

Stops **noise** and **VIBRATIONS**

[www.bruntons-propellers.com](http://www.bruntons-propellers.com)

# SigmaDrive

## HOW IT WORKS...



Even if an engine and propeller shaft are perfectly aligned when the vessel is built, maintaining that alignment when the engine is running and the vessel moving is an impossibility. However well the boat is built, that allows noise and vibration to be generated. Bruntons SigmaDrive units are the solution which can radically reduce or virtually eliminate these very annoying problems. SigmaDrives can cope with a 3 degree misalignment of the shaft in any direction; 6 degrees in total and, unlike most CV shafts, the DS intermediate shaft coupling can be fitted inline or at an angle making installation much easier and faster.

Today, a rapidly growing number of vessels from the most advanced like the Planet Solar, the largest purely solar powered boat in the world, to the highest quality superyacht tenders and workboats of many types, are choosing to fit SigmaDrives – surely proof enough of their exceptional capabilities, if proof were needed.

SigmaDrive anti-noise and vibration solutions are available for virtually every type of craft with engines up to 1300hp, and beyond that output custom built units can be produced. Here are the units' principal benefits.

- High running speeds
- Articulation and plunging in a single unit
- Low maintenance
- Space-saving installation solutions
- Ball spline keeps the shaft flexible when the engine is on soft mounts
- The CV shaft automatically adjusts to changes in the alignment between engine and drive unit
- Solutions for large and small bending angles
- Uses optimised material
- Long part life
- Eliminates the need for accurate engine alignment, either during initial installation or subsequent use
- Gearbox coupling kits available for all marine gearbox transmissions
- Easy to fit, usually without slipping the vessel or making shaft modifications

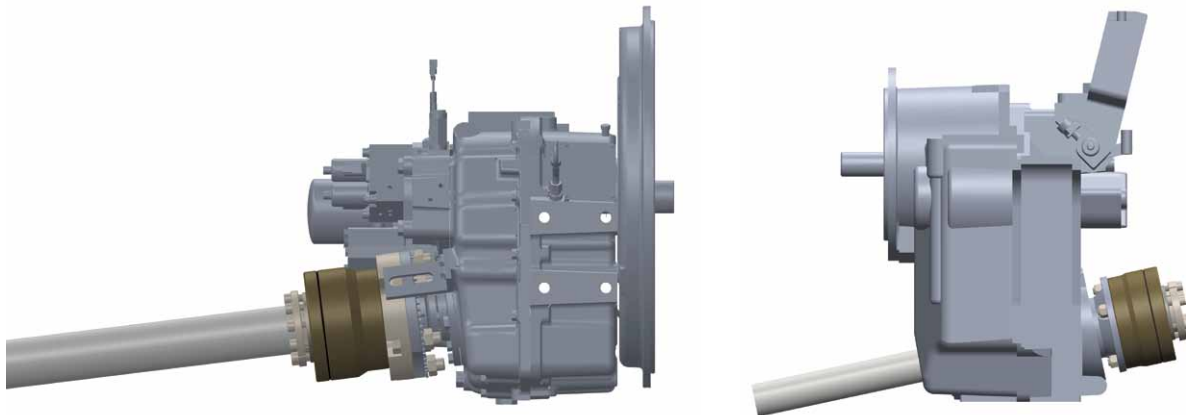


# SigmaDrive

## PRODUCT SYSTEMS

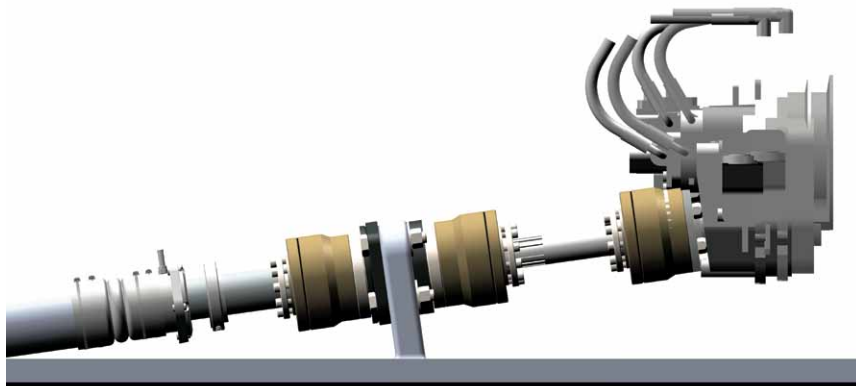
### SD / V DRIVE

The SD model fits shaft tapers and straight shafts and can be fitted to all makes of V drive transmissions.



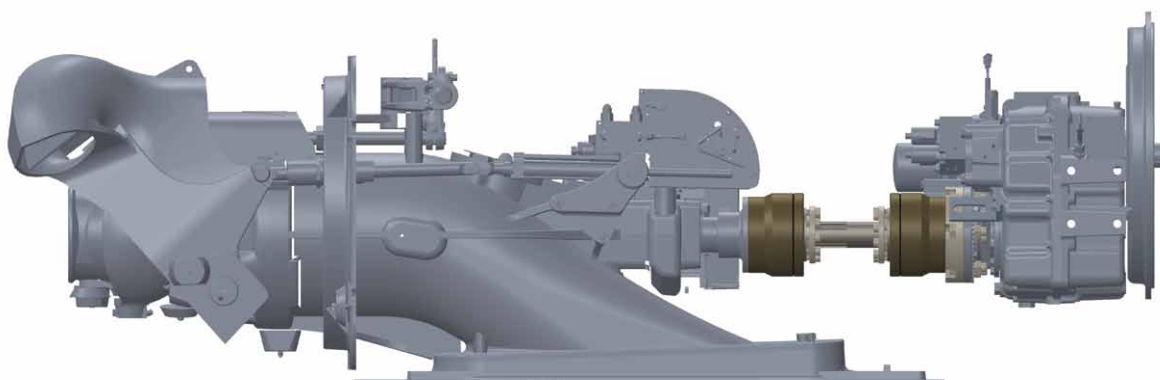
### STS – SIGMA THRUST SYSTEM

This system incorporates a thrust bearing to isolate the propellers' thrust to the engine. It uses a combination of three SD units fitted together. Two of which are incorporated in the thrust bearing and another coupled to the transmission with an intermediate shaft.



### D-SIGMA

The D Sigma is a constant velocity joint for coupling up jet drives and sterndrives to the main engine.



# SigmaDrive

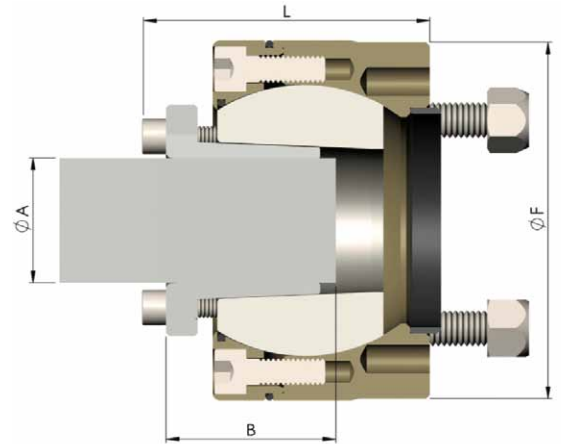
## MODEL SPECIFICATIONS

$$\text{Max Torque} = \left( \frac{K_w}{R_{pm}} \right) \times 9680 \times \text{Reduction}$$

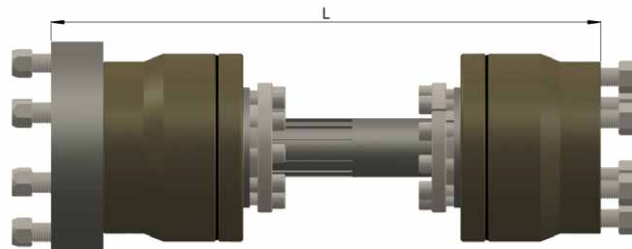
$$K_w = \text{hp} \times 0.7457$$

Here you will find the specifications for the various units within each of the three main SigmaDrive ranges. If you need any help please do not hesitate to contact us.

| SD RANGE | Model | Max Torque | Shaft Type             | Shaft Ø A            | Min shaft Depth B | Flange Dia Ø F | Flange Adaptor Ø | Overall Length L |
|----------|-------|------------|------------------------|----------------------|-------------------|----------------|------------------|------------------|
|          | SD55  | 550Nm      | Parallel ended V-Drive | 22-35mm<br>1-1.5"    | A+5mm             | 4"             | 5"               | 70mm             |
|          | SD100 | 1000Nm     | Parallel ended V-Drive | 30-45mm<br>1.5-1.75" | A+5mm             | 5"             | 5.75"            | 90mm             |
|          | SD150 | 1500Nm     | Parallel ended V-Drive | 45-50mm<br>1.75-2"   | A+5mm             | 5"             | 5.75"            | 100mm            |
|          | SD225 | 2250Nm     | Parallel ended V-Drive | 50-60mm<br>2-2.25"   | A+5mm             | 5"             | 5.75"            | 145mm            |
|          | SD300 | 3000Nm     | Parallel ended V-Drive | 50-70mm<br>2-2.5"    | A+5mm             | 5.75"          | 7.25"            | 139mm            |
|          | SD600 | 6000Nm     | Tapered with Keyway    | 70-90mm              | N/A               | 7-8"           |                  | 178mm            |



| DS RANGE | Model  | Max Torque | Min Length L | Max Length L |
|----------|--------|------------|--------------|--------------|
|          | DS500  | 550Nm      | 225mm        | TBC          |
|          | DS1000 | 1000Nm     | 260mm        | TBC          |
|          | DS1500 | 1500Nm     | 300mm        | TBC          |
|          | DS4000 | 3000Nm     | 460mm        | TBC          |



| STS RANGE | Model   | Max Torque | Min Length L | Max Length L | A     | B     |
|-----------|---------|------------|--------------|--------------|-------|-------|
|           | STS1500 | 1500Nm     | 377mm        | TBC          | 143mm | 310mm |
|           | STS3000 | 3000Nm     | 525mm        | TBC          | 181mm | 385mm |



Bruntons Propellers Ltd

T: +44 (0)1255 420005 E: sales@bruntons-propellers.com W: www.bruntons-propellers.com

Oakwood Business Park, Stephenson Road West, Clacton-on-Sea, Essex, CO15 4TL, UK

