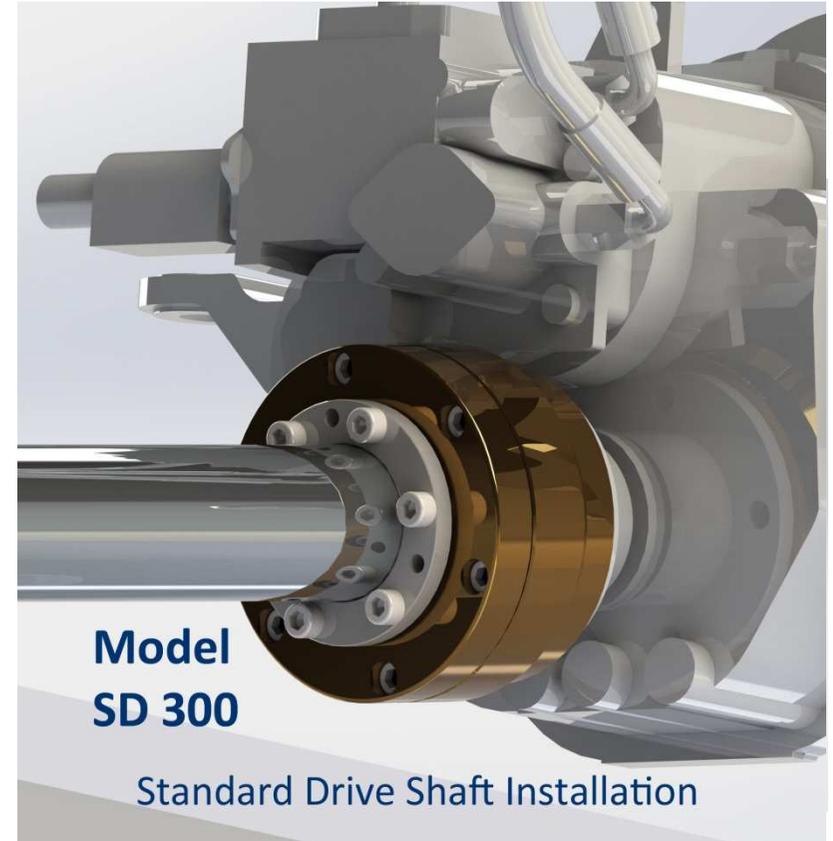


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SD30001	SD300 MAIN BODY	1
2	SD30002	SD300 COVER - <b>NOT TO BE REMOVED</b>	1
3	SD30003	SD300 CENTRAL SPHERE	1
4	SDBB30	BALL BEARING	6
5	M107.54X03.53'O'RING	INNER TOP O-RING	1
6	M101.27X02.62'O'RING	INNER BOTTOM O-RING	1
7	M145.72X2.62'O'RING	OUTER O-RING	1
8	RCK7070	SD300 CLAMP UNIT	1
9	M12X40SKHDCPTS12.9	M12 SOCKET HEAD CAP SCREWS - <b>NOT TO BE REMOVED</b>	6
10	M10X35SKHDCPTS12.9ZP	M10 SOCKET HEAD CAP SCREWS	10
11	REGISTER	OUTPUT FLANGE REGISTER	1
12	M16(M12)X50GRUBTS14.9	M16x50 (M12x50) HIGH TENSILE SECURING STUD	6
13	M16(M12)NYLOCSSA2	M16x1.5 (M12x1.5) NYLOC NUT	6



Brunton's Propellers Ltd |

Oakwood Business Park |

Stephenson Road West | Clacton-on-Sea |

Essex | CO15 4TL |

UK

T: +44 (0) 1255 420 005

W: [www.sigmadrive.info](http://www.sigmadrive.info)

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

## WHAT IS SIGMADRIVE ?

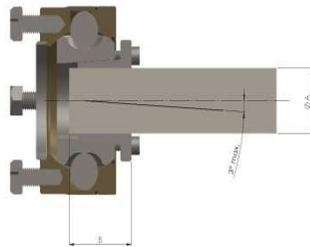
Sigmadrive is a constant velocity joint that is able to resist the propeller thrust without the need for thrust bearings. Fitted in the same place as a standard shaft coupling, it reduces noise and vibration that the engine transmits to the propeller shaft. It corrects misalignment between the engine and propeller shaft up to a working angle of 3°.

## INSTALLATION (See diagram 1)

Carefully clean the gearbox output flange and shaft contact surfaces. Apply a light oil film to the gearbox output flange and the shaft clamping surface. Insert the 12mm or 16mm (depending on which flange) high tensile studs (11) into the corresponding tapped holes to match the gearbox output flange, using the loctite **638** supplied. Fit the M12 or M16 Nyloc nuts to the corresponding high tensile studs (10) and tighten firmly. Slide the clamping unit (8) into the central sphere, insert the propeller shaft and tighten the M10 taper locking bolts (10) gradually and regularly in crossed sequence, all screws to reach the tightening torque **84Nm**. Note that the shaft will be drawn up into the clamp by as much as 3mm to 4 mm. **Do not use any oil with molybdenum bisulphide, or high pressure additives or grease on the shaft or clamp. These substances notably reduce the friction coefficient for the clamp unit.**

Proceed with normal alignment and fixing methods with propeller shaft and gearbox, taking care not to exceed the maximum working angle when centering Sigmadrive to gearbox output flange. It is preferable to make sure that the shaft is aligned to start with as the maximum installation angle should not exceed 3 degrees. We recommend using a standard half coupling to align the shaft particularly for a new running stern gear. For retrofitting, it is generally acceptable to replace the standard coupling with Sigmadrive, provided that the shaft is correctly aligned to begin with. For new sterngear installations we also supply special locking collars for the Sigmadrive, please contact us for details.

SD 300			
Shaft Diameter	B	Shaft Diameter	B
45mm	50mm	1.750"	50mm
50mm	55mm	2.00"	55mm
60mm	65mm	2.250"	65mm
70mm	75mm	2.500"	75mm



## RUNNING IN

Before starting the engine, rotate the shaft manually by hand and check that it rotates easily in both directions. Check and if necessary, reduce working angle. This can be measured using a bevel gauge and should not exceed our recommendation.

The Sigmadrive unit is packed with special high temperature grease. During initial operation it is very likely for the component to expel grease. The operating temperature, in some cases, can make the coupling run a little hot making the grease more fluid. We recommend cleaning the excess grease from the coupling, from time to time, using a cloth. Ensure the vessel is stationary and the engine is switched off, preferably at the dock, when following this procedure. Please also check the temperature of the couplings as they may still be near to running temperature after initial motoring trials.

Run installation to bring engine up to working temperature and re-check torque settings on the gearbox flange nuts and also the shaft taperlock.

## MAINTENANCE

The Sigmadrive is extremely low maintenance and does not require regreasing. Once installed correctly it will last as long as a conventional half coupling. Periodically check mounting bolts and nuts for tightness and overall condition.

## REMOVAL AND DISASSEMBLY

Loosen the M10 high tensile clamping screws using an allen key. Insert the screws into the dismantling thread and tighten gradually and regularly in crossed sequence until the back cone is released. If the taper lock component is to be reused relubricate both screws and threads.

## TECHNICAL DATA

MODEL	SD300	THRUST MAX.	5000 Kg
SERIAL NUMBER		TEMP. MAX.	60°C
MAXIMUM TORQUE	3000 Nm	LUBRICATION	GREASE
MISALIGNMENT MAX.	6°	GREASE TANK	0,1 Kg
Rpm MAX.	3000 Rpm	GREASE TYPE	BESLUX PLEX L2/S