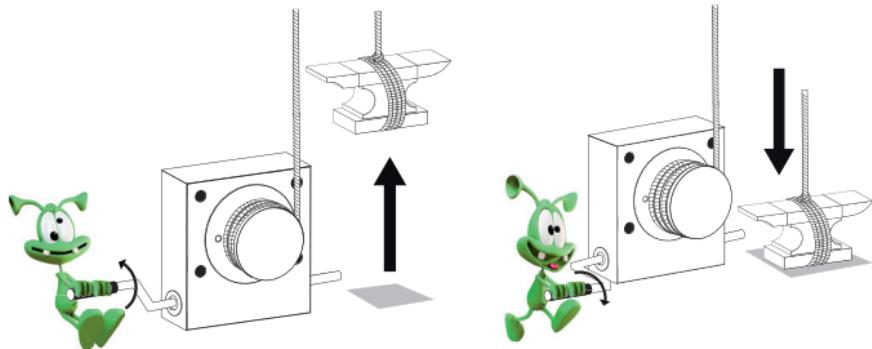


# Technical information

## What is anti-back drive ?

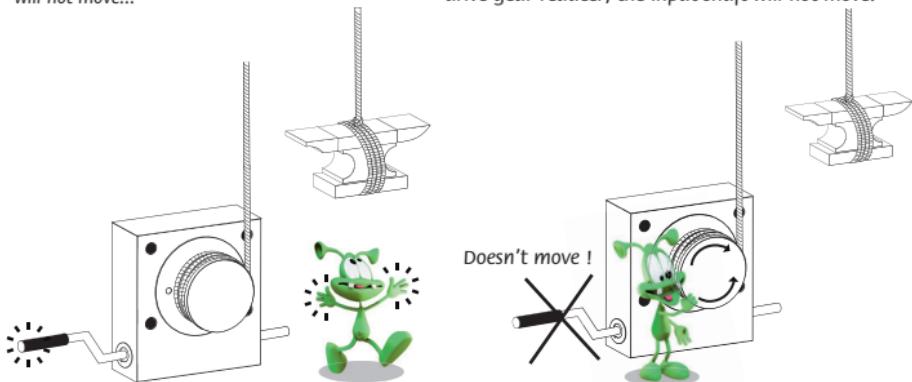
The inputs of all of our gear reducers can turn in both directions whether they are reversible or not reversible. But what is anti back drive ?

The input of an anti-back drive gear reducer can turn in both directions. In this example an anti-back drive gear reducer can be used to raise or lower a load by turning a handle.



...However, if the handle is released, the load will not move...

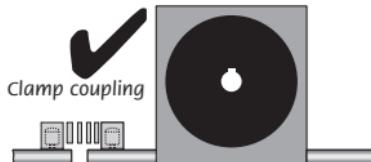
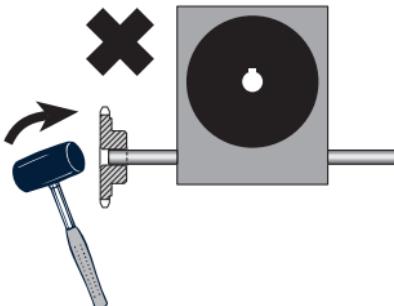
...If you try to turn the output of an anti-back drive gear reducer, the input shaft will not move.



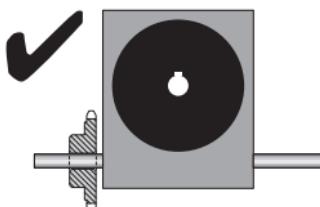
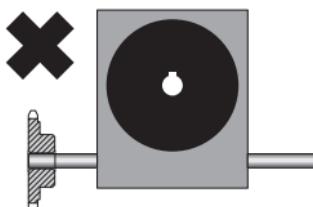
The Anti back drive property is sometimes referred to as « self locking »

- (i)** Very occasionally, the reverse efficiency of an anti-back drive gear reducer is insufficient to guarantee anti back drive and a light brake will be required on the input shaft to ensure safety.

## All types of gear gearboxes Assembly advice

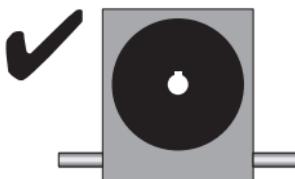
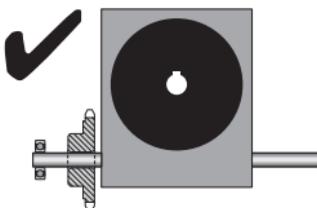


Clamp coupling avoids damage to shaft and absorbs misalignments.



Gears mounted at the outer extremity of the input shaft can cause bending and eventual failure of the shaft.

Mounting a gear as near to the casing as possible allows the torque produced by the overhung load to be reduced, and protects the shaft from premature wear.



The addition of a bearing at the end of the shaft acts as a counterweights to the overhung load thus avoiding damage to the shaft.

Please contact us about any modifications you may require to be made to a shaft. In that way they can be done before assembly, thus avoiding any possible damage to the gear reducer due to later re-machining.

**Note: Gear reducers can be mounted in any position.  
Any modifications made by the customer will void the guarantee.**

# Technical information on gear gearboxes

**TORQUE:** Torque figures have been calculated on the basis of a 12,000 hour working life and being 12 hours per day. For 24/24 use, multiply the original figure by 0.75.

**WORKING TEMPERATURE:** Normal working temperature range is 0°C to +70°C.

Alternative greases for use between -55°C and +155°C are available, as are bearings with sealed joints (2RS) for use up to +120°C, steel bearings without joints for use up to +150°C or stainless steel bearings for use up to +288°C when used with special high temperature grease.

Standard grease allows use of up to +80°C in most applications. However if the speed or torque rises, the gear reducer temperature will also rise, which could cause damage.

**MODIFICATIONS:** We can modify gear reducer, adding keyways or circlip groove or modifying the shaft... Please contact us with your requirements.

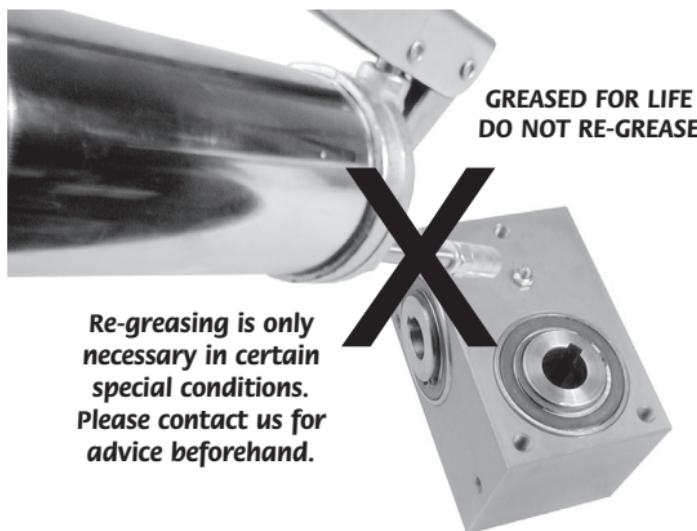
**Any modifications that you carry out to a gear reducer modification will void the guarantee.**

**USAGE:** The use of flexible coupling is recommended to connect the gearbox to the rest of the system.

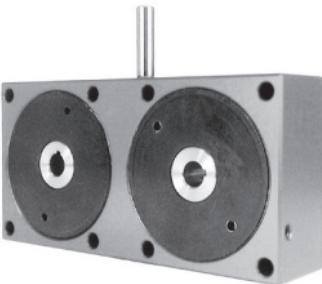
**Gear reducers are designed to reduce speed, not multiply it. Because of this, we cannot guarantee the correct operation of a gear reducer when used backwards.**

The user must always test a gear reducer in his own application to ensure that it is suitable and produces the desired results.

**OILING:** Gear reducers are greased for life and do not require maintenance. If re-greasing, do not over-fill as this could cause gears to get stuck and over-heat the gear reducer.



## Modifications to standard gearboxes



We can easily adapt our standard gearboxes to meet your specific requirements. On request and with no minimum order, we can manufacture :

- different shaft lengths and diameters
- other bore diameters (metric or imperial)
- flat plates, keyways, circlip grooves...
- addition of channelled or threaded rings
- custom-made parts from a drawing, specification or sample.

To find out more, contact our technical team.

## Custom made gearboxes built to order

Please send your request for a custom made gearbox to our technical department on +33 (0) 437 490 055