

PROPPELLER FLANGES

**UL260/ UL350/
UL390/ UL520 AERO
ENGINES**

Preface

Thank you for considering / choosing ULPower Aero engines.

The document will provide you with basic information on propeller flanges.

Remarks

The figures in this Technical Data document show the typical construction. They may not represent in full detail or the exact shape of the parts which have the same or similar function.

Specifications are given in the SI metric system with the USA equivalent in parenthesis. Where precise accuracy is not required, some conversions are rounded off for easier use.

In addition to this document, please refer to the following:

- Installation Manual
- Operating Manual
- Maintenance Manual
- Illustrated Parts Catalogue
- Technical data document

Modifications

The information and components/system descriptions contained in this document are correct at the time of publication. ULPower, however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on its products previously manufactured.

ULPower reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

Please contact your dealer or check the manufacturers website (<http://www.ULPower.com>) for any updates or changes concerning the engine and its manuals.

All engines : Propeller drive

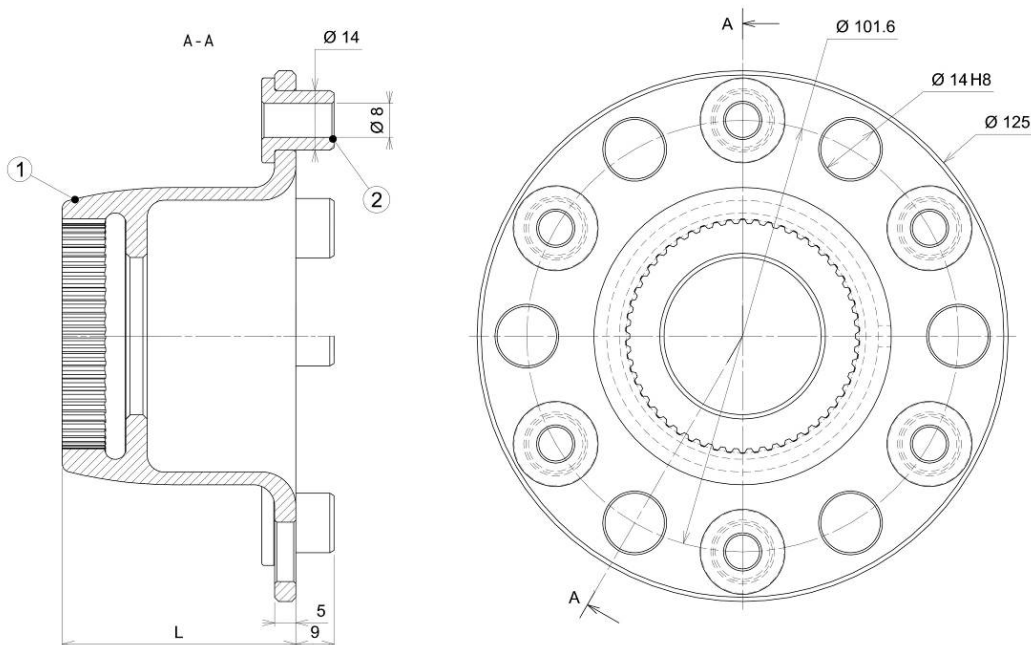
The ULPower Aero engine is a direct drive engine. The propeller is mounted on the propeller flange which is directly connected to the crankshaft; no gearbox or belt reduction is used. The propeller flange is fixed to crankshaft with a splined connection to take the torque loads and is held in position by a single central bolt. The bolt is locked with a special locking washer. A large ball bearing is used as thrust bearing which is held in position by two disc springs and a spacer ring. This assembly allows engine to be used in either tractor or pusher configuration. Engine turns clockwise when seen from cockpit in tractor configuration.



The propeller must be carefully selected to match the airframe and the engine characteristics. The hub of the propeller must be drilled with holes to match the flange. 6 propeller drive lugs are provided with the engine. These are made to have a tight fit in the propeller flange holes.

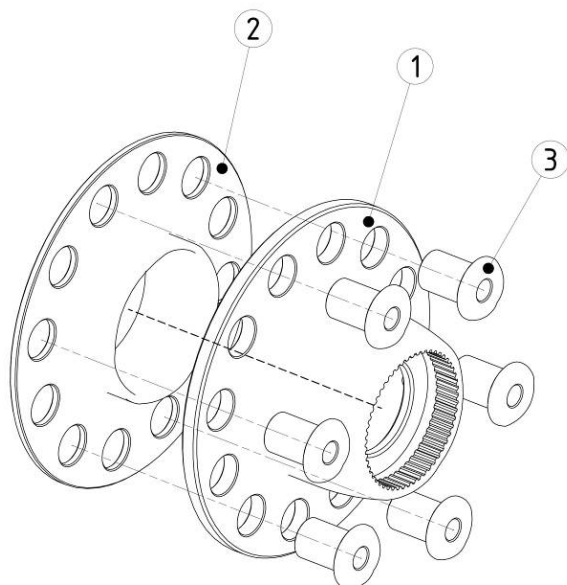
ULPower offers different types of propeller flanges.

1. Standard Flange for naturally aspirated engines



Nr.:	Partnumber :	Name :	P/assy
1	E022501	Propeller flange L = 55 mm (Standard)	1
1	E022504	Propeller flange L = 110 mm	1
1	E022505	Propeller flange L = 90	1
1	E022506	Propeller flange L = 35	1
2	E023004	Drive lug Ø 14	6

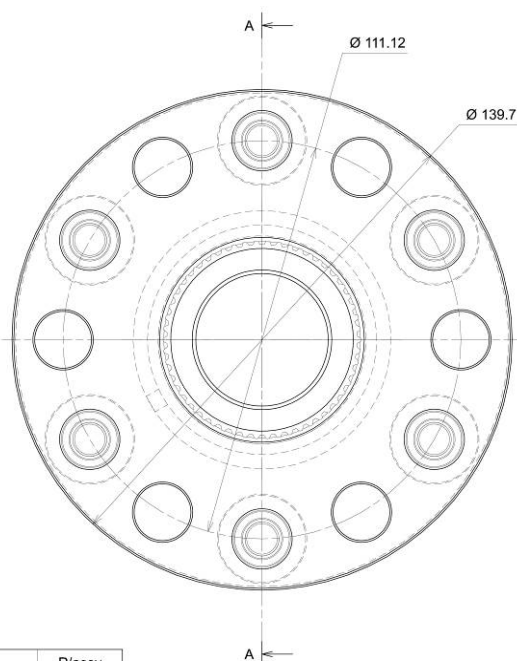
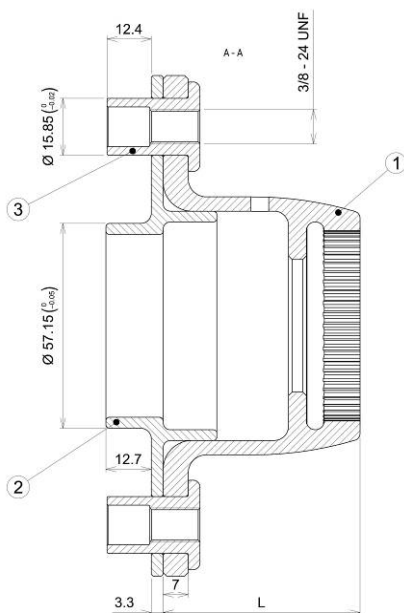
★ **Attention** : When not using the ULP standard flange, please make sure to install propeller reduction and propeller flange (See Picture)



Installation of item 2 is mandatory for a good propeller performance

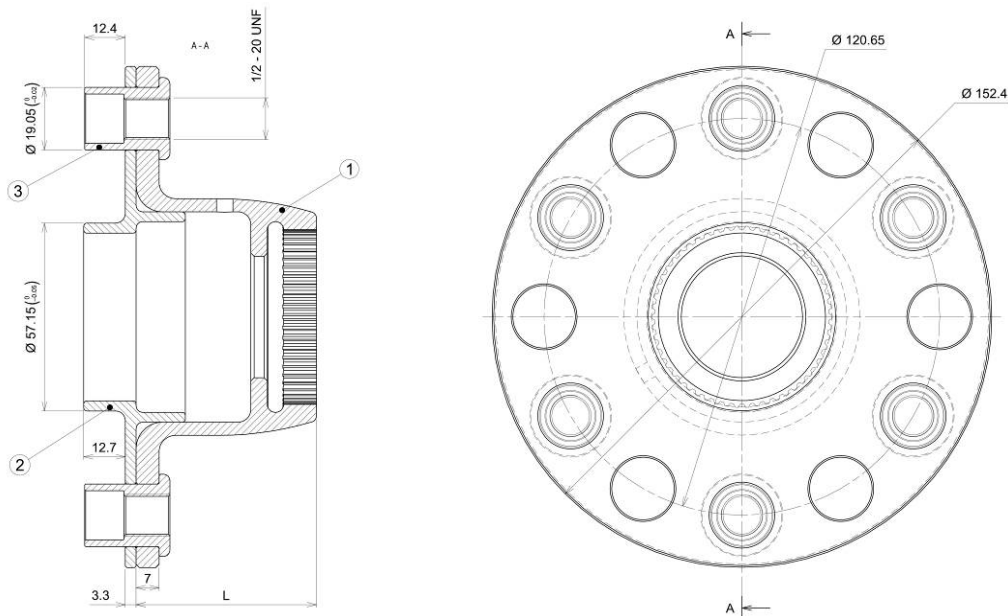
Nr.	Discription	Quantity
1	Propeller Flange	1
2	Propeller Reduction	1
3	Drive Lug	6

1. SAE I - F – Flange : **E022550 L055 / E022550 L090 / E022550 L110 = assembly**



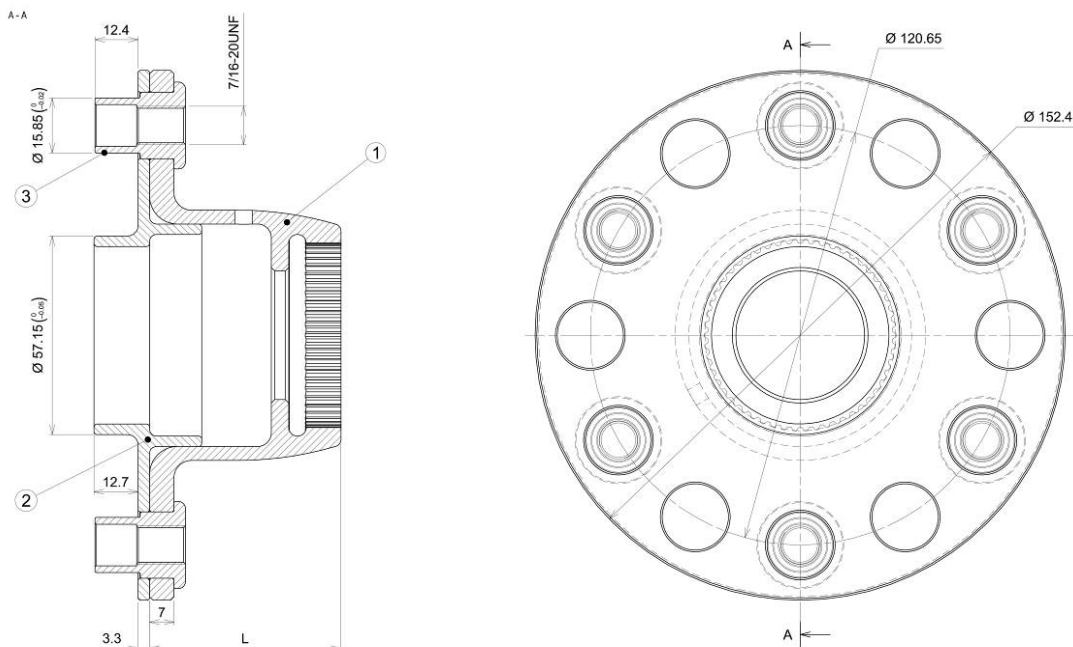
Nr. :	Partnumber :	Name :	P/assy
1	E022520C E022521C E022522C	Propeller flange SAE I L = 55 F - Flange Propeller flange SAE I L = 90 F - Flange Propeller flange SAE I L = 110 F - Flange	1
2	E022535A	Propeller reduction F - Flange	1
3	E023020A	Drive lug F - Flange (SAE I)	6

2. SAE VI - B – Flange : **E022551 L055 / E022551 L090 / E022551 L110 = assembly**



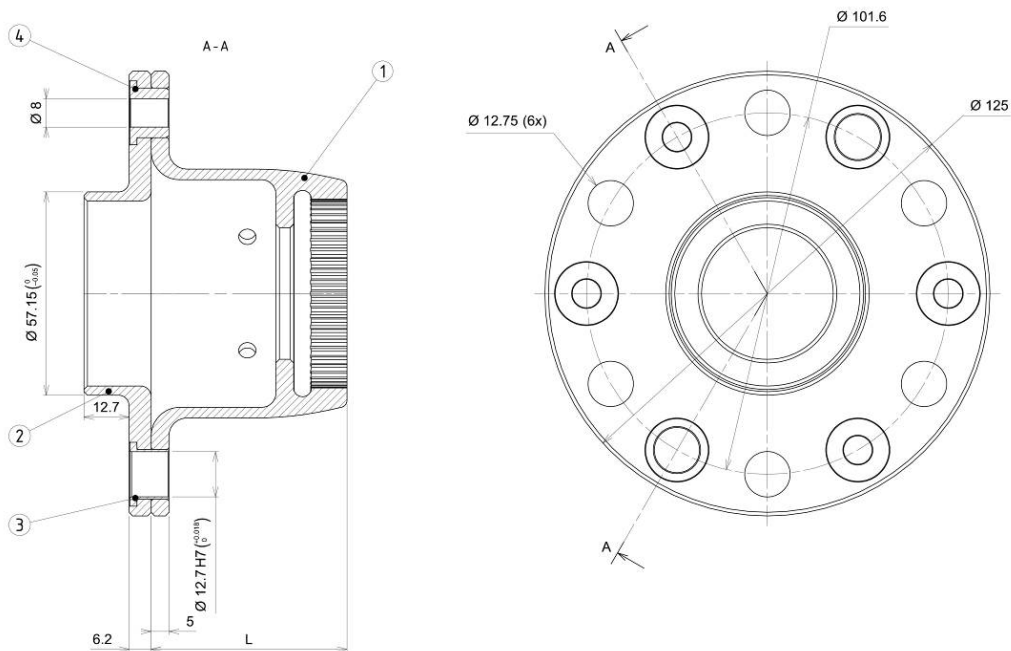
Nr.:	Partnumber :	Name :	P/assy
1	E022525A E022526A E022527A	Propeller flange SAE V or VI L = 55 B or C - Flange Propeller flange SAE V or VI L = 90 B or C - Flange Propeller flange SAE V or VI L = 110 B or C - Flange	1
2	E022540A	Propeller reduction B or C Flange	1
3	E023025A	Drive lug B - Flange (SAE VI)	6

3. SAE V - C – Flange : **E022552 L055 / E022552 L090 / E022552 L110 = assembly**



Nr.:	Partnumber :	Name :	P/assy
1	E022525A E022526A E022527A	Propeller flange SAE V or VI L = 55 B or C - Flange Propeller flange SAE V or VI L = 90 B or C - Flange Propeller flange SAE V or VI L = 110 B or C - Flange	1
2	E022540A	Propeller reduction B or C Flange	1
3	E023030A	Drive lug C - Flange (SAE V)	6

4. D – Flange : **E022553 L055 / E022553 L090 / E022553 L110 / E022553 L035 = assembly**



Nr. :	Partnumber :	Name :	P/assy
1	E022501D E022504C E022506C E022506B	Propeller flange L = 55 Propeller flange L = 110 Propeller flange L = 90 Propeller flange L = 35	1
2	E022530B	Propeller reduction D - Flange	1
3	E023007A	Drive lug D14 x d12.7 D - Flange	2
4	E023008A	Propeller reduction D - flange drive lug D14 x d8	4

Revision