the reducer can be positive and reverse operation.

二. 安装

- 1、可按实际要求采用多种安装形式, 六个面均能安装, 110~150实际安装方位应与订货时确定的安装方付一致, 且使加油(透气)螺孔向上。
- 2、安装必须牢、可靠。安装后用手转动, 必须灵活, 无卡带现象。
- 3、原动机、减速机和机构之间须仔细对中, 误差不得大于所有联轴器的许用补偿
- 4、本厂产品出厂时, 所有结合面均经粘合剂密封防漏处理, 用户自行拆装后应确保密封性能完好, 以免造成漏油

two Install

- 1, according to the actual requirements of a variety of installation forms, six surfaces can be installed, 110~150 actual installation orientation should be with When ordering, the installation side is determined to pay the same, and the refueling (breathable) screw hole is upward
- 2, the installation must be solid and reliable. After installation, rotate by hand, must be flexible, no cassette phenomenon.
3. The prime mover, reducer and working mechanism must be carefully aligned, and the error shall not be greater than the allowable compensation of all couplings
- 4, the factory products, all the bonding surface are sealed by the adhesive leak-proof treatment, the user's own disassembly Ensure that the sealing performance is intact to avoid oil leakage

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三. 润滑油的使用更换

蜗轮蜗杆减速机出厂前均已加足润滑油，在使用1000小时后应更换新油，以后定期添、换，确保油量。

2、本厂产品出厂时，为防止运输中漏油，已将加油(透气)螺塞旋紧密闭，使用时030~090加油螺塞无须松开，特殊环境下，可去掉平油塞，换上(透气)螺塞。110~150待安装后，去掉松开，去掉上端平油塞，换上随机携带的(透气)螺塞。

3、若更换润滑油，应符合表中要求使用，不同牌号的油禁止混用，牌号相同而粘度不同的油允许混用。

4、注油量按附表一，油品按附表二。

5、减速机工作环境温度 $-20^{\circ}\text{C}\sim+40^{\circ}\text{C}$ 。当环境温度低于 0°C 时，起动前润滑油必须加热到 0°C 以上或采用低凝固点的润滑油。

四 注意事项

1不得重力锤击减速机外壳，以免损坏。

2、定期检修安装基础、密封件、传动轴等是否正确，经常保持表面清洁以利于散热。

3、如正确使用，润滑油的最高温度应小于 85°C 。油温温升变化异常，产生不正常噪声等现象时，应立即停机检查，排除故障后，方可继续使用。

4、更换新的配件必须经跑合负载试验后再正式使用。

Three. Use and change of lubricating oil

Worm gear reducer before the factory have been added enough lubricating oil, in the use of 1000 hours should be replaced with new oil, after the regular addition, Change, make sure the oil level.

2. When our products leave the factory, in order to prevent oil leakage during transportation, the refueling (breathable) plug has been tightly closed, and 030~090 is added when used. The oil plug does not need to be loosened. Under special circumstances, the flat oil plug can be removed and replaced with a (breathable) plug. 110 to 150 Remove it after installation. Loosen, remove the upper flat oil plug, and replace it with a random (breathable) plug.

3, if the replacement of lubricating oil, should meet the requirements of the table to use, different grades of oil prohibited mixing, the same grade and different viscosity Oil mixing is allowed.

4, the amount of oil injection according to the first schedule, oil according to the second schedule.

5, the working temperature of the reducer is $-20^{\circ}\text{C}\sim+40^{\circ}\text{C}$. When the ambient temperature is below 0°C , the lubricating oil must be heated before starting. Lubricating oil to 0°C or above or with low freezing point.

Four points for attention

1 Do not hammer the reducer shell with gravity to avoid damage.

2, regular maintenance of the installation base, seals, transmission shaft, etc., is correct, often keep the surface clean to facilitate heat dissipation.

3, if used correctly, the maximum temperature of the lubricating oil should be less than 85°C .

Oil temperature rise changes abnormally, producing no When the phenomenon of normal noise, it should be stopped for inspection, and after troubleshooting, it can continue to use.

4, the replacement of new parts must be run load test before formal use.

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五、质量承诺

1. 确保向用户提供满足合同要求的可信产品
2. 凡按本《产品说明书》规定安装、使用、结合面未经拆装、确属本厂制造不良造成的故障或损坏, 自出厂之日起, 一年内实行“三包”:
- “三包”期外, 保证用户的配件供应期外,
- 保证用户的配件供应。
3. 做好用户咨询, 售前售后服务争创一流。

5. Quality commitment

1. Ensure that users are provided with credible products that meet the requirements of the contract
2. Installation, use and combination according to the provisions of this "Product Manual" The face has not been disassembled, and it is indeed caused by the factory's bad manufacturing Or damaged, from the date of delivery, the implementation of "three guarantees" within one year: Outside the
- "three guarantees" period, to ensure that the user's spare parts supply period, Ensure the supply of accessories for users.
- 3, do a good job of user consultation, pre-sales and after-sales service strive for first-class.

六: 润滑油加注量

减速机型号 geraunits	加注量 fill quantity in liters 单位: 升 (L)					
	B3	B6	B7	B8	V5	V6
NMRV025	0. 02					
NMRV030	0. 042					
NMRV040	0. 081					
NMRV050	0. 153					
NMRV063	0. 30					
NMRV075	0. 58					
NMRV090	1. 02					
NMRV110	3. 02	2. 55		2. 25	3. 02	
NMRV130	4. 55	3. 55		3. 35	4. 55	
NMRV150	7	5. 4		5. 1	5. 4	

七: 推荐润滑油油牌号

蜗轮蜗杆分度圆滑动速度m/s	蜗轮蜗杆油牌号	
≤2. 2	G-N680W	WA320
>2. 5~5	G-N460W	WA320
>5~12	G-N320W	WA320

故障分析 Malfunctions Analysis

故障情况 Fault Description	故障原因 Reasons	解决办法 Solutions
过热 Overheating	原动力、减速机、工作机连接不当 Improper connection among prime mover, reducer	调整至适当位置，使三者相联轴线同轴 Adjust to proper position
	超负荷运转 Overloading	适当调整负荷 Adjust to proper load
	油封过度磨擦 Over Friction of oil seals	在油封唇口处滴润滑油 Drop lubricant at oil seal
	☆润滑油过少或过多 ☆Lubricant oil over much or shortage	按注油方式或调整油量 Adjust to proper oil quantity as lubricant capacity table
	☆润滑油杂质多或润滑性差 ☆Much impurity in oil or inferior oil	按润滑油选用表更换合适新油 Refill proper oil
振动 Vibration	原动力、减速机、工作机固定不良 Prime mover, reducer and the operation device mount badly	查出不良固定部件，正确回紧 Find out the bad place, tighten it
	蜗轮副齿部磨损或损伤 Tooth surface of worm gear sets worm-out or damaged	更换蜗轮副（需要时本公司配合） Replace worm gear sets (we will cooperate with you when necessary)
	轴承磨损 Bearing worn-out	更换轴承 Replace Bearing
	螺栓松脱 Bolt loose	因紧螺栓 Tighten Screw
杂音 Noise	原动机与减速机连接不当 Improper connection among prime mover, reducer and the operation device	原动机重新调整连接 Adjust to proper position
	轴承损伤或间隙过大 Bearing damaged or too large clearance	更换轴承 Replace Bearing
	蜗轮副齿合不良 Worm gear sets mesh badly	修整齿面或更换蜗轮副（请与本公司联系） Mend tooth surface or replace worm gear sets (please contact to us)
	☆润滑油不足 ☆Lubricant oil shortage	按注油方式或补充润滑油 Fill in adequate oil as lubricant capacity table
漏油 Oil leakage	油封唇口磨擦 Oil seal lip worm-out	更换油封 Replace oil seal
	油封档轴颈磨损 Shaft of oil seal area worn-out	更换输入轴或带轮轴蜗轮 Replace input or output shaft with worm gear
	放油螺塞未旋紧 Oil screw plug loose	螺纹处加密封胶，旋紧螺塞 Tighten oil screw plug
	油标破损 Oil gauge damaged	更换油标 Replace oil gauge
蜗轮副齿面磨损过快 Tooth surface of worm gear sets abrade extra-quickly	超负荷运转 Overload	调整至适当负荷 Adjust to proper loading
	☆润滑油不符合要求 ☆Lubricant oil not according with requirement	更换合适的润滑油 Replace proper lubricant oil
	☆润滑油不足 ☆Lubricant oil shortage	按油标指示点加足润滑油 Fill adequate oil as indication
	未按规定定时换油，润滑油劣化 requiremen, oil deteriorates	按规定要求适时更换润滑油 Replacing oil in time according to require ment
	运转温度过高 Overheating while running	1. 按“过热”故障处理 2. 采取合适措施，降低周边环境温度 1.Deal with it as“Overheating” 2.Adopting proper measures to make environment temperature fall

注：1. ☆为换油后出现的故障原因。

2. 如果发生其他故障无法解决时，请随时与我们联系，以便提供咨询服务。

2.If other faults not listed above occur, Please contact with us at any moment, Our company will supply thorough consultation and service.