Assembly Instructions PLG

IMS:GEAR

ATTENTION! Read these instructions carefully and in its entirety BEFORE you start assembly!

- **Please make sure that no dirt particles get into the gear unit during the assembly process.**
- **All assembly parts must be free of dirt, impact or other damage.**
- **Gears may not be disassembled. Should the gears accidentally fall apart during assembly, please return the gears back to IMS Gear. Non-expert reassembly of individual parts or re-greasing can cause the gear unit to function incorrectly or to fail prematurely.**
- **Due to the many possible types of influences on screw connections (effective thread penetration in the motor bearing shield, plastic or metal flanges, etc.) each necessary screw torque must be determined and validated by the customer himself depending on the usage and operating load. All screw connections are always to be secured against unintentional self-loosening.**
- **Should you not have the necessary data for the correct assembly of the gear unit, please contact us before the assembly process. IMS Gear is not liable for incorrect assembly.**

MOTOR PINION

General

- Please find the installation measurements (a) in the table below
- The motor pinion is always to be shielded from any damage (i.e. impact) during and after assembly!

Connection Types Pinion / Shaft

Connection of the motor shaft depends on the pinion design:

- Press Fit:
  Ensure that the pinion is always set tight onto the shaft. The motor pinion should never be pressed on at an angle. In order to avoid that, a press-on fixture is recommended.
  ATTENTION! In order to avoid damage to the motor, always support the motor shaft during the press-on assembly.
- Glued Push Fit:
  Appropriate glue may be chosen by the customer and used according to the manufacturer's recommendations.
- Keyed Push Fit with Set Screw:
  Tighten set screw with appropriate tooling and secure against unintentional self-loosing
- Non-keyed Push Fit with Set Screw:
  Tighten set screw with appropriate tooling and secure against unintentional self-loosening
- Drilled & Pinned Push Fit:
  Please note, that the motor shaft is to be secured appropriately with a radial support during the assembly of the spring pin.

MOTOR FLANGE

Plastic, Aluminum and Zinc Die Casted Flanges

- Check the screw penetration (c) of the screw.
  ATTENTION! Screws are never to penetrate so deep, that they could damage the motor.
- Set motor flange level onto motor center diameter.
- Tighten motor flange screws crosswise if necessary:
  Secure motor screws against unintentional self-loosening.

GEAR UNIT ASSEMBLY

- Remove the protective plastic cap for direct assembly WITHOUT a motor flange.
- Some gear units come with a loose paper gasket / seal. In this case, the next step is to mount the paper gasket / seal in such a fashion, that the stamped out holes align and it is temporarily screwed on with two screws.
- Check to assure, that the thrust washer is centered between the motor center and the ring gear.
- Carefully – WITHOUT damaging the gear teeth – thread the motor pinion onto the gear until the ring gear sits level onto the motor flange.
- Slightly tighten the two screws on the bearing flange side.
- Insert the missing screws into the gear unit and tighten crosswise.
- Finally tighten all screws crosswise according to the established torque:
  Secure gearbox screws against unintentional self-loosening.

FITTING DIMENSIONS FOR THE GEAR ASSEMBLY

Gear	a in mm	b in mm	screw penetration c
IMS.22 Pro MAX	$4{,}55_{+/-0{,}15}$	0,2	customer specific determination
IMS.22 Eco MAX	$4{,}55_{+/-0{,}15}$	0,2	
IMS.32 Pro/Pro LN	$5{,}9_{+/-0{,}2}$	0,2	
IMS.32 Eco	$5{,}9_{+/-0{,}2}$	0,2	
IMS.42 Pro/Pro LN	$8{,}15_{+/-0{,}15}$	0,2	
IMS.42 Eco	$8{,}15_{+/-0{,}15}$	0,2	
IMS.52 Pro/Pro LN	$8{,}15_{+/-0{,}15}$	0,3	
IMS.62 Pro/Pro LN	$10{,}25_{+/-0{,}15}$	0,3	
IMS.72 Pro/Pro LN	$11{,}95_{+/-0{,}15}$	0,5	
IMS.81 Pro/Pro LN	$13{,}45_{+/-0{,}2}$	0,3	
IMS.105 Pro/Pro LN	$18{,}15_{+/-0{,}15}$	0,5	
IMS.120 Pro	$19{,}35_{+/-0{,}25}$	0,5