JRT Gearmotor

Operating Instructions

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JIE INTELLIGENT DRIVE SOLUTIONS PROVIDER

Contents

1 Important Notes

Safety and warning instructions

Always follow the safety and warning instructions in this publication!

Electrical hazard
Possible consepuences: Severe or fatal injuries

Hazard
Possible consepuences: Severe or fatal injuries

Hazardous situation
Possible consepuences: Slight or minor injuries

Harnful situation
Possible consepuences: Damage to the drive and the environment

Tips and useful information

You must adhere to the operating instructions to ensure
- Trouble-free operation
- Fullfillment or any rights claim under guarantee

Consequently, read the operating instruction before you start to working with the gear units!

The operating instructions contain important information about servicing. Therefore,Keep the operating instruction close to the gear units.

Waste Disposal

Please follow the latest instructions: Dispose of the following the mater -ials in accordance with the regulations in force:

- **Steel scrap:**
  Housing parts Gear Shafts
  Anti-friction bearing Gray-cast iron (if there is no special collection)
- **Parts of the worm gears are made of non-ferrous metals. Dispose of the worm gears as appropriate.**
- **Collect waste oil and dispose of it correctly.**

- **Adjust the lubricant fill volume and position of the breather valve**
- **Accordingly in the event of a change of mounting position(see Sec "Lubricants" and "Mounting positions")**
- **Follow the instructions in Sec. "Mechanical installation"/ "Installing the gear units"!**

2 Safety Notes

Preface

The following safety notes are primarily concerned with the use of gear untis. If usi -ng gearmotors，please also refer to the safety notes for motors in the relevant oper-ating instructions.
Please also consider the supplementary safety notes in the individual sections of these operating instructions.

General information

During and after operation, gearmotors, gear units and motors have:
• Live parts • Moving parts
• Hot surfaces(may be the case)
Only qualified personnel may carry out the following work:
• Transportation • Putting into storage
• Installation / assembly • Connection
• Startup • Maintenance • Servicing
The following information and documents must be observed during these processes:
• Relevant operating instructions and wiring diagrams
• Warning and safety signs on the gear unit / gearmotor
• System-specific regulations and requirements
• National / regional regulations governing safety and the prevention of accidents
Serious injuries and property damage may result from:
• Improper use
• Incorrect installation or operation
• Unauthorized removal of necessary protection covers or the housing

Designated use

Gearmotors / gear units from JIE are intended for industrial systems. They corresp -ond to the applicable standards and regulations.
Technical data and information about the permitted conditions can be found on the na -meplate and in the documentation.
It is essential that you follow all the instructions!

Transportation

Inspect the shipment for any damage that may have occurred in transit as soon as you receive the delivery. Inform the shipping company immediat-ely. It may be that you are not permitted to startup the drive due to the da-mage.
Use suitable sufficiently rated handling equipment if necessary. Remove any t -ransportation fixtures prior to startup.

Installation / Assembly

Observe the instructions in the sections "Installation" and "Assembly /Rem-oval"!

Startup / Operation

Check that direction of rotation is correct decoupled status.Listen out for unusu -al grinding noises as the shaft rotates.
Secure the shaft keys for test mode without drive components. Do not render mon itoring and protection equipment inoperative even for test mode.
Switch off the gearmotor if in doubt whenever changes occur in relation to normal operation（e.g. increased temperature, noise, vibration）. Determine the cause; contact JIE-ASIADRIVE if necessary.

Inspection / Maintenance

Follow the instructions in the section "Inspection and Maintenance"!

3 Prerequisites for assembly

3.1 Check that the following conditions have been met:

- The data on the nameplate of the gearmotor matches the voltage supply system.
- The drive has not been damaged during transportation or storage
- Ensure that the following requirements have been met:

For standard gear units:

Ambient temperature according to the lubricant table in Sec. "Lubricants"(see standard)
The drive must not be assembled in the following ambient conditions:

- Potentially explosive atmosphere - Oil
- Acids - Gas - Vapors
- Radiation

For special versions:

The drive configured in accordance with the ambient conditions.

For helical-worm gear units:

No large external mass moments of inertia which could exert a retrodriving load on the gear unit.

3.2 You must clean the output shafts and flange surfaces thoroughly to ensurethey are free of anti-corrosion agents, contamination or similar. Use a commercially available solvent. Do not let the solvent come into contact with the sealing lips of the oil seals —danger of damage to the material!

When the drive is installed in abrasive ambient conditions, protect the output en -d oil seals against wear.

3.3 Installing the gear unit

The gear unit or gearmotor is only allowed in the specified mounting position.

The oil checking and drain screws and the breather valves must be freely access- ible!

At the same time, also check that the oil fill is as specified for the mounting position.
The gear units are filled with the required oil volume at the factory. There may be slig -ht deviations at the oil level plug as a result of the mounting position, which are permit -ted within the manufacturing tolerances.

Use plastic inserts (2~3mm) if there is a risk of electrochemical corrosion between th -e gear unit and the driven machine. The material used must have an electrical bleeder resistor<$10^9\Omega$。Electrochemical corrosion can occur between various metals, for exa- mple, cast iron and high-grade steel. Also install the bolts with plastic washers! Ground the housing additionally use the grounding bolts on the motor.

Installation in Damp locations Or in the open

Drives are supplied in corrosion-resistant versions for use in damp areas or in the open air.Repair any damage to the paintwork

Gear unit venting

JRTR19、JRTR29 in mounting positions M1，M3，M5 and M6 have no breather plug.

JIE supplies all other gear units with the breather valve installed and activated according to the particular mounting position.

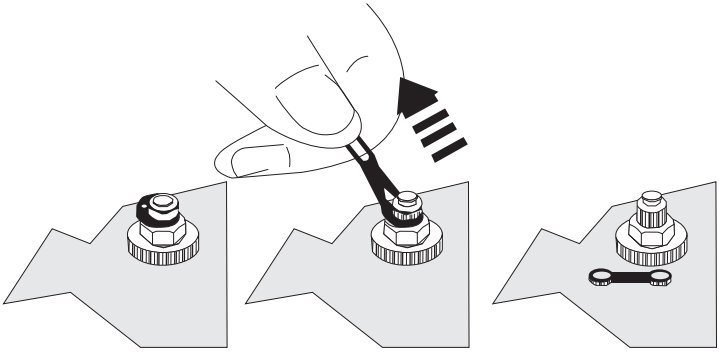
Exceptions

1. JIE supplies the following gear units with a screw plug on the vent hole pro-vided:
   - Gear units for extended storage
   - Pivoted mounting positions, if possible
   - Gear units for mounting on a slant

   The breather valve is located in the motor terminal box. Before start-up, you must replace the highest screw plug with the breather valve supplied.
2. JIE supplies a breather valve in a plastic bag for gear head units requiring venting on the input end.

Activatingthe breather valve

1.Breather valve with transport fixture　2.Remove the transport fixture　3. Breather valve activated



Pic.1　Activating the breather valve

Painting the gear unit

If you paint or respray the drive, ensure that you cover the breather valve a-nd oil seals carefully.Remove the strips of tape after completing the painting work.

4 Mechanical Installation

4.1 Required tools / aids

- Set of spanners
- Torque wrench (for shrink discs, AQH motor adapter and input shaft assem -bly with centering shoulder
- Mounting device
- Shims and distance rings if necessary
- Fixing devices for input and output elements
- Lubricant
- Bolt adhesive

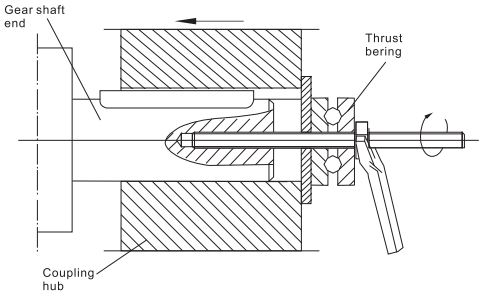
Installation tolerances

Tab1

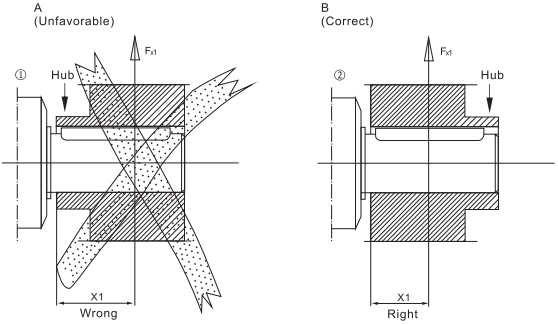
Shaft end	Flanges
Diameter tolerance accordance with DIN 748 ・ISO k6 for solid shafts with$\phi \leqslant$50mm ・ISO m6 for solid shafts withϕ>50mm ・ISOH7 for hollow shafts Center bore in accordance with DIN 332, shape DR	Centering shoulder tolerance in accordance with DIN 42948 ・ISOj6 with b1$\leqslant$mm ・ISOh6 with b2>230mm

4.2 Gear unit with solid shaft Installing input and *outputelements*

The following figure shows a mounting device for installing couplings or hubs on gear unit or motor shaft ends. It may be possible to dispense with the thru -st bearing on the mounting device.



Avoid impermissibly high overhung loads: Install the gear or chain sprocket according to figure B.



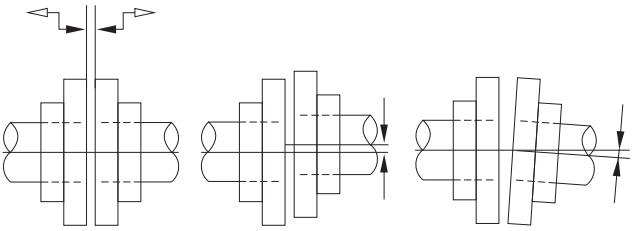
- Only use a mounting device for installing input and elements. Use the cent -er boreand the thread on shaft end for positioning.
- ***Never drive belt pulleys, couplings, pinions,etc. onto the shaft end by hitting them with a hammer. This will damage the bearings, housing a- nd the shaft!***
- ***In the case of belt pulleys, make sure the belt is tensioned correctly in accordance with the manufacturer's instructions .***
- Power transmission elements should be balanced after fitting and must not give rise
  to any impermissible radial or axial forces

Note:

Assembly is easier if you first apply lubricant to the output element or heat it up briefly（to 80～100° C）

Installing couplings

Couplings must be mounted and balanced according to the information pro -vided by the coupling manufacturer:



a)Max and min clearance b)Axial misalignment c)Angular misalignment

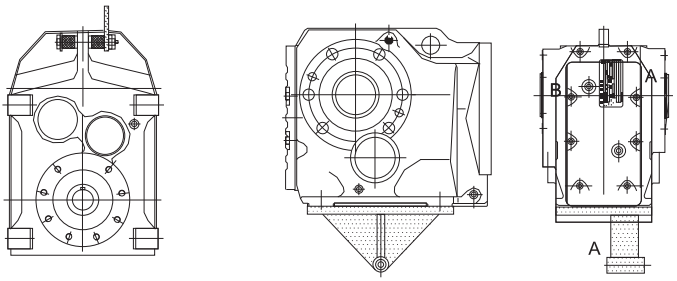
Input and output elements such as belt pulleys, couplings, etc. must be protected against contact!

4.3 Torque arms for mounted gear units

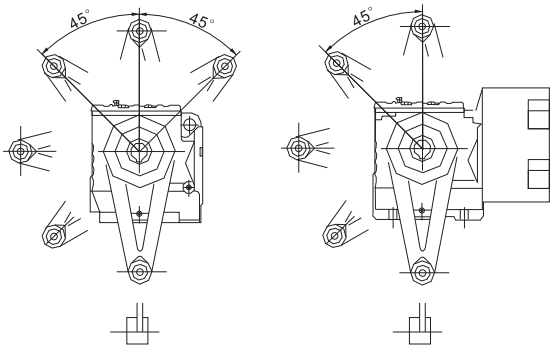
Do not place torque arms under strain during installation!

Parallel shaft
Helical-bevel gear units

Helical gear units
- Bush with bearings on both ends→（1）
- Install connection end B as a mirror image of A



Helical-worm gear units
- Bush with bearings on both ends→（1）

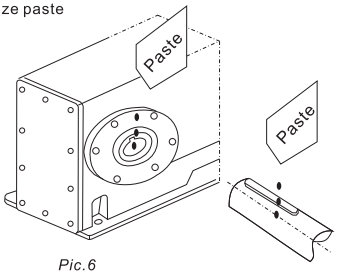


Pic. 5 :Torque arm for helical-worm gear units

Mounted gear unit with keyway or splinted hollow shaft

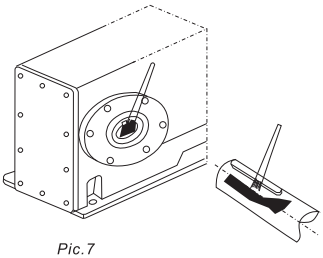
Installation notes

1. Apply Anti-seize paste



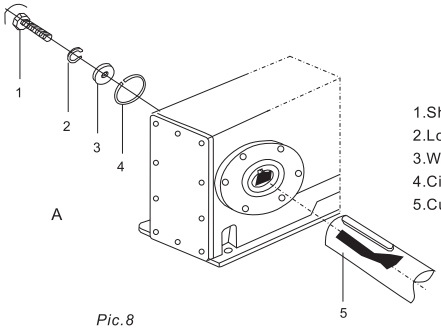
Pic.6

2. Distribute the Anti-seize paste carefully



Pic.7

3. Install the shaft and secure it axially
（mounting is facilitated by using a mounting device）
3A：Mounting with standard scope of delivery

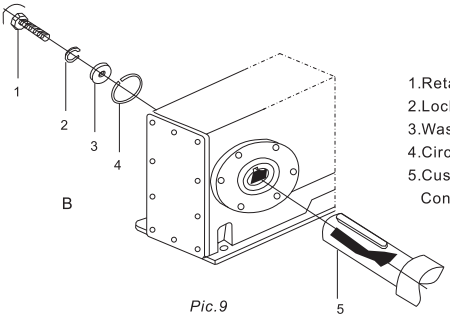


1.Short retaining bolt
2.Lock washer
3.Washer
4.Circlip
5.Customer shaft

Pic.8

3B：Assembly with JIE assembly / disassembly kit

Customer's shaft with contact shoulder

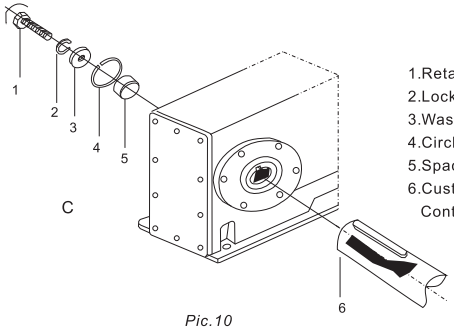


1.Retaining bolt
2.Lock washer
3.Washer
4.Circlip
5.Customer's shaft with Contact shoulder

Pic.9

3C： Assembly with JIE assembly / disassembly kit

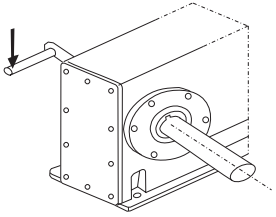
Customer's shaft without contact shoulder



1.Retaining bolt
2.Lock washer
3.Washer
4.Circlip
5.Spacer
6.Customer's shaft without Contact shoulder

Pic.10

4. Tighten the retaining bolt to the appropriate torque（see table 2）



Pic.11

Table 2:

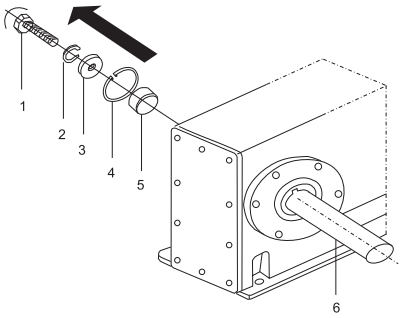
Bolt	Tightening torque（Nm）
M5	5
M6	8
M10/12	20
M16	40
M20	80
M24	200

Note：

To avoid contact corrosion, we recommend that the customer's shaft should additionally be recessed between the two contact surfaces!

Removal notes This description is only applicable when the gear unit was assembled usingthe installation / removal kit from JIE

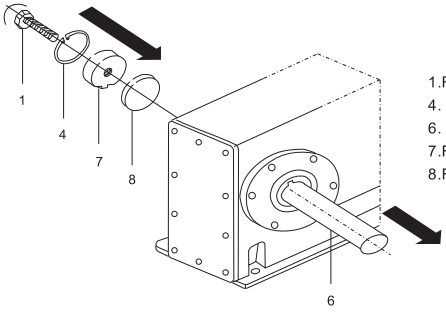
1. Loosen the retaining bolt 1 .
2. Remove parts 2 to 4 and, if fitted, sparcer 5.



1.Retaining bolt
2.Lock washer
3.Washer
4.Circlip
5.Spacer
6.Customer shaft

Pic.12

3. Insert the forcing washer 8 and the fixed nut 7 from the JIE installation / removal kit between the customer's shaft 6 and the circlip 4.
4. Re-insert the circlip 4。
5. Screw the retaining bolt 1 back in。Now you can force the gear unit off the Shaft by tightening the bol

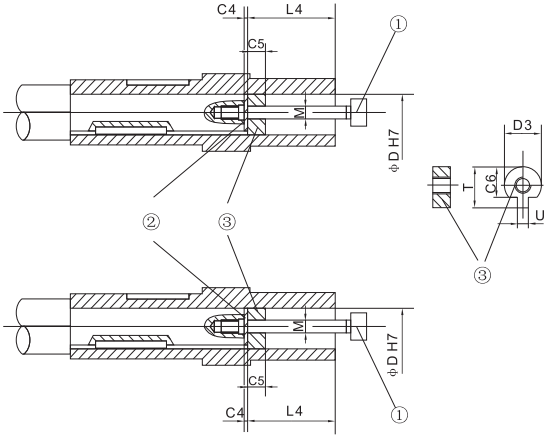


1.Retaining bolt
4. Circlip
6. Customer shaft
7.Fixed nut
8.Forcing washer

Pic.13

JIE installation removal kit

JIE installation / removal kit can be ordered under the following part number.



Pic.14 JIE installation / removal kit

1 Retaining bolt
2 Fixed nut for disassembly
3 Forcing washer

Table 3

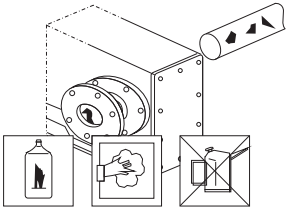
Type	D^{H7} [mm]	M[1)]	C4 [mm]	C5 [mm]	C6 [mm]	$U^{-0.5}$ [mm]	$T^{-0.5}$ [mm]	$D3^{-0.5}$ [mm]	L4 [mm]
JRTSA..49	25	M10	5	10	20	7.5	28	24.7	35
JRTFA..39、KA..39、SA..49、SA..59、	30	M10	5	10	25	7.5	33	29.7	35
JRTFA..49、KA..49、SA..59	35	M12	5	12	29	9.5	38	34.7	45
JRTFA..59、KA..59、FA..49、KA..69、SA..69	40	M16	5	12	34	11.5	41.9	39.7	50
JRTSA..69	45	M16	5	12	38.5	13.5	48.5	44.7	50
JRTFA..79、KA..79、SA..79	50	M16	5	12	43.5	13.5	53.5	49.7	50
JRTFA..89、KA..89、SA..79、SA..89、	60	M20	5	16	56	17.5	64	59.7	60
JRTFA..99、KA..99、SA..89、SA..99、	70	M20	5	16	65.5	19.5	74.5	69.7	60
JRTFA..109、KA..109、FA..99	90	M24	5	20	80	24.5	95	89.7	70
JRTFA..129、KA..129	100	M24	5	20	89	27.5	106	99.7	70
JRTFA..159、KA..159	120	M24	5	20	107	31	127	119.7	70

1) setscrew

Mounted gear units with shrink disc
Installation notes

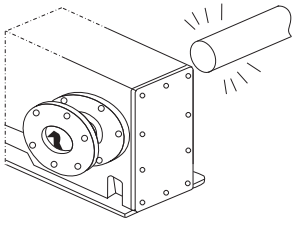
· Do not tighten the locking bolts unless the shaft is installed the hollow shaft could become deformed!

1.Carefully degrease the hollow shaft hole and the input shaft



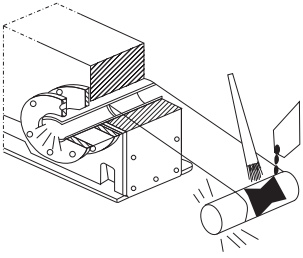
Pic.15

2.Hollow shaft / input shaft after degreasing



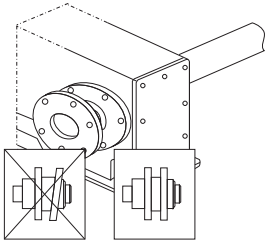
pic.16

3. Apply Anti-seize paste to the input shaft[1)] in the area of the bushing.



Pic.17

4.Rivet the shaft.

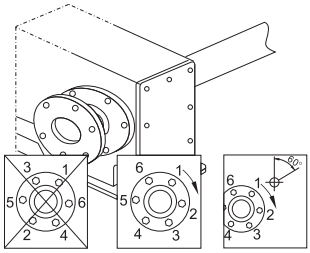


Pic.18

STOP

1）It is essential to make sure that the clamping area of the shrink disk is free from grease !
2）For this reason, never apply Anti-seize paste directly to the bushing as the paste may b -e able to get into the clamping area of the shrink disk when the input shaft is put on.

5.Tighten the locking bolts with the torque wrench by working round several tines from one bolt to the next (not in diametrically opposite sequence)



Pic.19

Table 4

Gear unit type	Bolt	Nm	∢max.[1)]
JRTSH39	M5	5.5	60°
JRTFH39 ~ 69、JRTKH39 ~ 69、JRTSH49 ~ 69	M6	16	
JRTF/K/SH79	M6	12	
JRTF/K/SH89 ~ 99	M8	38	
JRTF/KH109	M10	65	
JRTF/KH129 ~ 159	M12	120	
JRTF/KH169、JRTKH189	M16	250	

1) Maximum tightening angle per cycle

Notes on removing the aviod shrink disk

1. Unscrew the locking bolts evenly one after the other. Each locking bolt may only be unscrewed by about one quarter turn in the initial cycle. This is in order to avoid tilting and jamming the locking collars. Do not fully unscrew the locking bolts!
2. Remove the shaft or pull the hub off the shaft.(You must first remove any rust that may have formed between the hub and the end of the shaft).
3. Pull the shrink disk off the hub.

Caution:
Risk of injury if the shrink disk is not removed correctly!

Shaft-mounted Reducer with J-LOC

Caution

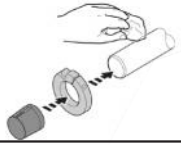
For flange or foot mounting types, the tolerance compensation function of the J-LOC shaft will generate stress in the driving equipment.
Property damage.
Flange or foot mounting shall only be adopted when assembling the J-LOC if over-positioning is confirmed to be avoided. It is imperative to ensure that the shaft tolerance compensation can be achieved.

Tip

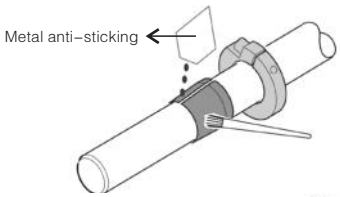
When using flange mounting, the lock ring may not be installed due to specification limitations.

1. Installation of User Shaft without Shaft Shoulder

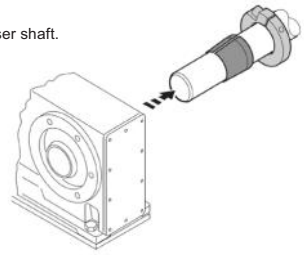
Follow the steps below for operation:
1.1Clean the user shaft and the inner side of the hollow shaft.
1.2Ensure that all residual grease, lubricating oil or rust inhibitor is completely removed.



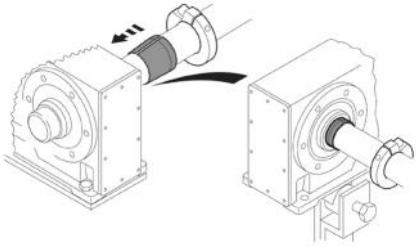
1.3 Apply metal anti-seize agent to the shaft sleeve and spread it evenly and carefully.



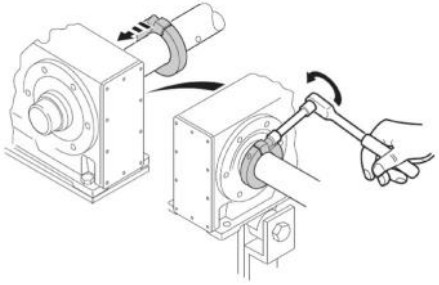
1.4 Slide the reducer onto the user shaft.



1.5 Push the shaft sleeve into the reducer until it reaches the stop.

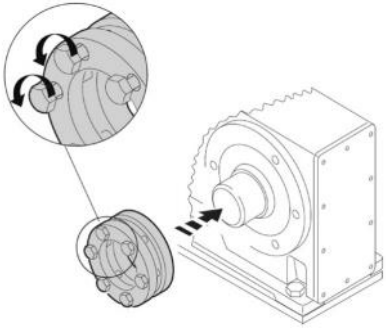


1.6 Secure the shaft sleeve with the lock ring. Fasten the lock ring to the shaft sleeve with the corresponding tightening torque. Refer to the table below for the correct tightening torque.

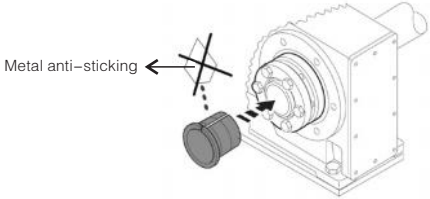


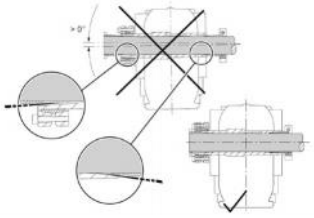
Reducer model			Tighten with a torque Nm	
JRTFT..	JRTKT..	JRTST..	Standard	Stainless steel
39/49	39/49	39/49/59	10	10
59 ~ 99	59 ~ 99	69 ~ 99	25	25
109	109	/	38	38
129	129	/	65	65
159	159	/	150	150

1.7 Ensure that all screws are loosened, then slide the locking disc onto the hollow shaft.



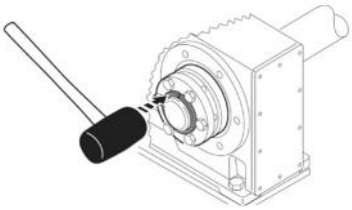
1.8 Slide the taper sleeve onto the user shaft and push it into the hollow shaft. Note that the reducer shall be installed flush with the user shaft.



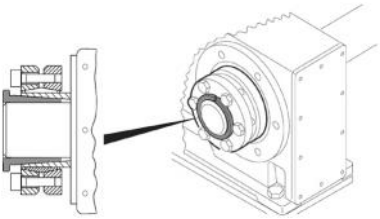


1.9 If the reducer is equipped with a shaft shoulder, assemble the locking disc to the stop on the shaft shoulder, but the minimum distance between the outer ring of the locking disc facing the reducer and the reducer housing shall not be less than 2mm. If the reducer has no shaft shoulder, assemble the locking disc at a distance of 2 ~ 3mm from the reducer housing.

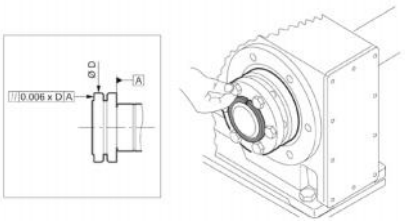
1.10 Tap the flange surface of the taper sleeve gently to ensure that the taper sleeve is firmly installed inside the hollow shaft.



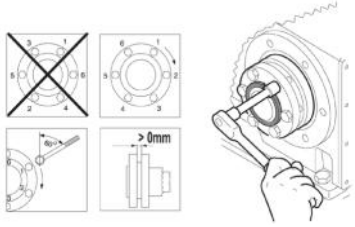
1.11 Check whether the user shaft is properly seated in the taper sleeve.



1.12 Tighten the screws of the locking disc by hand only. Ensure that the outer rings of the locking disc are parallel to each other.

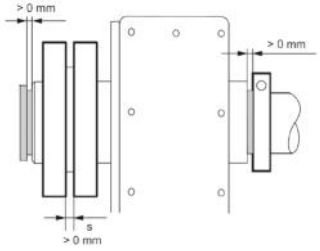


1.13 Tighten the screws according to the corresponding tightening torque in the table below. Tighten the screws circle by circle in sequence (do not use the cross-tightening method).



Reducer model			Screw specification	Tighten with a torque of ±5% Nm
JRTFT..	JRTKT..	JRTST..		
/	/	39	M5	5.5
39 ~ 69	39 ~ 69	49 ~ 69	M6	16
79	79	79	M6	12
89/99	89/99	89/99	M8	38
109	109	/	M10	65
129/159	129/159	/	M12	120

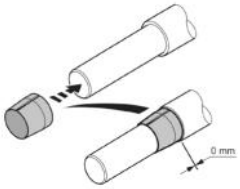
1.14 After assembly, check whether the gap "s" between the outer rings of the locking disc is greater than 0mm.
1.15 Check whether the gaps between the taper sleeve and the end of the hollow shaft, as well as between the hollow shaft and the lock ring, are both greater than 0mm.



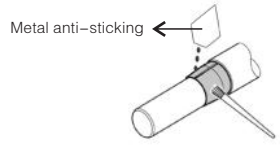
2. Installation of User Shaft with Shaft Shoulder

2.1 Clean the user shaft and the inner side of the hollow shaft. Ensure that all residual grease, lubricating oil or rust inhibitor is completely removed.

2.2 Install the shaft sleeve onto the user shaft

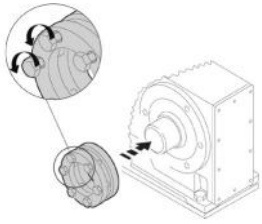


2.3 Apply metal anti-seize agent to the shaft sleeve and spread it evenly and carefully.

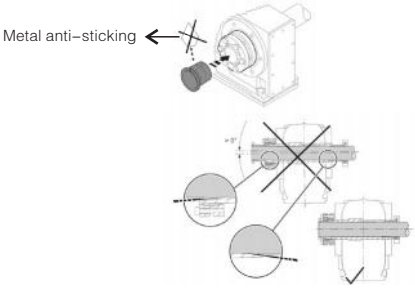


2.4 Slide the reducer onto the user shaft.

2.5 Ensure that all screws remain loosened. Slide the locking disc onto the hollow shaft.

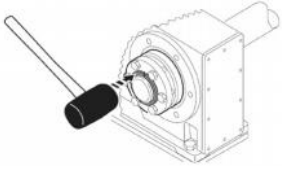


2.6 Slide the taper sleeve onto the user shaft and push it into the hollow shaft. Note that the reducer shall be installed flush with the user shaft.

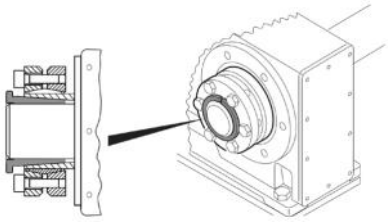


2.7 If the reducer is equipped with a shaft shoulder, assemble the locking disc to the stop on the shaft shoulder, but the minimum distance between the outer ring of the locking disc facing the reducer and the reducer housing shall not be less than 2mm. If the reducer has no shaft shoulder, assemble the locking disc at a distance of 2～3mm from the reducer housing.

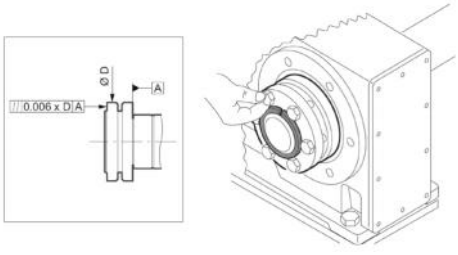
2.8 Tap the flange surface of the taper sleeve gently to ensure that the taper sleeve is firmly installed inside the hollow shaft.



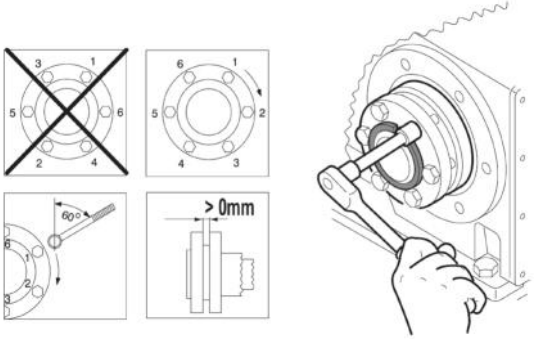
2.9 Check whether the user shaft is properly seated in the taper sleeve.



2.10 Tighten the screws of the locking disc by hand only. Ensure that the outer rings of the locking disc are parallel to each other.



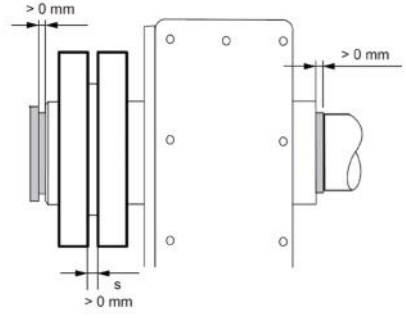
2.11 Tighten the screws according to the corresponding tightening torque in the table below. Tighten the screws circle by circle in sequence (do not use the cross-tightening method).



Reducer model			Screw specification	Tighten with a torque of ±5% Nm
JRTFT..	JRTKT..	JRTST..		
/	/	39	M5	5.5
39 ~ 69	39 ~ 69	49 ~ 69	M6	16
79	79	79	M6	12
89/99	89/99	89/99	M8	38
109	109	/	M10	65
129/159	129/159	/	M12	120

2.12 After assembly, check whether the gap "s" between the outer rings of the locking disc is greater than 0mm.

2.13 Check whether the gaps between the taper sleeve and the end of the hollow shaft, as well as between the hollow shaft and the shaft shoulder of the user shaft, are both greater than 0mm.



3. Disassembly of Shaft-mounted Reducer

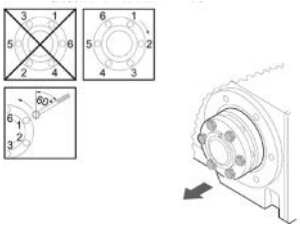
⚠ Warning

High surface temperature poses a risk of burns, which may cause serious injury.

· Allow the equipment to cool down sufficiently before operation.

Follow the steps below for operation:

3.1 To avoid bending the outer ring of the locking disc, loosen the locking screws a quarter turn in sequence.



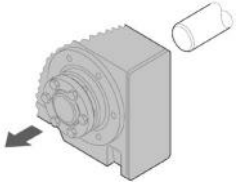
3.2 Unscrew the locking screws evenly in sequence. There is no need to unscrew the locking screws completely at this time.

3.3 Remove the taper sleeve. If necessary, the outer ring of the locking disc can be used as a disassembly tool.

Follow the steps below for operation:

- Remove all locking screws.
- Screw a corresponding number of screws into the threaded holes of the locking disc.
- Press the inner ring against the reducer housing.
- Pull the taper sleeve off by tightening the screws.

3.4 Pull the reducer out of the shaft.



3.5 Pull the locking disc out of the output shaft.

Cleaning and lubricating the shrink disk

There is no need to strip down and re-grease disassembled shrink disks before they are screwed back on.

The shrink disk only needs to be cleaned and re-greased if it is contaminated.

Use one of the following solid lubricants for the tapered surfaces:

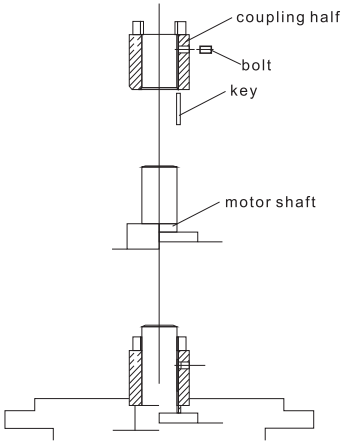
Table.5

Lubricant（Mo S2）	**Sold as**
Molykote321(Lube coat)	Spray
Molykote spray(powder spray)	Spray
Molykote G Rapid	Spray or paste
Aemasol MO 19P	Spray or paste
Aemasol	Spray
DIO—setral 57N(Lube coat)	

Grease the locking bolts with a multipurpose grease such as Molykote BR2 or similar。

4.4AM adapter coupling

IEC adapter AM63-225



Pic.20

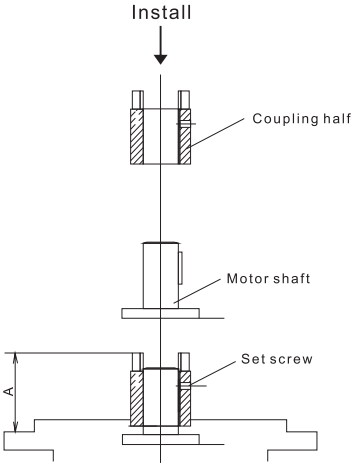
1.Clean the motor shaft and flange surfaces of the motor and adapter.
2.Remove the key from the motor shaft and replace it with the supplied key (not AM63 and AM250).
3.Heat the coupling half to approx 80° C ~ 100° C, push the coupling half onto the motor shaft.
4.Use a setscrew to secure the coupling half and the kay on the motor shaft.
5.Install motor onto the adapter. making sare that the dogs of the two coupling halves engage in each other.

STOP

When installing a motor onto the adapter, you must use an anaerobic fluid seal to ensure that moisture cannot penetrate adapter.

*Advise to daub the lube in the coupling half. for preventing the osculant cant erization.

AM adapter coupling（IEC adapter coupling AM250/AM280）



Pic.21

1.Clean the motor shaft and flange surfaces of the motor and adapter。
2.Remove the key from the motor shaft and replace it with the supplied key (not AM63 and AM250).
3.Heat the coupling half(479)to approx 80° C～100° C，push the coupling half onto the motor shaft.
4.Check point A
5.Mount the motor on the adapter. When doing this, make sure the coupling dogs of the adapter shaft engage in the plastic spider.

4.5 AN adapter coupling

Instructions for Using AN Input Module

1、When the model is < AN182, the input module is of straight - plug type without a coupling

1.1 Clean the motor shaft and motor flange.

1.2 Check dimension A.

2、When the model is ≥ AN182, the input module is equipped with a coupling

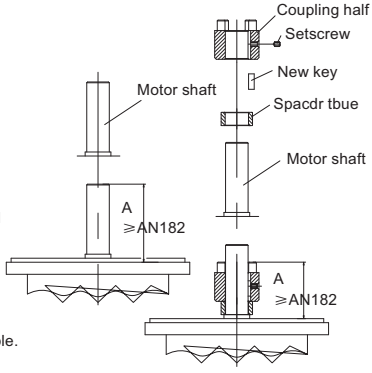
2.1 Clean the surfaces of the motor shaft, motor flange and coupling.

2.2 Remove the key on the motor shaft, install the spacer sleeve on the motor shaft, and then install the new key.

2.3 Heat the half-coupling to about 80℃ - 100℃, then sleeve it into the motor shaft and install it to the position of the spacer sleeve.

2.4 Fix the key and half -coupling with set screws and tightening torque T according to the following table.

2.5 Recheck dimension A.

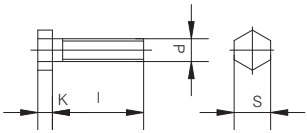


AN尺寸	56	143/145	182/184	213	254	284	324	364
A(mm)	<53	<60.2	48.5	56.5	66	75.5	93.5	93.5
T(Nm)	/	/	2.6	2.6	5.5	5.5	9.2	9.2
Setscrew	/	/	M6	M6	M8	M8	M10	M10

3 Mounting the motor on the AN Input Module

3.1 To prevent contaminants from entering the AN input module, apply an appropriate sealant on the contact surface between the input module and the motor.

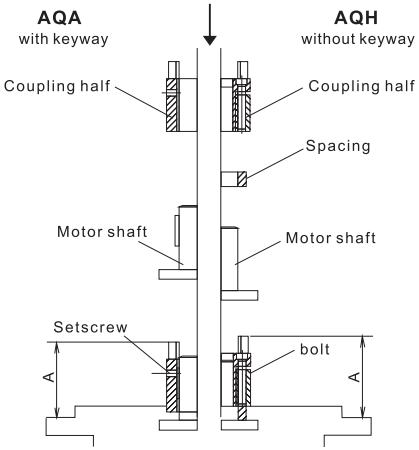
3.2 When the model is < AN182, the motor can be directly mounted on the AN input module. When the model is ≥ AN182, ensure that the claws of the motor's half-coupling are engaged with the rubber elastic sleeve inside the claws of the input module.



3.3 Use the ASME B1.1-compliant bolts specified in the table below to secure the motor to the input module.

AN 尺寸	Code	d (in)	l (in)	K (in)	S (in)	Material	SAE strength class	Surface Protection	Torque Nm	Torque Lbf-ft
56	019900000957	3/8-16	1	1/4	9/16	Steel	Grade 5	Blackening	38	28
143/145										
182/184	019900000984	1/2-13	1-1/4	11/32	3/4				92	68
213										
254										
284										
324	019900000703	5/8-11	1-3/4	27/64	15/16				183	135
364										

4.6 AQ adapter coupling



Pic.22

1. Clean the motor shaft and flange surfaces of the motor and adapter.
2. AQH:Unscrew the bolts of the coupling half and loosen the conical Connection.
3. Heat the coupling half（80～100° C） and push it onto the motor shaft. Type AQA / AQH: Up to clearance "A" (see table).
4. AQH: Tighten the bolts on the coupling half in diametrically opposite sequence until all bolts reach the tighten T_A specified in the table.
AQA: Use a setscrew to secure the coupling half.
5. Check the position of the coupling half
Install motor onto the adapter making sure that the dogs of the two coupling halves engage in each other. The force that must be applied when joining the two coupling halves is dissipated after final assembly, so there is no risk of any axial load being applied to adjacent bearings.

Setting dimensions, tightening torque

Table.6: Coupling size, Tightening torque.

Type	Coupling size	Clearance"A" [mm]	Bolts DIN 912[1)]	Tightening torqueT[1)] [Nm]
AQA/AQH80/1/2/3	19/24	44.5	M4	3
AQA/AQH100/1/2		39		
AQA/AQH100/3/4		53		
AQA/AQH115/1/2/3		62		
AQA/AQH115/3	24/28	62	M5	6
AQA/AQH140/1/2		62		
AQA/AQH140/3	28/38	74.5	M5	6
AQA/AQH190/1/2		76.5		
AQA/AQH190/3	38/45	100	M6	10

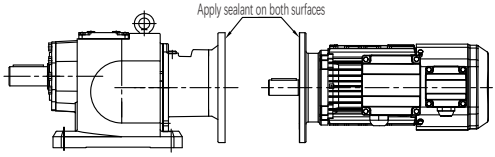
1) Use in （AQH）

4.7 AD input shaft assembly

Please refer to Sec. "Installing input and output shafts" for information on mounting of input elements.

4.8 Protection for Connection Between Input Adapter Flange and Motor

When the customer connects to the input adapter flange supplied by JIE (including AM-type IEC motor input interface, AN-type NEMA motor input interface, and AQS-type servo motor input interface), apply sealant on the mating surface between the motor and the input adapter flange.



5 Startup

5.1 Startup of helical-worm gear units

Note: The direction of rotation of the output shaft JRTS..helical-worm gear units has been changed from CW to CCW; this is different from the S..2 series. Change direction of rotation: Swap over two motor feeder cables.

Run-in period

Helical-worm gear units require a run-in period of at least 24 hours before reaching their maximum efficiency. A separate run-in period applies for each direction of rotation if the gear unit is operated in both directions of rotation. The table show the average power reduction during the run-in period.

Table 7: Average losing power of helical -worm gear units.

No. of starts	Helical-worm gear units	
	Power reduction	i range
1	12%	50...280
2	6%	20...75
3	3%	20...90
4	-	-
5	3%	6...25
6	2%	7...25

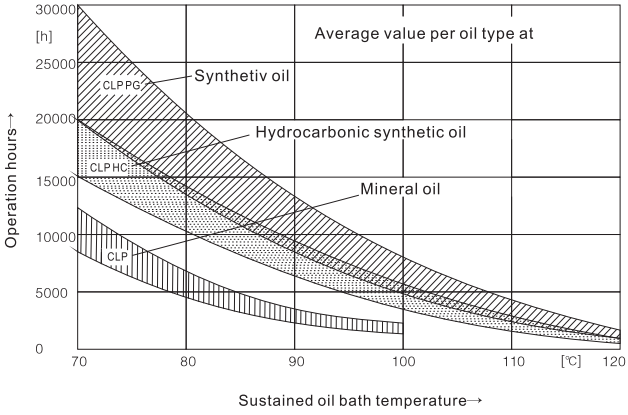
6.Inspection and Maintenance

6.1 Inspection and maintenance intervals

takle 8:Cycle of back-check and maintenance

Frequency	What to do ?	Memo
After 300 hours initial operating	cleanning house,then change oil	See 6.3
Every 3000 machine hours,		
at least every 6 mouths	Check oil and oil level	
Depending on the operating conditions(see pic 23)every 3 years at the latest	Change mineral oil	
	Replace anti-friction bearing greaseReplace oil seal	
Depending on the operating conditions(see pic 23)every 5 years at the latest	Change synthetic oil	
	Replace anti-friction bearing grease Replace oil seal	
JRTR17/27 are have lubrication for life and are therefore maintenance-free		

6.2 Lubricant change intervals



Pic.23 Oil change intervals for standard gear units under normal environmental conditions。

6.3 Inspection and maintenance of the gear unit

Do not intermix synthetic lubricants and do not mix synthetic and mineral lubricants together!

The position of the oil level and oil drain plug and the breather valve depends on the mounting position. Refer to the diagrams of the mounting positions.

Checking the oil level

1.De-energize the gearmotor and secure it to prevent it from being switched on inadvertently!
Wait until the gear unit has cooled off-Danger of burns!

2.Refer to Sec."Installing the fear unit" when changing the mounting position!
3.For gear units with an oil level plug: Remove the oil level plug, check the fill level and correct it if necessary. Screw the oil level plug back in.

Checking the oil

1.**De-energize the gearmotor and secure it to prevent it from being switched on inadvertently!**
Wait until the gear unit has cooled off-Danger of burns!
2.Remove a little oil from the oil drain plug.
3.Check the oil consistency.
4.For gear units with an oil level plug: Pemove the oil level plug, check the fill level and correct it if necessary. Screw the oil level plug back in.

Changing the oil Only change the oil when the gear unit is at operating temperature.

1.**De-energize the gearmotor and secure it to prevent it from being switched on inadvertently**!
Wait until the gear unit has cooled off-Danger of burns!
Note: The gear unit must still be warm otherwise the high viscosity of excessively cold oil will make it harder to drain the oil correctly.
2.Place a container underneath the oil drain plug
3.Remove the oil level plug, breather plug/breather valve and oil drain plug.
4.Drain all the oil.
5.Screw in the oil drain plug.
6.Pour in new oil of the same type through the vent hole. Do not mix synthetic Lubricants.
—Pour in the volume of oil in accordance with the mounting position or as specified on the nameplate。
—Check at the oil level plug。
7.Screw the oil level plug and the breather plug back in

7 Malfunctions

Problem	Possible cause	Remedy
Unusual, regular running noise	a)Meshing/grinding noise: Bearing damage b)Knocking noise: irregularity in the gearing	1.Check the oil, change bearingsContact customer service
Unusual, irregular Running noise	Foreign bodies in the oil	1.Check the oil Stop the drive, contact customer service
Oil leaking1） • From the gear cover plate • From the motor flange • From the output end oil seal • From the motor oil seal	a)Rubber seal on the gear cover plate leaking b)Seal defective c)Gear unit not vented	a). Tighten the bolts on the gear cover plate and observe the gear unit, Oil still leaking: Contact customer service b). Contact customer service
Oil leaking from breather valve	a)Too much oil b)Drive operated in incorrect mounting position c)Frequent cold starts(oil foams) and/or high oil level	a)Correct the oil level b)Mount the breather valve correctly and correct the oil level
Output shaft does not turn Although the motor is run-Ming or the input shaft is rotated	Connection between shaft and hub in gear unit interrupted	Send in the gear unit/ gearmotor for repair

1) Short-term oil/grease leakage at the oil seal is possible in the run-in phase (24 hours running time).

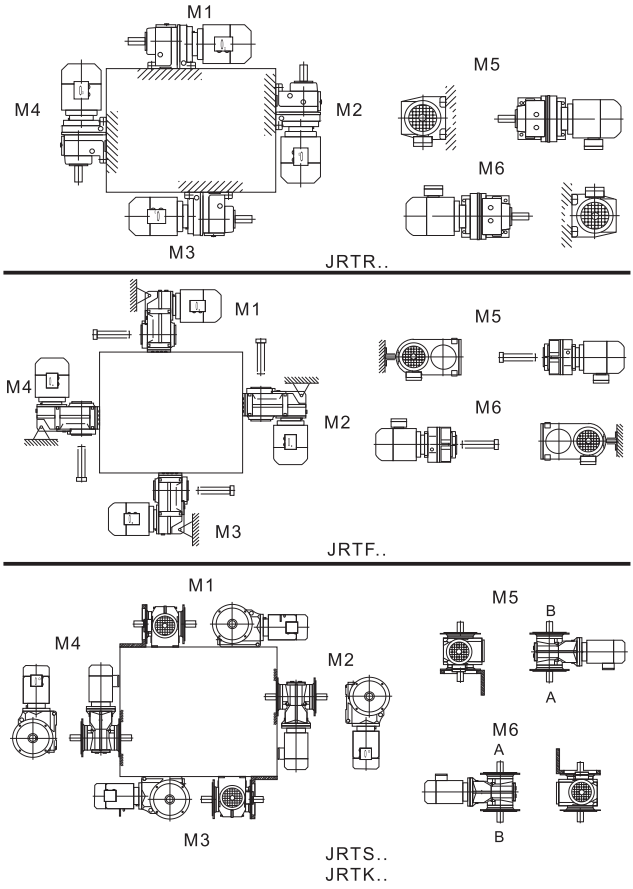
Please have the following information to hand if you require the assistance of our customer service：

- Data from the nameplate(complete)
- Nature and extent of the fault
- Time and peripheral circumstances of the fault
- Presumed cause

8 Mounting Positions

8.1 General information on mounting positions

Mounting position designation
JIE differentiates between six mounting position M1~M6 for gear units. The following figure shows the gearmotor in mounting positions M1~M6.



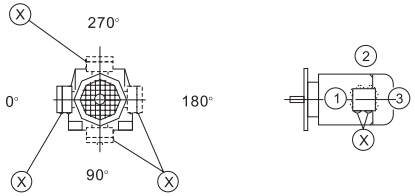
Pic.24 Depiction of mounting positions M1…M6

Remark:1.Bolt with rubber band is breather valve.
2.The read bolt is oil level plug.
3.The downmost bolt is oil drain plug.

8.2 Important order information

Position of the Motor terminal box and cable entry

Possible positions of the terminal box are 0° ，90° ，180° ，270° 。
As viewed onto and cable entry the fanguard.
In addition, the position of the cable entry can be selected. The possibilities are "X" (normal position), "1". "2" or "3"



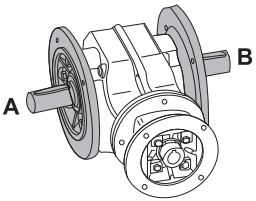
Pic.25 Position of terminal box and out line plug.

The terminal box cannot be positioned at 90° on the R19d63··· geared motor.

- Only: cable entries "X" and "2" are possible with DT56 and DR63 motor
- Exception :This restriction does not apply to the D63 with the Isplug connector.
- Cable entry ¨2〃 is not possible with the D71..BMG 90° motor with terminal。 Box position 90° .

Position of the Output shaft and the output flange

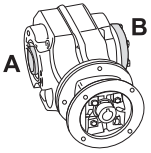
In right-angle gear units, it is necessary to indicate the position of the output shaft and output flange:
A or B or A+B



Pic. 26 Position of output shaft and output flange.

Position of the Connection end in Right-angle gear units

In shaft mounted right-angle gear units with shrink disk, it is necessary to indicate whether the A or B end is the connection end. In Fig 12, the A end is the connection end. The shrink disk is located opposite the connection end.



Pic. 27 Position of joint

Connection end at bottom only is possible with JRTK169/JRTK189, in mounting Positions M5 and M6.

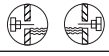
Table 9: Example

Type	Mtg. Pos.	Shaft with	Flange with	Connection end	Position of shrink disk	Position of Terminal box	Position of cable entry	Dir. Of rot. Of the output
JRTK49D71D4	M2	A	-	-	-	0°	“X”	CW
JRTSF79D100L4	M6	A+B	A+B	-	-	90°	“3”	-
JRTKA99D132M4	M4	-	-	B	-	270°	“2”	-
JRTKH109D160L4	M1	-	-	A	B	180°	“3”	-

Symbols used

The following table shows the symbols used in the mounting position sheets and what they mean:

Table.10

Symbol	Meaning
	Breather valve
	Oil level plug
	Oil drain plug
	In line plug

Churning losses

Increased churning losses may arise in some mounting positions. Please contact JIE in case of the following combinations:

Table 11

Mounting position	Gear unit type	Gear unit size	Input speed（rpm）
M2,M4	JRTR	99...109	＞2500
		＞109	＞1500
M2,M3,M4,M5,M6	JRTF	99...109	＞2500
		＞109	＞1500
	JRTK	79...109	＞2500
		＞109	＞1500
	JRTS	79...99	＞2500

9 Lubricants

9.1 Lubricant fill quantities

The specified fill quantities are recommended values. The precise values vary depending on the number of stages and gear ratio. When filling, it is essential to check the oil level plug since it indicates the precise oil capacity.

The following tables show guide values for lubricant fill quantities in relation to the Mounting position M1~M6.

Helical gear units

（***JRTR***）

Gear unit type	Fill quantity （L）					
	M1[1)]	M2[1)]	M3	M4	M5	M6
JRTR19/R19F	0.25	0.6	0.35	0.6	0.35	0.35
JRTR29/R29F	0.25/0.4	0.7	0.4	0.7	0.4	0.4
JRTR39/R39F	0.3/1	0.9	1	1.1	0.8	1
JRTR49/R49F	0.7/1.5	1.6	1.5	1.7	1.5	1.5
JRTR59/R59F	0.8/1.7	1.9	1.7	2.1	1.7	1.7
JRTR69/R69F	1.1/2.3	2.6/3.5	2.8	3.2	1.8	2
JRTR79/R79F	1.2/3	3.8/4.3	3.6	4.3	2.5	3.4
JRTR89/R89F	2.3/6	6.7/8.4	7.2	7.7	6.3	6.5
JRTR99	4.6/9.8	11.7/14	11.7	13.4	11.3	11.7
JRTR109	6/13.7	16.3	16.9	19.2	13.2	15.9
JRTR139	10/25	28	29.5	31.5	25	25
JRTR149	15.4/40	46.5	48	52	39.5	41
JRTR169	27/70	82	78	88	66	69

Gear unit type	Fill quantity （L）					
	M1[1)]	M2[1)]	M3	M4	M5	M6
JRTRF19	0.25	0.6	0.35	0.6	0.35	0.35
JRTRF29	0.25/0.4	0.7	0.4	0.7	0.4	0.4
JRTRF39	0.4/1	0.9	1	1.1	0.8	1
JRTRF49	0.7/1.5	1.6	1.5	1.7	1.5	1.5
JRTRF59	0.8/1.7	1.8	1.7	2.1	1.7	1.7
JRTRF69	1.2/2.5	2.7/3.6	2.7	3.1	1.9	2.1
JRTRF79	1.2/2.6	3.8/4.1	3.3	4.1	2.4	3
JRTRF89	2.4/6	6.8/7.9	7.1	7.7	6.3	6.4
JRTRF99	5.1/10.2	11.9/14	11.2	14	11.2	11.8
JRTRF109	6.3/14.9	15.9	17	19.2	13.1	15.9
JRTRF139	9.5/25	27	29	32.5	25	25
JRTRF149	16.4/42	47	48	52	42	42
JRTRF169	26/70	82	78	88	66	71

1)The output end gear unit of multi-stage gear units must be filled with the larger oil volume.

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTRX59	0.6	0.8	1.3	1.3	0.9	0.9
JRTRX69	0.8	0.8	1.7	1.9	1.1	1.1
JRTRX79	1.1	1.5	2.6	2.7	1.6	1.6
JRTRX89	1.7	2.5	4.8	4.8	2.9	2.9
JRTRX99	2.1	3.4	7.4	7	4.8	4.8
JRTRX109	3.9	5.6	11.6	11.9	7.7	7.7

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTRXF59	0.5	0.8	1.1	1.1	0.7	0.7
JRTRXF69	0.7	0.8	1.5	1.7	1	1
JRTRXF79	0.9	1.5	2.4	2.5	1.6	1.6
JRTRXF89	1.6	2.5	4.9	4.7	2.9	2.9
JRTRXF99	2.1	3.6	7.1	7	4.8	4.8
JRTRXF109	3.1	5.9	11.2	10.5	7.2	7.2

Parallel shaft helical gear units
（*JRTF*）

JRTF..,JRTFA..B,JRTFH..B,JRTFV..B:

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTF..39	1	1.2	0.7	1.2	1	1.1
JRTF..49	1.5	1.8	1.1	1.9	1.5	1.7
JRTF..59	2.6	3.7	2.1	3.5	2.8	2.9
JRTF..69	2.7	3.8	1.9	3.8	2.9	3.2
JRTF..79	5	7.3	4.3	8	6	6.3
JRTF..89	11	13.0	7.7	13.8	10.8	11
JRTF..99	18.5	22.5	12.6	25.2	18.5	20
JRTF..109	24.5	32	19.5	37.5	27	27
JRTF..129	40.5	55	34	61	46.5	47
JRTF..159	69	104	63	105	86	78

JRTFF..:

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTFF..39	1	1.2	0.7	1.3	1	1.1
JRTFF..49	1.5	1.9	1.1	1.9	1.5	1.7
JRTFF..59	2.6	3.8	2.1	3.7	2.9	3
JRTFF..69	2.7	3.8	1.9	3.8	2.9	3.2
JRTFF..79	5.1	7.3	4.3	8.1	6	6.3
JRTFF..89	10.3	13.2	7.8	14.4	11	11.2
JRTFF..99	19	22.5	12.6	25.5	18.9	20.5
JRTFF..109	25.5	32	19.5	38.5	27.5	28
JRTFF..129	41.5	56	34	63	46.5	49
JRTFF..159	72	105	64	106	87	79

**JRTFA..,JRTFH..,JRTFV..,JRTFAF..,JRTFHF..,JRTFVF..,JRTFAZ..,
JRTFHZ..,JRTFVZ..:**

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTF..39	1	1.2	0.7	1.2	1	1.1
JRTF..49	1.5	1.8	1.1	1.9	1.5	1.7
JRTF..59	2.7	3.8	2.1	3.6	2.9	3
JRTF..69	2.7	3.8	1.9	3.8	2.9	3.2
JRTF..79	5	7.3	4.3	8	6	6.3
JRTF..89	10	13.0	7.7	13.8	10.8	11
JRTF..99	18.5	22.5	12.6	25.0	18.5	20
JRTF..109	24.5	32	19.5	37.5	27	27
JRTF..129	39	55	34	61	45	46.5
JRTF..159	68	103	62	104	85	77

**JRTFA..,JRTFH..,JRTFV..,JRTFAF..,JRTFHF..,JRTFVF..,JRTFAZ..,
JRTFHZ..,JRTFVZ..:**

JRTK..,JRTKA..B,JRTKH..B,JRTKV..B:

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTK..39	0.5	1	1	1.3	1	1
JRTK..49	0.8	1.3	1.5	2	1.6	1.6
JRTK..59	1.2	2.3	2.5	3	2.6	2.4
JRTK..69	1.1	2.4	2.6	3.4	2.6	2.6
JRTK..79	2.2	4.1	4.4	5.9	4.2	4.4
JRTK..89	3.7	8	8.7	10.9	7.8	8
JRTK..99	7	14	15.7	20	15.7	15.5
JRTK..109	10	21	25.5	33.5	24	24
JRTK..129	21	41.5	44	54	40	41
JRTK..159	31	62	65	90	58	62
JRTK..169	35	100	100	125	85	85
JRTK..189	60	170	170	205	130	130

JRTKF..:

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTKF..39	0.5	1.1	1.1	1.5	1	1
JRTKF..49	0.8	1.3	1.7	2.2	1.6	1.6
JRTKF..59	1.3	2.3	2.7	3	2.9	2.7
JRTKF..69	1.1	2.4	2.8	3.6	2.7	2.7
JRTKF..79	2.1	4.1	4.4	6	4.5	4.5
JRTKF..89	3.7	8.2	9	11.9	8.4	8.4
JRTKF..99	7	14.7	17.3	21.5	15.7	16.5
JRTKF..109	10	22	26	35	25	25
JRTKF..129	21	41.5	46	55	41	41
JRTKF..159	31	66	69	92	62	62

JRTKA..,JRTKH..,JRTKV..,JRTKAF..,JRTKHF..,JTRKVF..,JRTKAZ..,
JRTKHZ..,JRTKVZ..:

Gear unit type	Fill quantity （L）					
	M1	M2	M3	M4	M5	M6
JRTK..39	0.5	1	1	1.4	1	1
JRTK..49	0.8	1.3	1.6	2.1	1.6	1.6
JRTK..59	1.3	2.3	2.7	3	2.9	2.7
JRTK..69	1.1	2.4	2.7	3.6	2.6	2.6
JRTK..79	2.1	4.1	4.6	6	4.4	4.4
JRTK..89	3.7	8.2	8.8	11.1	8	8
JRTK..99	7	14.7	15.7	20	15.7	15.7
JRTK..109	10	20.5	24	32	24	24
JRTK..129	21	41.5	43	52	40	40
JRTK..159	31	66	67	87	62	62
JRTKH..169	35	100	100	125	85	85
JRTKH..189	60	170	170	205	130	130

Helical-worm gear units (JRTS)

JRTS..:

Gear unit type	Fill quantity （L）					
	M1	M2	M3[1)]	M4	M5	M6
JRTS..39	0.25	0.4	0.5	0.6	0.4	0.4
JRTS..49	0.35	0.8	0.7	1.1	0.8	0.8
JRTS..59	0.5	1.2	1	1.5	1.3	1.3
JRTS..69	1	2.0	2.2/3.1	3.2	2.6	2.6
JRTS..79	1.9	4.2	3.7/5.4	6	4.4	4.4
JRTS..89	3.3	8.1	6.9/10.4	12	8.4	8.4
JRTS..99	6.8	15	13.4/18	22.5	17	17

JRTSF..:

Gear unit type	Fill quantity （L）					
	M1	M2	M3[1)]	M4	M5	M6
JRTSF..39	0.25	0.4	0.5	0.6	0.4	0.4
JRTSF..49	0.4	0.9	0.9	1.2	1.0	1.0
JRTSF..59	0.5	1.2	1	1.6	1.4	1.4
JRTSF..69	1	2.2	2.3/3	3.2	2.7	2.7
JRTSF..79	1.9	4.1	3.9/5.8	6.5	4.9	4.9
JRTSF..89	3.8	8	7.1/10.1	12	9.1	9.1
JRTSF..99	7.4	15	13.8/18.8	23.6	18	18

JRTSA..,JRTSH..,JRTSAF..,JRTSHF..,JRTSAZ..,JRTSHZ..:

Gear unit type	Fill quantity （L）					
	M1	M2	M3[1)]	M4	M5	M6
JRTS..39	0.25	0.4	0.5	0.6	0.4	0.4
JRTS..49	0.4	0.8	0.7	1.1	0.8	0.8
JRTS..59	0.5	1.1	1	1.6	1.2	1.2
JRTS..69	1	2	1.8/2.6	2.9	2.5	2.5
JRTS..79	1.8	3.9	3.6/5	5.9	4.5	4.5
JRTS..89	3.8	7.4	6/8.7	11.2	8	8
JRTS..99	7	14	11.4/16	21	15.7	15.7

The output end gear unit of multi-stage gear units must be filled with the larger oil volume.

9.2 Lubricant used regularly

JRTR/JRTF/JRTK	Mobil	ISO	VG220
JRTS	Mobil	ISO	VG680

Other needs, please contact JIE.

JRT GEAR UNITS & GEARMOTORS

JRTR
Helical Inline Gearmotors
Size: 09-189
Ratio: 3.37-289.74
Input power: 0.16-340HP
Output torque: 21-499633 lb-in

JRTF
Parallel Shaft Helical Gearmotors
Size: 29-169
Ratio: 3.77-281.71
Input power: 0.16-340HP
Output torque: 31-328333 lb-in

JRTK
Helical-Bevel Gearmotors
Size: 39-189
Ratio: 3.98-197.37
Input power: 0.16-272HP
Output torque: 88-555403 lb-in

JRTS
Helical-Worm Gearmotors
Size: 39-99
Ratio: 3.97-288
Input power: 0.16-30HP
Output torque: 88-43336 lb-in

JRTW
Helical Face Gearmotor
Size: 10-30
Ratio: 6.57-75
Input power: 0.12-1.5HP
Output torque: 221-619 lb-in

JRH INDUSTRIAL GEAR UNITS

JRHH
Parallel Shaft Gear Units
Size: 3-28
Ratio: 1.25-450
Input power: 5.85-14306HP
Output torque: 20341-12381600 lb-in

JRHB
Helical Bevel Gear Units
Size: 4-28
Ratio: 5-400
Input power: 3.81-6677HP
Output torque: 48642-12381600 lb-in

JRHD
Bucket Elevator Gear Units
Size: 5-16
Ratio: 25-71
Input power: 21.8-1775HP
Output torque: 97284-1530012 lb-in

JRHO
Palm Oil Gear Units
Size: 310
Ratio: 56, 80
Input power: 144, 191HP
Output torque: 663300 lb-in

JRHA
Cooling Tower Gear Units
Size: 166
Ratio: 14
Input power: 310HP
Output torque: 185724 lb-in

JRP PLANETARY GEAR UNITS

JRP
Planetary Gear Units
Size: 9-36
Ratio: 25-4000
Input power: 0.54-17597HP
Output torque: 194568-229994400 lb-in

JRP
Planetary Gear Units
Size: 01-8
Ratio: 3.08-3460
Input power: 0.03-261HP
Output torque: 8844-114972 lb-in

JRPH
Rotary Planetary Gear Units
Size: 08-100
Ratio: 3.4-2000
Input power: 102-340HP
Output torque: 70752-884400 lb-in

JRP RV
Inline Planetary Gear Units
Ratio: 3-100
Backlash: 1-3/3-5/5-7arc-min
Torque: 53-29185 lb-in

JRP RE
Right Angle Planetary Gear Units
Ratio: 3-100
Backlash: 4-9/6-11arc-min
Torque: 106-16980 lb-in

JRW WORM GEAR UNITS

JRSTD
IEC Worm Gear Units
Size: 25-150
Ratio: 5-100
Input power: 0.08-20HP
Output torque: 115-13716 lb-in

JRWND
NEMA Worm Gear Units
Size: 30-150
Ratio: 5-100
Input power: 0.08-20HP
Output torque: 115-13716 lb-in

JRWNED
Double Reduction Units
Size: 25/30-63/150
Ratio: 100-5000
Input power: 0.08-2HP
Output torque: 257-23628 lb-in

JRKM, JRKB
Hypoid Gear Units
Size: 28-68
Ratio: 7.5-300
Input power: 0.1-15HP
Output torque: 708-6637 lb-in

WPA
Worm Gears
Size: 40-250
Ratio: 10-60
Input power: 0.16-45HP
Output torque: 168-24292 lb-in

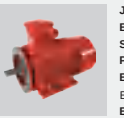
JD THREE PHASE ASYNCHRONOUS MOTORS

JDC, JCS Servo Motors & Drives
Power: 0.54-10HP
Output Torque: 11-425 lb-in
Input power: 1AC 220V/3AC 380V
Communication:
Pulse, EtherCAT, Profinet

JDL
Asynchronous Servo Motor
Torque: 22-1770N.m
Speed: 1200r/min-3000r/min

JD-IEC
IEC Standard Motors
Size: 63-315
Power: 0.16-272HP
Efficiency: IE3 IE4 IE5

JD-NEMA
NEMA Standard Motors
Size: 56C-365TC
Power: 0.16-30HP
Efficiency: NEMA Premium



JD-B
Explosion-Proof Motors
Size: 80-315
Power: 0.75-272HP
Explosion-Proof Grade:
Exib II BT4
Efficiency: IE3 IE4 IE5

JC INTELLIGENT DRIVE SOLUTIONS

JC
Intelligent Drive Solutions
Industrial Drive Solutions incl Reducers, Motors, Converters, Sensors, Internet of Things, etc.

JCMC VFD Gearmotors
Size: 175-255
Power: 1-7HP
Input Power: 3AC 380-440V
Output Frequency: 0-200Hz
Communication:
ModbusRTU, Profinet, ASi

JCI Intelligent Monitoring System
Power: AC220V, DC24V
Communication: Wifi, 4G, RS485
Items:
Vibration, Temperature, Pressure, Current
Deployment:
Public Cloud, Private Cloud

JCME Distributed VFDS
Size: 175-255
Power: 1-7HP
Input power: 3*AC380-440V
Output Frequency: 0-200Hz
Communication:
Profinet, ModbusRTU, ASi

JCF VFDS
Size: 175-355
Power: 1-74HP
Input power:
1*AC220/3*AC400V
Communication:
Profinet, EtherCAT, CANOPEN

MORE OPTIONS

JRES(R、K)
Stainless Steel Helical Gearmotos
Size: 37-67
Ratio: 3.41-199.81
Input power: 0.24-10HP
Output torque: 106-8048 lb-in

JRES
Stainless Steel Worm Gearmotors
Size: 30-90
Ratio: 7.5-100
Input power: 0.08-5.4HP
Output torque: 23-4053 lb-in

JRTH、JRTV
Front&Rear Roller Gearboxes
Size: 18-60
Ratio: 3-1800
Input power: 0.13-10HP
Output torque: 14-29136 lb-in

JRSS
Screw Lifters
Size: 35-150
Ratio: 5-40
Input power: 0.26-22HP
Lift Capacity: 1102-57431 lb-in

JRTM
Spiral Bevel Right Angle Units
Size: 2-25
Ratio: 1-5
Input power: 0.019-455HP
Input Speed: 10-1450r/min

JRGC
Transfer Case
Size: 0401, 1501
Ratio: 0.589, 0.659, 0.756, 0.825
Max. Output Torque(Pump): 12303 lb-in
Max. Output Torque(Working Shift)
353760 lb-in

JN
Agricultural Machinery Gear Units
Ratio: 0.364-2.33
Input Speed: 800r/min
Efficiency: ≥96%

JPF
Front&Rear Roller Gearboxes
Size: 1706-2012
Ratio: 3.04-33.568
Input power: 2-4HP
Output torque: 974-2407 lb-in

JEC
Escalator Units
Size: 2-15, 2-25
Ratio: 24.5
Efficiency: ≥96%
Working Life: 146000h
Output torque: 31219-45547 lb-in

JIE Intelligent Drive Solutions Provider
For more products, please contact JIE.
(Inch)